JUST AS THE RATE OF PROFIT AND INTEREST INTERACT, 
SO TOO FINANCIALIZATION AND PRODUCTION.

This article not only examines turnover in the US economy during Quarter 3, but, includes an analysis of the composition of funding making up circulating capital. For the first time the contributions made by internal funds (provided by profit) and external funds (provided by bank credits) can be analysed, because the turnover formula yields circulating capital in real time. The results, beginning in 1955, show how abnormal the current period is in terms of this funding.

This posting is a departure from the regular report based on the most recent data on turnover, in this case that of the Third Quarter. It was inspired by a comment made by Cameron regarding the current behaviour of Commercial and industrial Loans which are the short-term bank credits usually used to finance working capital rather than fixed assets. What follows gives an insight into the issue of financialization, or better still, what is keeping the business cycle going. I intend to use the word “business cycle” divorced from the term “industrial cycle” in this article because I believe that the industrial cycle (Marx), has become dissociated from the business cycle, which is abnormal.

Turnover in the third quarter.

Over the last six months manufacturing turnover has decelerated. At 4.29, manufacturing turnover is at its second weakest level since 2016 when it hit 4.25, and, is now proximate to the 4.21 level found in 2009 in the aftermath of the financial crash. The same applies to the goods producing sector in its entirety. The current turnover of 3.78 is within striking distance of the 3.71 found at the depths of the financial crisis in early 2009. Clearly, this data shows US industry continuing to weaken in the second half of the year.

Graph 1.

(Source: see accompanying spreadsheet “GROSS OUTPUT Q3 2019”)
Graph 2 below shows the percentage movement from quarter to quarter. At the end of the old business cycle and at the beginning of the new (rising animation), the volatility is extreme. In contrast, the quarterly volatility over the last two years is subdued with the overall rate declining. The volatility around changes to the economy in 2008 and in 2014 cannot be ignored and any analysis which does so, has to be considered partial.

Graph 2.

No such thing as financialization or finance capital.

I believe Marx and Engels would have rejected the categories finance capital and financialization. The reason is that Marx and Engels were not one dimensional or one-sided. They did not see economic life as a line (one dimensional), or a circle (two dimensional) but as a spiral, a multi-dimensional world embodying time and reflecting the push and pull sideways and upwards between the dominant laws governing the economy, and the counter-vailing laws.

Marx always treated industrial capital (including commodity capital) distinctly from money capital because they were separated by process and function. Capital is cleft into industrial and money capital in the normal way via the rate of profit. A capitalist will move his or her capital between the two depending on the average rate of profit. If money capital earns a higher rate of profit via the medium of interest, then capital will migrate from industry to banking capital and vice versa. Here we consider a longer term perspective where the difference in the rate of profit is well established rather than episodic. See [https://theplanningmotivedotcom.files.wordpress.com/2018/04/the-overstatement-of-the-finance-sector-pdf.pdf](https://theplanningmotivedotcom.files.wordpress.com/2018/04/the-overstatement-of-the-finance-sector-pdf.pdf) This article shows the minimal difference in the rate of profit between industry and finance when comparing returns on capital and nothing else.

In the shorter term the profit earned by banking capital depends on the movement of the rate of interest. The rate of interest in turn is governed by the law of supply and demand, the demand for bank credit as against its availability. Demand and supply are not independent entities here. Much
depends on the business cycle. The demand for money is at its lowest in the period of stagnation or recession that follows the economic emergency. Interest rates are at their lowest at this time because the many hoards of money capital cannot find any outlets, including those for speculative purposes, as the speculative rout following the financial emergency is still fresh in memory.

Conversely, interest rates peak at the pinnacle of the cycle. What Marx called the phase of forced production when turnover starts decelerating before seizing up, and immediately prior to the financial emergency. Thus at every phase the driver continues to be the level of investment and whether or not this is funded by internal funds (profit) or external funds (bank credits). This section analyses these ratios going back to 1955. Of course, this analysis is only possible because we are able to distil circulating (working) capital from the system of national accounts via the turnover formula.

