WHY MARXISTS CANNOT IGNORE CIRCULATING CAPITAL!

In the 1970s Marxists first started extracting what they called the rate of profit from the System of National Accounts (SNA). In reality this was the rate of return, or s/c, an equation not found in Das Kapital. They were reduced to using s/c by an acceptance that it was impossible to distil turnover from the SNA. Thus no attempt was made to obtain variable capital nor circulating capital. They adapted to sitting on a two legged stool, having swept the missing third leg under the carpet.

Marx provided us with categories, categories which he understood were necessary to understand the physiognomy of the capitalist mode of production. One of the essential elements was turnover. Without turnover it is impossible to calculate variable capital which is the **v** in s/v, c/v and s(c+v) i.e. the rate of surplus value, the composition of capital and above all the rate of profit. Furthermore without turnover it is impossible to understand what he called the industrial cycle now commonly called the business cycle.

Once again, on Michael Robert's blog, I have been criticized for emphasizing that the rate of profit should not be confused with the rate of return. It has been pointed out that the rate of return based on fixed capital and the rate of profit based on both fixed and circulating capital show similar trends. Superficially they do, but to be a Marxist one must not be content with the superficial. These trends are similar only because they share the same numerator, s or profit. But their denominators are different, and this differences as we shall see in this article is crucial to understanding a number of phenomena including the nature of the industrial cycle. In other words, the essence is in the variations not the similarities.

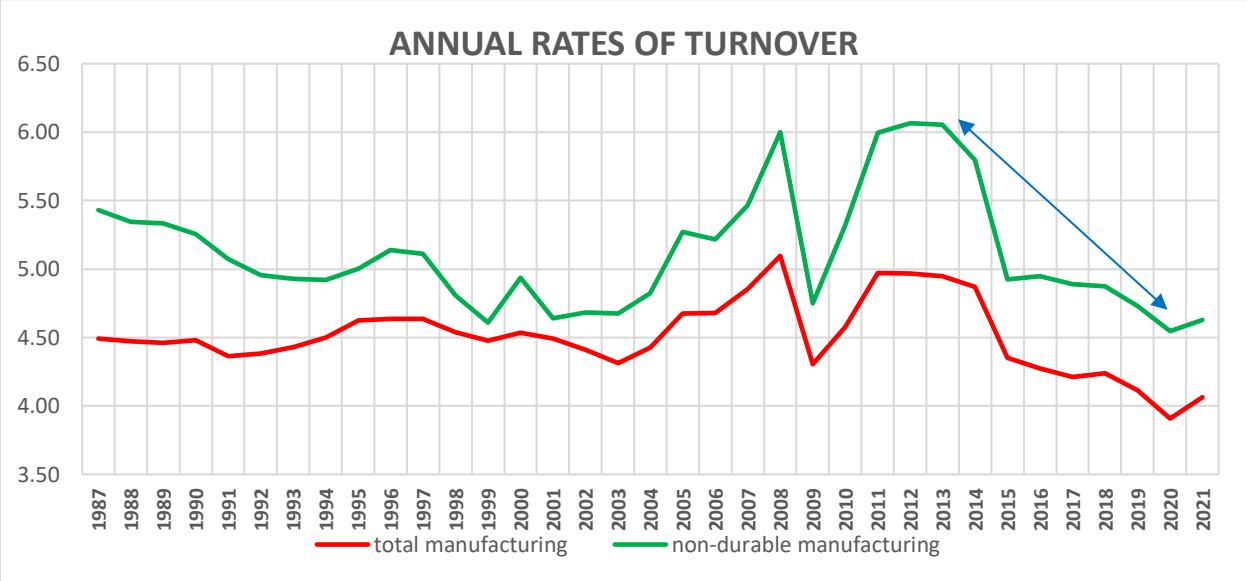
I will go further. In every scientific endeavor practitioners use the most accurate tool as their disposal. If a doctor is offered two thermometers, one accurate to a single degree, the other to two degrees, no doubt they will reach for the more accurate thermometer despite the fact that both thermometers could reveal rising or falling temperatures depending on their degree of movement. The doctor will do so because the more accurate thermometer will reveal more about the patient than will the less accurate, by for example revealing more quickly a change in temperature.

