All Value-Form, No Value-Substance: Comments on Moseley's New Book, Part 8

Andrew Kliman, August 11, 2016

Following the publication of Part 7 of this series of comments on Fred Moseley's new book (Kliman 2016), he and I have had some additional discussion (republished in an appendix below). I'm pleased to announce that we may be seeing the first step of forward movement in the debate. Yesterday, he acknowledged that,

> if you assume given physical quantities, then there is only one rate of profit that is consistent with these given physical quantities. Adding "labor as a producer of value" to given physical quantities doesn't change the basic logic. The given physical quantities still determine the rate of profit and will also determine the new value produced that is consistent with this rate of profit. I realize this point more clearly now. [Moseley 2016]

There are a couple of errors in this statement.[1] But the important point is that Moseley now acknowledges that, "if you assume given physical quantities," his equalized rate of profit is quantitatively identical to the physicalist rate of profit, as I have been arguing. Until this point, he had insisted that the two rates of profit are quantitatively different, because labor is a producer of value in his interpretation of Marx, but not in physicalist theory. However, he now

---

[1] The claim that "there is only one rate of profit that is consistent with these given physical quantities" is not exactly correct. First, the actual rate of profit (i.e., the rate of profit computed on the basis of values or prices) will almost never equal the physicalist rate of profit *if prices and values are temporally determined*—that is, if per-unit prices and values of inputs are not constrained to equal per-unit prices and values of outputs! Second, the "only one rate of profit claim" doesn't hold true if rates of profit aren't equalized.

Furthermore, Moseley misunderstands why his equalized rate of profit is quantitatively identical to the physicalist rate. The reason is not that "physical quantities … determine the new value produced that is consistent with [the] rate of profit." The reason is that simultaneous valuation in conjunction with the assumption of an equalized rate of profit *constrains the relative prices* (e.g., the ratio of the per-unit price of Good 1 to the per-unit price of Good 2). Consider, for instance, Moseley's failed attempt to show that his rate of profit can differ from 11.1% when the physicalist rate is 11.1% (see the end of point 2 of his "Reply to Kliman's Part 7," republished in the appendix). He assumed that "new value in Sector 1 = 6 and new value in Sector 2 = 30" *and* that "$p_1 = 5$ and $p_2 = 3$." The latter assumption, not the former one, is the problem. As I showed in Part 7, it follows from simultaneous valuation in conjunction with the equalization of the rate of profit that p_1/p_2 must equa1 1 (given the physical quantities he was working with). But Moseley's latter assumption implies that p_1/p_2 equals 5/3. As a result of this assumption, his rate of profit was not equalized across sectors, and thus his "prices of production" weren't prices of production, as I pointed out in response to his reply. If he had instead assumed that $p_1 = p_2 = 4.5$, he would have satisfied the condition that total price equals total value *and* the condition that the rate of profit is equalized … but his rate of profit would have equaled 11.1%, just like the physicalist rate of profit!

acknowledges that this is incorrect: “Adding ‘labor as a producer of value’ to given physical quantities doesn’t change the basic logic.” Thus, if the rate of profit is equalized and per-unit prices of inputs and outputs are constrained to equal one another, “there is only one rate of profit that is consistent with these given physical quantities”—the physicalist rate.

Yet there is still a catch. Moseley concedes that he was wrong to contend that his rate of profit is quantitatively different from the physicalist rate, if—but only if—“you assume given physical quantities.”

> However, if one does not assume given physical quantities, but instead assumes given quantities of money capital and quantities of labor-time and the labor theory of value (as in my interpretation of Marx’s theory), then *the rate of profit is determined in a different way and the rate of profit determined is different.* [Moseley 2016]

His only attempt to substantiate this bold assertion is the following:

> This difference is most clearly seen in the case of full automation. If one assumes given physical quantities and that there is a physical surplus, then the rate of profit will be positive. However, if one assumes given quantities of money capital and labor-time and the LTV [labor theory of value], and L [expenditure of living labor] = 0, then the rate of profit will be zero. These two different theories of the rate of profit clearly come to different conclusions. [Moseley 2016]

I have already shown, again and again, that these statements are false. But in an effort to encourage what may be the first step of forward movement, I’ll show that they are false once again.