Before proceeding, however, it is necessary to add a concluding remark. If we were to utilise the concepts of finance capital or financialization, we would lose everything. What was dynamic would now become fossilised. Just as capitalism can only exist as “many capitals”, so it can only exist with industrial and money capital independently facing each other. Money capital and industrial capital, dialectically, exist as the “unity of opposites”. They do not exist as a “synthesis” simply because neither begot the other. Capitalism emerges standing on two legs, money and industrial capital. Just as the reduction of many capitals to a few or a single capital would freeze the movement of capital, so would the emergence of finance capital, thus arresting the dynamic of capitalism which is based on capital moving from low to high rates of profit with the minimum of credit friction. (Note 1.)

**Examining the contribution to working capital from the side of profit.**

Cameron pointed to the odd behaviour of Industrial and Commercial Loans highlighted by a blog by Wolf Street. I thought this phenomenon needed more detailed analysis. The best data source for this credit is FRED table BUSLOANS. In order to obtain a clearer picture we will look at the inter-relationship between internal funds and external funds in the sphere of working capital.

The sourcing of internal funds are profits, and profits is that share of surplus value belonging to the enterprise. Thus we will look at the rate of exploitation, the rate of surplus value and consequently the mass of profits. For this purpose NIPA Table 1.14 will be used. Once again the turnover rates found in the goods producing sector will be applied to the non-financial corporate sector which makes up over two thirds of total sales in the US economy and is thus representative for the economy as a whole. Two sets of graphs will be presented. Those based on an annual series beginning in 1955 to give a historical perspective and a quarterly series beginning in 2005 to provide finer detail and which is provides more accurate current trends. These graphs will be paired up.

The first two graphs (3 and 4) relate to the rate of exploitation. This is the ratio of net value added less compensation divided by compensation. In other words, the annual net surplus (free of taxes) divided by annual compensation. This applies to the quarterly figures and the annualised ones. The rate of exploitation is analogues to a rate of turnover of 1, or an annual rate, which of course is non-existent. The vast majority of rates are multiples of 1. Nevertheless, it is worthy because it is the closest aggregate which throws light on the physical division of the working day into its paid and unpaid parts.

The reader should note that 2019 represents the first three quarters of the year. In addition, no attempt has been made to separate productive from unproductive workers, because functionally unproductive workers like clerical workers are paid out of variable capital and hence circulating capital, just as productive workers are. (Marx Volume 3) Thus while the division between the two types of workers may explain why the rate of exploitation has not risen as much as expected, it has no bearing on our specific analysis of the flow of funds financing working capital.
Of course, it is not the rate of exploitation that determines the mass of profits but the rate of surplus value. The Marxist formula for the rate of exploitation is \( \frac{s}{v} \) where \( s \) stands for the annual net surplus and \( v \) for annual compensation, whereas the rate of surplus value is \( \frac{s^n}{v} \) where \( n \) stands for the number of annual turnovers. Because turnovers vary so too does the absolute difference between the rate of
exploitation and the rate of surplus value. One of the primary drivers of this variation is the phasing of the industrial cycle. All this is brought out in Graph 5. (Note 2)

**Graph 5.**

![Rate of Surplus Value vs Rate of Exploitation](https://theplanningmotivedotcom.files.wordpress.com/2019/10/part-1.-annual-turnover-1998-2018-pdf.pdf)

The rate of surplus value rises higher than the rate of exploitation in the up-phase and falls further in the trough of recession. This is due to the alternating acceleration then deceleration in the rate of turnover. It is this differential rate of turnover which means that it is the rate of surplus value, not the rate of exploitation, which determines the mass of profits. (Note 2.)

**Graph 6.**

Graph 6 is one of the most important of Graphs. It shows why turnover cannot be ignored. Trying to connect the capitalist dots without using it is crude and clumsy. Graph 6 shows the convergence between the rate of surplus value and the mass of profits and the divergence of the rate of exploitation and the mass of profits. This is due to the changes in the rate of turnover or what is the same thing, the changing periods of production and circulation. The Graph is based on non-durable manufacturing.

