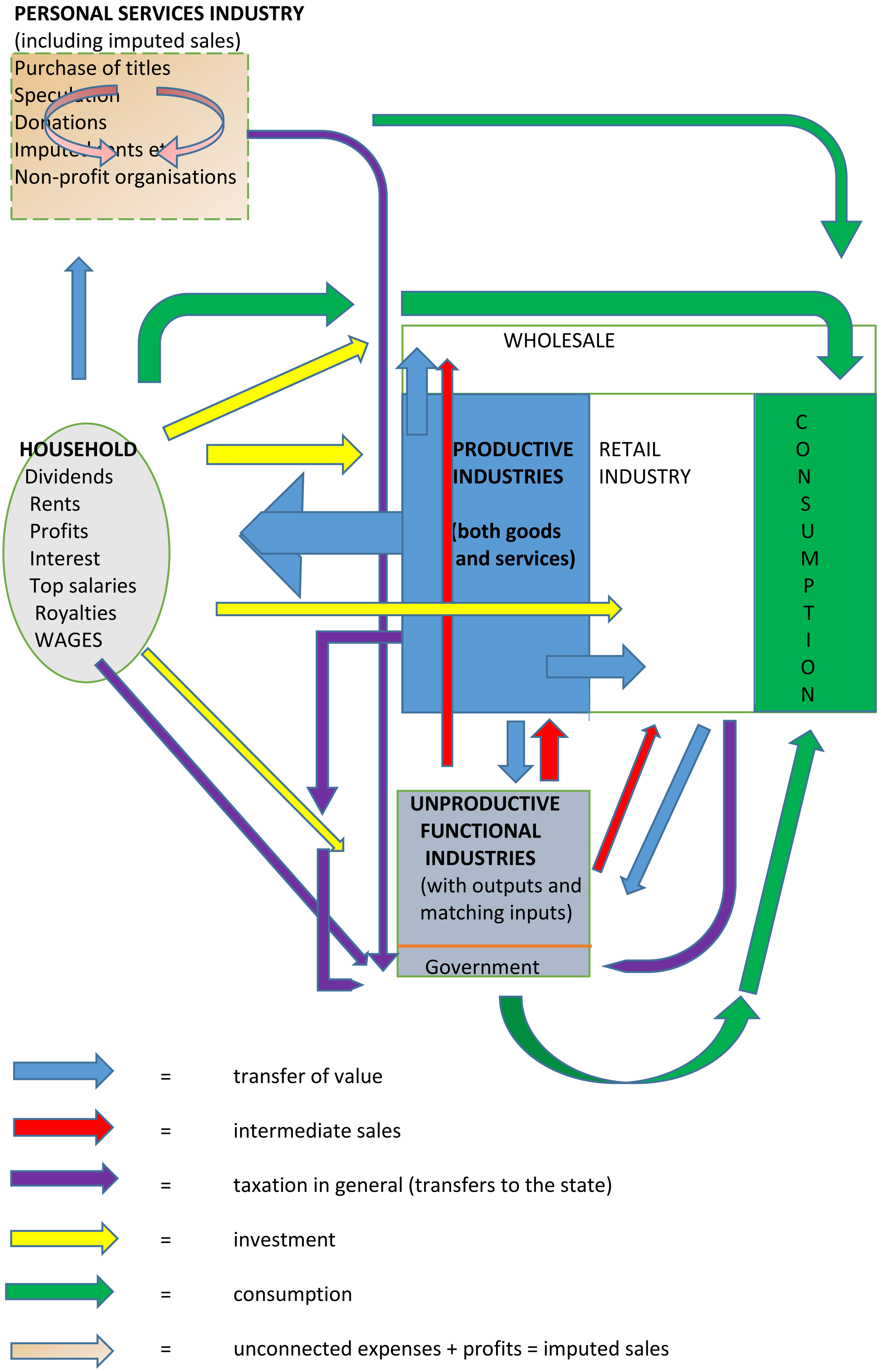
Deflating the size of the US economy.

This posting, by means of the diagram on this page, represents a refinement of the distinction between functional unproductive workers and those engaged in personal services.



Explanation of Flows.

Since the emergence of what is now called the *System of National Accounts* or SNA for short, many diagrams have been proposed to capture the complexity that is the national expenditure of labour in its variety of forms. Shaikh and Tonak do so on page 22 in their monumental but deeply flawed book: *Measuring the Wealth of Nations*. The diagram presented here on page 1 is of a different order, more complex and more accurate.

To understand why we separate out spheres of production, it is necessary to understand the three great horizontal divisions of labour within capitalist society. The first is between productive and unproductive labour. The second is between unproductive workers necessary for the functioning of capitalism and those unproductive workers engaged in providing personal services to the capitalist class. Finally there is the distinction within productive labour itself between those engaged in producing articles of consumption for the working class (Department 2A) – and those producing articles of consumption for the capitalist class (Department 2B) which represent such a drain on society. The reason for these distinctions is not semantic. Capitalism is based on the production of profits, and each of these species of workers either produce profits, consume profits, or contribute towards the duplication of profits. For the time being we are concerned only with the first two divisions: that between productive and unproductive workers, and that within unproductive workers between those who are functional and those who are providing personal services.

At the outset it is important to note that the total labour expended within capitalist society exceeds the labour expended producing commodities. However, as the wealth of a nation is measured by the value of its annual commodity product, this wealth is not equivalent to the total physical output of labour. In other words, some labour (for example domestic labour) is ignored, while some labour is counted as commodity-producing labour when in reality it is not. Hence the "value added" by commodity production as measured by GDP is at once an underestimate of physical labour expenditure and at the same time an overestimate of social labour.

