

All Value-Form, No Value-Substance: Comments on Moseley's New Book, Part 11

Andrew Kliman, August 22, 2016

Fred Moseley has just tacitly accepted the temporal single-system interpretation (TSSI) of Marx's value theory. He now recognizes (more or less clearly) the contradiction between Marx's theory and simultaneous valuation of inputs and outputs, and he takes a stand in favor of Marx's theory. He doesn't say this openly, and he is trying to wriggle out of the contradiction, but the handwriting is on the wall.

Contradiction between Marx's Theory and Simultaneism

Let me first exhibit the contradiction as clearly as I can. Consider a two-sector, fully-automated economy without fixed capital, in which neither sector uses its own product as an input, and the "price" rate of profit is equalized.

Assume that the macro-monetary values--"monetary quantities that are *taken as given directly*" (Moseley 2016a)--are as follows.

Table 1. Moseley's Macro-Monetary Values

Sector	Capital			Surplus-value	Total value	Value rate of profit	Profit	Total price	Price rate of profit
	Constant		Variable						
	C_I	C_2							
	C_I	C_2	V	S	$W = C_I + C_2 + V$	$\frac{S}{C_I+C_2}$	π	$P = C_I + C_2 + \pi$	$\frac{\pi}{C_I+C_2}$
1	0	4	0	0	4	0%			
2	4	0	0	0	4	0%			
Total	4	4	0	0	8	0%			

Also, imagine that the physical quantities in this economy are as follows.

Table 2. Physical Quantities

Sector	Input of Good 1	Input of Good 2	Physical Output
	A_1	A_2	X
1	0	4	5
2	4	0	5
total	4	4	

The information in these two tables allows us to compute the per-unit input prices, p_1^{IN} and p_2^{IN} :

$$C_{21} = 4, A_{21} = 4, \text{ and } C_{21} = p_2^{IN} A_{21}, \text{ so } p_2^{IN} = 1$$

$$C_{12} = 4, A_{12} = 4, \text{ and } C_{12} = p_1^{IN} A_{12}, \text{ so } p_1^{IN} = 1$$

Note that C_{12} and C_{21} have not been derived from the physical quantities. To repeat, they are “monetary quantities that are *taken as given directly*,” just as Moseley (2016a) has stipulated.

Now, there are only two ways to complete the macro-monetary table.

(A) Set each sector’s price rate of profit, $\frac{\pi}{C_1 + C_2}$ equal to the total-economy value rate of profit,

or

(B) Stipulate that the per-unit output prices must equal the per-unit input prices.

Option (A) gives us the following:

Table 3A. Moseley’s Macro-Monetary Values -- Pro-Marx Version

Sector	Capital			Surplus-value	Total value	Value rate of profit	Profit	Total price	Price rate of profit
	Constant		Variable						
	C_1	C_2							
	C_1	C_2	V	S	$W = \frac{C_1 + C_2 + V}{C_1 + C_2}$	$\frac{S}{C_1 + C_2}$	π	$P = \frac{C_1 + C_2 + \pi}{C_1 + C_2}$	$\frac{\pi}{C_1 + C_2}$
1	0	4	0	0	4	0%	0	4	0%
2	4	0	0	0	4	0%	0	4	0%
Total	4	4	0	0	8	0%	0	8	0%

The information in this table, together with the physical data, allows us to compute the per-unit output prices, p_1^{OUT} and p_2^{OUT} :

$$P_1 = 4, X_1 = 5, \text{ and } P_1 = p_1^{OUT} X_1, \text{ so } p_1^{OUT} = 4/5$$

$$P_2 = 4, X_2 = 5, \text{ and } P_2 = p_2^{OUT} X_2, \text{ so } p_2^{OUT} = 4/5$$

So all three of Marx's aggregate equalities are preserved: total price equals total value, total profit equals total surplus-value, and the aggregate price rate of profit equals the aggregate value rate of profit.

But the per-unit input and output prices are not equal.

