DUPLICATED VALUE. ACCOUNTING FOR THE LOW RATE OF TURNOVER WITHIN PRIVATE INDUSTRY.

The turnover formula offers us a vital insight into the capitalist economy. Here we consider Marx's division of the economy into its productive and unproductive spheres. Marx did not imply by this that the economy was divided into a necessary and an unnecessary sphere. Quite the contrary, Marx recognised that the unproductive sphere was necessary for the functioning of the entire capital. Instead his intention was to distinguish the sphere where value was produced from the sphere where part was consumed as this had profound implications for the functioning of the entire economy. Our formula for the first time reveals this interaction, confirms the importance of distinguishing the productive from the unproductive sphere and discusses its influence on the profitability of the economy.

When we apply the turnover formula to the whole economy, it yields a result in 2014 of 2.65 turnovers a year or an average turnover period of 138 days. This is a surprisingly low number and unexpected in light of the turnovers achieved in the goods producing industries. Here we have turnovers of 4.89 for manufacturing, 5.59 turnovers for non-durable goods manufacturing and 3.98 for the entire goods producing industries.

The reason for the low number of turnovers within the entire private economy therefore has to lie elsewhere and it does. It is to be found within the service sector where turnovers in 2014 averaged only 2.26. And because the service sector appears to be three times bigger than the goods producing sector, its weight depresses the overall turnover rate yielding the average of 2.65 turnovers. Now it may be suggested that there is an issue with the turnover formula itself. However we can assure the reader that the formula is robust and that this is confirmed in Table 5.8.5B where the BEA records final sales to inventory ratios in lines 36 and 38. We will have cause to look at this table in greater detail further on.

It follows that if the formula is sound, it must be revealing a problem elsewhere, it must be exposing a flaw in the underlying data on which it is based - the National System of Accounts compiled by the BEA. A flaw resulting from the inability of the BEA to follow Marx and to distinguish between the productive and unproductive spheres in the economy. *(Note 1)*. As far as the BEA is concerned all industries are productive and the value ascribed to that industry arises from within it. In short the BEA considers all sales to yield value regardless of where they are sited in the economy. From this totality of sales the BEA then deducts intermediate sales again without consideration to their source in order to arrive at value added and therefore National Income.

This is a superficial view of the world. It is a mechanical and dishonest transposition of Marx methodology first presented in Book 2 of Das Kapital, one stripped of its essence, the labour theory of value. For Marx, the value of a commodity was the external expression of the labour embodied in it (and by this we mean socially necessary labour time). Value emanated from production. It did not emanate from the mere buying and selling of the resulting commodities. The conversion of a commodity into money did not give it value, rather the value already contained in the commodity was expressed by money through sale. Otherwise it would be impossible to explain why products sell between specific ranges of prices, and why when they fall below the range, production is halted and conversely, why if they sell above it, production is expanded.

We now begin to see the importance, as Marx did, of distinguishing the productive sphere from the unproductive sphere. Only in the productive sphere does production take place, only here are new and additional commodities produced and only here does value emerge. In the unproductive sphere production does not take place and if it does, then that production does not take the form of new

commodities. No value is produced there. Instead the value that circulates in the unproductive sphere has been transferred to it by the productive sphere. It is value produced in the productive sphere but spent in the unproductive sphere.

It would be wrong of course to equate the unproductive sphere with the service sector. The service sector has both productive and unproductive industries, but it is in the service sector that most of the unproductive industries are located. Further it would be wrong to equate productive and unproductive labour with productive and unproductive industries. Within productive industries unproductive labour as well as productive labour is found, but in unproductive industries only unproductive labour is found. (Note 2.)

To distinguish the one sphere from the other it is necessary to return to Marx's description of the circuit of capital whose duration our turnover formula maps. The primary circuit of productive capital is described by Marx as $M.C...P...C^+.M^+$. In time this formula will in economics, play the same role as $E=MC^2$ does in physics.

Marx begins with money or **M**, which in the hands of the employing capitalist is used to buy the factors of production in the form of commodities **C.** By reuniting labour power and means of production, production **(P)** is set in motion and brand new commodities **C⁺** are produced. The plus sign denotes that these new commodities are pregnant with additional value provided free by the workers in that company. When finally sold, money returns **M⁺** to the hands of the employing capitalists and again the plus sign shows that extra money is received. In short, the capitalist has received back more money than they paid out and this constitutes their profit.

We will now look at the other circuits all of which make up a distinct specie. Some are paid out of capital and others out of revenue. Whatever the case, we will note each manifests a deficiency in the circuit by either having no **P** (production) or no **C⁺** or no **M⁺**.

