

All Value-Form, No Value-Substance: Comments on Moseley's New Book, Part 12

Andrew Kliman, November 7, 2016 [corrected version; original version: Nov. 6]

A Tale of Two Economies

Last month, Fred Moseley (2016) attempted once again to distinguish his “macro-monetary” rate of profit from the rate of profit of Sraffians and other physicalists. His latest argument is preposterous. Although he doesn't say so openly, it boils down to the claim that his rate of profit is quantitatively different from (other) physicalists' rate of profit because he and they are computing the rates of profit *of two different economies!*

It goes without saying that two different economies will have two different rates of profit. The rate of profit in the U.S. isn't equal to the rate of profit in Germany. Even two Sraffians, employing the exact same theory and exact same methods, will compute one rate of profit for the U.S. and a different rate of profit for Germany, simply because they are working with two different sets of physical data.

So the question isn't now, nor has it ever been, whether Moseley's rate of profit for one economy is quantitatively identical to (other) physicalists' rate of profit for a different economy. The question is, and always has been, whether the two rates of profit—*computed for one and the same economy*—are quantitatively identical. The answer is “yes.” Moseley himself concedes this but, as I said, not openly.

Here is what he does say:

Kliman's so-called “physicalist” input-output coefficients are derived from my monetary prices of production These “physicalist” input-output coefficients (along with the assumption of equal rates of profit across industries and input prices = output prices) are *consistent with only one rate of profit* and that is my Marxian monetary rate of profit [W]hen Kliman proceeds to derive his “physicalist” rate of profit from these “physicalist” input-output coefficients, the *derived* “physicalist” rate of profit must be equal to the *assumed* Marxian monetary rate of profit. [Moseley 2016, p. 1, emphases in original]

What Moseley has admitted here is that (1) physical input-output coefficients can be derived from his macro-monetary data, (2) these physical input-output coefficients allow us to compute an associated physicalist rate of profit, and (3) *this physicalist rate of profit is quantitatively identical to Moseley's “monetary” rate of profit.*

So Moseley is a physicalist. He has now admitted it. His rate of profit is physically determined *in the same sense that every other physicalist's* rate of profit is physically determined: the only proximate determinants of his rate of profit are physical input-output (and real wage) coefficients. In other words, if we have these coefficients, that is all we need in order to correctly compute Moseley's rate of profit.

Table 1. Moseley vs. Other Physicalists: Different Economies, Different Rates of Profit

Moseley

Sector	Physical Quantities					Macro-Monetary Data								Rates of profit	
	A_1	A_2	B_2	L	X	C_1	C_2	V_2	S	W	π	P	value	price	
	1	0	21	3	7	30	0	21	3	4	28	6	30	14.8%	25.0%
2	18	0	6	14	30	18	0	6	8	32	6	30	33.3%	25.0%	
Total	18	21	9	12		18	21	9	12	60	12	60	25.0%	25.0%	

Physicalist rate of profit = 25.0%. Per-unit price of Good 1 = per-unit price of Good 2 = 1.

Other Physicalists

Sector	Physical Quantities					Macro-Monetary Data								Rates of profit	
	A_1	A_2	B_2	L	X	C_1	C_2	V_2	S	W	π	P	value	price	
	1	0	25	1	6	30	0	50	2	4	56	8	60	7.7%	15.4%
2	23	0	3	18	30	46	0	6	12	64	8	60	23.1%	15.4%	
Total	23	25	4	24		46	50	8	16	120	16	120	15.4%	15.4%	

Physicalist rate of profit = 15.4%. Per-unit price of Good 1 = per-unit price of Good 2 = 2.

Nonetheless, Moseley insists that his rate of profit is quantitatively different from other physicalists' rate of profit. “[B]oth my Marxian monetary rate of profit and Kliman’s ‘physicalist’ rate of profit [i.e., the physicalist rate of profit associated with the physical input-output and real wage coefficients underlying Moseley’s “macro-monetary” data] are *different* from the Sraffian rate of profit which is derived from actual input-output coefficients” (Moseley 2016, p. 1, emphasis in original).

So, according to Moseley, there are *two different* sets of input-output and real wage coefficients to consider. One of them, derived from his “macro-monetary” data, yields a physicalist rate of profit that is quantitatively identical to his “macro-monetary” rate of profit. But the other set, the “actual” input-output and real wage coefficients of the “actual” Sraffians, is *different*. And so it yields a quantitatively *different* rate of profit.

Table 1 illustrates what Moseley has in mind.¹ In the top section, the *derived* physicalist rate of profit, 25%, equals his “macro-monetary” rate. But that fact, he insists, doesn’t mean that his rate

¹ A_1 and A_2 are the quantities of Goods 1 and 2 used up as inputs. B_2 is the amount of Good 2 purchased by workers. L is the living labor performed. X is physical output.

