HOW COVID HAS TEMPORARILY RESTRUCTURED THE WORLD ECONOMY. The question of profitability.

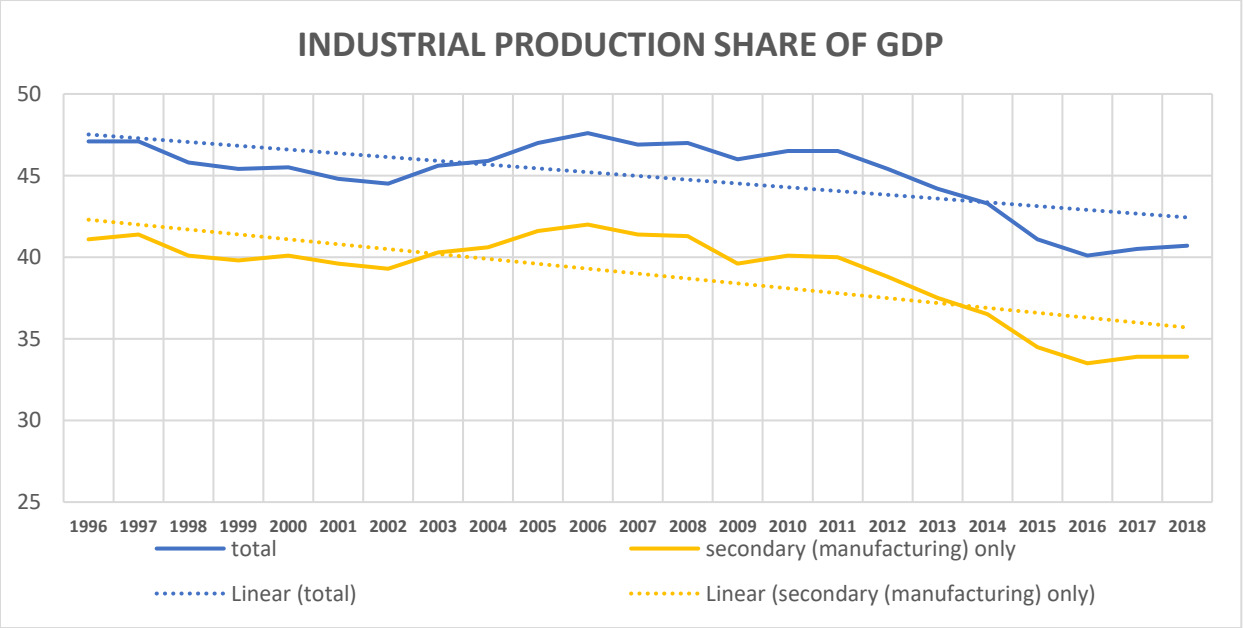
The pandemic has not only interrupted the world economy, but it has also led to its restructuring. In particular, lockdowns have favoured goods producing industries at the expense of the service sector. This can be seen by the jump in the cost of shipping a seaborne container, congestion outside harbours on the East Coast of the USA, and the growth in global goods trade. According to the latest CPB World trade monitor up to November 2020, global industrial production was up 4.2% and global trade was up 6.8%. https://www.cpb.nl/en/worldtrademonitor

This article is a preliminary investigation which may raise more questions than it answers. I have chosen to investigate China, not because of the sarcastic comment that the main beneficiary of all the pandemic relief funds is China, but because it has the most up to date information. It is also the world's factory.

China's evolving economy.

The Chinese economy is divided into three sectors by the National Bureau of Economic Statistics http://www.stats.gov.cn/enGliSH/ The Primary Sector includes inter-alia mining and agriculture. The Secondary Sector is dominated by manufacturing. Finally, the Tertiary Sector is their service sector. The Secondary Sector dominated the economy for decades, but it has recently been eclipsed by the Tertiary Sector. The falling share of the secondary sector is seen in the graph below. Keep your eye on the year 2011 and 2012, it will feature in the other graphs as well.

Graph 1.