The General Case

Let’s do what Moseley wants us to do, “assume[ ] given quantities of money capital and quantities of labor-time and the labor theory of value (as in my interpretation of Marx’s theory).” The quantities of money capital, and the quantities of surplus-value determined by quantities of labor-time and “the labor theory of value” are given in the following table.

sector	C_1	C_2	V_1	V_2	S	W	π	P	$r = \frac{\pi}{C_1+C_2+V_1+V_2}$
1	0	24	0	3	1	28	3	30	11.1%
2	12	0	0	15	5	32	3	30	11.1%
total	12	24	0	18	6	60	6	60	11.1%

C_{21} (= 24) is Sector 1's monetary advance of constant capital to purchase Good 2 as an input, and C_{12} (= 12) is Sector 2's monetary advance of constant capital to purchase Good 1 as an input. V_{21} is the spending, by Sector 1's workers, on Good 2, paid for indirectly by variable-capital advances of Sector 1 firms. V_{22} (= 15) is the spending, by Sector 2's workers, on Good 2, paid for indirectly by variable-capital advances of Sector 2 firms. S is surplus-value, $W \equiv C_1 + C_2 + V_1 + V_2 + S$ is the total value of output, π is (average) profit, P is the total price of output, and r is the equalized rate of profit.

We see that Moseley's "macro-monetary" rate of profit, determined just the way he wants it determined, is 11.1%. What about the physicalist rate?

The physicalist rate of profit is the positive value of $\boldsymbol{r}$ that renders the determinant of matrix **H** equal to zero, where

$$\mathbf{H} = \begin{bmatrix} 1 & 0 \\ 0 & 1 \end{bmatrix} - \begin{bmatrix} (a_{11}+b_{11}) & (a_{12}+b_{12}) \\ (a_{21}+b_{21}) & (a_{22}+b_{22}) \end{bmatrix}(1+\boldsymbol{r})$$

a_{ij} is the amount of good i needed to produce each unit of good j, and b_{ij} is the amount of good i paid as real wages in sector j, per unit of good j produced.

Now because—and only because—Moseley is a simultaneist (i.e., he constrains per-unit prices of inputs to equal per-unit prices of outputs), we can express each of the physical input-output coefficients—the a and b terms—either as a ratio of his "macro-monetary" variables, or as the product of a ratio of his "macro-monetary" variables and a per-unit price ratio:

$$a_{11} = \frac{p_1 a_{11} X_1}{p_1 X_1} = \frac{C_{11}}{P_1} = \frac{0}{30} = 0$$

$$a_{21} = \left(\frac{p_2 a_{21} X_1}{p_1 X_1}\right)\left(\frac{p_1}{p_2}\right) = \left(\frac{C_{21}}{P_1}\right)\left(\frac{p_1}{p_2}\right) = \left(\frac{24}{30}\right)\left(\frac{p_1}{p_2}\right) = 0.8\left(\frac{p_1}{p_2}\right)$$

$$b_{11} = \frac{p_1 b_{11} X_1}{p_1 X_1} = \frac{V_{11}}{P_1} = \frac{0}{30} = 0$$

$$b_{21} = \left(\frac{p_2 b_{21} X_1}{p_1 X_1}\right)\left(\frac{p_1}{p_2}\right) = \frac{V_{21}}{P_1}\left(\frac{p_1}{p_2}\right) = \left(\frac{3}{30}\right)\left(\frac{p_1}{p_2}\right) = 0.1\left(\frac{p_1}{p_2}\right)$$

$$a_{12} = \left(\frac{p_1 a_{12} X_2}{p_2 X_2}\right)\left(\frac{p_2}{p_1}\right) = \left(\frac{C_{12}}{P_2}\right)\left(\frac{p_2}{p_1}\right) = \left(\frac{12}{30}\right)\left(\frac{p_2}{p_1}\right) = 0.4\left(\frac{p_2}{p_1}\right)$$

$$a_{22} = \left(\frac{p_2 a_{22} X_2}{p_2 X_2}\right) = \left(\frac{C_{22}}{P_2}\right) = \left(\frac{0}{30}\right) = 0$$