Option (B) gives us just the opposite:

Table 3B. Moseley's Macro-Monetary Values -- Simultaneist Version

Sector	Capital			Surplus- value	Total value	Value rate of profit	Profit	Total price	Price rate of profit
	Constant		Vari- able						
	C_1	C_2	V						
	C_1	C_2	V	S	$W = C_1 + C_2 + V$	$\frac{S}{C_1 + C_2}$	π	$P = C_1 + C_2 + \pi$	$\frac{\pi}{C_1 + C_2}$
1	0	4	0	0	4	0%	1	5	25%
2	4	0	0	0	4	0%	1	5	25%
Total	4	4	0	0	8	0%	1	10	25%

Here, the per-unit input and output prices are indeed equal:

$$P_1 = 5, X_1 = 5, \text{ and } P_1 = p_1^{OUT} X_1, \text{ so } p_1^{OUT} = 1$$

$$P_2 = 5, X_2 = 5, \text{ and } P_2 = p_2^{OUT} X_2, \text{ so } p_2^{OUT} = 1$$

But all three of Marx's aggregate equalities are violated. Total price is greater than total value, total profit is greater than total surplus-value, and the aggregate price rate of profit is greater than the aggregate value rate of profit.

Moseley's Response to Part 10

I shall quote and comment on the entirety of Moseley's (2016b) response to Part 10 of this series of comments (Kliman 2016b). (Moseley's text is indented.)

Comment on Kliman's Part 10

Full Automation

I would revise my "permissible to assume a fully automated economy with a physical surplus" as follows:

1. It is permissible to assume that a fully automated economy with a physical surplus is **technically feasible**.
2. According the Sraffian theory, the **rate of profit would be positive** in such a fully automated economy with a physical surplus and thus is **viable** in a capitalist economy (e.g. Dmitriev, Bortkiewicz, Steedman).
3. According to my interpretation of Marx's theory, the **rate of profit would be zero** in such an economy because there is no surplus labor, in spite of the physical surplus; and thus such an economy is **not viable** in capitalism (see also Mandel, Late Capitalism, Chapter 6, "The Third Technological Revolution"). (Steedman's 1985 NLR paper was a criticism of a defender of Mandel's conclusion (Morris-Suzuki) in a 1984 NLR paper; both papers were entitled "Robots and Capitalism".)
4. Therefore, my interpretation of Marx's theory of the rate of profit is clearly different from Sraffian theory and comes to the opposite conclusion regarding the viability of a full automation in a capitalist economy.

Good. He tacitly accepts the TSSI. In other words, his third and fourth points accept Option (A) and reject Option (B). By doing so, they tacitly accept temporal, rather than simultaneous, valuation of input and output prices.

In Part 10, Kliman repeated an example from Part 7 of a fully automated economy with a physical surplus. He first calculated the rate of profit by the physical coefficients (= 0.77).

He then claimed to calculate the rate of profit according my interpretation of Marx's theory. However, the method he used to calculate "my" rate of profit is not an accurate representation of my interpretation of Marx's theory of the rate of profit because it is derived from **price of production equations**. This derivation is not obvious from the excerpt quoted by Kliman ("using the same procedure as above"), but it is clear in his Part 7. The "same procedure as above" was/is to determine the rate of profit from prices of production equations.

However, as I explained in my comment on Part 7, the rate of profit in my interpretation of Marx's theory is **not determined by price of production equations.** The rate of profit in my interpretation of Marx's theory is instead determined **prior to** and **independently of** these price of production equations by the aggregate ratio of $S/(C+V)$ and $S = m SL$, and then this predetermined rate of profit is **taken as exogenously given** in these price of production equations. The unknowns in Marx's prices of production equations are the prices of production (P_1 and P_2 in Kliman's examples), not the rate of profit (see more below).

Therefore, the conclusions drawn by Kliman on pp. 2-3 regarding the rate of profit *do not apply* to my interpretation of Marx's theory of the rate of profit because these conclusions are derived from price of production equations.

Once again, Moseley is endorsing Option (A). In the third paragraph, he states that the price rate of profit is “determined *prior to* and *independently of* these price of production equations by the aggregate ratio of $S/(C+V)$ ” and that “[t]he unknowns in Marx's prices of production equations are the prices of production ..., not the rate of profit.” In other words, he says that we

should set each sector's price rate of profit, $\frac{\pi}{C_1 + C_2}$ equal to the total-economy value rate of

profit, $\frac{\pi}{C_1 + C_2}$, and then compute the amounts of profit and the sectors' total prices on that basis.

