All Value-Form, No Value-Substance: Comments on Moseley's New Book, Part 10

Andrew Kliman, August 18, 2016

Fred Moseley is trying to have it both ways. I'm damned when I assume given physical quantities, and I'm damned when I don't assume given physical quantities.

In Part 8 of this series of comments, I provided a demonstration, one of many, that his "macro-monetary" equilibrium rate of profit is quantitatively identical to the rate of profit of the (other) physicalist economists. He attempted to dismiss this demonstration on the grounds that it supposedly *assumed given physical quantities*:

> these monetary quantities are derived from physical quantities ….

> But that is not my interpretation. My interpretation is in terms of monetary quantities that are *taken as given directly*, as quantities of money capital advanced to purchase means of production and labor-power, and not derived from given physical quantities. [Moseley 2016b]

Then, in Part 9, I produced another demonstration, this time proceeding in the opposite direction. I began with "monetary quantities that are *taken as given directly*," just as he stipulated. He has now tried to dismiss this demonstration as well, on the grounds that it *did not assume given physical quantities* (specifically, given physical quantities that ensure that there is a positive physical surplus):

> It is perfectly permissible to assume an economy with a physical surplus and compare the conclusions of Sraffian theory and my interpretation of Marx's theory in that case (and also compare Kliman's "physicalist" rate of profit) (this is the procedure used by Dmitriev, et al). In fact, this seems like a very good way to compare these different theories, since the spotlight is on the absence of labor and its effect on the rate of profit. [Moseley 2016c]

Okay, so here's a "perfectly permissible" example of a fully-automated "economy with a physical surplus." It is an example in which no sector uses its own product as an input, just as Moseley demands. It is reproduced verbatim from Part 7 (Kliman 2016x, pp. 9–10):

Demonstration 2: Fully automated production with positive physical surpluses
Let's alter the example above by eliminating living labor and therefore eliminating real wages, while keeping everything else the same:

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

Since real wages equal zero in both sectors, $b_{21} = b_{22} = 0$, and thus

$$\mathbf{H} = \begin{bmatrix} 1 & -0.4(1+r) \\ -0.8(1+r) & 1 \end{bmatrix}$$

So that the determinant of $\mathbf{H}$ is

$$1 - (0.8)(0.4)(1+r)^2$$

In this case, the physicalist solution for the equilibrium rate of profit is the positive value of r that renders this determinant equal to 0. That value is 0.7678. So the physicalist rate of profit is $r = 76.78\%$.

Let us now consider Moseley's equilibrium rate of profit in this case. The V terms now equal zero, while the other terms remain unchanged: $C_{12} = 4\,p_1$, $C_{21} = 8\,p_2$, $P_1 = 10\,p_1$, and $P_2 = 10\,p_2$. Using the same procedures as above, we find that $p_1/p_2 = \sqrt{2}$ and that Moseley's "macro-monetary" rate of profit is $r = 76.78\%$. It is quantitatively identical to the physicalist rate of profit r.

Now, we also know that "in ([Moseley's] interpretation of) Marx's theory, *labor is also a producer of value*." So no new value is created when production is fully automated. Therefore, not only the V terms, but also the S terms, are equal to zero. And since $p_1/p_2 = \sqrt{2}$, we know that $p_1 = \sqrt{2}\,p_2 \approx 1.4142\,p_2$. Moseley's "macro-monetary" price-of-production table is therefore:

Sector	C_1	C_2	V	S	W	π	P	$r = \dfrac{\pi}{C_1 + C_2}$
1	0	$8\,p_2$	0	0	$8\,p_2$	$6.142\,p_2$	$14.142\,p_2$	76.78%
2	$5.657\,p_2$	0	0	0	$5.657\,p_2$	$4.343\,p_2$	$10\,p_2$	76.78%
total	$5.657\,p_2$	$8\,p_2$	0	0	$13.657\,p_2$	$10.485\,p_2$	$24.142\,p_2$	76.78%

But once again, this is all value-form and no value-substance, since Moseley's rate of profit is actually physically determined and therefore equal to the rate of profit of the (other) physicalist economists.

Moseley is, however, correct in one respect: in his interpretation, all new value is created by living labor, so that no new value is created in a fully automated economy. And therefore his equilibrium rate of profit "should" be zero. But this conflicts with the simultaneism, and therefore physicalism, that are also features of his interpretation. *What resolves this conflict, as we can see from the above table, is the emergence of an*

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additional source of profit, profit that arises despite the absence of any surplus labor pumped out of workers. As a result, under fully automated production, Moseley's interpretation implies that total profit exceeds total surplus-value and, consequently, total price exceeds total value.

After I published this demonstration in Part 7, Moseley [2016a] responded to it as follows:

> 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 [input-output] 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.

In other words, he rejected the demonstration on the grounds that the monetary quantities, and the monetary rate of profit computed on the basis of the monetary quantities, are derived from "known physical quantities." This is essentially the same thing Moseley said in order to dismiss the demonstration provided in Part 8 that I discussed above: the monetary quantities were not "*taken as given directly*."

But recall that, in order to dismiss a demonstration provided in Part 9, he said the opposite: "It is perfectly permissible to assume an economy with a physical surplus and compare the conclusions of Sraffian theory and my interpretation of Marx's theory in that case." *That's exactly what I did in Part 7, and exactly what I have just done again.* And I've found that, in this fully-automated economy with a physical surplus, the "Sraffian" (physicalist) rate of profit is 76.78% and Moseley's "macro-monetary" rate of profit is 76.78%.

Fred, please make up your mind!

Do you want me to assume physical quantities and derive your monetary quantities from them?

Or do you want me to assume monetary quantities and derive physical quantities from them?

Please do not remind me, once again, that surplus labor (SL) and therefore surplus-value (S) equal zero in your fully-automated economy. I know that, and I have reproduced that result *exactly* in the table of monetary quantities above. Yes, your "value rate of profit" $\dfrac{S}{C_1 + C_2}$ equals

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zero. But your "price rate of profit" does not and cannot. 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 $\pi = P_1 + P_2 - C_1 - C_2 =$

$10\,p_1 + 10\,p_2 - 4\,p_1 - 8\,p_2 = 6\,p_1 + 2\,p_2$. And your "price rate of profit" $\dfrac{\pi}{C_1 + C_2}$ must therefore be

positive as well.

So the discrepancy between your "value" and "price" rates of profit is not due to any failure on my part to recognize that surplus-value equals zero in your fully-automated economy. It is due instead, as I explained in the demonstration reproduced above, to "the emergence of an additional source of profit, profit that arises despite the absence of any surplus labor pumped out of workers." That additional source of profit is an inevitable consequence of simultaneous valuation. If per-unit input and output prices are forced to equal one another (and they aren't all zero), then profit must equal $6\,p_1 + 2\,p_2 > 0$ even though surplus-value equals zero.

Once you tell me whether you want me to assume physical quantities and derive your monetary quantities from them, or assume monetary quantities and derive physical quantities from them, I will be able to address the rest of your latest reply. If, however, you want the twain never to meet—if you want the physicalist rate of profit derived from physical quantities, without reference to the monetary side of the economy, and the monetary rate of profit derived from monetary quantities, without reference to the physical side of the economy—then please tell us how we can ensure that we're considering the *one and the same* economy.

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. 2016a. [Comment on "All Value-Form, No Value-Substance: Comments on Moseley's New Book, Part 7"]. August 8. Posted in "Comments" section at http://www.marxisthumanistinitiative.org/miscellaneous/all-value-form-no-value-substance-comments-on-moseleys-new-book-part-7.html.

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