No Marxist can foreswear using a more accurate tool without ceasing to be a Marxist. In this article we will see how much more detail is found by using the more accurate rate of profit, as well as the insights turnover provides. It is my firm conviction that once the reader has observed the graphs and the detail they provide, they will be in agreement with me. (All data, all references, all equations are contained in the attached spreadsheet which should also be studied. It have used the period 1987 to 2021 not out of choice but because this is the longest continuous period provided by the BEA in the section GDP-by-Industry, KLEMS, Composition of Industry. I would have preferred going back further to at least 1972 but that was impossible.)

The first graph will be the basis of this article – Annual Rates of Turnover. I have chosen two sectors throughout, manufacturing and within manufacturing the non-durable part. I chose non-durable manufacturing for one reason, its rate of turnover is higher than durable, thus by its volatility more is revealed. In comparing non-durable to total manufacturing it is obvious that durable manufacturing would have much lower rates of turnover. The reason is obvious; it takes much longer to produce a jet aircraft than it does to produce a pot of yoghurt, thus turnovers are slower in the durable sector because on average the production period is more extensive.

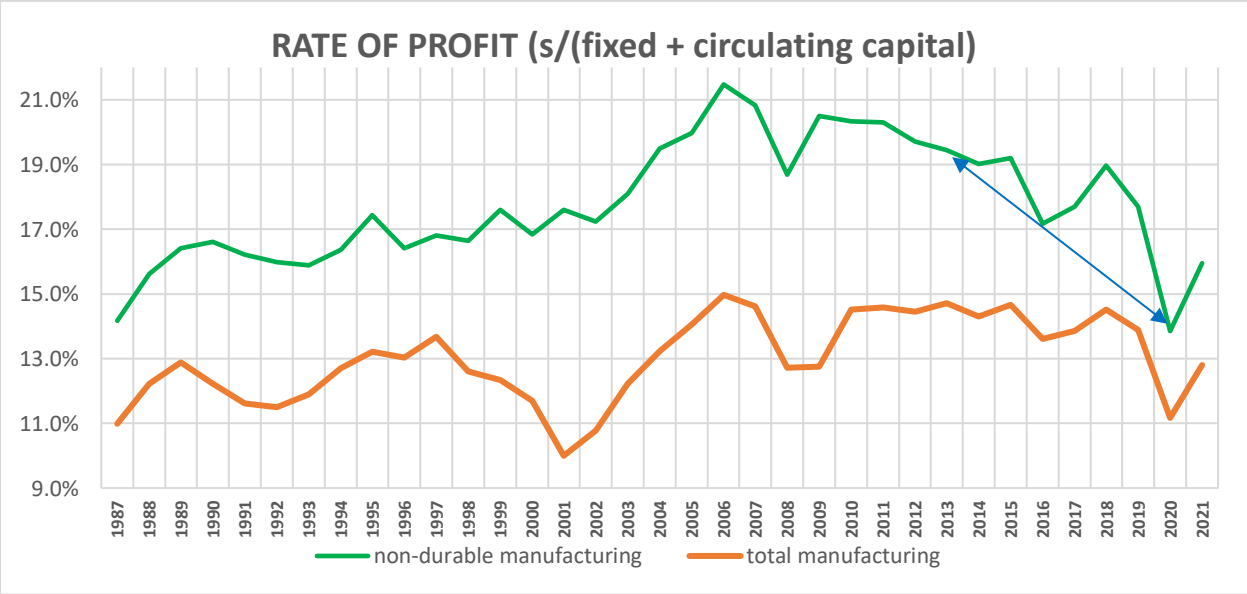
In observing the rate of turnover, the contours of globalisation are clearly seen this century. This is due to the expansion of global supply chains at this time. What the turnover formula is picking up is the growth in intermediate products provided by these just-in-time chains. It is the ratio of intermediate sales to final sales that dictates the structure of an industry. Take the car industry. The production/assembly time of cars by motor car companies (final sales) at this time fell by many days primarily because these car companies became more of an assembler than a producer because much of what they had produced in-house before, they now bought in. Thus taking into account the growth in the chain of production and therefore more producers, the production time per producer shrank and this is reflected in their turnover.