Distribution. Here we refer to the wholesale and retail industries in particular and we include areas of consumption like bars where the bulk of what is sold has been produced elsewhere. Here the formula is described as $M.C.M^+$. Money buys a commodity in order to resell it thereby converting it back into more money. We note there is no production, therefore no possibility of value being added. *(Note 3)* Here much of the value included in the distributive industries is transferred to it from the productive sphere via the price system. In short producers sell their commodities to their distributors at a discount. In turn this discount forms the margin allowing the distributer to cover his costs and make a profit. Below the surface, on average, producers are selling their products to merchants at a price below their value and when the distributors sell these commodities at the higher price, they do so, at a price (on average) which now equals their value. These discounts reduce the monetary size of the goods producing sector but it does not alter the turnover period within it, as all sales are relatively diminished, intermediate as well as final sales. And as our formula depends on intermediate and final sales, this proportionate adjustment of both the numerator and the denominator cancel each other out leaving turnover periods unaltered.

Money dealing capital. This is the relationship between the moneyed capitalist (say banks) and the industrial or merchant capitalist. Here the banks or their equivalent, lend money to the industrialist or merchant so they can buy commodities. In the case of the former it is used to initiate, complete or expand production, and in the latter case it is used to buy commodities for resale. Marx described the circuit thus: $M.M.C.M^+M^+$. The first part, M.M is the loan. The first M is the actual loan, and the second M is the use of this money to buy commodities. The second part M^+M^+ is the splitting of the resulting profit. The first M⁺ is the profit earned by the industrialist or merchant. The second M⁺ is the money

paid back to the moneyed capitalist in the form of interest or capital plus interest. No new value is produced in this relationship, only shared. There is only a transfer of value in the form of interest payments whose origins ultimately lies in the productive sphere. Once again we identify the transfer of surplus value.

Speculation. Here the illusion is complete. Money seems to produce more money though to be sure money has never taken a printing or design course without which no money can be stamped or printed. Money dances with itself, faster and faster until it spins apart and falls over. Here the circuit is described as $M.M^+$ the most simple yet most beguiling circuit of all. Here no new value arises, only illusions, as there is no production and no new commodities.

Outsourcing. The next circuit is that of outsourcing which has grown as a percentage of GDP and is described as $M.C…P…M$. What is missing here is $\mathbf{C^+}$, new and additional commodities. The relationship between the commissioning company and the outsourcing company is not the relationship between buyer and seller, but between Principal and Agent (which is why, by way of example, advertising firms are often called advertising agencies). Actually and legally the labour expended in outsourcing firms does not belong to the firm as agent, but to the Principal who has commissioned and paid for it, regardless of whether this payment takes place before, during or after completion. It has not been produced for sale but for use by the commissioning company. The fact that outsourcing companies may act as agents for many Principals at the same time does not alter this fundamental relationship. It merely expresses the socialisation of function. Here the income of the agent represents an expense to the Principal. What the agent gains the Principal loses, resulting in no new value being added. There is a transfer of value from the productive sphere to these industries in the form of revenue to pay for the service, regardless of whether it is accounting, payroll, marketing which includes telemarketing, cleaning, catering, security, or advertising.

Household, charitable, non-profit industries. Here the circuit is described as $M.C…P…$ The second half of the circuit is missing altogether. Labour power and means of production may be acquired but production is for use, not for sale. Money goes out but no new money comes in. There is a purchase but no sale. For example if a wealthy employer employs maids, cleaners, gardeners or chauffeurs, their labour is not sold but used by the employer. The money to pay for this staff comes from rents, profits, interest or dividends whose source lies in the productive sphere. Once again we have the transfer of value in the form of revenue generated elsewhere.

Finally the BEA invents value by imputing value where none is produced. The most notable example is imputing rents to owner occupier housing as though they were tenants renting their properties from an external landlord!

In sum what we have is the transfer of value from the productive sphere to the unproductive. Although the BEA is committed to avoid duplication, this principle is only adhered to within industries and not between industries. When we consider there are hundreds of six digit industries in the National Accounts, the scope for duplication is vast. What the BEA is guilty of is failing to account for this transfer of value from the productive sphere to the unproductive sphere. It does so, by either failing to deduct the transfer when it leaves the productive sphere or secondly by continuing to add it to the unproductive sphere as though it was new and additional value. By failing to do either, the BEA double counts, which overinflates value added and thereby the size of the economy – GDP. On a more positive note, any deflating of GDP will increase the share of GDP taken up by investment. It may transpire that the apparent paucity of investment, may not be as acute as first thought.

