NOW IT GETS INTERESTing.

We follow Marx in our understanding, that in real life, direct links are seldom found between cause and effect. More often than not, there are mediating forces at work, subsidiary forces, that ensure that instead of straight lines being the norm, zig zags are. This posting looks at the role of interest rates which are currently playing a confusing if not abnormal role in the economy .

Marxist have long accepted, correctly so, that it is profits that drive investment and not the other way around. More specifically, a rising rate of profit is associated with rising investment and vice versa. There is currently a profit recession in the global economy. It can be argued that this has resulted in an industrial recession globally. The highly regarded *ALL-Global Manufacturing PMI* released on the 1st July fell to 49.3 from June's figure of 49.4. This reading has been negative for three months in a row. Additionally, 49.3 is the lowest reading for 7 years. The latest Dutch based *CPB World Trade Monitor* puts industrial momentum at 0.7% courtesy of Chinese industrial momentum. https://www.cpb.nl/en/worldtrademonitor.

In the mean time, the same report suggests that global trade momentum was zero.

However, if we turn to GDP data, the world economy is still growing. According to the IMF's latest projection for global GDP growth, released on the 18th July, global growth is expected to expand by 3.2% in 2019. https://www.imf.org/en/Publications/WEO/Issues/2019/07/18/WEOupdateJuly2019 This growth is down to only one factor, while investment is falling, consumer spending is rising. In Germany despite industrial contraction, retail sales increased 3.5% over the last quarter. In June, Japanese retail sales advanced 0.5% year on year despite industrial output being down 4.1% over the same period. In the United States, while industrial production is down 1% since the beginning of the year, consumer spending is up by 2.8%. https://fred.stlouisfed.org/series/PCE & https://fred.stlouisfed.org/series/INDPRO/

The primary reason is the state of world stock markets. According to the FT all world index, despite the collapse in profitability, global share prices remain elevated at around 340 compared to 260 in 2016,. https://markets.ft.com/data/indices/tearsheet/summary?s=AW01:FSI As we shall discuss later the index has fallen sharply over the last month. What is supporting these share prices? The simple answer is low interest rates and easy money. Or in the words of Marx, the "*the cheapness of capital*" which "*gives facilities to speculation just in the same way as the cheapness of beef and beer gives facilities to gluttony and drunkenness."* (Volume 3, Chapter 25, page 532 Penguin Edition.)

The stock markets are highly concentrated. The total market cap of global markets in 2018 was $68.65 trillion according to the World Bank. https://data.worldbank.org/indicator/CM.MKT.LCAP.CD The top 100 corporations account for 26% of this and the top 25 tech companies for 8% of the total market cap. The S&P 500 is being driven by less than ten non-financial giant corporations that are worth 22% of the market, the same concentration the banks achieved prior to 2008. On the other side of the coin, Bloomberg has shown that 38% of S&P corporations have a negative worth (assets less liabilities). On average, tangible net worth per share has fallen from $304 in 2014 to $273 in 2018 and yet the market is much higher currently. https://www.bloomberg.com/opinion/articles/2018-09-17/s-p-500-has-a-tangible-net-worth-problem

The corporations that have done best are the ones that cater for the top 10% of earners. This top 10% spend as much as the bottom 80% of society and are acutely dependent on the capital gains arising from the stock and bond markets as well as property. (We may also add that because of their extravagant consumption, the carbon footprint of the average family in the top 10% is 25 times greater

than the carbon footprint of a family in the bottom half of earners.) To confirm this, we need look no further than auto sales where the market for cheaper small sedans has collapsed while that of the larger and more expensive SUVs and trucks has soared. Whenever markets have fallen so have retail sales particularly more expensive products and whenever markets have risen so too have retail sales.

The nature of interest rates.

