THE FORMULA FOR DETERMINING TURNOVER TIMES USING G.O. AND G.V.
DOES UNPRODUCTIVE LABOUR ALTER ITS RESULTS?

This article was written in response to criticism of our formula because it excludes the distinction between productive and unproductive labour. The distinction between productive and unproductive labour is important, but irrelevant to the formula as it does not affect either Gross Value (GV) or Gross Output (GO) on which the formula is based. It therefore does not alter turnover times. Furthermore a distinction between these two forms of labour becomes important only after we have been able to prepare turnover times because prior to that it is impossible to quantify the capital spent on productive labour and the revenue spent on unproductive labour. This is the paradox our critics fail to recognise.

While all workers are exploited, not all workers are productive. By productive, Marx meant workers who actually produce profits (surplus value). By unproductive workers, Marx meant workers who consume value, workers who are therefore paid out of profits reducing them.

Under Feudalism, a much simpler and transparent mode of production, the distinction between those who produced food, clothing, shelter, arms etc, and those who consumed them was easier to distinguish despite all the different gradations that marked the lord’s retinue. The priest lived off the tithe paid by agricultural labour. The lord and his little army of retainers - from the court jester to the armed guard - lived off the agricultural surplus provided by the compulsory labour of their serfs or peasants in the form of taxes, or rents, or direct expropriation of part of their crop, or being forced to work the land of the noble without payment. Hence not only did the lord and his family live off agricultural labour, but so too his little army of helpers that made his life comfortable and allowed him and his family to rise above the general conditions of society at the time.

Similarly under capitalism. All exploiting classes require their little army of helpers, those who manage exploitation, those who sell the resulting commodities and those who account for the property of their capitalist master. In other words Billions of Pounds, Dollars, Yen, Euros, Yuan and so on are paid in wages for supervisors, and for workers employed in selling, marketing, advertising, administration, accounting and so on. These workers, necessary to capitalism, but not to production itself, reduce the profits of the capitalist class.

Marx thus makes a distinction between productive and unproductive workers, between those who produce and those who consume value. We can now look more closely at the three conditions that distinguish productive labour from its opposing form.

**Condition 1.** Productive labour is labour that produces more value than is consumed in its production. It produces surplus value.

**Condition 2.** In order for condition 1 to hold two exchanges are required. The first being the purchase of the factors of production required for production to commence and the second, the later sale of the resulting commodities. It is the second exchange, the sale, which converts the labour newly produced into value and the surplus labour into surplus value. Productive labour is not the production of surplus labour. (Thus it is possible for a worker to be exploited but not to produce profits.) In the absence of the second exchange, namely the sale and the conversion of that labour into exchange value, no value emerges to compensate for the value consumed.

**Condition 3.** Only production produces value. Once produced and transported to its point of final sale, no more value can be added to a given commodity. The fact that a specific commodity can change
hands many times (wholesalers and retailers) does not add to its value despite its change in price. Rather the commodity sets off under-priced, sold at a discount, priced below its value, and as it changes hands adding to its price, the price merely catches up to its value. Circulation adds back the price element that is discounted by the producer to finance the costs of circulation. The fact that this discount is now obscured by convention, does not alter the fact that circulation leaves value unaffected despite the price changes.

All three conditions must hold for productive labour to function. A new commodity must be produced, it must be sold and its sale price must exceed its cost price. Only this type of labour is capable of producing surplus value.

UNPRODUCTIVE LABOUR.

Unproductive labour does not produce value, it consumes value.

There are two kinds of wage labour that constitutes unproductive labour. Firstly labour engaged in supervision and secondly, labour engaged in circulation. Supervisory labour does not add to the value of a commodity. Its purpose is to orchestrate the exploitation of productive workers. Similarly with labour dedicated to circulating commodities, though here the bulk of the labour is not supervisory but clerical. We may refer to the wages of these workers as the cost of sales and administration. They are the front office workers in clerical roles, administrative roles, accounting roles, legal roles, selling roles, marketing roles and advertising roles. It makes no difference whether these functions are in-house or out-sourced.