We can estimate this over-inflation of value in the following way. First by looking at Gross Output relative to inventories and then by looking at Gross Value relative to inventories for specific industries and the economy as a whole. If as we suspect that value is duplicated, the ratios should be altered by this duplication. We begin with gross output/inventories for 2014. (Inventories are yearend.)

	non-durable	goods producing	total
Gross Output	3204	8538	27533
Inventories	291	1080	2501
G.O./inventories	**11.0**	**7.9**	**11.0**

The line in bold is the number of turnovers when measured against annual output. We notice that non-durable and total private industries are the same, 11 turnovers or 33.2 days on average. Now let us turn to the ratio of value added to inventories.

	non-durable	goods producing	total
Gross Value	972	3431	15074
Inventories	291	1080	2501
G.O./inventories	**3.3**	**3.2**	**6.0**

We notice that the ratio falls proportionately more in non-durable and goods producing industries than it does in the economy as a whole. Whereas non-durable and total were originally equal, now non-durable at 3.3 is barely half of the 6.0 found in total private industries. The percentage reduction between the two ratios is 70% in non-durable manufacturing, 60% in goods producing industries but only by 45% in the economy as a whole. Adjusted for the goods producing industries which is one third of the total, the fall in the service sector has only been around 38%.

The only way to explain this discrepancy is that gross value has been overstated whereas gross output may not have been. The result of this overinflated value in total industry is that the ratio between gross output and gross value at 183% is much lower than that found in non-durable 330%. And we could say that this overstatement is located in the service sector as expected. Against this it may be argued that the service sector is more labour intensive. Here we find the technical composition to be lower which means less is spent on constant capital (including circulating constant capital i.e. inventories) and more is spent on variable capital. Clearly this partly explains why the value added ratio should be higher in this sector. But it is the minor not the major reason.

The differing composition of capital therefore makes it difficult to quantify the exact overstatement, which could be as high as 40% on the figures above, but which is bound to be lower given the labour intensive nature of the service sector. It is unlikely to be in the vicinity of 3.3 as found in non-durable, but close to it, as the duplication of value added is the main factor. There is of course a much more laborious way of estimating this duplication and that is to trawl through the industries that compose National Income to identify, isolate and quantify the unproductive industries. A good subject for a PhD dissertation.

A simpler route is to turn to table 5.8.5B row 36. In this row the BEA calculates inventory turnover, not for all private industries, but for domestic industries. Domestic industry is smaller than private industry because it excludes non-profit institutions, compensation paid to domestic workers, and imputed rental of owner-occupied nonfarm housing. In other words a significant slice of the unproductive sphere and therefore a significant slice of duplicated value is excised. As a result turnovers fall from the 6 recorded above to 4.9 per annum, a fall of 18%.

A similar fall is to be found when we remove financial industries other than insurance and adjust for imputed rentals already discarded under domestic industries. This brings us down to 3.8 turnovers, a fall of 36%. If that is applied to our formula then the reduction in the denominator G.V. of 36% yields a turnover for the economy of 27533/9647+(27533-9647)/9647 = 4.8 which stands well above the original turnover of 2.65.

We can now turn to the question of the effect of the original and depressed ratio of 2.65 and its effect on profitability. The original pre-adjustment turnover periods have oscillated within an insignificant band over the last 17 years. Within those numbers there has been a slowdown of about 2.5% in the goods producing sphere offset by an improvement in services of under 5%. Some industries on the other hand have shown significant improvement, for example non-durable manufacturing which has shortened its turnover periods by 20% thereby shortening total manufacturing by 10%.

A turnover period of 2.65 compared to 4 and above for goods producing and other productive industries does have a depressing effect on the rate of profit. Profits are produced within a cycle of production but measured annually. It follows that the more cycles of production and therefore the turnover of capital, the greater is the mass of annual profits, and everything else being equal, the resulting rate of profit.

Unproductive industry in part, is a necessary expense to capitalism, but all expenses represent deductions from the mass of gross profit. The smaller the expenses, the fewer will be the deductions and the greater the residual mass of profits. Hence the productive sphere always seeks to reduce the size of the unproductive sphere in the interest of maximising profits. This has not happened over the last 17 years. Instead the service sector's share of National Income has grown by 4% mainly due to the increase in the size of the financial industry, which has more or less offset the improvement in turnover times found there. The effect on profits has been neutral.