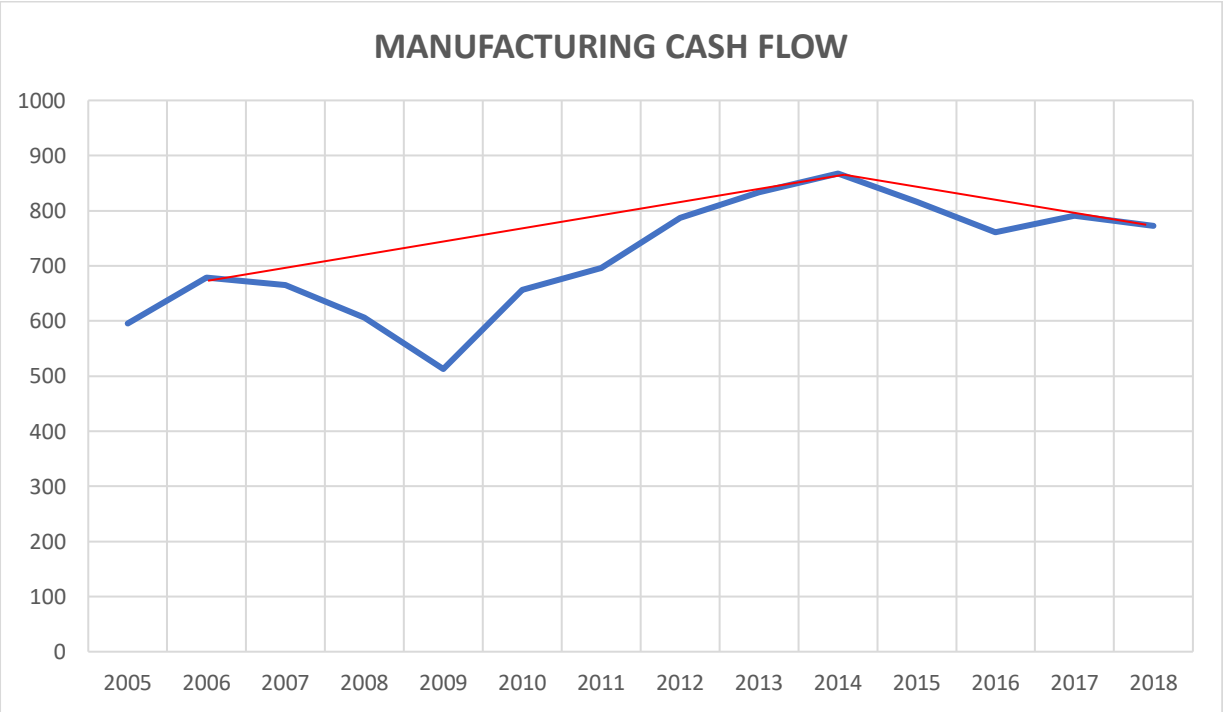
Once again we follow Marx's lead in understanding that the rate of interest is set by competition. Capital splits between industrial/commercial capital on the one side and monetary capital on the other. This split is governed, as in all matters, by the question of profitability. If a higher rate of profit can be earned by being a banker than by being an industrialist, then the number of bankers will grow, and the number of industrialists will fall. Of course, in real life the matter is somewhat stickier as it is difficult to step out of the shoes of an industrialist and straight into the shoes of a banker.

More to the point, the demand for loanable funds, outside the consumer sector, is generally determined by the investment requirements set by industrial and commercial capital. The supply of loanable funds in turn is provided by the banking sector and wholesale credit markets. The demand for loanable funds depends on the phases of the industrial (business cycle). It is at its lowest in the phase of stagnation and highest in the phase of overproduction.

During the phase of prosperity, when profits are rising sharply, much of the investment needs of commerce and industry are met from internal funds due to rising profits. Under these circumstances, non-financial corporations bank profits rather than seek fresh loans, although this can be uneven. I have argued that such a long-term state of prosperity began with globalisation which lasted from the early 1990s until 2014. It was this abundance of profits at least in the USA, Japan and Europe, that led to the sustained fall in interest rates.

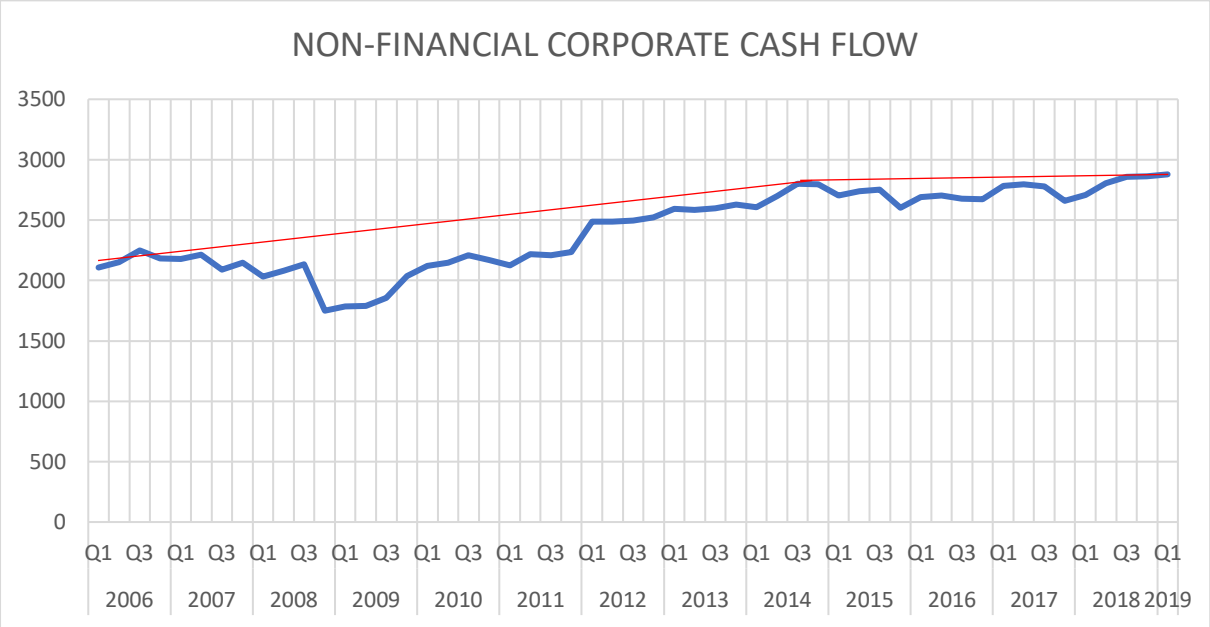
However, the period of prosperity ended with collapse of profits after 2014, as the two graphs below which plot cash flows show. Corporate cash flow here is the sum of pre-tax profits plus depreciation.