That is *precisely* the procedure I used above to compute the figures in Table 3A. And since it follows from Option (A) that the per-unit input and output prices are not equal, Moseley is once again tacitly accepting temporal, rather than simultaneous, valuation of input and output prices.

On top of p. 4, Kliman presents a different argument:

“There is a physical surplus, as you stipulate. And the per-unit input and output prices are equal, as you also stipulate. Therefore, unless both prices are zero (so that the rate of profit is undefined), there must be monetary profit in the economy as a whole; total profit is $\pi = P1 + P2 - C1 - C2 = 10p1 + 10p2 - 4p1 - 8p2 = 6p1 + 2p2$. And your “price rate of profit” $\pi / (C1 + C2)$ must therefore be positive as well.”

No, this is not a “different argument.” The passage he quotes simply makes an implication of the preceding argument more explicit.

However, once again this is a misrepresentation of my interpretation of Marx's theory. There are *not two rates of profit* in my interpretation of Marx's theory, but only one rate of profit, the price rate of profit which is determined in Volumes 1 and 2 and *presupposed* in Volume 3, and in particular in the determination of prices of production in Part 2 of Volume 3. This “prior determination of the total surplus-value” is one of the two main features of my “macro-monetary” interpretation of Marx's theory (the macro feature). Chapter 3 of my book presents 80 pages of textual evidence to support this macro interpretation of Marx's theory (e.g. the rate of profit *presupposed* in the determination of prices of production).

The total profit in Volume 3 is by assumed to be *identically equal* to the predetermined total surplus-value ($\pi \equiv S$ and $S = m SL$). Marx said that profit is just “another name” for surplus-value – the same quantity is viewed in relation to the total capital ($C + V$) rather than just in relation to variable capital (the true source of profit according to Marx’s theory).

Thus, according to my interpretation of Marx’s theory, the total profit is *not derived from given physical quantities* (and simultaneously with unit prices) as in Kliman’s equation above ($\pi = 10p_1 + 10p_2 - 4p_1 - 8p_2$). That is a Sraffian theory of profit (derived from given physical quantities), not my interpretation of Marx’s theory of profit.

According to my interpretation of Marx’s theory, the price rate of profit (PRP) is instead determined by the ratio of the predetermined total surplus-value (or profit) to the total capital:

$$PRP = S / (C + V) \equiv \pi / (C + V).$$

According to my interpretation, prices of production are then determined by:

$$P_i = (C_i + V_i) (1 + PRP)$$

This is what I meant above when I said that the rate of profit is an *exogenous given* in Marx’s theory of prices of production, as determined by the prior theory of the total surplus-value.

Very good! This passage comes as close as one can possibly come to endorsing the TSSI without doing so openly. Note that Moseley affirms that the price rate of profit is

$$PRP = S / (C + V) \equiv \pi / (C + V)$$

which *equals zero* in the example above. And the sectors’ total prices are

$$P_i = (C_i + V_i) (1 + PRP)$$

so that, in the example above

$$P_1 = (4 + 0)(1 + 0) = 4$$

Since $X_1 = 5$, and $P_1 = p_1^{OUT} X_1$, it follows that $p_1^{OUT} = 4/5$

Similarly,

$$P_2 = (4 + 0)(1 + 0) = 4$$

Since $X_2 = 5$, and $P_2 = p_2^{OUT} X_2$, it follows that $p_2^{OUT} = 4/5$

These per-unit output prices are exactly those I computed above for Option (A). They *do not* equal the input prices. Hence, Moseley has endorsed the TSSI, without actually doing so openly!

In the case of full automation, $S = 0$, and hence $\pi = 0$ and the PRP = 0.

Therefore, it follows from my interpretation of Marx's theory that full automation is **not viable** in a capitalist economy. Since this economy cannot exist, the question of whether or not input prices = output prices does not arise.

Wrong, wrong, wrong! This statement passes illicitly from “not viable” to “cannot exist.” But they are two different things. Moseley's “macro-monetary” interpretation isn't viable, but it exists.

Now, he might instead contend that the TSSI is the interpretation that isn't viable. Whatever. The point here is: one of these interpretations isn't viable, yet it exists.