Capitalist accounting conventions recognise the distinction between productive and unproductive labour implicitly. The set of final accounts for most firms begins with The Trading Account. Here is to be found Gross Profit. Gross Profit is normally defined as annual sales less the cost of producing those sales. The cost of production so stated is annual wages plus materials, components and energy used up producing those sales. This implicitly recognises that the gross profits of the firm emanate from production itself, being the difference between output and inputs.

Within the cost of production is to be found the element of supervisory labour.

From Gross Profit we now move to the Profit and Loss Account which yields Net Profit. Net Profit is always smaller than Gross Profit by the amount of expenses that are deducted from Gross Profit. These expenses have been listed in the previous paragraph and are often referred to as SG&A for short (selling, general and administrative expenses). These expenses exist only because the commodities being produced have to be accounted for and sold into the market.

It follows that the smaller expenses are, the smaller the difference between Gross Profit and Net Profit (the profit available for distribution after tax and depreciation). Hence these expenses, which can loosely be defined as the cost of sales, vs the cost of production, are a deduction from the profits produced in production. They are paid for out of the surplus value produced by the productive workers in the firm. These clerical workers therefore consume value rather than produce it. The surplus value already produced, is reduced.

Marx referred to those workers, whose wages are paid out of surplus value as being paid out of revenue. They are peculiar to capitalism, to a market economy. Even when their function is outsourced, say marketing, where now a double exchange occurs, they remain unproductive. The fact that they are now exploited by a new employer who sells marketing to the old firm, does not alter the fact that the income of the new firm originates from the profits produced in the old firm. There is merely a distribution of existing value rather than the production of new value.
THE NATIONAL ACCOUNTS.

The division between productive and unproductive labour is irrelevant at an economy wide level. If we assume that the value that forms national income is produced by productive labour and that it is equal to this value then its distribution does not alter the total amount. It just means that some of it may end up in the hands of A rather than B. In that sense we can state that national income = the wages of productive workers + unproductive workers + profits + rent + interest. Adding up these five components of value as they appear in the System of National Accounts is equal to the total value of the commodities produced in one year. The inclusion of the wages of unproductive workers does not increase the total value added, rather it reduces the profits, rents and interest the capitalists lay claim to leaving the total unaffected. Wages for unproductive workers = lower profits for the capitalists.

This is not to say that it is impossible to misstate GDP or National Income. It can be misstated. This will occur whenever there is double counting. Double counting occurs when the Statistical Offices around the world impute value where none is produced. Typically this happens under two circumstances. Item 1 below and 2 & 3.

1. Imputed rent. Owner occupiers (private homes) are treated as though they are their own landlord and are paying themselves a rent equivalent to that of the occupier of a rented home or building. These additional ‘rents’ inflate national income.

2. Intellectual Property. The treatment of I.P. as capital rather than an expense, has led to the treatment of in-house research and development (R&D) and in-house software as though they were commodities. In other words the company is assumed to be buying its own R&D and software. A sale is imputed where none exists. In the USA, when this convention was introduced GDP went up 2.7%.

3. Non-Profit organisations (including charities) and organisations that do not sell anything. As with R&D there is only one exchange, the first, the hiring of workers and the means of their work. The results of their work are never sold, but this does not stop the statistical authorities imputing a sale. The result, the fictitious sale cancels the purchase. By a statistical sleight of hands, the deduction has been contra’ed out. And when something is no longer reduced, it is bigger.

One final consideration is fictitious capital. As this lies outside the scope of productive and unproductive labour it is mentioned only because it too can increase GDP without increasing the total value produced in production. There are two kinds of fictitious capital, primary and secondary, or in the language of the working class, bets and bets on bets. Primary fictitious capital has a direct claim on surplus value, and here we consider the traditional titles of shares, loans and bills of exchange all of which are secured by real assets. Depending on market conditions the price of these shares, loans and bills fluctuate. Secondary products are leveraged products tied to the price movement of these primary forms of fictitious capital, and here we think of futures, options, synthetics, price insurance or derivatives in general.