Marx and his predecessors were aware of the difference between social labour and physical labour, but it was Marx that brought out its significance for the production of profit and therefore the state of the overall economy. The distinction between physical and social labour is vital in a market economy. In such an economy the labour of the individual only becomes part of the labour of society through being exchanged. Labour that is not exchanged, remains private labour, not social labour – not value producing labour. The capitalist social relation is therefore comprised not only of production, but the exchanges that surround it.

This social relation comprises two essential exchanges which connect the producer to the rest of the economy. It begins with a purchase and ends with a sale. The purchase comprises the stage where the firm (an employing set of capitalists) acquires the factors of production without which production cannot proceed. These factors include labour power (hiring workers) and means of production. By re-uniting workers with their means of production, the firm sets production in motion, resulting in new and additional commodities for sale. The second and concluding exchange takes place when these commodities are converted back into money. As workers produce unpaid labour, the money received from the sale exceeds the money spent on the purchase – thus yielding a profit.

To describe the capitalist social relation, Marx used the following circuit of capital, a formula which to economics is as important as $E=MC^2$ is to physics. It is described thus: **M.C….P….C⁺..M⁺** where **(M)** is the money capital used to buy the factors of production in their commodity form **(C)**. Production **(P)** then ensues. The extra dots that surround **P** represents the additional time that production requires compared to the period of exchanges at the beginning and end of the circuit. Finally, the $^+$ signs at the end of the circuit represents the additional value embodied in the new commodities, that commands additional money when they are sold. Only labour expended in this manner becomes part of the labour of society. Only this labour produces commodities. Only this labour produces value and therefore surplus value. Only this labour is considered productive because it alone is capable of producing profits and thereby enriching the capitalist class.

All other labour is unproductive – that is to say unproductive of profit. Marx did not demean this kind of labour. Nor did he imply that it was unnecessary labour. He realised that, with the exception of personal services to the capitalist class, it was labour necessary for the functioning of capitalism or, as he saw it, maintaining the metabolism of the system. In addition, much of this unproductive labour indirectly supports the production of profits. Domestic labour, that is the private and unpaid labour produced in the home and shamefully mainly by women, reduces the value of labour power. Anything which reduces the value of labour power, and therefore wages, helps boost profits. In sum, the bulk of unproductive labour enables the functioning of capital and helps increase profits without directly producing any.

In an earlier posting, entitled **DUPLICATED VALUE: ACCOUNTING FOR THE LOW RATE OF TURNOVER WITHIN PRIVATE INDUSTRY,** we examined the different circuits describing different industries. We saw that in each case, the stage (P), (C^+) or (M^+) found in the circuit of productive capital, was missing. If production did not take place, or if a new commodity was not produced, new value could not arise. This meant these industries were not value-producing but value-consuming. The value circulating in these industries was transferred to them from the productive industries where it was produced.

This is what our diagram shows. All the blue arrows represent a transfer of value from the productive industries. There are arrows to wholesale, retail, unproductive functional industries and, of course, to the household sector. We note there is no direct blue arrow between the productive industries and the personal services industry. The significance of this will be examined later. The purple arrows represent value transfer in the form of taxation to the government sector. The returning red arrows represent inputs or intermediate sales. These red arrows contra the blue arrows ensuring that what is added at destination has been deducted at source, thus avoiding duplication. Again we note that there are no returning red arrows from the personal services sector found in the top left hand corner. There is thus no accounting for any transfer of value, which means there are only plusses but no minuses, therefore duplication.

In this posting we will be looking at a specific phenomenon. Instead of comparing productive to unproductive labour or productive industries to unproductive industries, we will be examining the distinction between unproductive labour necessary for the functioning of capital and unproductive labour that merely provides personal services to the capitalist class. This distinction is captured by our diagram. There we find two unproductive sectors. The first called *Unproductive Functional Industry* **(UFI)** is found at the bottom of the diagram and the second called *Personal Services Industry* **(PSI)** is found in the top left hand corner – as has already been mentioned.

UNPRODUCTIVE FUNCTIONAL INDUSTRY (UFI).

Although we will be dealing primarily with the Personal Services Industry, a detour via the Unproductive Functional Industry is needed in order to understand the difference between the two. This is done in order to fully describe the transfer of value between the UFI and productive industry. UFI workers are paid out of capital. It is a misconception to assume that Marx limited variable capital to the payment of wages to productive workers only. In Chapters 16 – 18 of Part IV of the third volume of *Capital*, Marx identifies commerce to be, in the main, a sphere inhabited by unproductive labour. This does not prevent him from stating on page 402 that commercial capital breaks down into both constant and variable capital viz: "The other costs are reducible to variable capital that is advanced for commercial employees." And again on page 406 "… a commercial employee of this kind is a wage labourer like any other … as his labour is bought with the merchant's variable capital, not with money that he spends as revenue..." Where, in these chapters, Marx makes a distinction between variable capital applied to productive labour and variable capital applied to unproductive labour, he does so to remind us that only variable capital applied to productive workers is pregnant with future profits.

UFI workers are essential to the functioning of capital. Put another way, they secure and circulate the value produced by productive workers. There is therefore always a link between UFI workers, who assist in the valorising of value, and workers who produce it. Within the corporation itself, the labour of productive workers is captured by the Trading Account, whereas the labour of unproductive workers is captured by the Profit and Loss account.

Productive (factory) workers produce the gross profit of the firm ($60 billion). This gross profit is then reduced to net or undivided profit ($30 billion) by the expense of unproductive (office-clerical) workers. The value added, as assessed by the System of National Accounts, derived from corporate accounts, as below, is thus total wages plus net profit - and not productive workers' wages plus gross profit. It is a combination of both sets of account. It is $40 billion plus $30 billion and not $20 billion plus $60 billion. This is shown below.