Graph 1.



(Source: Table 3.4ESI for Depreciation and Table 6.17D for profits. 2018 depreciation extrapolated.)

Graph 2.



(Source: Table 1.14)

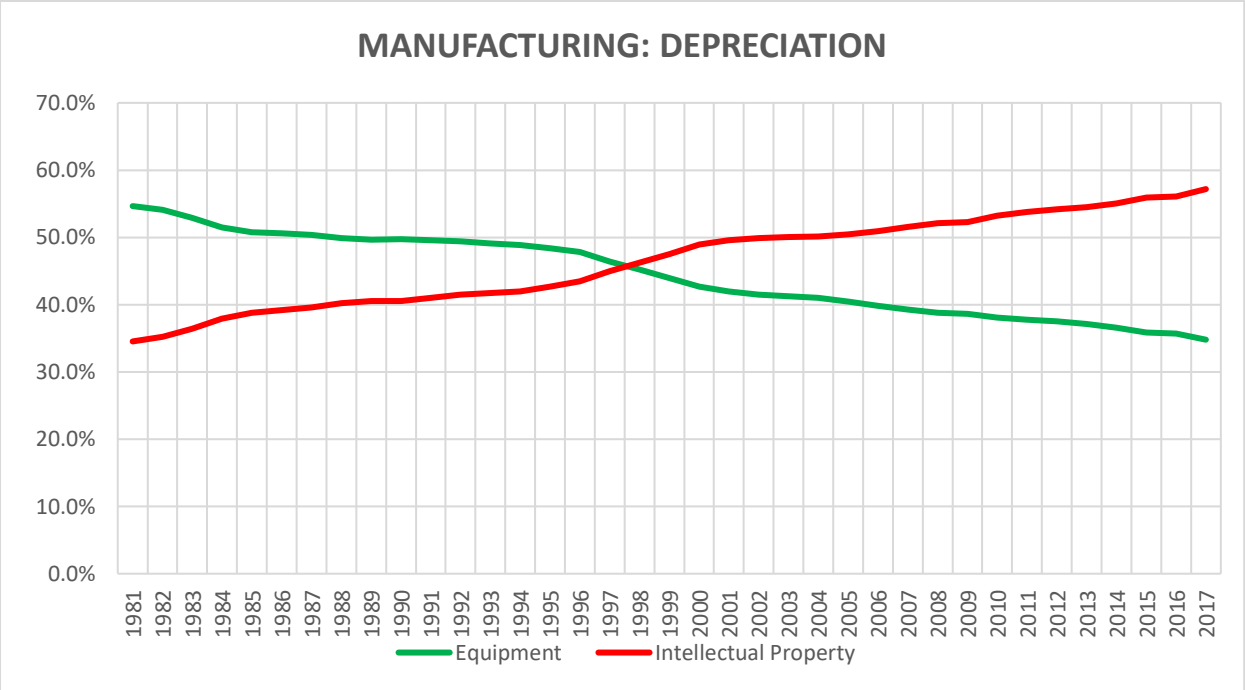
The slope can more clearly be seen in the case of manufacturing. A rise between 2006 and 2014 followed by a steeper downward slope post 2014. In the case of non-financial corporate the graph flattens. These are nominal figures. Adjusted for inflation the fall from 2014 would be more pronounced.

However, the cash flow trends are flattered by the misuse of depreciation following the 2012 revisions which capitalised Intellectual Property (IP). To achieve this the BEA and other statistical bureaus invented a final sale, called an imputed sale. This allowed them to convert what had been an intermediate sale into a final sale. This achieved two things: firstly, it boosted GDP by about 3% and secondly it was one of the causes of the slowdown in turnover, because anything that boosts final sales while leaving total sales unaltered, results in a slowdown in turnover as measured by the formula. This is not a case of the formula being wrong, instead it is a case of the data being corrupted.

The result of this revision has led to the overstatement of depreciation. This overstatement is problematic because of its effect on profits. Normal depreciation, that is wear and tear on machinery and equipment, serves to raise selling prices by its inclusion. This reimburses a firm for the loss of part of their machines and equipment. However, because some depreciation is now a product of creative accounting, it is not replenished by a higher selling price as it has no effect on price. This has tended to depress profits, as profits is the balancing item in corporate cash flow. Not that the capitalists mind, for it reduces their tax bill without reducing their cash on hand. Over time, this has become a bigger problem because depreciation has grown as a share of cash flow. This can be seen in the graphs below.