$$b_{12} = \left(\frac{p_1 b_{12} X_2}{p_2 X_2}\right)\left(\frac{p_2}{p_1}\right) = \left(\frac{V_{12}}{P_2}\right)\left(\frac{p_2}{p_1}\right) = \left(\frac{0}{30}\right)\left(\frac{p_2}{p_1}\right) = 0$$

$$b_{22} = \left(\frac{p_2 b_{22} X_2}{p_2 X_2}\right) = \left(\frac{V_{22}}{P_2}\right) = \left(\frac{15}{30}\right) = 0.5$$

Therefore

$$\mathbf{H} = \begin{bmatrix} 1 & 0 \\ 0 & 1 \end{bmatrix} - \begin{bmatrix} (0+0) & \left(0.4\left[\frac{p_2}{p_1}\right] + 0\right) \\ \left(0.8\left[\frac{p_1}{p_2}\right] + 0.1\left[\frac{p_1}{p_2}\right]\right) & (0+0.5) \end{bmatrix}(1+\boldsymbol{r})$$

$$= \begin{bmatrix} 1 & -0.4\left(\frac{p_2}{p_1}\right)(1+\boldsymbol{r}) \\ -0.9\left(\frac{p_1}{p_2}\right)(1+\boldsymbol{r}) & 1-0.5(1+\boldsymbol{r}) \end{bmatrix}$$

and so the physicalist solution for the equilibrium rate of profit is the positive value of ***r*** that render the determinant of **H,**

$$1-0.5(1+\boldsymbol{r}) - (0.4)\left(\frac{p_2}{p_1}\right)\cdot(0.9)\left(\frac{p_1}{p_2}\right)(1+\boldsymbol{r})^2 = 1-0.5(1+\boldsymbol{r}) - 0.36(1+\boldsymbol{r})^2$$

equal to zero. That value is 0.111, so the physicalist rate of profit is 11.1%, exactly like Moseley's "macro-monetary" rate! The latter is supposedly determined by "given quantities of money capital and quantities of labor-time and the labor theory of value," but, as we should all know by now, that's all value-form and no value-substance. Contrary to what he claims, the value-form stuff makes no quantitative difference; it is simply not the case that "the rate of profit determined is different."

Fully Automated Economy

But what about the case of a fully automated economy? Recall Moseley's argument, quoted above: "If one assumes given physical quantities and that there is a physical surplus, then the [physicalist] rate of profit will be positive. However, if one assumes given quantities of money capital and labor-time and the LTV, and L = 0, then the ['macro-monetary'] rate of profit will be zero."

He wants us to believe that, when $L = 0$ (no living labor is expended), so that his "macro-monetary" rate of profit equals zero, the physicalist rate of profit will be positive because "there is a physical surplus." This argument obviously begs the question. He needs to *prove* that there can be a physical surplus in this case. But he provides no proof. He simply *assumes* this.

In fact, there *cannot* be a physical surplus in this case, and therefore the physicalist rate of profit will equal zero. And that is why Moseley's rate of profit will also equal zero. Because he, like all (other) physicalist economists, values inputs and outputs simultaneously, his equilibrium rate of profit is determined by the same physical quantities—technological and real wage coefficients—that determine their rate of profit, and in exactly the same manner.

To see this, consider the example above, but reduce the V and S terms to zero because living labor is no longer expended. We now have the following fully-automated economy:

sector	C_1	C_2	V_1	V_2	S	W	π	P	$r = \frac{\pi}{C_1 + C_2 + V_1 + V_2}$
1	0	24	0	0	0	24	0	24	0%
2	12	0	0	0	0	12	0	12	0%
total	12	24	0	0	0	36	0	36	0%

Note that, once again, we have "assume[d] given quantities of money capital and quantities of labor-time and the labor theory of value (as in my interpretation of Marx's theory)." We have not "assume[d] given physical quantities." Moseley's "macro-monetary" rate of profit, determined just the way he wants it determined, is 0%.