TRADING ACCOUNT

Annual sales adjusted for inventory =	$120 billion
Less wages paid	$20 billion
Less inputs used up (materials etc)	$40 billion
Equals gross profit (c/f)	$60 billion

PROFIT AND LOSS ACCOUNT

Gross profit (b/f)	$60bn
Less office wages	$20bn
Less office inputs	$10bn
Equals net profit (c/f)	$30bn

Here we find that the total value of sales is $120 billion in the Trading Account = gross output. After subtracting the inputs of $40 billion going into the factory, the value produced by these productive workers is $80 billion, for which they are paid $20 billion in wages, leaving $60bn unpaid as the firm's gross profit. In the Profit and Loss Account, this gross profit of £60 billion is reduced to net profit of $30 billion by the wages of the office workers found there together with the inputs needed for their work. From the point of view of the national accounts, Gross Output is $120 billion, intermediate sales are $50 billion (inputs of $40bn in the factory and $10bn in the office), yielding value added of $70 billion divided into wages of $40 billion and net profit of $30 billion.

We note immediately that while the value "added" by productive workers in this firm amounts to $80 billion, the national accounts register only $70 billion. This is due to the office inputs of $10 billion. In other words, the money paid out for inputs or intermediate sales represents a leakage of value from the firm, a transfer of value to other firms from which the inputs are acquired. The term "value added" is therefore a misnomer. What the system of national accounts really measures is not value *added* but value *realised*, i.e. value added less inputs or, what is the same thing, the residual element of value that remains in the firm after transfers. It goes without saying that value realised is always smaller than value actually "added" (produced) within the **productive sphere.**

If we return to our example and mistakenly add in the gross profit of $60 billion instead of the net profit of $30 billion, we would arrive at an **inflated** total output of $150 billion, not $120 billion. Intermediate sales remain at $50 billion but value added would increase to $100 billion. This is an overstatement of $30 billion, because the deductions of $30bn in the Profit and Loss Account is ignored. In this case we would have duplication. But this does not occur because the profits added by the productive workers are always reduced by the wages of the unproductive workers, reducing the gross profit to net profit. When this happens the actual value "added" (*realised*) is the correct figure.

This is the essence of national accounts, derived by Marx in Volume 2 of *Capital* where he established the overarching principle that "double counting" needed to be avoided. As long as the plusses added by productive workers are reduced by the minuses applied to unproductive workers, total wages and net profit will equal the value produced by productive workers. Over the economy as a whole (excluding duplication) total value added will equal total value produced because it is the sum of value realised plus transfers between industries.

Having looked at the transfer of value within the firm, we will now examine the transfer between firms. Specifically between productive firms and unproductive firms. Here the role of intermediate sales is crucial. One of the biggest UFI industries is outsourcing. All workers in outsourcing companies are unproductive - they do not produce value. The relationship, as we have shown in our earlier posting, is not that between buyer and seller, but between principal and agent. If we take a hypothetical payroll company, the payroll it produces belongs to the principal not the payroll company itself. The payroll is therefore not a commodity, something the payroll company is free to sell. Indeed, if the payroll company sold this information, which is confidential, it would be in breach of contract and subject to criminal and civil penalties. Here the circuit is described as M.C…P…M$^+$. We note that C$^+$ is missing.

The value that circulates within the payroll company, paying its wages while leaving a residue of profit, arises in the sourcing company, for example a car manufacturer. The link between the car company and the payroll company is called an intermediate sale. This sale logs the transfer of value in the national accounts. The plus produced by the payroll firm constitutes a minus (a cost) to the car company. The additional output of the payroll firm is cancelled out by the additional input into the car company. This will be made clear in the extension of our previously used example.

The car company, which originally carried out its payroll function in house, has decided to outsource it. When it was done in-house, it cost $3 billion in wages and $3 billion in inputs to carry out. In short it cost $6 billion. When the car company fires its payroll department it reduces office wages from $20 billion to $17 billion and office inputs from $10 billion to $7 billion yielding this saving of $6 billion. But the corporation needs payroll. The reason it has sacked its payroll department is that it is cheaper to outsource it. It can contract out its payroll department to a specialist firm for only $5 billion - yielding a saving of $1 billion. Thus office inputs, which were reduced to $7 billion, are now increased to $12 billion due to the new input of $5 billion, but office wages remain at their reduced level of $17 billion.

The Trading Account is not affected but the Profit and Loss Account now looks like this.

<u>ORIGINAL</u> PROFIT AND LOSS ACCOUNT		**<u>NEW</u> PROFIT AND LOSS ACCOUNT**	
Gross profit (b/f)	$60bn	Gross profit (b/f)	$60bn
Less office wages	$20bn	**Less** office wages	$17bn (-$3bn)
Less inputs	$10bn	**Less** inputs	$12bn (+$2bn)
Equals net profit (c/f)	$30bn	**Equals** net profit (c/f)	$31bn (+$1bn)

As far as the National Accounting Bureau is concerned, gross output has risen to $125 billion of which $120 billion belongs to the car company and $5 billion to the payroll company. If we assume that payroll inputs in the payroll company match those of the car company when the payroll was in-house, intermediate sales would have increased by $2 billion in the car company and $3 billion in the payroll company, an increase of $5 billion to $55 billion. When we deduct this $55 billion from the gross output of $125 billion, we arrive at the original $70 billion realised in the car company.

