

THE ACCUMULATION OF DEBT DURING THE INDUSTRIAL CYCLE.

This is a speculative article which arises, firstly, from observations in the preceding article, titled, "Imperialism, Driven by the Fall in Profitability" and the more general observation that debt always accumulates alongside capital in the up-phases of the industrial (business) cycle, only to be purged alongside capital in the recessionary phase which begins with the financial crisis marking the definitive end to the industrial cycle.

The requirement for debt arises out of either one of two events. Firstly, when current income is insufficient to cover the cost of a means of production or an expensive article, but which can be covered over time with future income. A mortgage comes to mind, allowing the payment of a house to be spread over 20 to 30 years. The other form of debt is usually found in circulation where credit is obtained to purchase an article for the purposes of selling at a later date at a price which covers and clears the debt. There is a final ancillary debt worth mentioning, and that is debt used to maintain the liquidity of insolvent borrowers or firms where cash flow does not permit the paring down of the principal or original loan.

These are the debts that circulate on the surface of the capitalist system. They are the obvious and familiar forms of debt. The debt we are looking for is subterranean, hidden and much more powerful, helping create the eddies and swirls that ripple the surface disturbing the more superficial form of debt. This is the debt which is the necessary and unavoidable by-product of the accumulation process itself. A shadow that weighs heavily on the accumulation process itself.

Innate debt.

The two Tables below are taken from the section on Credit Money in the above cited article on Imperialism. <https://wordpress.com/post/theplanningmotive.com/1772> . If we accept that the bulk of the money supply is monetized sales revenue (c + v + s), and that it consists of the conversion of private production into social consumption via the sale, then we have to recognise the distinction between legacy value and current value (which includes preserved value).

The two tables below provide this distinction. If we stand at the conclusion of the cycle of production formed by Table 5, we note the value of its output is 19905. If we look at the monetized legacy value formed from the sale of the output in Table 4, it provides only 18830. There is thus a shortfall of 1075.

Table 4. (Expanded Reproduction) (+4.8% growth in GDP)

DEPT.	c	+	v	+	s	=	current value
1	8495		2230		2230		12955 (+585c)
2	2275		600		600		3475 (+245v)
3	1600		400		400		2400 (0s)
Legacy value	12370		3230		3230		18830 (+830)

Table 5. (+5.7% growth in GDP)

Dept.	c	+	v	+	s	=	current value
1.	8895		2435		2435		13765 (810)
2	2460		640		640		3740 (265)
3	1600		400		400		2400 (0)
Legacy value	12955		3475		3475		19905 (1075)

Clearly 18830 is insufficient to circulate 19905. To complete the circulation of the 19905, credit money to the value of 1075 (adding up to 5% of the 19905) must be generated by the financial (banking) system. Whereas monetized revenue belongs to the holder or the depositor, credit money forms a debt. Thus existing alongside the 1075 in credit money is the obligation to repay this 1075 at a future date, an enforceable debt.

Now it could be argued that that 1075 in credit money is temporary. After all as we see in Table 6 below, the sales revenue at the end of the cycle provides 21245 which is 1340 larger than the 19905 at the end of 5. Plenty of money to pay off the 1075, or is there?

Table 6. (+5.7% growth in GDP)

Dept.	c	+	v	+	s	=	current value
1	9450		2620		2620		14690 (810)
2	2715		720		720		4155 (265)
3	1600		400		400		2400 (0)
Legacy value	13765		3740		3740		21245 (1075)

We know the money supply at the end of 5 consists of 18830 monetized sales revenues plus 1075 credit money, and that at the end of 6, it consists of 19905 monetized sales revenues plus 1340 additional credit money. This is shown in Table A below. The bottom row is the important one. If the 1075 is repaid at any time in cycle 6 and that credit money is extinguished, it will reduce the 19905 back to 18830. This being so, the amount of new credit money that will be needed to circulate the output of 6 standing at 21245 will have to rise to 2415. 1075 to replace the credit that has been extinguished plus the 1340 needed to cover the shortfall between cycles 5 and 6.

Table A.