The fuel for this area of speculation has been the surge of un-invested capital emanating from the real economy beginning in the late 1990s. Hence it is no coincidence that together with this sea of idle capital has grown the waves of speculation. Unlike the process of production where money capital (M) buys commodities (C) in order to initiate production (P) and thereafter to produce additional commodities C' and when sold to receive back more money M' (or M.C...P...C'.M' for short), now we have only  M - M' a purely monetary phenomena. (The Monthly Review, Volume 62, Issue 05 (October). The Financialization of Accumulation by Bellamy Foster is an interesting analysis of this phenomenon.)
Money begets more money and this is unconnected to the production or circulation of commodities. It is the unspent capital from previous cycles of production, which having retained its money form, now seeps back via the speculative back door. It is the unhealthy monetary overlap between cycles of production rather than new investment which increases reproduction. This growing phenomena has been termed the Financialization of Capital, not because it is a new phenomenon, it is not, but because it’s increased magnitude has given it such prominence.

To the degree that this extra money generates speculative returns making its owner feel richer, and to the degree that it generates jobs in the sphere of speculation, this feeds into current demand. Because this money remains idle capital despite its speculative circuit, capital which does not increase production and therefore value, it results only in price rises unconnected to the production of value. For example speculators in oil alters its price up or down beyond the norms of demand and supply. Therefore we may state that in the short run, the return of unspent capital in its monetary form through the process of speculation results in an increase in nominal GDP due to its effect on prices. This however does not detract from the fact that in the long run, prices and values average out over the entire business cycle. Speculators lose as well as win. Capital grows and capital is destroyed.

We may therefore conclude that there is no material alteration to GDP due to the presence of unproductive labour, and therefore that no modification to our formula for the number of annual turnovers for capital is warranted. Without turnover times it is impossible to distil variable capital from annual wages in the first place. It may of course be argued that a further step is required to arrive at true variable capital by removing unproductive wages from variable capital and adding it back to the profits from which it was deducted. We are told this is needed to produce an accurate rate of surplus value and rate of profit. In both cases this removal and re-addition would increase the rate of surplus value and the rate of profit. (Note 1.)

However this rate of profit would be unfamiliar to the capitalist class. Investors are not interested in the Marxian rate of profit but the rate of profit that exists in the real world and which either acts as an incentive or disincentive to invest. When investors estimate whether or not an investment is profitable, they estimate the profit on the total capital needed to be invested. Part of that investment is wages. These wages cover not only productive workers but clerical workers and supervisory workers, which together comprises the entire capitalist workforce. Working capital would be greatly reduced if wages were diminished by the removal of all wages other than those expended on productive labour.

In other words we seek a rate of profit that explains the behaviour of the capitalist class. And our rate of profit reflects this world. Working capital includes the wages investors need to pay out every week or month, multiplied by the weeks or months they must wait until new money comes in from selling their production. Total wages are therefore not only a function of the number of workers but of the period between wages going out and new money coming in. And that depends on turnover time which our formula yields. The shorter the period, the less capital, and the longer the period the more capital that is needed. In turn, the more each capital turns over each year, the greater the opportunity to produce profits.

Moreover changes to average turnover times always result in changes to profitability. This is particularly true at the end of the business cycle when sales slow down, turnover times extend and more capital is required. Indeed, rapid changes in turnover times are harbingers of change to the business cycle itself. Hence in order to understand the rate of profit and its movement, in the real world, it is necessary to include turnover times and changes to these times. Profit rates which hitherto were overstated due to the absence of wage capital are no longer overstated.
(Note 1. In order to avoid confusion, in future it may be useful to refer to wage capital rather than variable capital with regard to the capitalist rate of profit when it is based on an amalgamation of productive and unproductive labour and these wages are paid out of capital.)

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