Value has not been duplicated, only transferred and accounted for correctly in the national accounts. We now see the severity of the mistake made when variable capital is limited to only productive workers. In this case all these Marxists are doing is reversing the profit and loss account back into the trading account and intermediate sales back into gross output. When a set of capitalists considers a new investment, they will include the wages of the factory workers as well as the office workers who will sell, account for and administer their enterprise. They know well enough that the one group of workers cannot function without the other. The separation of the trading account from the profit and loss account is an explicit recognition that factory workers produce profits while office workers reduce them (the loss side of the Profit and Loss Account). Of course in their universities and text books, no mention of the distinction between productive and unproductive labour is ever found, because of the modern rejection of the Smithsonian, Ricardian and Marxian *labour theory of value*. And yet in practical terms, the schizophrenic capitalist class has to operate with this reality.

What outsourcing has done has not changed the scope of variable capital. The reduction of workers in the car company has reduced the variable capital spent on wages there and increased it in the payroll company, though not necessarily proportionately. It would be wrong to insist that only variable capital is spent in the car company factory and not in its offices nor in the offices of the payroll company. However, when we now look at the personal services sector, the scope of variable capital is changed.

THE PERSONAL SERVICES SECTOR.

Having investigated the distinction between productive workers and unproductive workers, we will now examine the distinction between unproductive functional workers and unproductive personal service providing workers. We will begin by looking at the flows on page 1. In the top right hand corner, we find the personal services sector and note it is solely connected by one blue arrow to the household sector. Most importantly there is no returning red arrow. There is thus a transfer of value from the household sector (blue arrow) but no red arrow, i.e. the intermediate sale needed to subtract it from the household sector from which it derives.

Why are there no intermediate sales back to the household sector? The simple answer is that the household sector resides in the sphere of consumption (and saving). Here is found all personal consumption expenditures. When capitalists hire personal services they do so as part of their personal consumption expenditures. Indeed, as far as consumption is concerned, total consumption breaks down into the consumption of articles of consumption and personal services. (However the household sector does not consume all that is produced, some of it saved and returned to production in the form of investment – the yellow arrows.)

Intermediate sales can only exist in the sphere of production – both primary and functional. They cannot exist in the sphere of consumption. A capitalist not only invests, not only consumes articles of consumption, but surrounds himself with personal servants such as personal assistants, maids, gardeners, chauffeurs, personal trainers and body guards – and in addition, tax consultants, accountants, lawyers, stock brokers and so on (talk about feudalism!) It does not matter if these servants are employed directly or indirectly via agencies or firms.

The important thing to remember is that this labour is purchased for personal use or, what amounts to the same thing, for immediate consumption. In such cases, labour is not set to work to produce a new commodity. Here the formula is M.C.P. We note there is no new commodity and therefore no new money coming in. The whole second half of the circuit of capital is missing. An example will clarify this. Mr Smith, the owner of a printing company, is involved in a dispute over property with his brother. He employs a firm of solicitors, Shyster and Son, to act on his behalf. In this case Shyster and Son, though well paid and educated, are the professional servants of Mr Smith for the hours of litigation he pays for. Let us go further. Let us say that Mr Smith is so impressed with this firm that he commissions a specific partner to write a book on law which his company will publish and sell. Now the partner is no longer the personal servant of Mr Smith. Mr Smith is no longer personally and directly consuming his labour, rather this labour is being used to produce a commodity (a book) for sale. A totally different relationship has emerged. Now production is for exchange not use. We have the purchase and sale of a commodity that constitutes the capitalist social relation. Concretely, the partner may have worked just as hard and as long on Mr Smith's personal litigation as he did on the book, but in the case of the book his labour takes on a different social form: it helps create new and additional value.

This confusion between the expenditure of labour and value production warrants another example, this time wider in scope. Here we will look at a film studio called VFP films. It has three divisions. The first produces Hollywood-type films for cinemas and TV. The second division produces adverts for cinemas and TV on behalf of clients. The third division produces home movies for the rich such as Mr Smith so he can record his blood line at play.

In the first division, the V in VFP, films are produced for sale. They are a commodity like any other. VFP sells these films to cinemas, later to TV and DVD companies. If the films are successful, the new money that comes in will exceed the money expended on their production and VFP will realise a profit. Now we know what the V stands for, it is the production of *value*.

Next we turn to the making of adverts – which takes place in the F division, the *functional* division. Let us assume our car company is bringing out a new model car and needs to inform and entice the public to buy it. The marketing department decides the best way to this is to make a beguiling advert. It therefore commissions such an advert from VFP. The expense of making this film is a cost to the car company which comes out its marketing budget. But this is not the end of the story. VFP has to pay the TV companies and cinemas to screen this advert on behalf of the car company. The total cost, and the total value of the intermediate sales is the cost of producing the advert plus the cost of screening it. Thus this cost forms the revenue circulating in VFP and, through it, to cinemas and TV stations.

Now contrast this to the Hollywood-type films the first division produces. In that division, it is the cinemas and TV companies that pay VFP to screen its films. Money comes in. But in the case of the adverts VFP has to pay the same cinemas and TV companies to screen the advert. Money goes out instead of coming in. In the case of the cinema money comes in rather than going out.

The same technicians could have been employed producing the film and the advert, while employing the same expertise, but the film and advert inhabit different social realities. The film is a commodity while the advert is not. The film produces added value (new and additional money comes in), the advert does not. The film costs money to produce but its sale, the new money, more than covers its cost. On the other hand, the advert just costs – and costs depending on how many screenings are paid for. In the case of the National Accounts, the film increases output and value added, while the advert increases output and intermediate sales, leaving value added unchanged. All is in order.