Graph 1.



We also note how globalisation began to unravel after 2014 as China ascended from being a sub-contractor to being a producer for its own account.

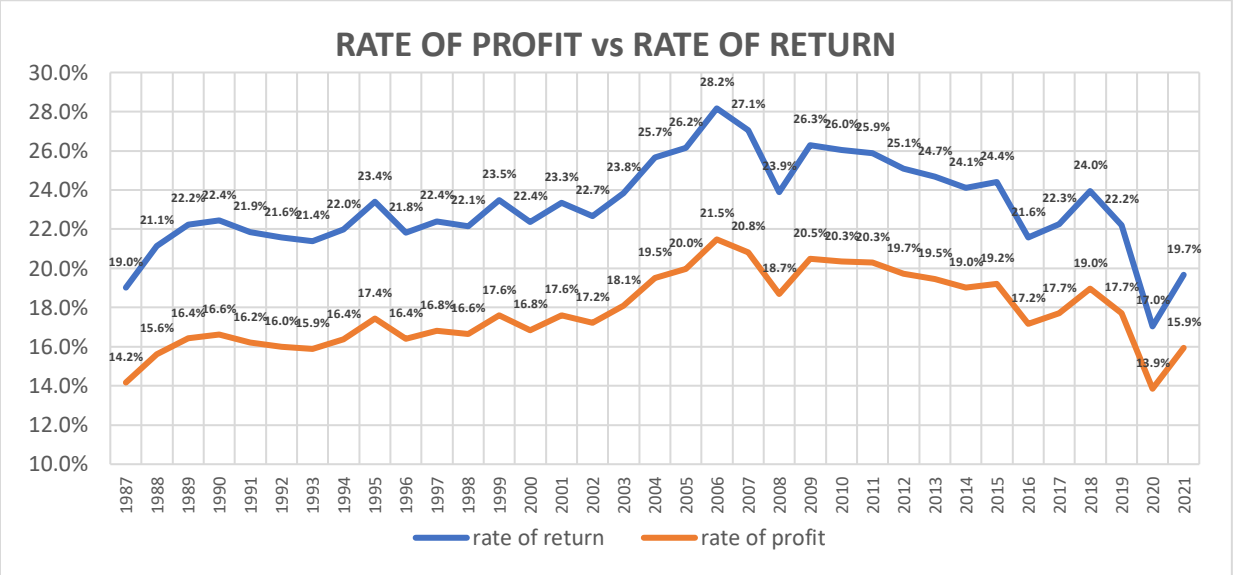
Graph 2.



The rate of profit above has been derived using the net surplus obtained through deducting compensation from net value added (gross value added minus depreciation). The net surplus is not my preferred choice when investigating the rate of profit. I prefer to use pre-tax unadjusted profits. Had I used pre-tax profits the fall in the rate of profit post-2014 would have been much more severe, in the order of 40%. But we shall stick with this surplus because it is part of one spreadsheet, and it adequately shows the symmetry between an acceleration in the rate of turnover and that of profit and vice versa. Where the fall in turnover has been greatest post 2014, non-durable, so too has the fall in the rate of profit. (See blue arrow above.)

