COMMENTS ON SCOTT CARTER

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ABSTRACT

Sraffian's concept or metaphor of a "pool profits" is theoretically point-less and empirically irrelevant. The appropriate calculation is the variation of the equilibrium price vector along the factor price frontier.

It is not clear to me how I can make a constructive contribution to this discussion. I am not a Sraffian. I am not particularly an anti-Sraffian either, just a non-Sraffian. I read The Book when it was first published in 1960. My main reactions, as far as I can remember, included (a) some astonishment that Sraffa has managed to learn so much about Simple Leontief Models with such primitive tools (even with help from Besicovich), and (b) the realization that modern work on linear models by Gale, Samuelson, von Neumann, McKenzie, and many others, including even yours truly, had been able to go considerably further, especially with Generalized Leontief Models (that allow for choice of technique within each industry). To which

I would add (c) that Sraffa's work did much to convert the two good plus labor circulating capital model into a neat heuristic and teaching device for capital theory, and (d) that all the stuff about the Standard Commodity and measures of Value was at best an antiquarian interest. I remember that I had a couple of conversations with Sraffa at Trinity College, Cambridge in 1963−1964; he was charming in a remote way, but as little interested in my ideas as I was in his. I would never imagine that The Book would become the basis of a whole literature, and that Sraffa's stray scraps of paper would be pored over and fought over. As you can see, I clearly lacked imagination.

I will illustrate some of my lack of imagination − or simple incomprehension − as I discuss Scott Carter's highly interesting and meticulous paper. The most direct way to do this is to remind you how a run-of-the-mill late 20th century economist would approach the particular propositions that Professor Carter appears to be talking about. (I say "appears to be" not because he is unclear, but only because I have learned that I sometimes misconceive what the question is, or at least what the subtext of the question is.) So we have a simple Leontief model, a fixed proportions constant returns-to-scale, no joint-production technology, with circulating capital and one primary factor, labor. (Sraffa seems to argue as if he is only concerned with a snapshot of interindustry commodity flows in an economy, with no technological assumptions of any kind, but that cannot be taken seriously. Without the standard technological assumptions there is no point to the various balance conditions he introduces. Sraffa's remark that one could allow a man from the moon to set prices after production has taken place just misses the point. Why would a man from the moon choose just those prices that eliminate all pure profit? The run-of-the-mill answer is that otherwise, under constant returns-to-scale, there can be no equilibrium.) So we have the prices of n goods, homogeneous labor, and a uniform rate of interest on the capital tied up for one period in production. The assumption of zero pure profit gives n equations in n commodity prices, the wage rate and the interest rate. The choice of a numeraire makes $n+1$ equations, leaving one degree of freedom. That allows for the famous factor-price frontier or wage−profit curve connecting the wage (in numeraire) and the rate of interest/profit. Note that particular endogenous magnitudes and even some ratios of magnitudes are not independent of the choice of numeraire, nor should we expect them to be. The wage (or any other price) in terms of gloves is not at all the same thing as a wage or price in terms of cell phones or in terms of some basket of goods. The particular choice of a numeraire, however, has nothing to do with anything "real" that happens; it is an algebraic convenience. Where the last $n+2$nd

equation comes from is a whole different conversation into which Carter's paper does not enter.

Now something changes. In the paper it seems to be a quantity which is something between a loose measure of labor intensity and the share of wages in total income, but not quite that either. This seems unnecessarily complicated: why would *that* number change exogenously? It is a complex artifact. It seems clearer just to compare the configurations at two different points on the factor-price frontier. No doubt the wage share will differ at the two comparison points, as will the whole configuration of prices. In principle, we could calculate by how much the wage share would change. But the basic question is: what happens to the prices of produced commodities (in numeraire)? Some will be higher and some will be lower, and this outcome can be calculated. (In principle we could calculate the vector functions $p(r)$ or $P(w)$.) The intuition is certainly that, if the wage has increased (and the rate of interest has decreased), it is the more labor-intensive goods that rise in price and the less-labor intensive gods that will fall in price, but the detailed algebra will involve all $n(n+1)$ technical coefficients and can be very complicated and even non-obvious. In this simple model, that is what "surplus and deficit industries" are all about.