Finally let us turn to the third division, the hiring of film-making expertise to the personal or household sector. This is a film made for the personal use of Mr Smith and his family. It is paid out of the dividends Mr Smith receives from his company and which has already been recorded by the National Accounts under Net Profit. By choosing to pay for this film, Mr Smith has merely forsaken spending on something else. It is a consumer choice. All we have here is a transfer of some of his already recorded dividends to the film company.

From the perspective of VFP, the income in division P is no different from the income in V and F, its other two divisions. But this income does not come from selling what has been produced, but from the hiring out of their production facility to Mr Smith for his use. The film crew, while at Mr Smith's home, shoot and edit the film with the family and leave the master video and copies behind. What has been produced, including the copyright, therefore belongs to Mr Smith. There is thus no sale of the video.

The sale by VFP to Mr Smith is really an intermediate sale because it is the provision of the factors of production enabling the production of a new use value – the family video. Mr Smith is the producer not VFP. So how does the statistical bureau treat this transaction? It treats it as if VFP is the producer and accordingly, their provision of the factors needed to produce the film is treated as a final sale. As a result, the value transferred to it by Mr Smith is classified as value newly added when none has been produced. On the other hand, there is no deduction of this value at source in the household sector. No expense or cost has been recorded in the household sector. There is thus duplication. Contrast this to the car company, where the advert is logged as a cost in the profit and loss account.

The difference is that Mr Smith's production is for use, while the car company's production is for exchange. The second difference is that the Smith household is consuming while the car company is producing. The Smith family do not see their treasured video as a cost while the car company sees its adverts as a cost. Mr Smith may have less money in his bank account, but he is richer for the film. A cost is the social expression of the expenditure of labour in the process of production. Consumption is the reward for that expenditure. In sum, while there is a cost of production, there can never be a cost of consumption and therefore intermediate sales linked to consumption. The Smith family film has to be treated as a final sale otherwise the national accounts would not balance, the consumer expenditure side would exceed the output side.

We will look at two further examples. The same applies to a tool hire shop. If a compressor is hired out to an individual to pump up her own bouncy castle, it is recorded differently – but treated no differently to when the compressor is hired out to a building contractor for a new building. In the former case, the hirer enjoys her bouncy castle throwing away the invoice, in the latter the invoice is filed as proof a cost of production was incurred.

Taking a final look at the Smith household, we find the gardener so admiring one of Mr Smith's shirts that he goes out and buys the same one, although he is mindful not to wear it to work. At the end of the month Mr Smith hands over $2000 in payment to his gardener. This $2000 increases the output of the household sector by that amount. When the gardener spends $100 dollars on the shirt it increases the output of the retail sector by $100 which, when added to the $2000 increase in output of the household sector, increases national output by a total $2100. Now when Mr Smith buys the shirt himself, it is only the output of retail that increases by $100. There has thus been a duplication in value amounting to $2000 by means of money passing from Mr Smith's hand, to that of his gardener. No one argues that the gardener does not work, does not expend labour, but this is not value-producing labour, it is labour for the personal use of the Smith family. The mere passing of money, this single sided transaction is interpreted as value added when in reality it is value duplicated.

We will look at one final variation. Up to now money has passed between hands, there has been at least a transaction albeit it single sided. The statistical bureaux even invent sales when no money changes hands. For example, they apply rent to owner occupiers as though an owner occupier were their own landlord. This boosts the output of the rental sector. Another classic example is Research and Development. Most Research and Development is done in-house and never sold. In the past the statistical bureaus treated R&D as an intermediate sale, a cost. Now they treat it as capital. And in order to so they invent the missing sale, the imputed sale, whereby the corporation (for example our car company) sells its own R&D to itself.

There are thus a variety of mechanisms by which value added is duplicated. It could be either through the invention of a sale (an imputed sale), the misconstruing of an intermediate sale as a final sale, or the absence of an intermediate sale to record the transfer of value. Anything which artificially increases total sales or reduces intermediate sales will inflate value added. By the device of imputed sales, value has been attached to the labour of the workers in P division and to that of the gardener when in fact the product of their labour did not become a commodity.

It would be wrong to assume that duplication is a small part of GDP. Duplication is significant, perhaps as much as 30% (after deducting the black market) of U.S. GDP, amounting to over $5 trillion. If this duplicated value was a country, that country would be the third largest economy in the world, measured by value – bigger than Japan. Many of the industries classified by the BEA are truly ridiculous. One that stands out is Industry 813A called *Religious, grantmaking, giving, and social advocacy organizations*. As religion is big business in the United States it has its own industry classification **8131.** Religion may increase the size of GDP, but all religious donations achieve, is to reduce the consumption of the giver and increase it for the priest and his/her church. The church is treated as a producer, and not necessarily the producer of miracles. In reality, the only miracle that occurs is that God's work is recorded as human value creating labour in the national accounts. Amen.

In conclusion, it is wrong to equate the expenditure of labour with the production of value. Not all labour produces value. And yet, with few exceptions, the national accounts treats most labour as value-producing labour even when no money changes hands. This is not a semantic argument. Only value-producing labour produces profits. Duplicated value on the other hand, as we are about to see, only preserves some of this already produced profit.

VARIABLE CAPITAL.

The import of Marx's distinction between variable capital and revenue spent on the purchase of labour power is now understood. It is the distinction between money spent on production for exchange versus money spent on production for use. In both cases money is spent on the first exchange, but only in the second case is money returned (i.e. when the output of that labour is sold as a commodity.) This is the mistake that Shaikh and Tonak make with their restricted view of variable capital.