What about the physicalist rate of profit? Using the same procedures we used in the preceding section to express each of the physical input-output coefficients—the a and b terms—either as a ratio of his "macro-monetary" variables, or as the product of a ratio of his "macro-monetary" variables and a per-unit price ratio, we find that

$$a_{21} = \left(\frac{p_2 a_{21} X_1}{p_1 X_1}\right)\left(\frac{p_1}{p_2}\right) = \left(\frac{C_{21}}{P_1}\right)\left(\frac{p_1}{p_2}\right) = \left(\frac{24}{24}\right)\left(\frac{p_1}{p_2}\right) = \left(\frac{p_1}{p_2}\right)$$

$$a_{12} = \left(\frac{p_1 a_{12} X_2}{p_2 X_2}\right)\left(\frac{p_2}{p_1}\right) = \left(\frac{C_{12}}{P_2}\right)\left(\frac{p_2}{p_1}\right) = \left(\frac{12}{12}\right)\left(\frac{p_2}{p_1}\right) = \left(\frac{p_2}{p_1}\right)$$

while all other a and b terms equal zero.

Plugging these results into our formula for matrix **H**, we find that

$$\mathbf{H} = \begin{bmatrix} 1 & 0 \\ 0 & 1 \end{bmatrix} - \begin{bmatrix} (0+0) & \left(\left[\frac{p_2}{p_1}\right]+0\right) \\ \left(\left[\frac{p_1}{p_2}\right]+0\right) & (0+0) \end{bmatrix}(1+\boldsymbol{r})$$

$$= \begin{bmatrix} 1 & -\left(\frac{p_2}{p_1}\right)(1+\boldsymbol{r}) \\ -\left(\frac{p_1}{p_2}\right)(1+\boldsymbol{r}) & 1 \end{bmatrix}$$

Thus that the determinant of **H** is

$$1 - \left(\frac{p_2}{p_1}\right)\cdot\left(\frac{p_1}{p_2}\right)(1+\boldsymbol{r})^2 = 1-(1+\boldsymbol{r})^2$$

and the physicalist solution for the equilibrium rate of profit, the positive value of ***r*** that renders this determinant equal to zero, is ***r*** = 0. Hence, the physicalist rate of profit equals 0%, just like Moseley's rate!

References

Kliman, Andrew. 2016. "All Value-Form, No Value-Substance: Comments on Moseley's New Book, Part 7." August 2. Available at http://www.marxisthumanistinitiative.org/miscellaneous/all-value-form-no-value-substance-comments-on-moseleys-new-book-part-7.html.

Moseley, Fred. 2016. [Comment on "All Value-Form, No Value-Substance: Comments on Moseley's New Book, Part 7"]. August 10. Posted in "Comments" section at http://www.marxisthumanistinitiative.org/miscellaneous/all-value-form-no-value-substance-comments-on-moseleys-new-book-part-7.html.

Appendix: Post-Part 7 Discussion

The following discussion is republished from the comments in the comments section of Kliman (2016). Note that there is a typo in the table of physical data in my attached file of August 8: the Physical Output of Sector 2 should be 10, not 0.

- **Fred Moseley on Mon, 8th Aug 2016 8:45 am**

Reply to Kliman's Part 7

1. Goods assumed to be inputs to their own production

The following key arguments in Kliman's Parts 1 and 3-6 – that are supposed to prove that my interpretation of Marx's theory of the rate of profit is the same as Sraffa's theory – depend crucially on the untenable assumption that *each and every good is an input to its own production.*

1. *The derivation of his equation (1") from his equation (1)* (and I would say also the prior derivation of (1) from (1")). For example, the key reduction of C1/P1 to a1 by the equation:
C1/P1 = (p1a1X1) / (p1X1) = a1.
(p1X1) cancels out because (and only because) Good 1 is an input in its own production. The denominator (p1X1) refers to Good 1 as on output and the numerator (p1a1X1) refers to the same Good 1 as an input in the production of itself. a1 is the quantity of Good 1 used to produced one unit of Good 1. If Good 1 were not an input to its own production, then the p1X1's don't cancel and Kliman's reduction of C1/P1 to a1 is not possible. Ditto for Good 2 and any other goods included in this argument (e.g. the third Good in Part 4). Therefore, if all goods are not assumed to be inputs to their own production, then equation (1") cannot be derived from equation (1).