You will have noticed that this description of the economic problem under discussion makes no mention of Value or of the zero-profit point on the factor-price frontier, or of exploitation, or of any of that baggage. I do not object to talking about those things, or about "the right of the worker to the whole product of his or her labor," but that is a different topic, not particularly relevant to price determination or surplus and deficit industries. To compare small things to great, there is a story that Laplace once outlined to Napoleon Bonaparte his description of the universe in terms of positions and velocities of particles, and the way that initial conditions determined the future. Bonaparte asked: "And what role does God play in your system?" To which Laplace is supposed to have replied: "Sir, I have no need of that hypothesis." Apocryphal or not, the same is true of Sraffa and Carter. In fact I was amazed to read − it may have been in Professor Bellofiore's paper − that one of Sraffa's scraps of paper labels these issues as part of the "metaphysics" of Ricardo, or Marx, or Marshall, or Sraffa. At a later time, Sraffa was thoroughly embedded in the Cambridge of Russell, Wittgenstein, and Moore. To call something "metaphysics" in that milieu was certainly not to pay it a compliment. But that is an aside.

What about the "pool of profits?" As far as I can see, there is no pool of profits. I suppose that Sraffa deserves the credit Professor Carter gives him for digging himself out of this hole that was dug for him in the first place

by Marx. On the other hand, he was not very clever to have fallen into it. I am not sure about this, but I think that the whole mess arises because Marx wants to start with the assumption of a uniform rate of surplus value, and then has the embarrassing need to convert into a uniform rate of profit. The best route would be simply to admit that the uniform rate of surplus value is a mistake. There is no mechanism in a capitalist market economy that tends to eliminate discrepancies between industries in the rate of surplus value. There is of course such a mechanism to eliminate discrepancies in the rate of profit; it is called the capital market. Sraffa must at some point have realized this.

I find it hard to focus on the path from the pool of profits to surplus and deficit industries because it seems to me to be a non-issue, the use of one superfluous concept to expunge another superfluous concept. But I will try briefly. Carter quotes one of Sraffa's fragments. ("When general wages fall, what the workers in any one industry lose does not go directly to the owners of the capital that employs them; it goes [later insert in pencil: "as it were"] into a pool, from which it is redistributed to the capitalists, not in proportion to their wage bill, but in proportion to their capital; thus the capitalists in one industry may get more, or less, than the workers they employ have lost in wages.") Note the "as it were." A plodding late 20th century economist will say: No, when wages fall, what workers in any industry lose goes, in the short run, precisely to the owners of the capital that employs them. But that situation is not an equilibrium, because it leads to unequal rates of profit on capital. If and when a new equilibrium price vector and rate of profit are established, corresponding to the new wage rate, a new and different distribution of profits across industries will accompany it, even if techniques of production are fixed. It is precisely defined in terms of the new r and p. I do not think that anything is gained by talk about surplus and deficit industries, other than to obscure the problem of finding a new equilibrium. No other "balance" is being redressed.

The heavy weather that Professor Carter documents in Sraffa's successive notes to himself seems to reflect almost entirely the difficulty of grappling with the difference between $p(w1)$ and $p(w2)$ (along with $r(w1)$ and $r(w2)$) by numerical examples and verbal categories instead of linear algebra. It is striking that the uniform rate of surplus value makes no appearance in these notes. The problem is just that the elements of the relevant Leontief inverse change in a complicated way when r and w change. The wonder is, as I have already said, that Sraffa got as far as he did.

I suggested in the first full paragraph of page 63 that the main or only issue of economics here is the behavior of $p(r)$. It appears that Sraffians

prefer to think about $p(r)-p(0)$, which I suppose is harmless enough by itself. They think of the deviations of $p(r)$ from $p(0)$ as "distortions" in $p(r)$. It probably makes more sense to think of $p(0)$ as the distorted vector, but it has no reality. Capital is scarce to the economy as a whole, and concepts like "abstinence" and "waiting" make some sense at that level. I have sympathy with the cynical view that talk about the abstinence and waiting performed by individual rich capitalists seems excessively solicitous. The important thing is to distinguish carefully between economics and the metaphysics, or what Duncan Foley calls the theology. This is difficult, of course.

Suppose that the workers own the stocks of perishable goods that make up circulating capital. It is then a little less satisfying to talk of exploitation, though one could train oneself to think of each person as having a dual personality, with the capitalist personality exploiting the worker personality. But that lacks charm. Suppose instead that circulating capital takes the form of one-period investment to build a valuable skill that obsolesces at the end of the period and has to be created all over again for next time. Workers with elaborate skills earn higher wages than unskilled workers. Are they exploiting the unskilled who haven't made the investment? The intensive-care nurse will be pissed off if you tell her that she is not "living labor."

Of course that is not the way a modern capitalist economy looks, let alone a 19th century capitalist economy. But that is my point. If you want to say that workers are exploited by the capitalist class in actual capitalism, be my guest. My own guess is that some of them are and some of them aren't. I don't think that setting $r = 0$ is the way to think about this. That just screws up price theory, which is all about $p(r)$.