Furthermore, as long as there is correspondence between inputs and outputs, no duplication occurs. In that case variable capital is real and the formula for the turnover of capital is accurate. The problem arises when duplication occurs. By this we mean when there is an output but no input, an addition but no subtraction and where that output is merely an accounting fiction. This of course is what occurs in the realm of personal service production where production is always for personal use.

This duplicated value, in common with real value, is decomposed into wages and profits. The question that now needs to be addressed, is what increases more: wages or profits? If a personal servant works for himself or herself, that is they are directly employed or self-employed, only wages materialise. If they work for an agency or a firm, then these employers always invoice their services for more than the wages they pay their workers. They end up with a profit. This is particularly true in the realm of finance, where banks profit hugely from looking after the wealth of the capitalist class even when they do not speculate with this money.

It is in the nature of personal services that they are labour intensive, and hence when we examine the input/output tables, where value added is broken down into wages, taxes and surpluses, we find that wages form the largest component. It must be remembered that the profits of the capitalist class are not diminished by the payment of wages for personal services. At the same time any profits in agencies or firms that form the residue after wages and expenses have been deducted are added to these undiminished profits. Thus profits are overstated in the National Accounts.

But so too are wages, only to a greater degree. That is why it is misleading to use the division of wages and profits as an indication of inequality when viewing the economy as a whole i.e. the totality of private industry. Inequality is much higher. If the capitalist class, because to do so is now once again fashionable, double their employment of servants, wages would shoot up and this would give the appearance that inequality has fallen, because relative to profits, wages have now increased. But this is an illusion. The capitalists have just changed their consumption habits, fewer yachts, mansions, Bentleys, and more servants.

This contributes to our understanding as to why the ratio of profits to wages is lower in total private industry compared to, for example, domestic industry. There is significant duplication in the former compared to the latter, which is why this author contends we cannot measure anything as long as there is duplication – and this applies to total wages and total profits. Deflating these total wages by turnovers would still yield inflated variable capital. Furthermore, turnovers are also slowed by duplication. Collectively, inflated wages divided by a deflated number of turnovers would result in grossly overvalued variable capital.

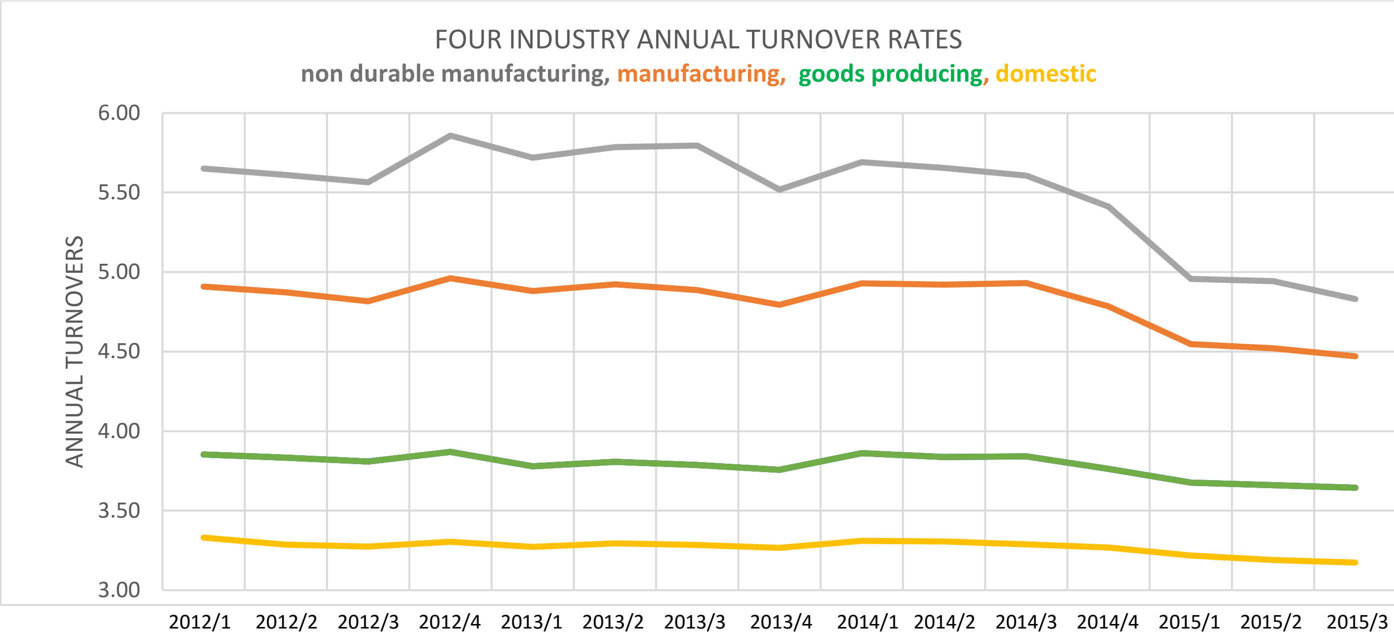
The turnover formula is based on the difference between value added and gross output. If we assume that gross output is $20 billion and intermediate sales are $8 billion, then value added would be $12 billion. This yields a ratio of 67% ($20/$12) and a turnover of 2.34. Let us assume that gross output is overstated by $2 billion making gross output really $18 billion. In that case value added would be reduced to $1 billion because intermediate sales remain at $8 billion. Now the ratio between G.O. and G.V. would increase to 80% ($18/$10) and turnover to 2.60.