2. *The calculation of "my" input-output coefficients* for various arguments. For example, a1 is calculated from the same equation above:
a1 = C1/P1.
But if Good 1 is not an input (C1) into the production of itself (P1), then this calculation makes no sense.

3. *Two arguments regarding "full automation".*

a. *No surplus output in Sector 1 because a1 = 1* (i.e. because it takes one unit of Good 1 to produce one unit of the same Good 1!). a1 is calculated as above from C1/P1 = 10/10 = 1. But if Good 1 is not an input to its own production, and there are other inputs to the production of Good 1, then it is not even possible to calculate the surplus output in Sector 1 (or any other single industry) because the inputs and Good 1 are heterogeneous commodities with no common unit of measure. Bill Jeffries has made a similar comment on earlier posts.

b. *Positive rate of profit in my interpretation of "full automation".* In this argument, Kliman assumed that a1 = 0.8 and calculated C1 from C1 = a1P1 = .8P1. But again, if Good 1 is not an input for itself, the determination of C1 in this way is not possible.

Furthermore, in this argument Kliman ignores my interpretation of Marx's theory of the determination of profit by surplus labor and erroneously calculates "my" amount of profit in his Sector 1 by the equation: $\pi 1 = P1 - C1 - V1 = P1 - 0.8P1$. So there are two problems with this equation: (1) it is not my equation for profit and (2) Good 1 is assumed to be an input to its own production. My equation for profit produced in Sector 1 is $\pi 1 = m\ (SL1)$ (where m is the MELT), and if thus SL1 = 0, then $\pi 1 = 0$.

2. Goods *not* assumed to be inputs to their own production

In his most recent Part 7, Kliman presents another two-sector model in which the two goods are not assumed to be inputs to their own production. He first determines the rate of profit by the physical coefficients (= 0.11).

He then asks: "What about Moseley's equilibrium rate of profit? It is the value of r that makes the total price of each sector's output equal to its advance of capital times '1 plus the rate of profit' (i.e., 1 + r)":

P1 = (C21+ V1) (1 + r)
P2 = (C12+ V2) (1 + r)

However, these price of production equations are *not* an accurate representation of my interpretation of Marx's theory of the rate of profit. The rate of profit in my interpretation of Marx's theory is *not determined by these price of production equations.* The rate of profit in my interpretation of is instead determined prior to and independently of these equations by the aggregate ratio of S/(C+V) and then *taken as exogenously given (predetermined)* in these equations.

Labor is *only a cost* in these equations (V); it is not a producer of value. There is no new-value term (N = m L) in these equations and thus no surplus-value term (S = m SL). Therefore, these equations cannot be the way the rate of profit is determined in Marx's theory. The equations look the same on the surface, but the logic of determination is fundamentally different (sequential determination vs. simultaneous determination). The unknowns in Marx's price of production equations are the prices of production (P1 and P2), not the rate of profit. I explain this sequential logic in detail in Chapter 2 of my book, which Kliman continues to ignore.

Kliman then decomposes the C's and V's in these equations into known physical quantities and unknown unit prices (Kliman does not present these equations explicitly, but they are implied by his substitutions):
p1X1 = (p2A21+ p2B21) (1 + r)
p2X2 = (p1A12+ p2B22) (1 + r)

So we are back to the Sraffian theory of the rate of profit and relative unit prices. It is thus no surprise that the rate of profit that is determined by these equations is the same as that derived

from the physical coefficients (0.11), because the physical coefficients come from these equations (e.g. a21= A21/X1). Therefore, whatever conclusions Kliman derives about the rate of profit determined from these equations do not apply to my interpretation of Marx's theory of the rate of profit.

Notice also that, in this case, Kliman does not try to prove that my interpretation of Marx's theory of the rate of profit is "physicalist" by deriving his equation (1") from his equation (1), as in previous posts; that derivation is not possible if goods are not assumed to be inputs to their own production. Instead, Kliman's argument in this case is in terms of the price of production equations, which is also *not* the way the rate of profit is determined in my interpretation of Marx's theory.