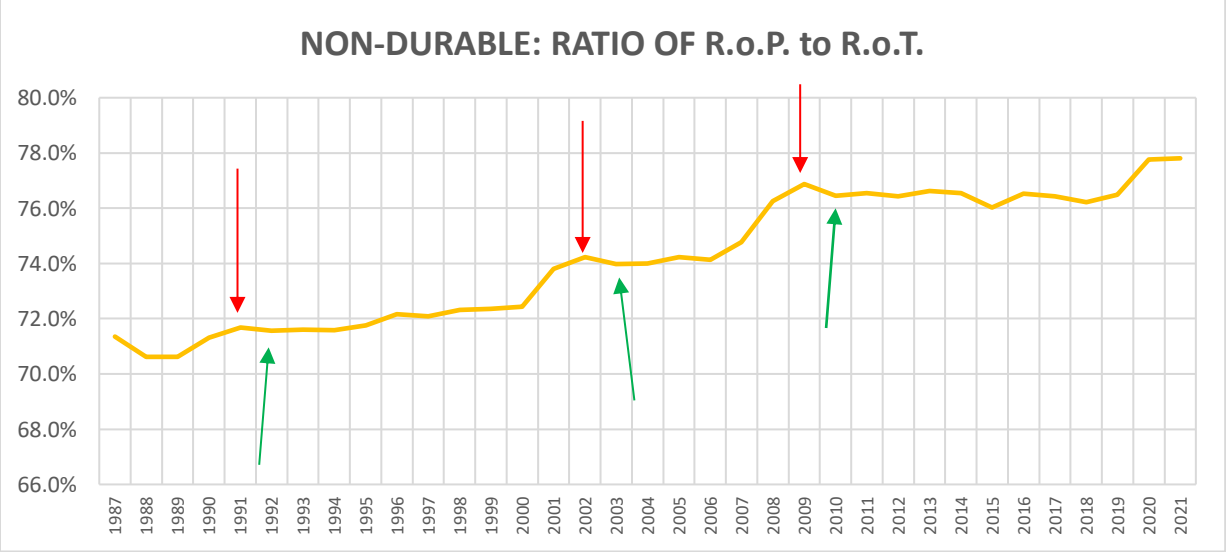
Now it becomes interesting as soon as we start comparing the rate of return with the rate of profit which includes circulating capital. The reader may say at first sight the rates below are symmetrical. Or are they?

Graph 3.



They are, if you are satisfied with a superficial view. But if you are not, look at the relative motion found in Graph 4 formed by the variation in the denominator, as highlighted by the arrows.

Graph 4.



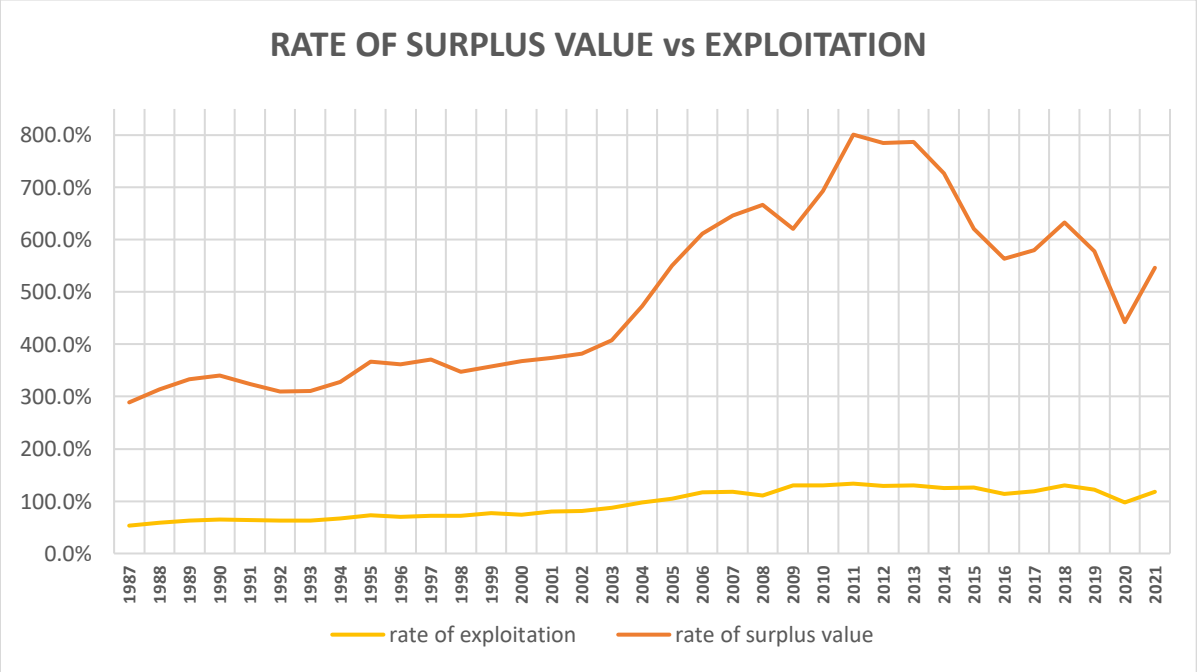
Each of the green arrows point to the resumption of the up-phase of the industrial cycle of which there are three between 1987 and 2019. What caused the change in trend; the volatility of circulating capital. Now visit the three upward bumps reflecting the phase approaching the termination of the cycle. This bump is formed by the swelling of circulating capital in the terminal phase of the up cycle. Now return to the green arrows, notice the small dips, they are caused by the destruction of circulating capital, primarily by the so-called inventory correction. (Were we to use quarterly data and pre-tax profits the humps and dips are much clearer, but alas such data only extends to 2005.)