Turning back to Graph 5 we note how the rate of surplus value has fallen since 2014. It has fallen by 27% which has had the most profound effect on the mass of profits in this sector. The mass of profits have fallen by a third since 2014 (Graph 7) and by over 40% in real terms when taking inflation into account. And they have fallen unrelentingly for over 5 years. Normally this collapse in profits is associated with a recession.

Graph 7.

Examining the contribution to working capital by loans and credits.

We note that the collapse of profits represents a deterioration in the potential contribution of profits to the funding of circulating capital. But there is more to this picture than meets the eye as we will see later. A deceleration of turnover is not only associated with a fall in the mass of profits, but with the rate, because it is also associated with an increase in circulating capital. Clearly if the production & circulation period increases from say, 70 to 80 days, the working capital which sufficed for 70 days, has now to increase to suffice to 80 days (if employment does not change). Its this increase in variable capital and through it circulating capital, which accounts for the fall in the rate of surplus value.

But more on this later. In the meantime the fall in the mass of profits, both post-tax and undistributed, as a share of circulating or working capital, is shown in the two graphs below. It is important to note the following two qualifications. Part of the increase in circulating capital will be found in the profit and loss account which will reduce profits. Those are the elements in circulating capital not directly linked to the production process e.g. general, administrative and accounting costs. Secondly, though non-financial corporations are by far the biggest users of this credit, they are not the exclusive users.
We note that since 2014 there has been a sharp fall in post-tax profits as a ratio of working capital. This is particularly evident in Graph 9. The fall from 2014 Q3 to Q3 of 2019 was exactly one third due to both the fall in the mass of profits as against the rise in working capital (Graph 10). The inclusion of undistributed profits is tangential, there to merely show how the effect of dividends and share buy backs. Here Graph 8 is the more revealing. The larger gap between the two evident from about 2005 shows the relative growth in share buy-backs and dividends.
After some slippage at the end of 2015 working capital began to grow. Part of the reason has been described above, the deceleration in the rate of surplus value requiring more capital for every $1 of output. Indeed, at this point it is useful to quickly examine the relationship between working capital and fixed capital. Graph 11 reveals that since the 2008 financial crash, the structure of US capital has changed. Instead of falling in the normal way, the share of capital held by circulating capital has risen marginally. This is mainly the product of the tepid investment in means of production which has led to low productivity and the reliance by corporate America on raising the absolute rate of exploitation through faster work and lower pay.
The combination of decreasing profits and increasing working capital has led to a greater reliance on bank credit since 2014. For our analysis and predictions we are focused on the 5 year period from the 3rd quarter of 2014 to the current period. Graph 12 will be looked at first. We note that the ratio of loans to working capital has never been higher. Its previous peak was in 1974 at 37.5%, its current peak of 38.3% is twenty percent higher than the historical average of 30.8%. Also note the how pointed is the shape of the pinnacles before the three biggest crashes and recessions over this period, 1974, 2001 and 2008. This becomes important when we examine Graph 13.

Graph 12.

Graph 13.
Graph 13 provides finer detail than Graph 12. Note the difference between the pinnacle of 2008 and the plateau of 2016 to 2019 outlined in red. There was a slight fall in 2016 in what I called the pseudo recession at that time. But it did not turn into the valley associated with a full recession. It then recovered in Q1 of 2018. The only time this has happened before was in the high inflationary period of the 1980s. The normal profile is a pinnacle produced by the sharp upward rise followed by an equally sharp downward fall in borrowings. This narrow peak coincides with what Marx described as the time when “money is king”, a time when the chain of credit begins to shatter because turnover seizes up and obligations cannot be met. In the preceding months the clamour for credit reaches a crescendo after which the voices become muted as illiquidity turns into insolvency. It is unusual for such an acute phase, really a crisis, to endure outside a year.

It is also associated with a spike in interest rates as bank and providers of credit take advantage of borrowers through the pricing in of risk. But before we look at interest rates it is useful to examine the interaction of profits and loans as Graph 14 does.