On the bottom half of p. 8, Kliman tries to take into account the key feature of my interpretation of Marx's theory that he omitted from the argument on the top half of the page in terms of price of production equations – that labor is also a producer of new value. He assumes new value in Sector 1 = 4 and new value in Sector 2 = 20 from which he deduces that surplus-value in Sector 1 = 1 and surplus-value in Sector 2 = 5. Thus the total surplus-value = 6 and the rate of profit = 6/54 = 0.11 (again). However, this result follows only from Kliman's specific assumption that the new values produced are 4 and 20 (these specific quantities for new value were no doubt chosen to produce a rate of profit = 0.11). If the quantities of new value were different, then the rate of profit would be different.

For example, if it is assumed instead that new value in Sector 1 = 6 and new value in Sector 2 = 30, and p1 and p2 are calculated in the same way that Kliman did, by setting
P1 + P2 = W1 + W2
10p1 + 10p2 = (C21 + 6) + (C12 + 30)
= (8p2 + 6) + (4p1 + 30)
and this equation is satisfied by the prices p1 = 5 and p2 = 3.
With these prices, V1 = 3, S1 = 3, V2 = 15, S2 = 15 (so the total S = 18), C21 = 24, C12 = 20, and the rate of profit is 18/62 = .29 ≠ .11.

Therefore, when account is taken of the unique feature of Marx's theory – that labor is not only a cost but also a producer of value – my interpretation of Marx's theory is clearly different from Sraffa's theory.

3. Full automation again

The fundamental difference between my interpretation of Marx's theory of the rate of profit and Sraffian theory is most clearly seen in the case of "full automation". According to Sraffian theory, if there is a physical surplus, the rate of profit will be positive, even though there is no labor. On the other hand, according to my interpretation of Marx's theory (as discussed above), S = m(SL), and thus if SL = 0, then S = 0. Simple and straightforward; no ifs, ands, or buts.

On p. 9, Kliman alters his example to assume full automation and sets real wages = 0. He first calculates the "physicalist" rate of profit from the I/O coefficients (= .77) and then he calculates "my" rate of profit and comes to the same conclusion. However, he erroneously calculates "my" rate of profit in the same way as in the previous section: by the same price of production

equations and the same decompositions into known physical quantities and unknown unit prices. And since this theory of the rate of profit is the same as Sraffian theory, it is no surprise that the conclusion is the same (rate of profit = .77). But again this result does not apply to my interpretation of Marx's theory of the rate of profit, because the rate of profit in my interpretation is not determined by these price of production equations. The rate of profit in my interpretation is determined by S/(C+V), and S = m (SL), so that if SL = 0, then S = 0.

On p. 10, Kliman uses the rate of profit that he has erroneously calculated for me to erroneously calculate positive amounts of profit in both sectors. But in my interpretation, if S = 0, then the rate of profit = 0, and the profit in both sectors = 0.

Kliman argued that in my argument regarding full automation I "fail to address the issue of whether Marx's theory as interpreted by Moseley is anti-physicalist *despite its simultaneism".* (p. 4; emphasis in the original)

The term "simultaneism" is ambiguous and potentially misleading. What Kliman means by simultaneism is that input prices = output prices. But simultaneous in this context often means the *logic of simultaneous determination* (i.e. input prices and output prices are determined simultaneously by a system of simultaneous equations, as in Sraffian theory). My interpretation does assume that input prices = output prices, but this equality is not based on the logic of simultaneous determination, but is instead based on the assumption that the *economy is in long-run equilibrium*. This is another way in which my interpretation of Marx's theory is fundamentally different from Sraffa's theory (sequential determination vs. simultaneous determination).

In any case, I derive in Chapter 2 of my book the result S = m(SL) on the basis of the assumption that the economy is in long-run equilibrium and thus input prices = output prices, i.e. that inputs are purchased at their prices of production (which are long-run equilibrium prices) and are sold as outputs at the same long-run equilibrium prices of production in the same period. Therefore, my "simultaneism" is assumed in the derivation of S, and there is nothing left to address.