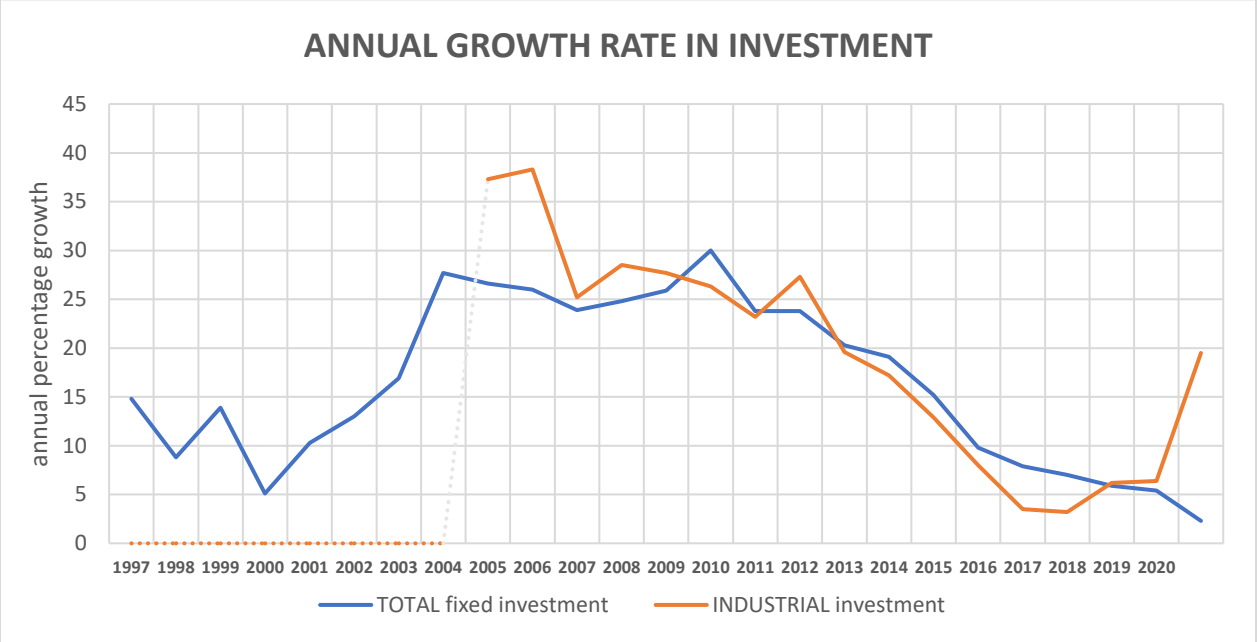


(All long-term data from the 2019 Yearbook. All tables refer to the Yearbook. Data for 2019 and 2020 is taken from monthly reports. Source for Graph 1 is Table 3-2 from the Yearbook plus monthly reports at year end.)

The share of industry now stands at around 40% of the economy. Since 1996 the fall has been around 6% of GDP.

The shrinking share of GDP is associated with the sharp fall in the annual growth rate of investment in industry. This can be seen in the next Graph where again 2011 features.

Graph 2.



(Source Table 10-1 plus monthly reports at year end.)

We note the sharp fall in the rate of fixed investment. From an average of 25% up to 2012 it falls to around 5% latterly. The jump in industrial investment in 2020 is due to the jump in the Primary Sector, and not the Secondary Sector. Such a profile suggests China is preparing a war economy by ensuring its stocks of raw materials. This fall in investment is a reflex caused by the fall in the rate of profit which takes place one year earlier in 2011 as shown in the graph below. Investment follows in the wake of profitability.

Graph 3.