Moseley is arguing that an economy with a zero rate of profit isn't viable. And he's right. The relevant definition of *viable*, according to the Merriam-Webster dictionary, is:¹

3 a : capable of working, functioning, or developing adequately <*viable alternatives*>

b : capable of existence and development as an independent unit <*the colony is now a viable state*>

c (1) : having a reasonable chance of succeeding <*a viable candidate*>
(2) : financially sustainable <*a viable enterprise*>

[<http://www.merriam-webster.com/dictionary/viable>]

A zero-profit economy isn't capable of working, functioning, or developing adequately. It doesn't have a reasonable chance of succeeding. It isn't financially sustainable. *Yet it can exist.*

Indeed, capitalist economies without profit have indeed existed. According to the U.S. Bureau of Economic Analysis (http://bea.gov/iTable/index_nipa.cfm, Table 1.14), corporations' total before- and after-tax profits were both negative in two years of the Great Depression, 1932 and 1933. The U.S. economy wasn't in a viable state. *Yet it existed.*

Of course, a capitalist economy in a persistent state of zero profitability might not exist *for very long*. But that's not the issue here. The issue is whether it could exist at all, even for a short while. It obviously could. And since this economy *can indeed* exist, the question of whether or not input prices = output prices *does* arise.

¹ The other two definitions pertain to living things only.

If there is positive profit in an economy with labor, as determined by $\pi \equiv S = m(SL)$, then there would be a tendency toward equal rates of profit and long-run equilibrium, which would result in input prices = output prices. However, if profit is zero in a fully automated economy, as determined by $\pi \equiv S = m(SL)$, then production would not take place and there would be no profit to equalize and input prices and output prices would not exist.

Wrong again! One might be able to argue that capitalists would not undertake production that would fail to yield them a profit *if they had perfect knowledge of the future*. But they don't have perfect knowledge of the future. U.S. corporations in 1932 and 1933 certainly did undertake production. And nowhere does Marx say that they capitalists possess perfect knowledge of the future. So the existence of the profit motive does not imply the non-existence of a zero-profit capitalist economy, either in reality or in Marx's theory.

Moreover, in the zero-profit Option (A) economy, individual firms within a sector—those that are more productive—might well receive positive profits that come at the expense of losses borne by other firms. Imagine, for instance, that one firm in Sector 1 produces 4 units of Good 1, using 1 unit of Good 2 as an input, while the other firms in the sector together produce 1 unit of Good 1, using 3 units of Good 2 as an input. Since $p_1^{IN} = p_2^{IN} = 1$ and $p_1^{OUT} = p_2^{OUT} = 4/5$, the highly productive firm receives a profit of $11/5$ and the other firms suffer a loss of $11/5$. So the lack of aggregate profit does not imply the non-existence of a zero-profit capitalist economy.

So, again, such an economy could indeed exist. And if it existed, it would have input and output prices, and given Moseley's preferred option (for now, at least)—the pro-Marx Option (A)—these input and output prices would *not* be equal.

Moseley is trying to leave himself an out by mentioning input prices equaling output prices as a result of the “tendency toward equal rates of profit and long-run equilibrium.” He wants to be able to argue that prices of production do not exist unless this tendency is full realized. That notion flatly contradicts Marx's actual theory (I'll be happy to provide textual evidence). What is true is that commodities don't *exchange at* their prices of production unless rates of profit are equal. Leaving aside monopoly and similar complications, they exchange at market prices that stand above or below their prices of production. But they can exchange at market prices that stand above or below their prices of production only if they *have* prices of production—that is, only if these prices of production *exist*.

But the worst part of this passage of Moseley's is that it *flatly contradicts itself*. On the one hand, he writes, “if profit is zero in a fully automated economy, as determined by $\pi \equiv S = m(SL)$.” This reaffirms a point he made earlier (in his point 3, above): “the *rate of profit would be zero* in such an economy because there is no surplus labor, in spite of the physical surplus.” On the other hand, he now denies this: “production would not take place and there would be no profit to equalize.” Bearing in mind that zero profit and “no profit” (i.e., the non-existence of profit) are two entirely different and incompatible things, it is clear that Moseley's final sentence is self-contradictory.