And this result (S = m SL and thus S = 0 if SL = 0) is clearly contrary to Sraffa's theory of the rate of profit (based on physical quantities and simultaneous determination).

4. Okishio Theorem again

Another important example of the fundamental difference between Sraffa's theory and my interpretation of Marx's theory which I have discussed in previous posts is the case of *labor-saving technological change.*

According to Sraffian theory and the Okishio theorem, labor-saving technological change will *never reduce* the rate of profit. And again the reason for this non-negative effect of labor-saving technological change on the rate of profit in Sraffian theory, is that *labor is only a COST* in Sraffian theory, so that a reduction in cost will never reduce the rate of profit.

On the other hand, in (my interpretation of) Marx's theory, *labor is also a producer of value*, and therefore labor-saving technological change not only reduces costs, but also reduces the

value and surplus-value produced (this is what is missing in Sraffian theory), and the net effect on the rate of profit depends on the relative strength of these two opposing intermediate effects.

Therefore, my interpretation of Marx's theory comes to a different conclusion regarding the all-important question of the effect of labor-saving technological change on the rate of profit. The Okishio theorem does not apply to my interpretation of Marx's theory. Labor is not only a cost, but is also a producer of value.

Kliman also argued that I do not provide a demonstration "that the simultaneism of Marx's theory as interpreted by Moseley is anti-physicalist *despite its simultaneism.* (p. 3; emphasis in the original)

But again, the important conclusion of my interpretation of Marx's theory that the rate of profit varies directly with the rate of surplus-value and inversely with the composition of capital is a simple and straightforward deduction from the above equation for S which is derived on the basis of the assumption that the economy is in long-run equilibrium and thus input prices = output prices:
$S = m\ SL$
$R = S / C+V$
$\approx S / C = (S/V) / (C/V)$
So again my "simultaneism" is assumed in the derivation of S and R, and thus there is nothing left to Demonstrate.

And this equation for the rate of profit is clearly different from the Sraffian theory of the rate of profit (based on physical quantities and the logic of simultaneous determination).

5. Luxury goods industries

The fundamental difference between my interpretation of Marx's theory of the rate of profit and Sraffian theory is also clearly seen in the case of luxury goods industries and technological change in luxury goods industries.

According to Sraffian theory, the technical conditions in luxury goods industries have *no effect the rate of profit, because luxury goods do not enter into the production of other goods and hence are not costs in the production of other goods. In my interpretation of Marx's theory, on the other hand, the composition of capital in luxury goods industries is included in the composition of capital for the economy as a whole and thus has an effect the rate of profit.

For example, if there is technological change in a luxury goods industry, then according to Sraffian theory this will have no effect on the rate of profit. According to my interpretation of Marx's theory, on the other hand, if the technological change in a luxury goods industry increases its composition of capital, this will increase the composition of capital for the economy as a whole, and this will cause the rate of profit to fall because there is no offsetting increase in the rate of surplus-value.

Conclusion

I have argued that:

1. Kliman's key arguments in his Parts 1 and 3-6 – that are supposed to prove that my interpretation of Marx's theory of the rate of profit is the same as Sraffa's theory (especially the derivation of his equation (1") from equation (1) and the calculation of "my" input-output coefficients by a1 = C1/P1) – are based on the unrealistic assumption that all commodities are inputs to their own production and thus these arguments are not acceptable.

2. The new argument in Part 7 is based on the determination of the rate of profit by price of production equations, but these equations are not an accurate representation of my interpretation of Marx's theory of the rate of profit, because labor is only a cost in these equations and not a producer of value, and because according to my interpretation the rate of profit is exogenously given in these equations not determined endogenously by them.

3. Kliman's attempt to add labor as a producer of value to his numerical example demonstrates (contrary to his aim) that my interpretation of Marx's theory of the rate of profit is *not* the same as the Sraffian theory of the rate of profit.

4. The following cases show the clear and fundamental differences between Sraffian theory and my interpretation of Marx's theory of the rate of profit: (a) full automation, (b) labor-saving technological change, and (c) luxury goods industries.