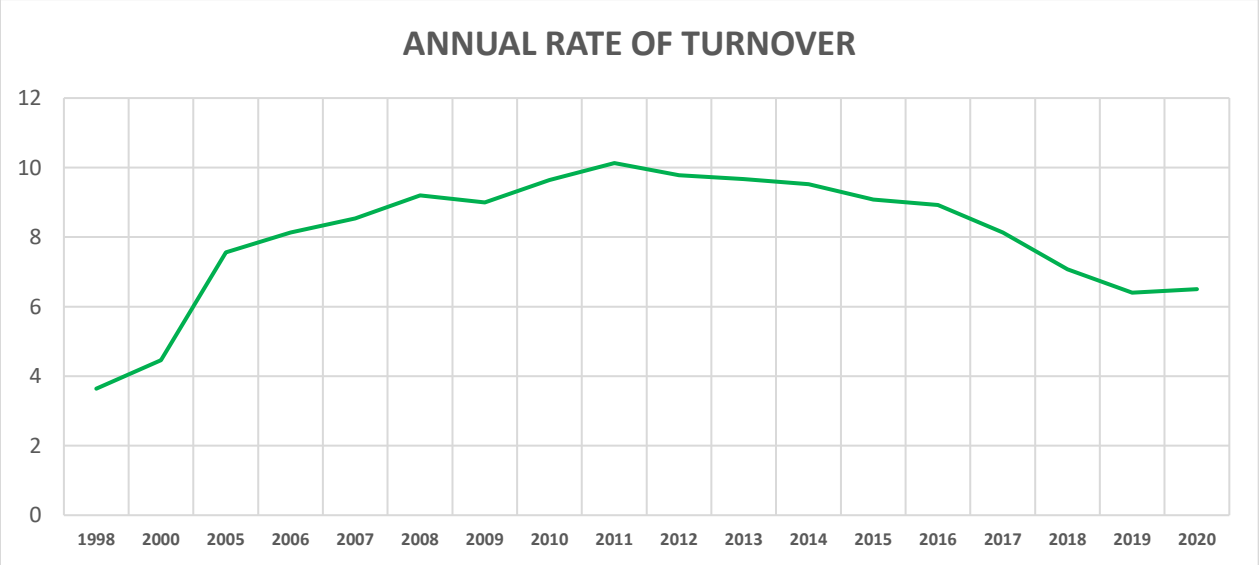
(Source: Table 13.3)

Michael Roberts and I are firm advocates that profits are the horse and investment the cart. Investment rises or fall in response to changes in profitability and not the other way round. By 2011 the massive investment wave following the Financial Crash of 2008, which also refloated the world economy, was running out of steam or profit. By the time the rate of profit fell in the USA (from 2014 onwards), the Chinese Complex Rate of return had already fallen 20% from 9.09% to 7.2%. By 2019, prior to the pandemic the complex rate of return fell to 5.3%. This 42% fall in profitability mimics the fall in the USA since 2014. Both countries have thus had sustained falls in profitability. The delayed fall in US profitability resulted from its corporations straddling the commanding heights of the global value chain.

The complex rate of return is not comparable to the rate of profit based on fixed and circulating capital, nor is it comparable to the rate of return. In China, the National Bureau does not provide fixed asset tables, only total asset tables which includes financial holdings. This is particularly important when dealing with State Organised Enterprises as extensive cross holdings are found there, which by expanding their financial side, tends to depress their complex rate of returns.

The same parabolic shape found in the above graph is found in the next graph which covers the annual rate of turnover. These parabolic shapes represent the ascent and the descent of globalisation. These shapes are similar to that found in the US economy with one exception, the peak occurs three years earlier in China, 2011 versus 2014 in the USA. In addition, the rate of turnover is much higher in China as befits an economy that until recently was primarily a contract manufacturer and assembler. Thus lots of imported inputs were put together speedily to generate outputs or exports.