Graph 14.

Graph 15.
In Graphs 14 and 15, the peaks tend to occur, when they do, after the outbreak of recession due to the collapse in profits. What is of interest here, looking at the period post 2014 (Graph 15), is the steady two thirds build in loans from 150% to 250% of profits. Indeed the level is already 25% higher than in the first half of 2008 immediately prior to the financial emergency.

Normally such a build in loans as a share of profits and working capital is met with an increase in interest rates. Firstly, because the lack of internal funds creates a dependency on external funds. Secondly, because the risk of default rises because there is a lower cover from profits. Since 2014 the interest rate coverage has fallen from 4.7 to 3.7. (Note 3.)

Graph 16.

The reflex of this deterioration in coverage is higher interest rates which did occur, but was then reversed. (The coverage itself was propped up by low interest rates which reduced interest payments.)

Graph 17.

(Source: FRED Table CPF3M 3-Month AA Financial Commercial Paper Rate, Percent, Monthly, Not Seasonally Adjusted)

The shape of this graph is revealing. In the period when profits were rising sharply from 2010 to 2014, against a background of below trend investment, the 90 day rate was effectively zero when taking
inflation into account. It only rises as anticipated, once profits begin to collapse and industry and commerce now relies more heavily on external funds to finance what little expansion there is. Thus there is a steady build in interest rates from 0.25% in mid-2015 to a peak of 2.59% in February.

But then it goes into reverse, not because of a recession but because the FED begins to cut its interest rates. It gets spooked by the economy stalling. The first of three cuts in 2019 occurred in March of 2019 and was accompanied by an announcement by the FED that it would abandon unwinding Quantitative Easing, i.e. selling off the assets it had accumulated since 2008, which had had the effect of pushing up long term interest rates. Thus the FED pre-empted the “scissors effect”, the snipping the industrial cycle by the fall in the rate of profit on the one side, and on the other, the rise in the rate of interest, which collectively precipitates the financial emergency.

By September this was not enough. The REPO rate began to shoot up, well outside the band set by the FED. As a result the New York FED created a facility to inject liquidity into the REPO market to bring down rates. This was a variant of MMT, the helicoptering of money into Wall Street via the REPO market which was admitted to by the Dallas FED President Kaplan in a recent Bloomberg interview. While the FED insists the injection is short term, and that unwinding will take place in February, the demand for this facility and the data suggests otherwise. After Total Assets held by the FED fell from $4.174 trillion on Wednesday the 1st of January to $4.150 trillion on the 8th, it then rose to a new high of $4.176 trillion on the 15th. The reversal in the disposal of assets is shown in the graph below.

**Graph 18.**

**Discussion.**

By financialization we understand leverage. There are two forms of Fictitious Paper. Tier 1 which is paper that acts as a direct claim on surplus value, for example shares and bonds, and Tier 2, which is a pure bet on the movement of Tier 1 paper. The growth in Tier 2 paper in relation to Tier 1 has consequences for the latter, because the profits made by Tier 2 paper is at the expense of income in Tier 1. The growth of Tier 2 paper does not increase the stream of surplus value emanating from production, but it does change the distribution between the holders of Tier 1 and Tier 2 paper.
What encourages Tier 2 paper is low interest rates. Conversely, leverage is reduced once interest rates rise. What therefore has to be explained is why interest rates have been so low for so long. This is not a unique state of affairs. Interest rates were low as well during the first Period of Globalisation prior to WW1. The same is true for the second Period of Globalisation from 1996 to 2014 (China and the USA) or 2016 when the contraction became globalised.

This recent period can be described as a two decade period of “prosperity” (Marx) punctuated by two speculative crashes in 2000 and 2008. I am not a fan of long waves, but it is clear that the industrial cycle is always located within the changing structure of the global economy and is influenced by it. In a period of prosperity profits abound, and much of the investment by the dominant corporations are funded internally. Hence it has a depressive effect on interest rates which was added to negligently by central bank interventions. However, prior to 2014, the dominant influence acting on the rate of interest was the rate of profit.