C_1 and C_2 are constant capital spent on Goods 1 and 2. V_2 is variable capital, used to pay wages that workers spend on Good 2. S is surplus-value. $W = C_1 + C_2 + V_2 + S$ is the total value

of profit is quantitatively identical to that of the other physicalists. Their rate of profit, computed from *actual* physical input-output and real wage coefficients, equals 15.4%, not 25%.

That's quite a difference. And that difference is entirely due to the fact that the physical quantities in the top half of Table 1 are quite different from the physical quantities in the bottom half.

Of course, if we are dealing with two different sets of input-output and real wage coefficients, we are dealing with *two different economies*. One and the same economy cannot have two different sets of physical coefficients associated with it at any one time. The rates of profit in the top and bottom halves of Table 1 therefore differ simply because they pertain to two different economies.

Thus, although Moseley fails to declare openly he and other physicalists are dealing with two different economies, and that *this* is why their rates of profit differ, this preposterous conclusion is the unavoidable consequence of what he does say.

Yet if Moseley thinks that he has finally emigrated to an island of safety, where his “macro-monetary” interpretation can dwell in pristine isolation, far away from actual economies and their actual input-output coefficients, he should think again. Nothing compels other physicalists to restrict themselves to their “actual” physical coefficients and steer clear of Moseley’s. *Any scruffy ruffian can grab hold of the input-output and real-wage coefficients derived from Moseley’s “macro-monetary” data and use them to compute a physicalist rate of profit.* The ScruffyRuffian rate of profit will be quantitatively identical to Moseley’s “macro-monetary” rate of profit.²

Using Moseley’s “non-actual” physical quantities to compute the physicalist rate of profit r , the scruffy ruffian will write down:

$$(21 + 3)p_2(1 + r) = 30p_1$$

$$(18p_1 + 6p_2)(1 + r) = 30p_2$$

It follows from the top equation that $p_1 = 0.8p_2(1 + r)$. Plugging the right-hand side of this last equality into the second equation, he obtains:

of output. π is profit. $P = C_1 + C_2 + V_2 + \pi$ is the total price of output. The value and price rates of profit equal $S/(C_1 + C_2 + V_2)$ and $\pi/(C_1 + C_2 + V_2)$.

The table assumes that per-unit input and output prices are equal, that the rate of profit is equalized, that the MELT = 1, and that “other physicalists” per-unit prices are normalized such that the price of the net product (total P – total C_1 – total C_2) equals the MELT times total living labor. Given these assumptions, per-unit prices and the numbers given in the table are the only correct ones. Given the physical quantities, the physicalist rates of profit are the only correct ones.

² I refer here to cases in which the physicalist rate of profit can be computed. Moseley can have a generally applicable interpretation of Marx’s theory only if it applies to such cases.

$$(18 \cdot 0.8p_2[1+r] + 6p_2)(1+r) = 30p_2$$

Dividing through by p_2 , and then multiplying out, he finds:

$$14.4(1+r)^2 + 6(1+r) = 30$$

Subtracting 30 from both sides, and then using the quadratic formula, the scruffy ruffian obtains the positive solution for $1+r$, which is 1.25. Thus, his physicalist rate of profit is $r = 25\%$.

As long as they are dealing with *one and the same* economy, both variants of physicalism—Moseleyan and ScruffyRuffian—compute *one and the same* equalized rate of profit.

Petitio Principii Precipitates Plunge into Pit of Preposterousness

What has caused Moseley's argumentation to plunge into this pit of preposterousness? The apparent answer is that he begs the question (commits a *petitio principii*). He adheres dogmatically to the belief that his rate of profit is quantitative different from other physicalists' rate of profit, and then reasons as follows:

- (1) My rate of profit does not equal the physicalists' rate of profit.
- (2) The physical quantities derived from my monetary data can be used to compute a physically determined rate of profit that equals my rate of profit.

Ergo

- (3) This physically determined rate of profit does not equal the physicalists' rate of profit.

But

- (4) These two rates of profit would be equal if the physical quantities derived from my monetary data were the same as their physical quantities.

Ergo

- (5) The two sets of physical quantities are not the same.
- (6) If the two sets of physical quantities are not the same, then the physically determined rate of profit that equals my rate of profit does not equal the physicalists' rate of profit.

Ergo

- (1) My rate of profit does not equal the physicalists' rate of profit.

If we eliminate premise (1), because it clearly assumes what needs to be proven, none of the conclusions (3, 5, and 1) in this line of argument follow.

It is sometimes hard to detect the fact that Moseley employs “My rate of profit does not equal the physicalists’ rate of profit” dogmatically, as an unquestioned premise instead of a claim that he needs to prove. That’s because the dogmatic character of his reasoning is sometimes disguised by statements that may seem to be independent arguments that the two rates of profit are quantitatively different. Consider, for instance, a topic that he belabors at great length in his most recent reply, the effect of labor-saving technological change in luxury goods industries.

Labor-saving Technological Change in Luxury Goods Industries

Moseley appeals to this case—to support his “conclusion” that his rate of profit does not equal the physicalists’ rate of profit—as follows:

According to Sraffian theory, labor-saving technological change in luxury goods industries *has no effect* on the rate of profit.