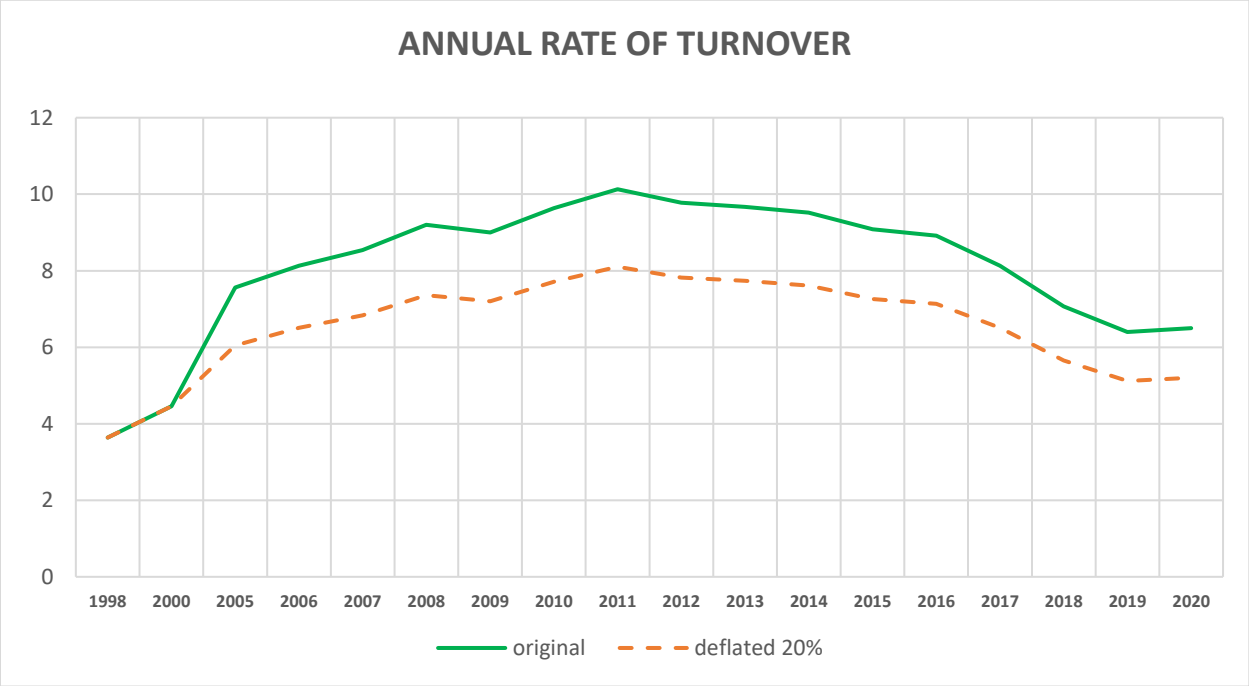
Graph 4.



(Source Table 13-3)

The methodology used here is to divide gross output by the sum of accounts receivable and inventories. I am now cautious using this metric as it tends to inflate turnover by between 15 and 20% when measured against the formula. The Chinese Annual Yearbook (2019) only provides this data over time which is why it is used. At least its relative movement is consistent, allowing annual comparisons. In Graph 5 I have deflated the rate by 20% so that it can be compared to other countries, particularly the USA.

Graph 5.