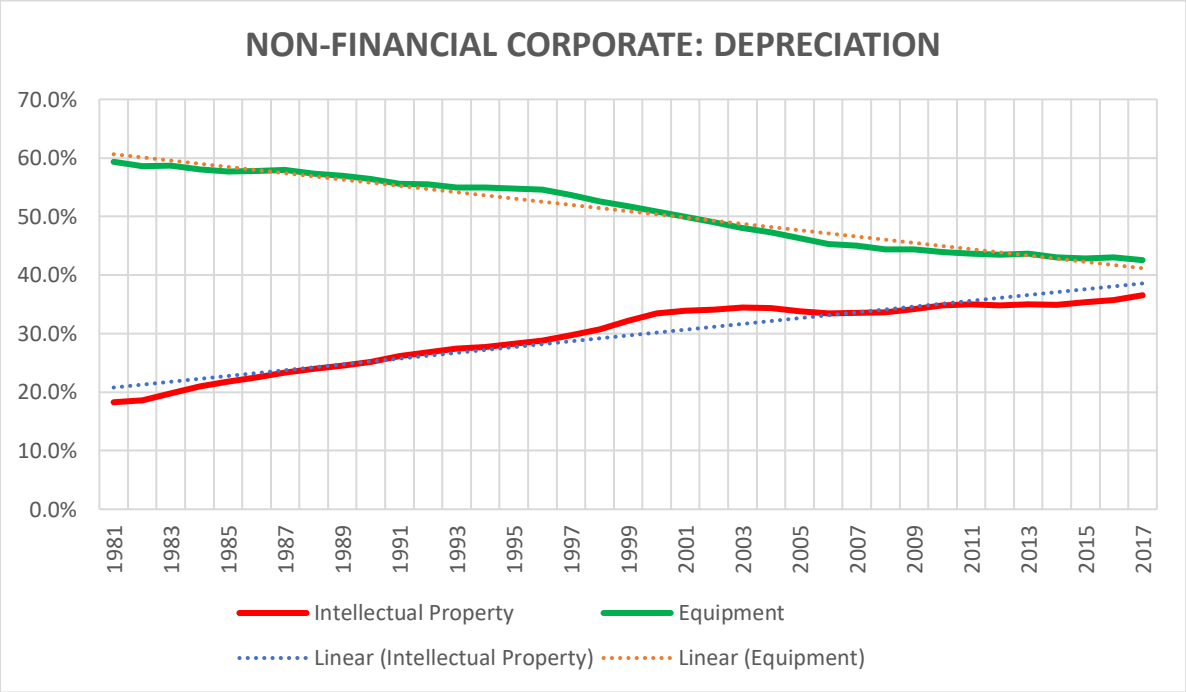
We see that IP deprecation, comprising mainly Research and Development and in-house software, has eclipsed the depreciation formed by machinery and equipment. This first switch occurred in the manufacturing sector as early as 1997 and should occur within the next few years in the corporate sector. It should be noted that the depreciation derived from equipment has not fallen absolutely, instead it has increased significantly over the years. Its fall is only relative, when it is compared to the even greater absolute rise of IP depreciation. If equipment now provides a smaller share of total depreciation this is because IP provides a much larger share.

Graph 3.



(Source: Table 4.4. Current-Cost Depreciation of Private Non-residential Fixed Assets by Industry Group and Legal Form of Organization) (See accompanying spreadsheet DEPRECIATION BROKEN DOWN UP TO 2017.)

GRAPH 4.

