Replies to Kliman

Fred Moseley*, 2016

Reply to Kliman Part 1

This is a reply to the first of Andrew Kliman's two posts on my recent book *Money and Totality: A Macro-Monetary Interpretation of Marx's Logic in* Capital *and the End of the 'Transformation Problem'*.

I will pass over Kliman's insults to me and other Marxian economists in the opening paragraphs of his post and try to keep the discussion on a higher plane.

In Kliman's post, he attempts to prove that my interpretation of Marx's theory of the rate of profit "arrives at physicalist results" with a numerical example and some algebra. Kliman's model is a very simple two-sector model which assumes *no fixed capital* and *equal turnover times* in the two sectors. Therefore, whether or not Kliman's argument is valid on the basis of his simple model – to be examined below –it does not apply to my interpretation of Marx's theory which assumes fixed capital and unequal turnover times. But let's take a look at Kliman's simple model.

The example consists of two periods – before and after technological change (see Kliman's tables on p. 3 of his post). The "technological change" that is assumed in the second period takes place primarily in Sector 2. C in Sector 2 is the same (10) in both periods, but V and also S are reduced from 10 to 2 and thus value (W) is reduced from 22 to 6, and the rate of profit for the economy as a whole is reduced from 50% to 25%.

In Sector 1, C, V, S, and W all remain the same, but profit is reduced from 6 to 3 (as a result of the reduction in the general rate of profit) and thus price is reduced from 18 to 15. In a later narrative, Kliman states that the quantity of output in Sector 1 is also reduced from 18 to 15 (hence it appears that the unit price is assumed to be =1 in both periods). But this is a bizarre result – the quantity of output in Sector 1declines even though both the inputs of C and V remain the same. What kind of "technological change" is this? I wish Kliman would explain why output in Sector 1 declines.

Along with this numerical example, Kliman presents some algebra that he claims proves that my interpretation of Marx's theory of the rate of profit is "physicalist" (i.e. depends only on physical quantities). This argument begins with the equation under the tables on p. 3 of his post, which Kliman argues holds

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true for this numerical example and also holds true in general. However, Kliman does not explain how this complicated equation is derived and I wish he would explain this derivation in detail.

In any case, Kliman argues further that, because my interpretation assumes that input prices are equal to output prices, various substitutions can be made into his equation (1) that convert the quantities of money capital in my interpretation to physical input-output coefficients and relative price ratios, and the relative price ratios cancel out, so that equation (1) is converted into equation (1") (toward the bottom of p. 4 of his post), according to which the rate of profit depends solely on the physical input coefficients a and b.
However, these substitutions are possible *only* because there is *only one capital good* (Sector 1) and *only one wage good* (Sector 2). For example, if there were two capital goods, then:

$$C_1 / P_1 = (p_1 a_{11} X_1 + p_2 a_{21} X_1) \; / \; p_1 X_1 \; = \; a_{11} + (p_2 / p_1) a_{21}$$

which does not reduce to a_{11}. In Kliman's equation for C_1 / P_1, p_1 cancels out because the output and the one capital good are the *same commodity*. But with two (or more) capital goods, this is no longer the case and p_2 / p_1 does not cancel out. And similar results for C_2 / P_2, C_3 / P_3,V_1 / P_1, V_2 / P_2, V_3 / P_3. Many price ratios would remain and would not cancel out. And of course there would be many more price ratios with more than two capital goods (or wage goods). Therefore, equation (1") cannot be derived from equation (1) if there are more than one capital goods and wage goods, which of course there are (*many* more) in the actual capitalist economy.

Indeed, I don't think even equation (1) could be derived if there are more than 1 capital goods and/or wage goods. Therefore, Kliman's argument that my interpretation of Marx's theory of the rate of profit is "physicalist" is *not valid*, even in his simple model with no fixed capital and equal turnover times.

Reply to Kliman Part 2

This is a reply to Kliman's second post on my recent book *Money and Totality*. This reply focuses on whether Marx's concept of prices of production are *long-run center of gravity prices* around which market prices fluctuate over multiple periods of time and which change only if productivity or the real wage changes (my interpretation) *or* are *short-run prices* that continue to change over multiple periods even though productivity and the real wage remain constant and thus cannot function as long-run center of gravity prices (TSSI)

I argued in my book that Marx's concept of price of production are long-run center-of-gravity prices, around which actual market prices fluctuate ("gravitate") from period to period. These long run center of gravity prices are in the classical tradition of Smith and Ricardo, which have three key characteristics: (1) they equalize the rate of profit across industries; (2) they are "centers of gravity" around which actual market prices fluctuate over extended periods of time; and (3) they change if and only if either the productivity of labor changes (due to changes in the technology of production) or (secondarily) if the real wage changes.

I argued that the TSSI prices of production have the first characteristic, but do not have the other two key characteristics and thus is a misinterpretation of Marx's concept of prices of production. According to the TSSI, the transformation of values into prices of production in as *ongoing process* that takes place over *multiple periods*, even though productivity and the real wage remains the same in all these periods. And since TSSI prices of production change every period, they cannot be "centers of gravity" around which market prices fluctuate over longer periods of time.