According to my interpretation of Marx’s theory, on the other hand, technological change in luxury goods industries generally *does have an effect* on the rate of profit, because technological change in luxury goods industries will generally increase the composition of capital, but will have no effect on the rate of surplus-value. [Moseley 2016, p. 2, emphases in original]

This seems at first to be an independent argument that the two rates of profit are quantitatively different. But it isn’t. Note first, that Moseley provides *no evidence whatsoever* that the rate of surplus-value will be unaffected, or that technological change in luxury goods industries will alter his rate of profit. He apparently thinks that his mere assertion is good enough—he doesn’t have to get his hands dirty by specifying some physical quantities and then doing the calculations that (he hopes) will *show* that his rate of profit changes but his rate of surplus-value does not.

But in the absence of any accompanying evidence, Moseley’s assertions are not an independent argument for his “conclusion” that his rate of profit differs quantitatively from other physicalists’ rate of profit. To the contrary, his assertions *presuppose and are deduced* from that claim, which functions as a dogmatically-held premise, not as a conclusion. He “knows” that his rate of profit differs, and so he “knows” that it changes when theirs does not. And thus he “knows” that a rising rate of surplus-value cannot fully offset a rising composition of capital, since that would cause his rate of profit to remain unchanged, which he “knows” isn’t right.

In fact, what Moseley says about the issue is simply false. Labor-saving technological change in luxury industries has *no effect* on his economy-wide rate of profit. And it *does* alter the rate of surplus-value. The interactive Excel spreadsheet that accompanies this installment of my reply—Phun with Physicalism!—demonstrates these claims. Sector 3 is the luxury (non-basic) sector. You can alter its physical quantities however you wish,³ but the rate of profit remains 100%.

³ Don’t think you can be a smart-ass and prove me wrong by setting the physical output of Sector 3 equal to 0. If it is 0, there is no longer a luxury-producing sector in the example, so you haven’t disproved anything.

That's because Moseley's rate of profit, just like every other physicalist's rate of profit, is determined by the physical quantities of the basic (non-luxury) sectors alone.

Moseley might wish to object that I am not permitted to test his assertions by starting with physical quantities and then deriving his "macro-monetary" magnitudes. According to his interpretation of Marx, he repeatedly asserts, the "macro-monetary" magnitudes are givens, data; they are not derived from physical quantities.

Unfortunately, he *cannot* lodge such an objection in this case. He is the one who has stipulated that the physical quantities change—there is "labor-saving technological change in luxury goods industries"—and he has asserted that if the technological change alters the physical quantities of the luxury goods sector(s) alone, then his rate of profit will change.⁴ There is only one way to test whether this assertion is true or false. One must *begin* with a change in the physical quantities of the luxury goods sector(s), and *then* derive Moseley's associated "macro-monetary" rate of profit from these changed physical quantities.

I conclude with a proof that Moseley's rate of profit must remain 100% if there is technological change in the luxury sector alone. The proof shows that, if there were any change in the rate of profit, then one or more physical quantities of the other sectors would have to change (given simultaneous valuation and an equalized rate of profit).

It follows from the definition of the rate of profit and the top two rows of physical quantities in the Phun with Physicalism! spreadsheet that any simultaneously-determined and uniform rate of profit must satisfy

$$(24 + 6)p_2(1 + r) = 60p_1$$

$$(18p_1 + 12p_2)(1 + r) = 60p_2$$

Now imagine that r , the uniform rate of profit, is less than 100%. It then follows from the top equation that $\frac{60p_1}{(24 + 6)p_2} - 1 < 1$, which in turn implies that $p_1 < p_2$. But it follows from the

bottom equation that $\frac{60p_2}{18p_1 + 12p_2} - 1 < 1$, which in turn implies that $p_2 < p_1$. So the rate of profit cannot be less than 100%—*given* these physical quantities in the basic sectors (and given simultaneous valuation and a uniform rate of profit).

Now imagine that the uniform rate of profit is greater than 100%. Using the same procedures as those used above, we again find that p_2 would have to be both greater than and less than p_1 . So

⁴ Note also that Moseley is comparing the implications of his interpretation to the implications of Sraffianism. The comparison is only valid if he and they mean the same thing by "technological change in luxury goods industries." And what they mean is that the physical quantities change.

the rate of profit cannot be greater than 100%—*given* these physical quantities in the basic sectors (and given simultaneous valuation and a uniform rate of profit).

Thus, unless Moseley gives up simultaneism—**yes, go for it, Fred!**—or the theoretical possibility of an equalized rate of profit, he can produce a change in the rate of profit only by changing one or more physical quantities of the basic sectors. If there is technological change in the luxury sector alone, his rate of profit must remain 100%.

Reference

Moseley, Fred. 2016. “Reply to Kliman—Update.” Oct. 3. Available at https://www.academia.edu/28908907/Reply_to_Kliman_Update.