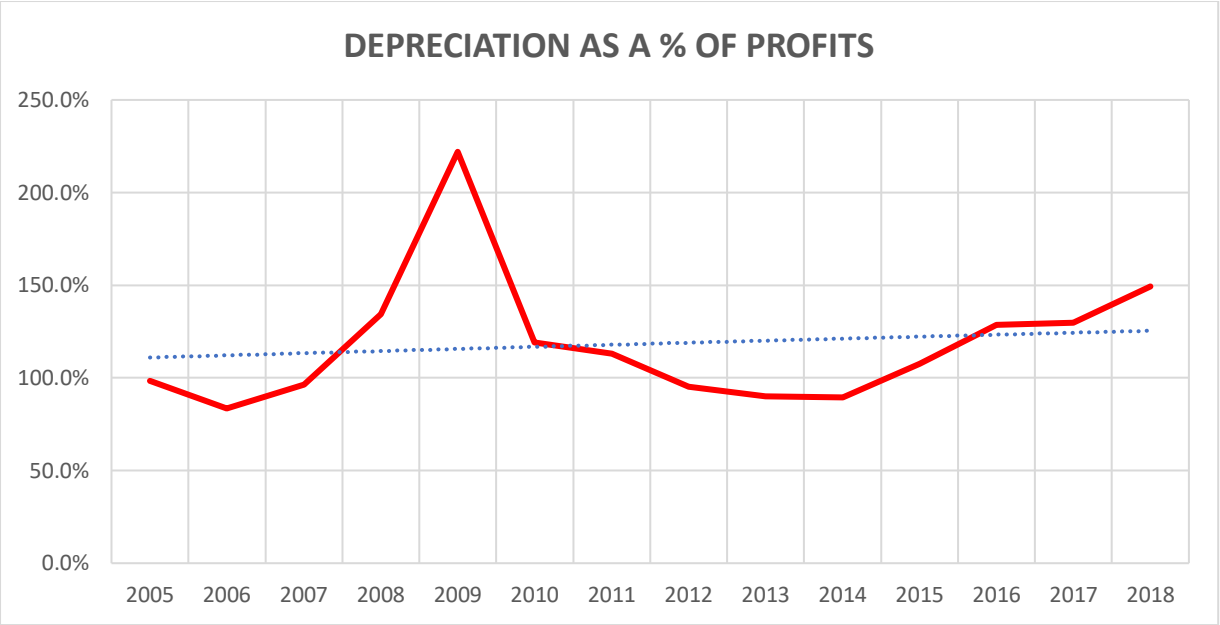


(Source: Table 4.4)

The final graph in this series shows the share of depreciation compared to the share of profits which together form the cash flow. Earlier we discussed the growing role of depreciation in the cash flow. In addition, it is important to observe that the relative shares are also influenced by the movement of profits. This is shown in the graph below which covers manufacturing. It shows how the relative share

of depreciation shoots up in the recession of 2009 and how it subsides as profits recover up to 2014 to a level last seen in 2006. After 2014 and the sharp fall in profits, the share of depreciation once again grows relative to profits. By 2018 its share is now two-thirds larger. The final observation is this: the cash derived from depreciation has a smoothing effect on corporate cash flow during the ups and downs in the movement of profits. Certainly, during downturns, it provides a degree of solvency to hard pressed corporations, an event often overlooked.

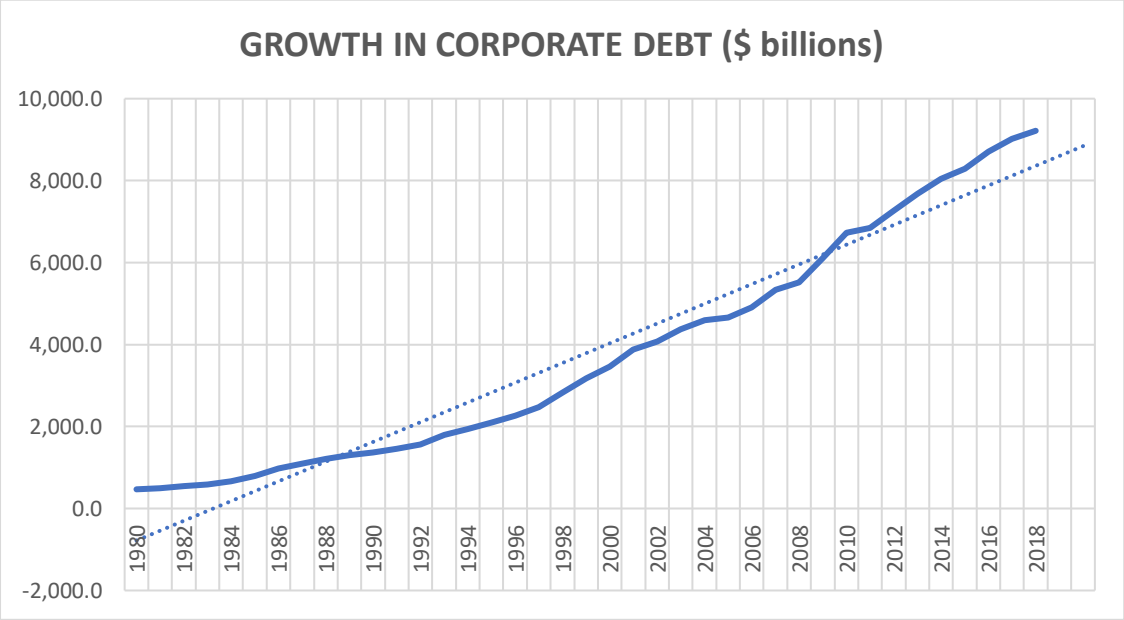
Graph 5.



Sources: (Tables 6.17D for profits and Table 3.4ESI for current cost depreciation.)

This relative decline in cash flow since 2014 has made corporations more dependent on external funds. This is confirmed in the graph below. It shows, that as the proceeds of globalisation poured into corporate coffers, borrowing declined below trend. This resulted in the secular decline in interest rates as the banking system lost some of its key corporate clients.

Graph 6.