Having dispensed with the superficial, what have we learnt? The profile in Graph 5 describes the beginning of the end of the business cycle and the beginning of the beginning of the business cycle. Something which cannot be seen simply by looking at the rate of return which has a different profile. The outstanding feature of Graph 5 is that its trend is smoothed and by being smoothed it is much easier to interpret.

Now let us turn to the difference between the rate of exploitation and the rate of surplus value. Marx referred to the rate of exploitation as the degree of exploitation because at its simplest, it was the division of the working day into its paid and unpaid parts. To obtain the rate of exploitation it is only necessary to divide the surplus by remuneration (compensation) The rate of surplus value however is more complex. It is based on variable capital which is obtained by dividing annual remuneration by the number of turnovers yielding a far smaller number. Employing manufacturing capitalists do not need 365 days of wages, only 65 days of wages in the case of non-durable with its 5.5 turnovers on average. This means that on average non-durable employers produce, sell and are paid every 65 days, meaning that new cash comes in every 65 days to replenish the cash that went out for things like wages and inputs.

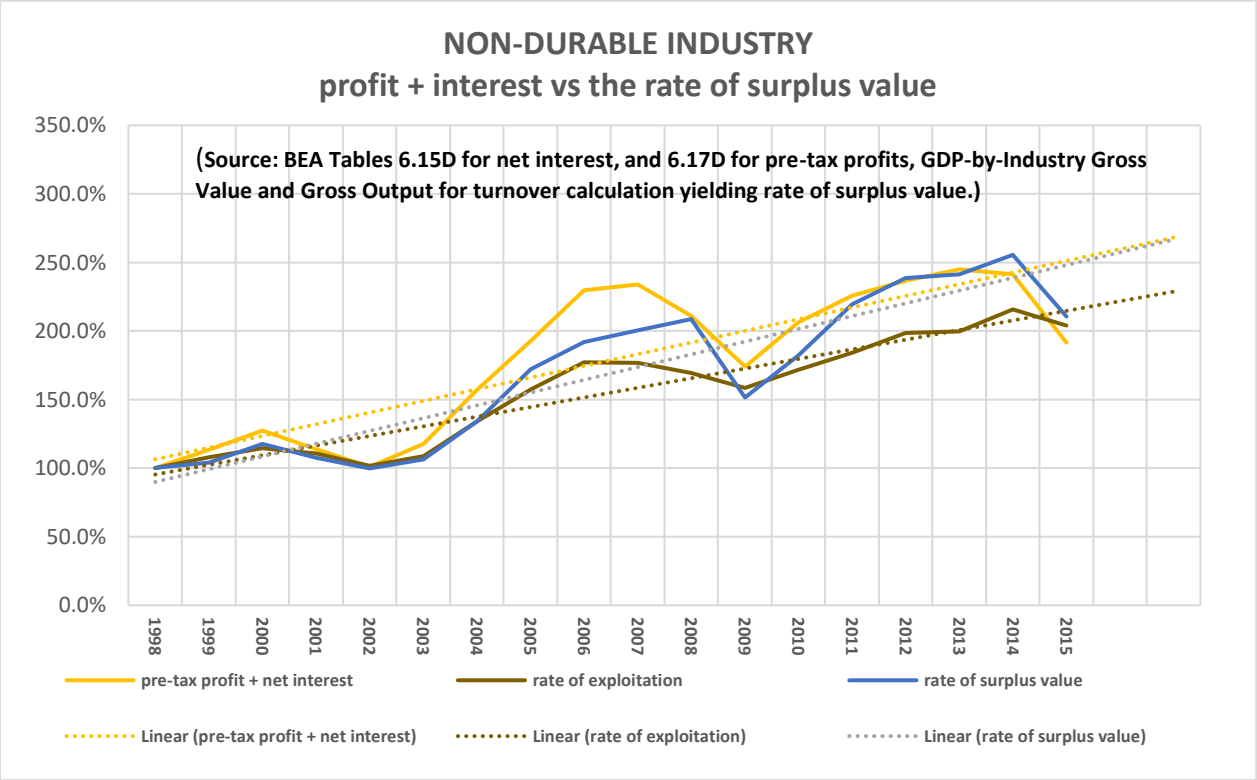
Take a look at Graph 5 below, not only is the rate of surplus value much bigger than that of exploitation because the denominator based on variable capital is smaller, but it is much more volatile. Turnover acts as an amplifier or de-amplifier. When turnover accelerates in the up-phase it boosts the rate of surplus value and vice versa in the down phase.