This can be seen in the graph below. It is the annual rate of exploitation. Here annual wages have been reduced by turnover times to wage capital (variable capital). Then the mass of profits for the year are divided over this wage capital. We notice immediately that the rate of exploitation has shot up in manufacturing, from below that of private industry to above it. One of the drivers of course has been the **increase in the number of turnovers in manufacturing**, higher productivity and the depression of wages relative to the economy as a whole. This explains why the rate of profit is substantially higher in manufacturing than it is in the private economy as a whole.
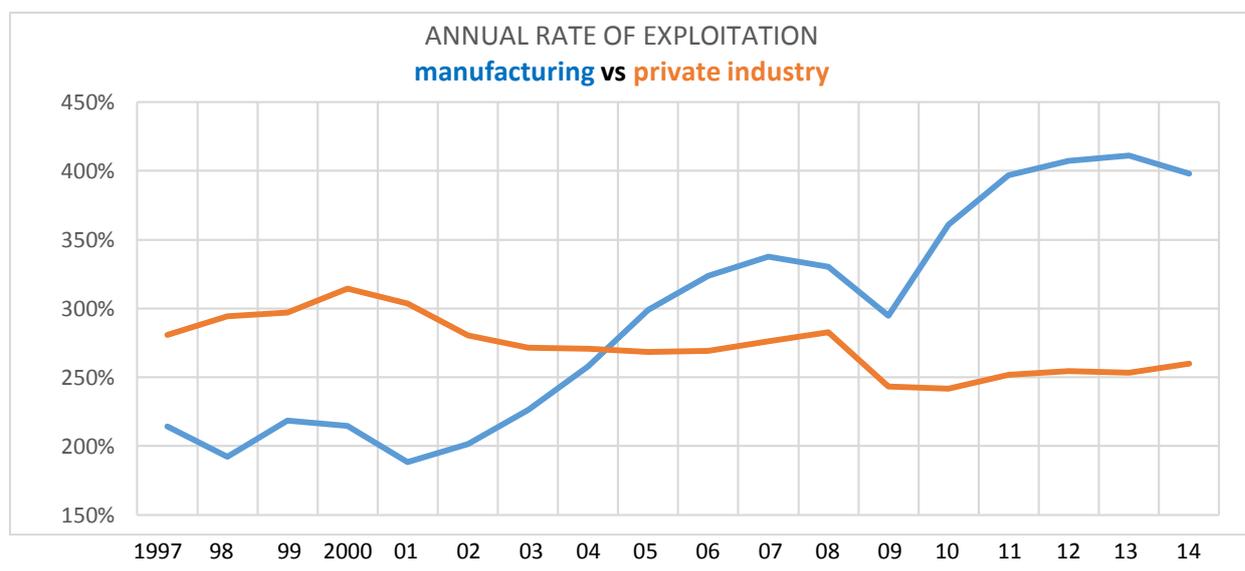
When we look at the rate of exploitation for the whole of private industry we notice that it is stagnant to falling. From the capitalist point of view this is alarming. It explains why the United States has become such a low wage economy. This stagnation in the rate of exploitation has many causes, low productivity, a reduction in the overall technical composition of capital and of course the growth of unproductive production relative to the national economy. It is worth noting as well, which will be the subject of a future posting that this low productivity in the overall economy has something to do with the growth of inequality and therefore the expansion in the production of luxury goods (Department 2B). The production of goods destined for the capitalist class who do not work, but sometimes pretend to, does not improve the productivity of the economy. It does not increase the rate of exploitation which requires cheaper goods produced for workers so that the paid part of the working day is reduced, allowing for the extension of the unpaid part.

We cannot conclude without including the difference in the rate of exploitation when using annual wages and when using wage capital. In 2014, the annual rate of surplus value was 260% when using wage capital, which fell to 98% when using annual wages. For every dollar of wage capital the capitalists received back $2.60 each year. The absolute level of exploitation is not what is significant. What is significant is that it is stagnating. And it is doing so despite two generations of North American workers who are working harder than their parents and for less. This is a broken economy, held together not by low interest rates, but by the passivity of its working class.

(Note 1.) In previous posting on the formula applied to the whole economy there was the implication that the plusses and minuses in the economy cancelled out. They do not because of the duplication of value addressed by this posting. To the extent that duplication is dealt with here, this constitutes a correction to the simplified view set out in earlier postings.

(Note 2.) It would be wrong to confuse the transfer of value between productive and unproductive workers and the duplication of value between productive and unproductive industries. Within a productive industry, where both productive and unproductive labour reside, the value added is unaffected by the presence of unproductive labour. All that is affected here is enterprise profit, not value added. The value added here is the sum total of the value added by productive labour. On the other hand, enterprise profit is the residual element left over after expenses (which includes unproductive labour) have been deducted from this value added.

(Note 3.) The point has already been made that some value is indeed added in distribution in terms of the transport, storage and maintenance of the use value of the commodity up to the point of its final sale. However the bulk of the "value added" by these industries are transferred to it by the producers.

Brian Green. December 2015