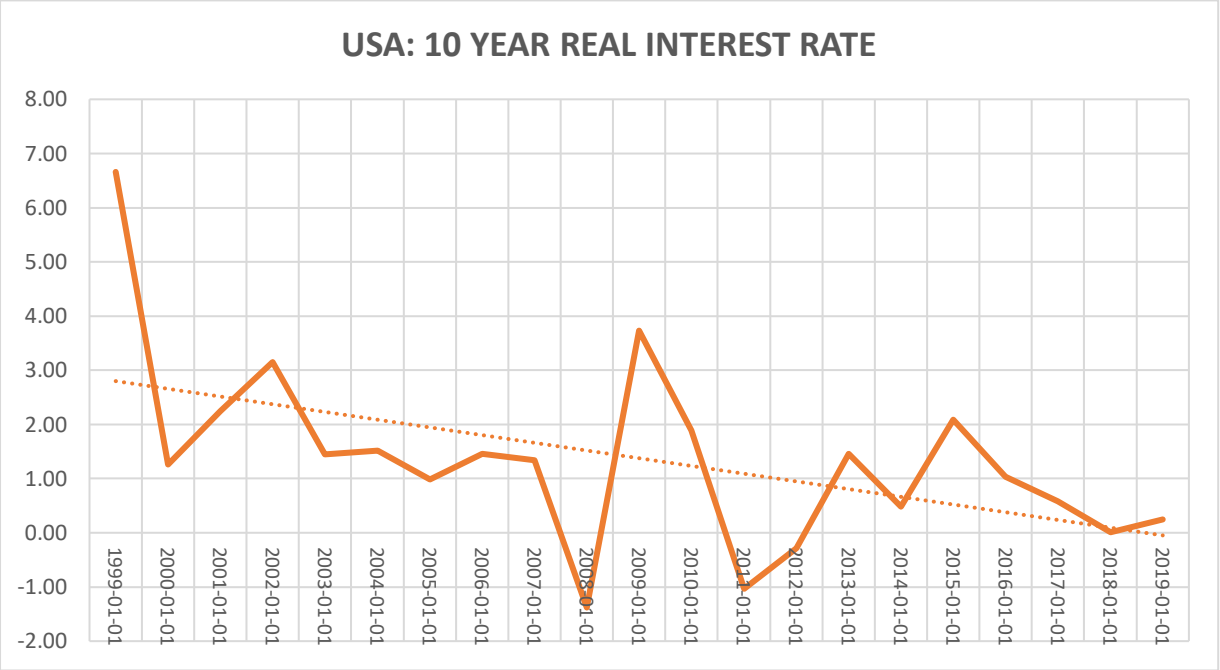


(Source: SIFMA https://www.sifma.org/resources/research/us-bond-market-issuance-and-outstanding)

We note that from around 2012, shortly before the period of overproduction leading up to 2014, the trend is reversed. For the first time in twenty years, corporate borrowing rises above trend. It then continues to rise further above trend. This surge in borrowing also coincides with the slow-down in the annual rate of turnover and with it, the elongation of each period of turnover of fluid capital. As a general rule, a slowdown in turnover is associated with the need for more working capital. For example, a quantum of working capital which was sufficient for a period of turnover of say 40 days is no longer sufficient when that period extends to 45 days.

And while it is true there was a pickup in interest rates up to 2015, since then there has been a fall in interest rates. What was a normal response for interest rates up to 2015, becomes abnormal after that date, because the fall in interest rates is not prompted by a fall in demand for loanable capital which continues to increase. The 10-year bond yield is chosen throughout as it is the key rate which sets other rates such as mortgage rates and even prime corporate overdraft rates.

Graph 7.



(Source: Table FRED CPIAUCSL for CPI.)

Nor was the fall in interest rates due to an explosion in bank credit, as some of the Fiat Money Professors would have us believe. As the table below shows, bank loans (credit) did not vastly exceed deposits from 2014 to 2018. (The Table is based on annual percentage growth.)

Table 1.