- **Andrew Kliman on Mon, 8th Aug 2016 12:38 pm**

Fred,

You're trying to show that your equalized rate of profit can differ from the physicalist rate of profit. But you fail to do so because your computations at the end of your point 2 are simply ridiculous. Your avg. rate of profit (29.0%) differs from the physicalist rate (11.1%), but your rate of profit is NOT equalized, and therefore your "prices of production" are NOT prices of production. Your computations imply that Sector 1′s rate of profit is 85.2%, while Sector 2′s rate of profit is -14.3% !

Please retract the claim that concludes this "demonstration" of yours: "Therefore, when account is taken of the unique feature of Marx's theory – that labor is not only a cost but also a producer of value – my interpretation of Marx's theory is clearly different from Sraffa's theory."

What you need to show is that your rate of profit need not equal 11.1% given the same physical data AND AN EQUALIZED RATE OF PROFIT. You will not succeed.

Further details are here: http://www.marxisthumanistinitiative.org/wp-content/uploads/2016/08/Moseleys-PoP-arent-PoP-8.8.16.pdf

Andrew Kliman, Aug. 8, 2016

Moseley's "prices of production" are NOT prices of production

That's because the two sectors' rates of profit aren't equal!

At the end of point 2 of his "Reply to Kliman's Part 7,"[1] published today, he tries to demon-strate that his equalized rate of profit (corresponding to his prices of production) can differ from the physicalist rate of profit, 11.11%. He uses the following physical data–which, together with the assumption that the rate of profit is equalized, imply that the physicalist rate of profit equals 11.11%.

Sector	Input of Good 1	Input of Good 2	Real Wages (units of Good 2)	Physical Output
1	0	8	1	10
2	4	0	5	0
total	4	8	6	

Moseley accepts that all of the following apply to his interpretation:

$C_{11} = 0, C_{21} = 8p_2,\ V_1 = 1 \cdot p_2,\ P_1 = 10p_1$

$C_{12} = 4p_1,\ C_{22} = 0,\ V_2 = 5p_2,\ P_2 = 10p_2$

In addition, he makes the following assumptions

1. New value added in Sector 1 = $V_1 + S_1 = 6$
2. New value added in Sector 2 = $V_2 + S_2 = 30$
3. $p_1 = 5$
4. $p_2 = 3$

His "price of production" table is therefore

sector	C_1	C_2	V	S	W	π	P	$r = \frac{\pi}{C_1 + C_2 + V}$
1	0	24	3	3	30	23	50	85.2%
2	20	0	15	15	50	–5	30	–14.3%
total	20	24	18	18	80	18	80	29.0%

What he needs to show is that his rate of profit need not equal 11.11% given the physical data above **AND AN EQUALIZED RATE OF PROFIT.** Hic Rhodus! Hic Salta!

He will not succeed.

[1] Available at http://www.marxisthumanistinitiative.org/miscellaneous/all-value-form-no-value-substance-comments-on-moseleys-new-book-part-7.html/comment-page-1#comment-383128

- **Fred Moseley on Wed, 10th Aug 2016 8:42 am**

This result shows is that if you assume given physical quantities, then there is only one rate of profit that is consistent with these given physical quantities. Adding "labor as a producer of value" to given physical quantities doesn't change the basic logic. The given physical quantities still determine the rate of profit and will also determine the new value produced that is consistent with this rate of profit. I realize this point more clearly now.

However, if one does not assume given physical quantities, but instead assumes given quantities of money capital and quantities of labor-time and the labor theory of value (as in my interpretation of Marx's theory), then *the rate of profit is determined in a different way and the rate of profit determined is different.*

This difference is most clearly seen in the case of full automation. If one assumes given physical quantities and that there is a physical surplus, then the rate of profit will be positive. However, if one assumes given quantities of money capital and labor-time and the LTV, and L = 0, then the rate of profit will be zero. These two different theories of the rate of profit clearly come to different conclusions.

The difference between these two theories of the rate of profit is also seen in the effects of labor-saving technological change on the rate of profit (Okishio Theorem) and in the effects of luxury goods industries on the rate of profit, as I have argued in previous comments.

These are two fundamentally different theories of the rate of profit (physical quantities vs. quantities of money capital, L, and the LTV) and they lead to different conclusions.