Graph 5.



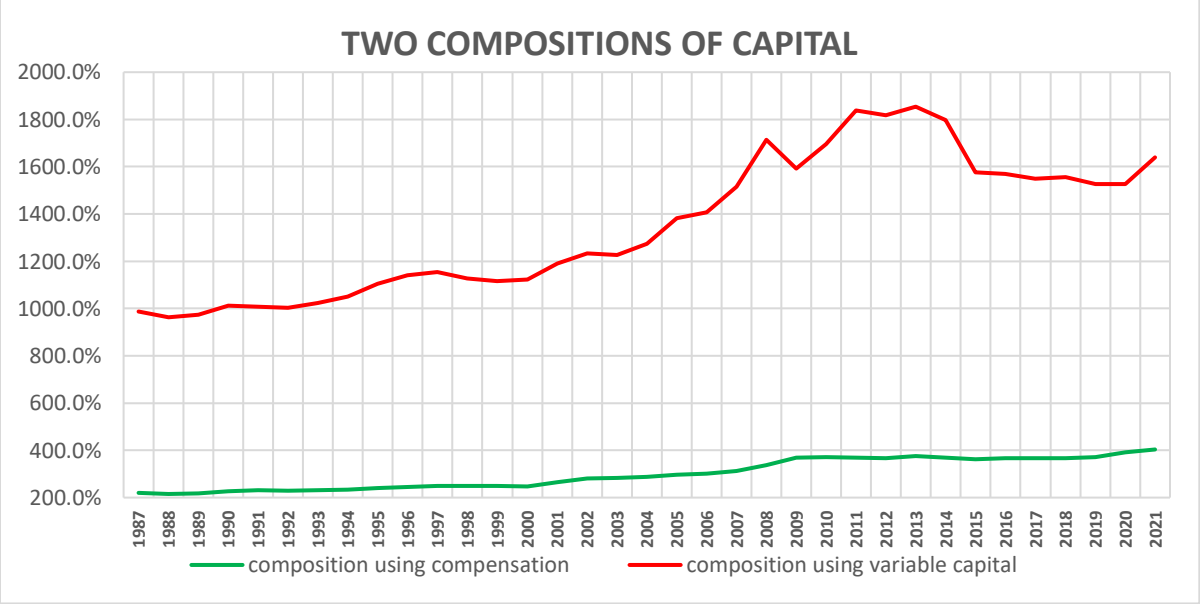
The alert reader would have made another connection. The movement in the rate of surplus value seems to mimic the movement in the rate of profit. Correct. Graph 6 below confirms that. It shows a **convergence** between the movement of profit and the rate of surplus value and a **divergence** in the movement between profit and exploitation. For me Graph 6 is the ultimate proof of the importance of turnover.

Graph 6.