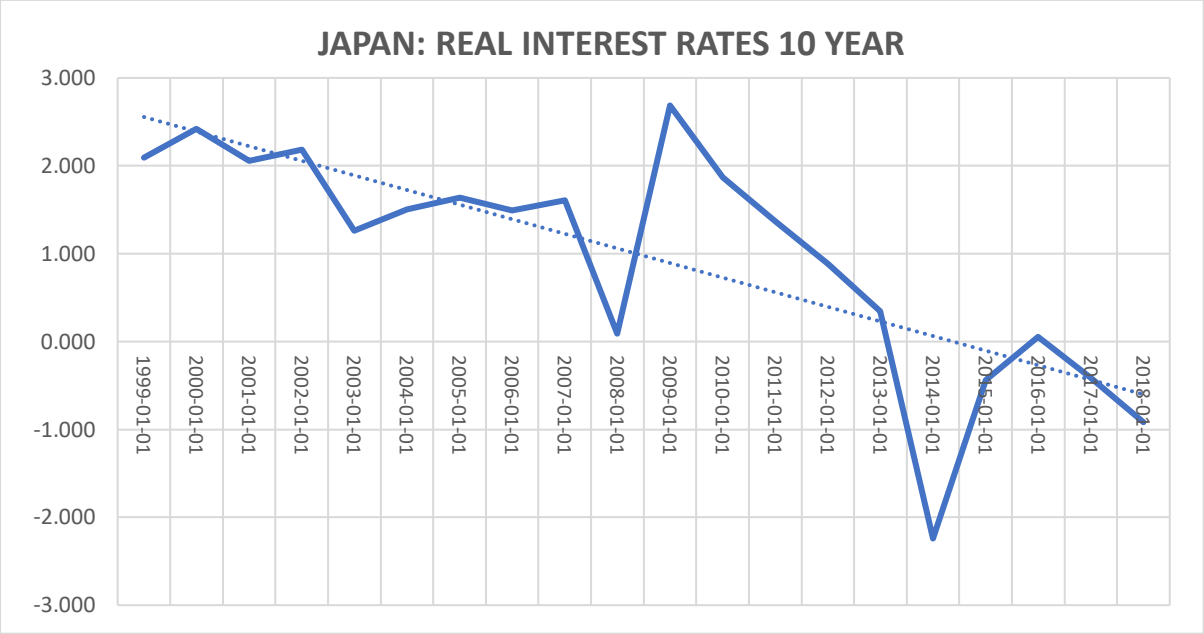
Account	**2014**	**2015**	**2016**	**2017**	**2018**	**(line)**
Bank credit	6.5%	7.5%	6.8%	3.0%	3.5%	(1)
Deposits	6.4%	4.9%	4.4%	4.6%	2.7%	(34)
Commercial and industrial loans	12.0%	10.5%	5.8%	1.0%	6.5%	(10)

(Source: Federal Reserve Table H8 released 2nd August.)

Rather the increase in rates was due to higher borrowing demand in the years 2014 and 2015. (Line 10) This was a normal interest rate reflex set by market conditions which did not repeat itself thereafter.

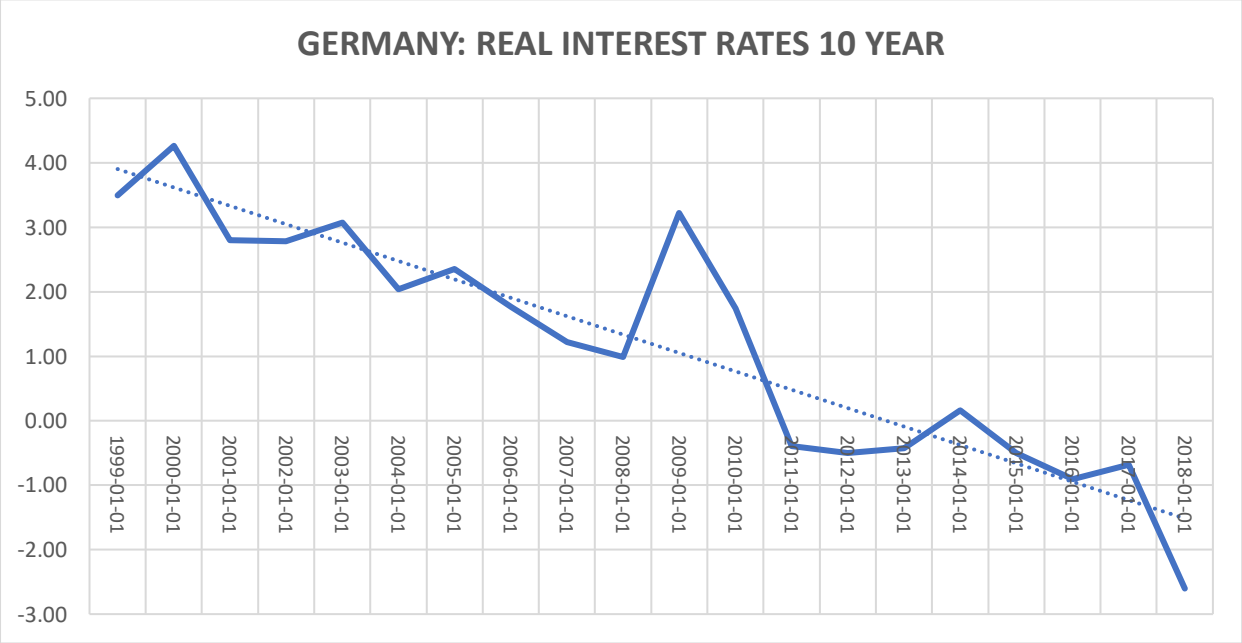
The same trends, only more extreme, are found for the third and fourth largest global economies (Japan & Germany). Unlike the USA, rates there did not recover into 2015 from 2009 but instead fell almost continuously from 2009 (Graphs 8 & 9). The primary reason is that both the Bank of Japan and the European Central Bank continued with their versions of Quantitative Easing (QE).