Since 2014 and particularly 2016 the dominant influence has been the interventions by central banks around the world. This intervention has now created a dependency on the largesse of the FED as we have seen most recently in the REPO market in New York. Thus what we currently need to focus on not finance capital but central bank capital. The Central Banks are modifying the relation between borrower and lender in the market.

This is clearly detrimental to savers (lenders) who are providing a real subsidy to the banks, but it is also undermining the role of interest rates in purging the metabolism of capitalism of its excesses or more precisely, the overaccumulation of debt which can no longer be supported by the flow of surplus value. This means that while the FED and other central banks are buying time they are doing so at the expense of accumulating excesses.

The distortions produced can be seen in the two graphs below. The first is from the CASS Freight index which shows the collapse in total freight shipments in 2019.

Graph 19.
The black line represents 2019. It shows that shipments are currently trending below 2016. In sum shipments have fallen 23% since the high point in May 2018. Total shipments fell 7.9% in December compared to December 2018, the steepest month on month fall since 2008. And yet, despite truck shipments falling 3.3%, retail sales rose 5.95% in value terms during the same period. (Odd that, even though Rolex watches, expensive perfumes and designer clothes take up little room!) https://www.cassinfo.com/freight-audit-payment/cass-transportation-indexes/december-2019

On the other hand the financial markets had a ball. The Wiltshire 5000 representing 97% of all listed shares, soared regardless. It finally went up by 31% during the year as the FRED data showed.

Graph 20.

Thus a “through the looking glass” economy. Over the course of the next few weeks the profit data around the world will become available and thus a deeper assessment of the world economy going into 2020 will be possible. (Note 4.) In the interim, there has been a deterioration in the amount of Commercial and Industrial credit outstanding as the table below shows. This is what Cameron drew my attention to, and should it continue to fall this is a negative for the economy and is more significant indicator than all the soft surveys. No wonder Trump signed the trade reprieve with China.

**Quarterly change: Commercial and Industrial Credit**

<table>
<thead>
<tr>
<th>2018, Q3</th>
<th>2018, Q4</th>
<th>2019, Q1</th>
<th>2019, Q2</th>
<th>2019, Q3</th>
<th>2019, Q4</th>
</tr>
</thead>
<tbody>
<tr>
<td>6.3%</td>
<td>9.5%</td>
<td>10.0%</td>
<td>2.5%</td>
<td>3.1%</td>
<td>-1.6%</td>
</tr>
</tbody>
</table>

Thus at the heart of matter is the question of profitability. In the absence of a rising rate of profit (seen as a discounted cash flow) the share market depends on FED hype. What is happening now involves supressing the reflexes that restores capitalism and keeps it dynamic. It is clear the capitalist class are petrified of another crash and the political consequences that it will generate.
Note 1. Following the US assassination of Iran’s military Chief of Staff, occurring as it did seven days after the first joint naval exercise involving Iran, Russia and China, I intend to produce an article on Imperialism to examine how earlier theorists oversimplified the contradiction between the global and national economy.

Note 2. I have shown previously that as long as the rate of surplus value falls below the rate of exploitation this will indicate a fall in the mass of profits. If we turn to Graph 5 we find in the run up to 2104 the rate of surplus value exceeding that of exploitation because of the acceleration in turnover, and as a result, the mass of profits expands. After 2014, and with the deceleration of turnover forcing the rate of surplus value below that of exploitation, the mass of profits contracts. Hence the general rule, as long as the rate of surplus value stands below that of exploitation, the direction of the mass of profits tends to be downwards. I have not found any exceptions to this rule.

Note 3. The formula for coverage is interest paid plus, tax plus profits divided by interest paid.

Note 4. It is impossible to reconcile retail sales, production of consumer goods, inventories and foreign trade. It appears that retail sales are overstated and with it, GDP. With all the data in for 2019 I will examine these dichotomies in a forthcoming post.

Brian Green, 17th January 2020.