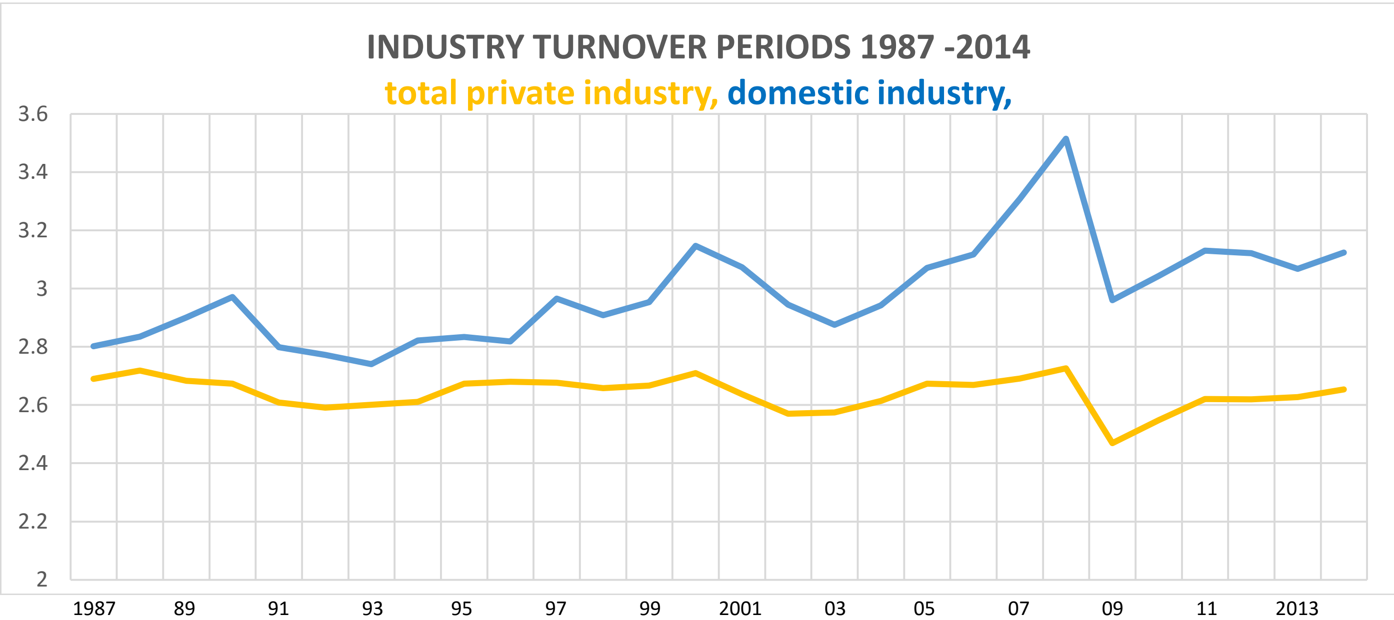
This combination of inflated annual wages and reduced turnovers makes it impossible to deduce variable capital over the whole economy. Variable capital turns out to be much too high. It outweighs the small addition to profits, thus ensuring that the rate of surplus value is grossly understated, turning it into a nonsense. Even the rate of surplus value in total domestic industry, which excludes most imputed sales like household services, non-profit industries and imputed rents for owner occupiers (Bea Table 1.3.5) remains understated. Even here we find duplication e.g. the treatment of Research and Development (nearly 3% of GDP) and more significantly that part of finance providing personal services to the rich (advice, custody and investment).

CONCLUSION.

As has become customary, we will conclude with a commentary on current conditions in the world economy based on the latest data. The first graph below plots various annual turnovers up to the third quarter of 2015, the latest available. Continuing where we left off, it shows that, as expected, domestic industry turns over faster than private industry because of the reduced amount of duplication found there. Although this graph is limited in duration, plotting the graph from 1987 (the second graph) shows that domestic industry turnovers have increased relative to private industry. This is due to the fact that private industry has grown faster than domestic industry and as a result, the relative weight of duplicated value has grown. This is shown in the second graph. Unlike all the other turnovers, which generally show an increase over time, private industry alone has stagnated and that is due to the rise in duplication. Inequality, which has encouraged duplication by boosting personal services, has acted as a brake on turnovers in private industry.

More significantly, the first graph (which is the current one) shows that turnovers began to fall in the second half of 2014. Since then the average turnover has elongated or slowed down by around 10% or 4 days. This is four days less in which to produce profits each year. That is bound to have a depressive effect on the rate of surplus value and with it the rate of profit – and this is confirmed by the article cited below in the *Financial Times* which found the mass of profits generated by S&P corporations declining from this time.





This fall in turnover times also acts to depress the rate of surplus value (exploitation) for it is only within each turnover period that profit is produced. Fewer turnovers means fewer opportunities to produce annual profits. So much for profits. What about the total compensation of workers on which variable capital is based? Unfortunately, annual *compensation* figures are not yet available, only *wages and salaries* up to the third quarter of 2015. This latter figure is smaller than total compensation because it excludes items like health care and pension contributions. If we were to use *wages and salaries*, which is smaller than *compensation*, variable capital would be smaller as well. A smaller base over which to measure profits would yield a significantly higher rate of surplus value.

However, we can still use wages and salaries to obtain a trend, and when we do, we find that the shadow rate of surplus value is falling quite sharply. This is confirmed by another indicator – labour costs – which rose 2.9% in 2014 and by 2.8% in 2015 (BLS data). In sum, turnovers are slowing and profits are falling creating downward pressure on both sides of the ratio reducing it. The rate of surplus value (exploitation) is the flywheel driving the capitalist engine. As it slows down, and it is doing so more abruptly, the urge to invest is reduced. Investment, which was already low, is falling, causing reproduction to crumble.