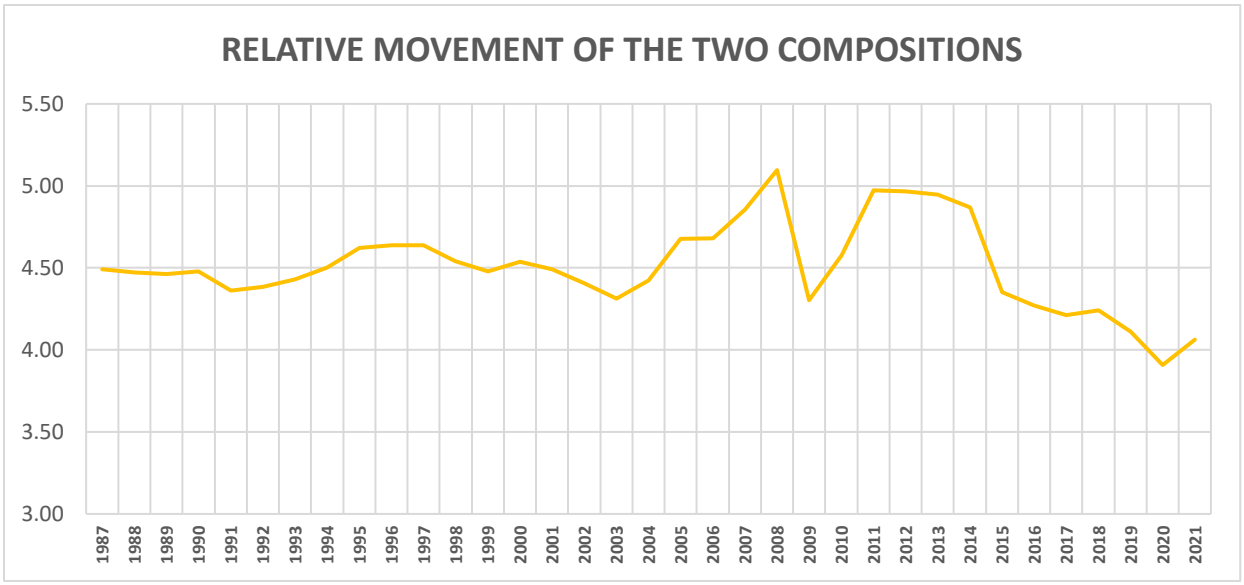


There is one final graph to consider, the composition of capital using variable capital vs compensation.

Graph 7.



Graph 8.



Notice how the trend mimics the rate of profit. The composition of capital rises sharply in the run up to 2008 and to the plateau formed after 2011, both times acting as a stronger headwind to the rate of profit than the crude composition. This profile cannot be seen in the green graph in Graph 7 where for example there is not the expected fall in the composition of capital in 2009. Likewise, whereas the composition of capital measured over variable capital falls after 2015, in the case of the cruder composition, it rises despite this being a period of low investment in fixed assets.

By now I hope the reader understands why I call the turnover formula below the Rosetta Stone. It allows us to interpret the SNA in a new and exciting way, to see what was obscured before.

$$\frac{GO}{GVA} + \frac{(GO-GVA)}{GVA} \quad \text{or} \quad \frac{GO}{GVA} + \frac{IS}{GVA}$$

(Where GO stands for Gross Output, GVA for Gross Value Added and IS for Intermediate Sales)

Conclusion.

I consider the defense of the rate of return as opposed to the rate of profit to be un-Marxist. This 50 year-old vulgar habit of substituting the rate of return for the rate of profit, the rate (degree) of exploitation for the rate of surplus value and the crude composition of capital for the actual composition of capital, must end. If it does not, it shows that we Marxists exhibit the same bad traits as found in many academic circles, namely the clinging onto the discredited old to preserve reputation. It seems the pre-turnover Marxists seek to deny the turnover formula by their silence. The notable exception is Michael Roberts.

To date no one has been able to refute the turnover formula. If someone did I would be the first to abandon it. That is because we should have only one loyalty - to the class and to history - nothing else.

Brian Green, 16th November 2022.