My book presented substantial textual evidence to support my interpretation of both of these other two characteristic of prices of production. For the characteristic of long-run center of gravity prices, Marx repeated a number of times in *Theories of Surplus-Value* and in Volume 3 of *Capital* and in letters to Engels that is prices of production were essentially the same as Smith's and Ricardo's "natural prices" which were long-run center of gravity prices around which market prices fluctuate (pp. 334-37).

For the characteristic of "change only if …", Marx argued in a number of passages, especially in Part 2 of Volume 3, that since prices of production are determined by the equation:

$$PP_i = (C_i + V_i) + R(C_i + V_i)$$

changes in prices of production could be due to a change in C_i or V_i or R, or some combination of these. Marx argued further in these passages (reviewed in my book, pp. 289-96) that changes in C_i or V_i are caused by changes in the productivity of labor, either in final goods industries, or in industries that produce the means of production for these final goods industries. A change of V_i could also be due to a change in the real wage. Marx also argued that a change in R is also caused either by a change in the productivity of labor somewhere in the economy which changes either the composition of capital or the rate of surplus-value. A change in the rate of surplus-value could also be due to a change in the real wage. These discussions of the causes of changes in prices of production seem to imply the conclusion that, if the productivity of labor and the real wage remain constant, then *prices of production would also remain constant*.

Marx does not mention in these passages any other possible cause of changes in prices of production, besides changes in the productivity of labor and/or the real wage. He certainly does not ever mention that C_i and V_i and prices of production might continue to change in successive periods as a result of the ongoing equalization of profit rates and the transformation of values into prices of production, even though productivity and the real wage remain constant (as in the TSSI).

Kliman doesn't say anything in his post about the second characteristic of prices of production as long-run center of gravity prices, and thus does not dispute my argument and textual evidence on this important point. Instead, he focuses on the third characteristic of "changes only if …". He argues that, since I define prices of production as *gross annual industry revenue* (not unit prices), another possible cause of changes of prices of production defined in this way that was not mentioned in these passages by Marx is simply an *increase in the scale of production*, since that would increase gross annual industry revenue even though productivity and the real wage remain constant. And he infers from this very slim basis that yet another possible cause of changes in the prices of production not mentioned by Marx is the ongoing multi-period transformation of values into prices of production, even though productivity and the real wage remain constant (as in the TSSI).

Kliman is correct that my definition of prices of production as "gross annual industry revenue" implies that an increase in the scale of production would increase prices of production defined in this way, even though productivity and the real wage remain constant. However, I will argue that this fact does not bolster Kliman's case that yet another cause of changes of prices of production is the ongoing transformation of values into prices of production.

I continue to think that "gross annual industry revenue" is the correct definition of prices of production in a general sense, but I now realize more clearly that in Part 2 of Volume 3 Marx analyzed prices of production in a *restricted sense*, as prices of production *per capital of 100*. All the industries in Marx's tables and illustrations in Part 2 have a total capital of 100, with unequal compositions of capital (ratios of constant capital to variable capital). Marx did this in order to emphasize the effect of unequal compositions of capital across industries on the value and surplus-value produced in each industry (Volume 3, pp. 261-62). Therefore, it seems reasonable to assume that in the passages in Part 2 that I reviewed in my book and that discuss the two causes of changes in prices of production, Marx had in mind this restricted sense of prices of production *per capital of 100*. This restricted definition of prices of production rules out an increase in the scale of production as a cause of changes in restricted prices of production. In this context, it made sense for Marx to state repeatedly that there

are only two causes of changes in prices of production – changes in productivity and changes in the real wage – and not to mention an increase in the scale of production (which is not theoretically interesting or important anyway) as a cause of changes in these restricted prices of production.

Kliman said in concluding his post:

> Hence, if the TSSI misinterprets Marx because it implies that prices of production can change even when technology and the real wage do not, then Moseley misinterprets Marx in the same way.

I don't think I misinterpreted Marx's prices of production fundamentally, but I agree that I did not fully appreciate the significance of Marx's restricted sense of prices of production (*per capital of 100*) in Part 2 of Volume 3 and the connection between this restricted sense of prices of production and Marx's discussions of the two causes of changes in prices of production in Part 2. And I will gladly acknowledge that in increase in the scale of production is another cause of a change in prices of production in the general sense of gross annual industry revenue.

However, this additional cause of changes in prices of production in the general sense does not contradict Marx's discussions of only two causes in his restricted sense. And it provides no basis for inferring that *another cause* of changes in prices of production (general or restricted) is the ongoing transformation of values into prices of production, as in the TSSI. There is no hint whatsoever in all of Marx's writings on the transformation and prices of production that the ongoing transformation is another possible cause of changes in prices of production. No textual evidence is presented in this post or in previous writings to support the TSS interpretation of prices of production as short-run prices that continue to change over multiple periods (even though productivity and the real wage remain constant) and thus cannot function as "centers of gravity" of market prices.

The most reasonable conclusion seems to be that the TSS interpretation of short-run prices of production is a misinterpretation of Marx's long-run prices of production.