The Long Read in the *Financial Times* by John Authers (27/2/2016) is a rare article that gives useful insights into the world economy. Here he cites a fall in S&P 500 corporate profits for the fourth quarter of 3.5%. Looking ahead, profits for the first quarter of 2016, which two months ago were predicted to rise by 2.3%, now look likely to fall by 5.7%, a reversal of 8%. The broader MSCI World index, expects profits to have declined by 12% in the developed world during the second half of 2015. Finally, Chinese industrial profits declined by 4.7% in 2015 compared to 2014 (Reuters 27 Jan 2016). Not all industries saw profit falls, but the average trend is down. More ominously the gap between S&P reported earnings and GAAP, the stricter rules governing earnings, widened from 9.5% in 2013 to 29.5% in 2015 exceeding the 28.6% found on the eve of the 2008 crash. In simple language, pro forma reporting of earnings allows companies to dismiss non-recurring expenses. This understating of costs boosted profits to the tune of 29.5% in 2015. CNBC reports an 81% probability of recession in the USA based on three quarters of continuous profit contraction. (This does not include the additional two quarters [Jan-March and April-June] where falls in profit have been pencilled in.)

The biggest cause of this fall, is the collapse in sales i.e. the collapse in revenue. World trade in the final quarter fell when adjusted for Chinese and other multinational over invoicing. According to CPB World Trade Monitor, exports in the final quarter were down 0.7% while imports were up 0.3%. Valued in dollars, the fall over the year was over 10%. CPB also puts world industrial output growth in the final quarter of 2015 as +0.2%. This is well within the margin of overstatement of production in China, and it is therefore likely that world industrial output is currently declining for the first time since 2009. The difference this time is that the contraction is due to a crisis in production and not in finances.

Slowly it is dawning on the capitalist class and their apologists that growth is inexorably slowing down. Secular stagnation haunts them. They see no way out, nothing to spur the system. There is another term for secular stagnation: *simple reproduction*. Neo-liberalism has enriched the capitalists and impoverished the working class. It has now run the economy into the ground. Capitalism which overthrew feudalism based on simple reproduction now enters its second childhood with production subsiding into simple reproduction and worse.

Enter left the reformists. For the first time in twenty years they are getting a hearing. By degrees, the economic debate is shifting away from monetary policy to fiscal policy. The OECD, IMF and others are calling for more government spending and less austerity. The economic programmes of populists like Jeremy Corbyn and Bernie Sanders which embrace Keynesian state intervention and wage rises are being discussed by the mainstream. As economic contraction sets in, their voices will be amplified and those, like Osborne, whose time is spent will be quietened.

From the viewpoint of capital, national solutions no longer provide a way out of its current crisis. But this is exactly what Corbyn and Sanders offer, national solutions to an international crisis. Their call is for their own government to spend more and for their workers to earn more – either through higher wages or a citizens' income. Carried out in isolation, in this or that country, these measures will be vulnerable to the movement of finance and trade which will undoubtedly force a prompt U turn. This is explicitly recognised by both the OECD and the IMF who called for a collective response to the crisis preparatory to the recent G20 meeting in China. Predictably, no such response was forthcoming. The bland communique from the G20 called for vague structural changes while adding balm to the markets, i.e. that while things were difficult, they were not critical.

What these 'under-consumptionist' solutions do not, and cannot, address is the central contradiction causing reproduction to break down: the contradiction between profits that are globalised and investment that is still national. Profits are global, investment is not. Contained within every capitalist crisis is the seeds of its resolution. In this case the need to remove the current barriers to renewed investment. This is the long term significance of TTIP AND TTP. Besides isolating China, this is the tip-tipping of the white stick on the uneven pavement as capitalism stumbles to create new conditions to expand investment. TTP and TTIP herald the restructuring of the nation state, the loss of sovereignty, the harmonising of the conditions for investment and the abolition of the impediments to free trade. In sum they seek a single global market like the EU, but whose Brussels will be located on some offshore island, shrouded in undemocratic mist. A new Bretton Woods Agreement renamed The Cayman Island Agreement (but marked 'Confidential').

In the meantime, the outlook for world capitalism darkens. China's economy deteriorates obscured by the increase in duplicated value. Britain's potential exit from the EU threatens the whole of Europe, while the elections in the USA are lit up by a right wing demagogue and a left wing populist. Brexit, the need to call a referendum over whether Britain should stay or leave the EU, shows how the capitalist themselves are buffeted by the winds of history. It is the global economic slowdown that is driving this referendum and yet this is the worst of times to call a referendum.

All competent sailors know that when heading into a storm they need to urgently reduce sails and never, ever raise any. But this is what Britain is doing with the referendum. The British economy is not exactly sea worthy. It has uncomfortably large budget and trade deficits, the biggest housing bubble in the world, a still weakened banking system and is only kept buoyant by the tide of hot money flowing into and through the City of London. The argument about whether or not Brexit will be good or bad for the economy will be decided by the markets themselves. Should they conclude that an exit is imminent, the run on the Pound could drive up interest rates and bring the housing market down. The added stresses and uncertainty of this referendum are the last things the British economy needs. From being the so called "success" of Europe, Britain could very easily be sunk by this referendum. But then that is emblematic of this new period, where economic contraction provokes one political crisis after another.

At a time of severe centrifugal forces and accompanying reaction, it is more important than ever to fight for the unity of the international working class beginning with European working class unity, which means opposing Brexit. Only the working class can provide the progressive centripetal force needed to counteract these destructive centrifugal forces. The problem remains, an economic system that is unable to further develop the world economy, to which it gave rise, without destructive convulsions.

Brian Green February 2016