

Measuring variable capital and turnover for the rate of profit

It has been generally accepted by Marxian authors (including this reviewer in the past) that in order to obtain an accurate measure of variable capital advanced in working out the overall (Marxian) rate of profit in an economy, the average number of turnovers, or the turnover time, must be calculated and the annual value of employee compensation (or wages) must be deflated accordingly.

This is usually based on the note by Engels on the turnover of capital inserted by him into Marx's manuscript in *Capital III* Chapter 4, The Effect of the Turnover on the Rate of Profit. As the authors say, "*Engels shows how the quantity of surplus-value is increased by reductions in the period of turnover (i.e. the time of production and circulation) and how capital was set free or tied up by changes in this turnover rate..... Engels explains how changes in the turnover of the circuit of capital influence the rate of profit, as profit rate "only expresses the relation of the produced quantity of surplus-value to the total capital employed in its production, it is evident that any such reduction (in turnover time) increases the rate of profit."*

Thus the authors conclude, like many others, that "*the ability to estimate turnover time enables the development of a more accurate rate of profit by converting annual wages into variable capital.*" But is this correct? Engels' note refers to the turnover of capital for an individual capitalist, but the overall rate of profit refers to the aggregate of all capitals, or in effect to one 'whole economy' capital. A change in the turnover time affects the distribution of the total surplus value but leaves that total unchanged. And it is the total that we need to compute the average rate of profit.

Suppose two capitals. Initially, both invest the same value and realize the same surplus value

A $1000c+1000v+500s$

B $1000c+1000v+500s$

Each realizes a rate of profit of $500s/2000 = 25\%$ and each produces 200 commodities.

Suppose now B innovates and invests the same capital, but in two turnovers (B1 and B2). The total output of B's two turnovers is 250.

A: $1000c+1000v+500s$; output 200

B1 $500c+500v+250s$; output 125

B2 $500c+500v+250s$; output 125

So B1 plus B2 invest 500S and B's total output is 250. So the unit price is $5000/450 = 11.1111$.

A realizes $200 \times 11.1 = 2222.2$ and thus has a rate of profit of $(2222.2-2000)/2000 = 11.1\%$, less than the previous rate of profit of 25%.

B realizes $250 \times 11.1 = 2777.8$ and thus has a rate of profit of $(2777.8 - 2000) / 2000 = 38.9\%$, greater than the previous rate of profit of 25%.

The above explains the motive for the innovator to increase the number of turnovers: it increases the innovator's (B) rate of profit through redistribution. But what counts for measuring the overall rate of profit is the total capital invested and the total profits irrespective of the number of turnovers and of the redistribution of those profits. If both A and B had invested in one turnover each, the statistics would have shown 1000s and $4000(c+v)$ and a rate of profit of 25%. If A had invested in one turnover and B in two, the statistics would have shown the same figures.

And, in the opinion of the reviewer, this is how Marx sees the question of the turnover of variable capital and the rate of profit. For Marx, labour is always and at the same time both concrete and abstract. Therefore, each commodity is a given use value that contains a given value. Commodity A contains the value (has required the abstract labour) needed to produce commodity A and not that needed to produce commodity B (even if the two values might be of the same quantity and thus represented by the same quantity of money).

And commodity A contains the value needed to produce it and not the value needed to reproduce it at some future time. It follows that if a capital buys a certain use value (bolts and nuts) at time t_1 and different bolts and nuts at time t_2 , they represent different values, different abstract labour, even if of the same quantity. To quote Marx: "The labour which was active yesterday is not the same that is active today" (1967, p. 309).

The labour power set in motion today by some labourers is not the same labour power that has been set in motion yesterday (even if, perhaps, by the same labourers). The labour power set in motion yesterday has consumed yesterday's means of consumption and has been used yesterday. So it cannot be the same labour power purchased today, consuming today's means of consumption and being used today. The money invested today represents a different labour power and thus is a different variable capital than yesterday's variable capital. To hold the contrary view, that *the money spent today represents yesterday's labour power* and thus is yesterday's variable capital, means implicitly to cancel time, to accept a simultaneist view contrary to Marx's temporalist view.

Marx presents an example: "a capital of 5,000, and not of 500, is expended successively in wages during the ten periods of turnover of 5 weeks each (op. cit. p. 309) ... The variable capital of 500 advanced during the second period of turnover *is not the identical capital* of 500 that had been advanced during the first period of turnover. That has been consumed, spent in wages but it is *replaced* [emphasis by Marx] by new variable capital of 500, which was produced in the first period of turnover in the form of commodities, and reconverted into money (pp. 309-310)... Therefore what is accomplished by the ten-fold turnover of the advanced variable capital of 500 is not that *this capital can be productively consumed ten times* ... Rather, ten times 500 of variable capital is employed in the 50 weeks and the capital of 500 ... must be replaced at the end of the 5 weeks by a newly produced capital of 500 (p.310)... its *value* is replaced by new value, hence renewed, but the *form* of its value (in this

case the absolute form of value, its money-form) is not renewed" (p.311, emphasis by Marx). So, in the opinion of this reviewer, for Marx, a value of 5,000 and not of 500 (as argued by the authors of this paper and others) should enter the denominator of the rate of profit.

The reviewer considers that the US official statistics are consonant with Marx's view. For variable capital, Chapter 10 of the BEA NIPA Handbook says: "Compensation measures the *total* income—both wages and salaries and supplements to wages and salaries—earned by employees in return for contributing to production *during an accounting period*". So, in estimating the overall rate of profit for the US, the figures to be considered for circulating capital should be the yearly total figures, as reported by the BEA statistics. Dividing by the number of turnovers, even if we knew the number of turnovers, would be mistaken.