Graph 8



(Source: FRED tables IRLTLT01JPM156N for interest rates & FPCPITOTLZGJPN for CPI.)

Graph 9.



(Source: FRED Tables IRLTLT01DEM156N for interest rates and DEUCPIALLMINMEI for CPI.)

All three economies saw spikes in their interest rates as the recession created a demand for additional funds when the chain of credit shattered. But thereafter, beginning at the end of 2009 (Japan and

Germany) and at the end of 2015 for the United States, interest rates plummeted. Today 25% of all bonds, both commercial and sovereign (government) are in negative territory. Most negatively yielding bonds were issued with positive interest rates originally, albeit low interest rates. As demand for these bonds drove up their price so the interest based on the higher price now appears negative. Part of the reason for the heightened demand is because of Central Bank buying. In Japan for example the central bank now owns 40% of Japanese government bonds. Now that negative interest rates are prevalent, entities with good credit ratings are now issuing bonds with negative interest rates. An extra ordinary state of affairs now exists, where issuers are effectively paying borrowers to purchase their bonds. Money so to speak is flowing uphill.

Discussion.

The purpose of this posting was to examine why it is, despite a collapse in profits globally, the world economy has not crashed. Why instead this contraction is limited to industry. The answer lies with interest rates.

Interest derives from profits. Workers produce surplus value which has to be shared out amongst the capitalist class consisting of Industrialists, Commercialists, Bankers, Landlords (and the State). Surplus value emanating from production first takes the form of undivided profit, from which the above mentioned deductions are made, leaving the residue, enterprise profit, considerably diminished.

From this vantage it is clear that interest is a burden on profits. The higher the rate of interest the heavier the burden, and the lower the rate of interest the lighter the burden. More specifically a scissors effect takes place towards the end of the industrial cycle (Marx) or as it is more commonly known today the business cycle, when falling profits due to the elongation of the period of turnover collides with rising interest rates as the demand for credit swells. It is this collision that topples the economy into a generalised recession.

In my previous posting https://theplanningmotivedotcom.files.wordpress.com/2019/07/usa-first-quarter-2019-report-pdf.pdf I presented the fall in turnovers since 2014, or what is the same thing, the extension to the periods of turnover. As Graph 5 of that posting shows, the rate of turnover decelerated from over 5 to just 4.25 by Q1 2019. Measured in days, the periods grew from an average 73 days to 86 days in 2019, or by 13 days. That meant the average manufacturer required 18% more working capital, everything else being equal. Normally, this would be burdensome if interest rates were responsive.

In this event interest rates would serve to discipline the industrialist or the commercialist. It would force them to flush out workers and force through other reductions in working capital. On the other hand, low interest rates diminishes this disciplinary effect. It makes it easier to continue in the old way, to maintain employment for example. Exactly what we are seeing today. It is very strange situation, where despite the growth in industrial production screeching to a halt, there has been no mass expulsion of labour from production.

And it has consequences for productivity growth. The normal measure of productivity is to measure the value of output (deflated) by the number of hours expended in its production. Fewer turnovers means it takes longer to realise value, or what is the same thing, to convert value into money which is its sole purpose. Hence the effect of decelerating turnovers is to undermine any growth in the rate of productivity.

Conclusion.

The critical question that is posed is this: how much longer can this continue. The trade war has taken a turn for the worse. The whole tone of discussion around Wall Street has changed. At the beginning of the trade dispute, most investors and speculators were expecting an easy Trump win, one which would shower them with riches as China was forced to open its financial doors. Now the tone has darkened. For the first time there is speculation that the USA could lose this war, a war that was supposed to revive it, but now threatens to accelerate its decline.

Nor is the FED as accommodating as Trump would like. Hence the Twitter rants after the Chairman's speech. Mr Powell is terrified of over-inflating what is already an inflated stock market. Thus, in the absence of a pliant FED and in the presence of a trade war that has taken an ugly turn, two crucial supports have been knocked aside. An inflection point in stock markets may have arrived. The FT Global Index has experienced a 5% monthly fall, while the recent sharp falls in the S&P 500 has wiped out its annual growth. The contradiction between an industry in contraction, and, a demand which is still increasing, can be resolved in one of two ways. Either industrial expansion will resume, or demand will be realigned with industrial conditions. The sudden and sharp fall in the stock exchanges shows that it is demand that will be realigned as expected, and this event will finally prepare the long-delayed recession, the Crash of 2019, whose delay has turned kilotons into megatons of debt.

Low interest rates have allowed capitalism to stumble deeper into the debt overgrowth. It is getting increasingly tangled up in the insolvency undergrowth. To wrench itself free will take a herculean effort which will eclipse 2008 in magnitude and damage to society. Society can no longer absorb these repeated insults and hurts. Capitalism which elevated society from the agrarian era into the industrial era, at such great cost to our planet, needs to be superseded and quickly. A historical emergency exists, one which, while it includes a climate emergency, is in every way broader and deeper.

Brian Green, August 2019.