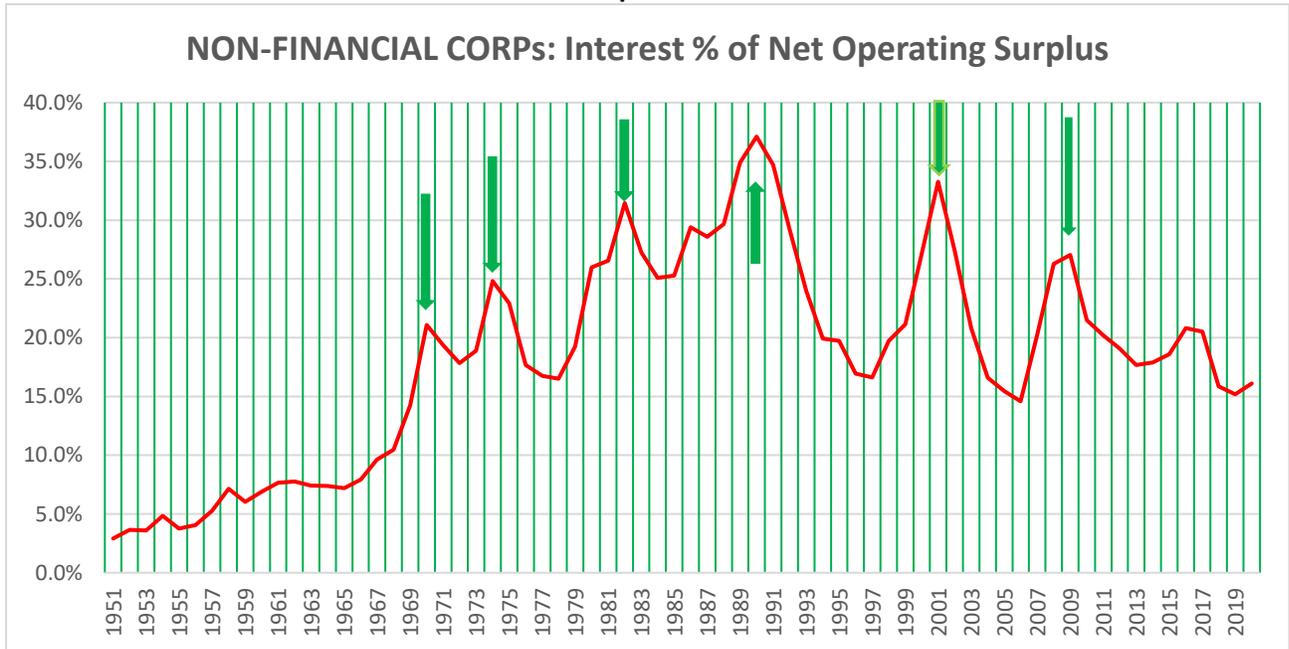
Cycle	Monetized revenue	Credit money	Total money	deficit
4	18830	?		
5	18830	1075	19905	1075
6	19905	1340	21245	1340
Totals		=2415		=2415
Paid back	19905 – 1075 = 18830			21245 – 18830 = 2415

Turning back to Tables 4 and 5, we note that the surplus product is new capital in its entirety. Means of production (Dept 1) valued at 12955 has risen to 13765 while the articles of production (Dept 2) have risen in value from 3475 to 3740. Together the growth of constant and variable capital amounts to 1075. The credit money of 1075 is needed in order to circulate this new capital making accumulation possible.

Now it follows that as long as capital accumulates there will be a rise in debt. Legacy value tends to lag behind current sales value. This accumulated debt can only be purged under one condition, legacy value needs to exceed current value, and that requires a recession when value is destroyed. It is the realisation problem, when prices plunge reducing the amount of current sales value, and above all, no new credit can be obtained under these conditions. Only now does legacy value exceed current value setting the stage for the purging of debt. In a sense the recession rebalances legacy and current value. It prevents the deficit in legacy value acting as a drag on the production of future value.