So he can't have it both ways. If he wants to continue to maintain that the rate of profit would be zero, then he must accept the fact that his per-unit input prices of production and output prices of production are unequal. If, however, he wants to maintain that profit wouldn't exist, he must issue a retraction of his oft-repeated claim that his interpretation implies that profit would be zero. *And* he must issue a retraction of his oft-repeated claim that his interpretation and "Sraffian theory" arrive at "clearly different" conclusions regarding the magnitude of the rate of profit in a fully-automated economy (see his point 4, above). "Sraffian theory" does not—*does not*—maintain, any more than Moseley maintains, that the rate of profit is positive in an economy in which profit doesn't exist because the economy doesn't exist!

Therefore, Kliman's different argument on p. 4 *also does not apply* to my interpretation of Marx's theory. If the rate of profit is determined by physical quantities and determined simultaneously with unit prices, as in Kliman's example and Sraffian theory, then the rate of profit in a fully automated economy would be positive. On the other hand, if the rate of profit is determined by aggregate quantities of surplus labor and money capital, as in my "macro-monetary" interpretation of Marx's theory, then the rate of profit would be zero.

In Kliman's misrepresentation of my interpretation of Marx's theory, the prior determination of the total surplus-value in Volumes 1 and 2 is simply ignored and plays no role in the determination of the rate of profit and prices of production in Volume 3. Instead, Kliman's equation starts over again from scratch and assumes given physical quantities and derives profit and the "price rate of profit" from these given physical quantities. But this is not my interpretation of Marx's theory; this is a Sraffian interpretation of Marx's theory in terms of given physical quantities.

As I noted above, "Kliman's different argument on p. 4" isn't a different argument. It just makes an implication of the preceding argument more explicit.

As for the charge, here and earlier, that I "misrepresent[]" Moseley's interpretation, I plead innocent. All I have done is exhibit the internal contradictions within his interpretation, internal contradictions produced by his attempt to affirm (i) Option (A), in which the equalized price rate of profit is determined by and equal to the aggregate value rate of profit, but also affirm (ii) Option (B), in which per-unit input prices equal per-unit output prices. It is impossible to avoid "misrepresenting" this, because it makes no sense: *Options (A) and (B) are incompatible* (except in accidental special cases in which the value rate of profit happens to equal the physicalist rate).

So when I don't manage to compute input prices that equal output prices on the basis of "the prior determination of the total surplus-value in Volumes 1 and 2," it isn't because I have "simply ignored" anything or I have "start[ed] over again from scratch." *It is because it cannot be done.* Moseley *knows* that it cannot be done. He tried to do it and failed. He managed to get per-unit input prices equal to per-unit output prices, but his price rate of profit wasn't equalized (see the Appendix to Kliman 2016a).

Fred, it is time to put up or shut up. Either accept that Options (A) and (B) are incompatible, or produce an example in which per-unit Options (A) and (B) both hold true (and the value rate of profit doesn't happen to equal the physicalist rate).

References

Kliman, Andrew. 2016a. "All Value-Form, No Value-Substance: Comments on Moseley's New Book, Part 8." August 10. Available at <http://www.marxisthumanistinitiative.org/miscellaneous/all-value-form-no-value-substance-comments-on-moseleys-new-book-part-8.html>.

_____. 2016b. "All Value-Form, No Value-Substance: Comments on Moseley's New Book, Part 10." August 18. Available at <http://www.marxisthumanistinitiative.org/miscellaneous/all-value-form-no-value-substance-comments-on-moseleys-new-book-part-10.html>.

Moseley, Fred. 2016a. [Comment on "All Value-Form, No Value-Substance: Comments on Moseley's New Book, Part 8"]. August 13. Posted in "Comments" section at <http://www.marxisthumanistinitiative.org/miscellaneous/all-value-form-no-value-substance-comments-on-moseleys-new-book-part-8.html>.

_____. 2016b. [Comment on "All Value-Form, No Value-Substance: Comments on Moseley's New Book, Part 10"]. August 22. Posted in "Comments" section at <http://www.marxisthumanistinitiative.org/miscellaneous/all-value-form-no-value-substance-comments-on-moseleys-new-book-part-10.html>.