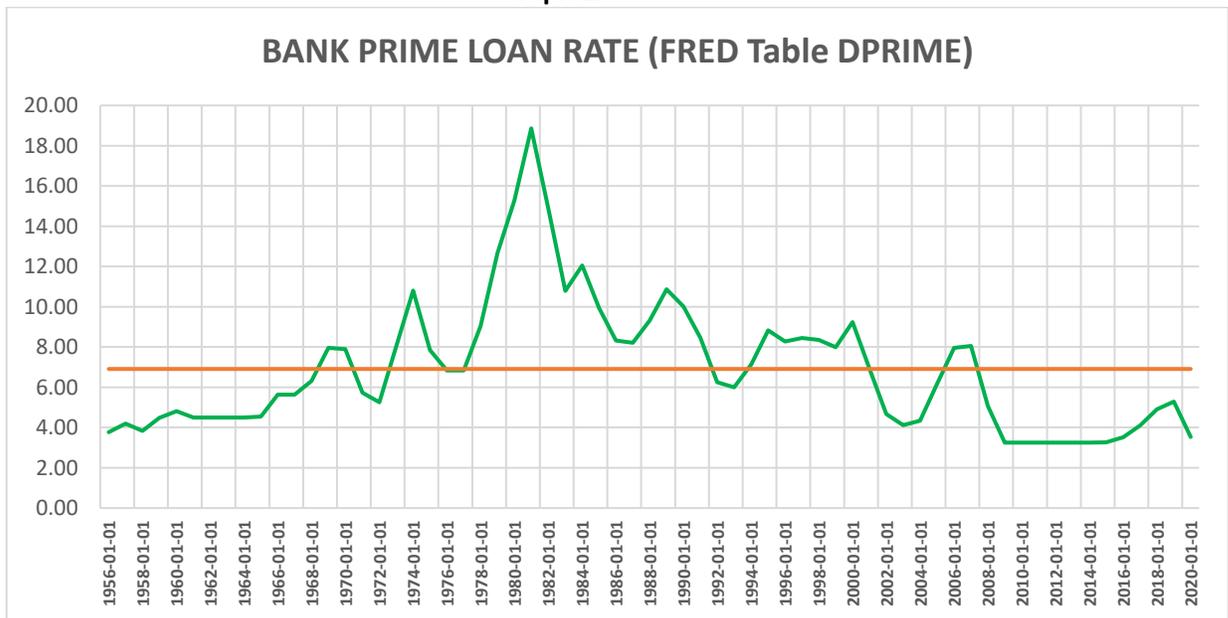
What now needs to be done is to examine whether the real world corroborates this. And indeed the shape of the graph found in Graph 1 is the predicted shape. (Every arrow points towards the peak of the phases of expansion.) We note that interest as a share of surplus value rises in the up-phases when the volume of debt increases and with it interest rates. To gain perspective Graph 2 covers bank loan interest rates. This rate of interest refers to bank loans and not bonds, though both rates move in tandem. These rates apply to US Non-Financial Corporations.

Graph 1.



(Source: NIPA Table 1.14)

Graph 2.



I have included Graph 2 because movements in interest rates of themselves, without any change in the volume of loans, can eat up a bigger share of undivided profits or net operating surplus. Nevertheless without dissociating volume from interest rates it is clear the greater proportion of interest, with the exception of the late 1980s, is due to changes to the volume of debt rather than interest rates.

Thus the increase in the requirement of credit money to circulate the additional capital seems confirmed by the peaks they form. Conversely, the purging of debt in the aftermath of recession is also clearly seen through the valleys they form. In most cases the fall to the floor of the valleys on the downside halves the share taken up by interest rates. This fall is associated with the accumulation process stalling. Nonetheless the fall frees up profits thus helping lay the foundation for future accumulation. We now have a clearer and more rounded understanding of the barriers thrown up by the accumulation process itself. Formerly the focus was on profitability alone, but the role of debt has now been described as well.

It is also important to distinguish the chronic from the acute. The immediate trigger or should we say the event which detonates the financial crisis, what Marx called an “emergency”, is a sharp upward spike in interest rates as the chain of trade credit begins to disintegrate. Despite the sharp uptick in interest rates, rising risks makes new and additional credit unavailable. The whole metabolism of capitalism becomes constipated with unsold commodities backing up, and this gridlock in turn paralyzes production.

It is probable that the central banks instinctively recognise this. They have cheapened credit money since 2009 in order to prevent interest rates playing their part in purging debt. They have thereby reduced the burden on profits but also promoted speculation. However, economic laws cannot be overridden by monetary policy indefinitely. Capitalism is capitalism, it cannot change its spots.

Conclusion.

The tail wind during the up-phases of the industrial cycle is the rate of profit. The headwind on the other hand is the surge in debt caused by the accumulation process itself. A given rate of profit will be adequate to service a given level of debt, but it may be inadequate with a higher level of debt. The general law is that the longer the industrial cycle extends, the more the rate of profit tends to decline, the more debt tends to rise. At a certain point the accumulation process becomes compromised. There is too little profit facing too much debt. It is as though the capitalist ship, which having sped up, has created such a large bow wave that it threatens to up end the ship.

These are the barriers that capital throws up before itself. Capitalism needs to smash through them if it is to re-ignite the accumulation process and this requires purging excess industrial capital and excess financial debt. This is the destructive phase, the clearing away of capital and debt to make way for a renewed round of accumulation at a higher level. And its success requires the suppression of the working class.

This scars capitalism over and over again, destroying the gains of labour and tearing at the fabric of society. This marks capitalism out as a crisis ridden, transitory mode of production. It may be society’s first industrial society, but workers must ensure that it is not the last. If we are to make the most of capitalism, we must use its legacy to build a new society based on the abolition of capitalist private property, and to do so for the sake of future generations and our planet.

Brian Green, 22nd June 2021.