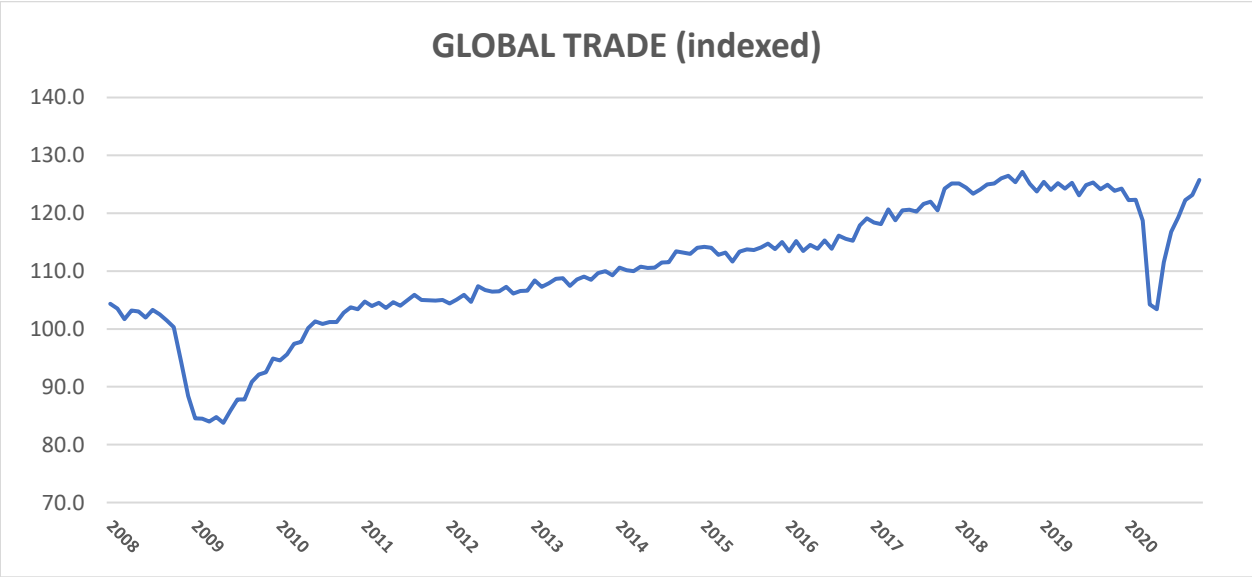


Even deflated, at a peak of over 8 turnovers per annum, Chinese industry had a turnover far higher than any other major economy. This reflected China's status as a rapid turn-around contract manufacturer and assembler forming the hub of the global supply chain.

Discussion.

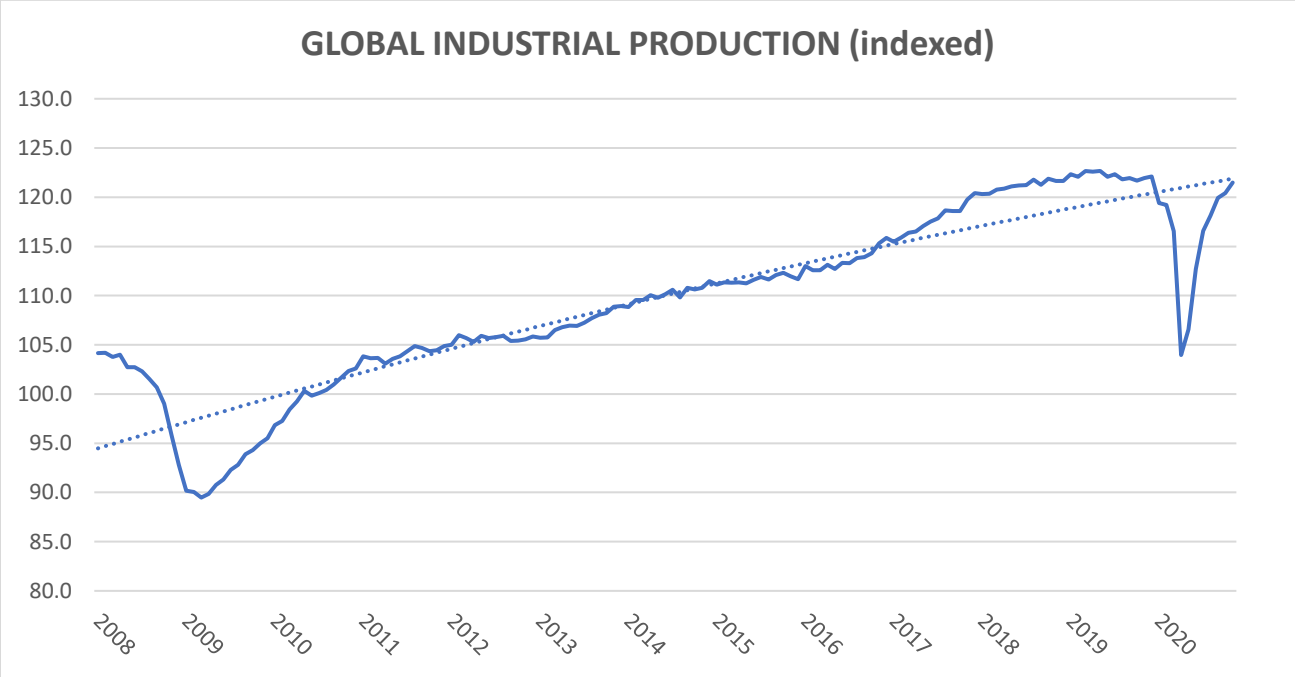
Before proceeding to specifics let us take a global overview. Graph 6 is based on the latest data from the CPB.NL institute whose link is at the head of this article. It shows that 2020 experienced a precipitous fall in trade that was 10% deeper than in 2008. However, the recovery took only half the time.

Graph 6.



By the end of 2020 global trade will have exceeded the 2018 peak. The same applies to world industrial output. A deeper and sharper fall with a more immediate recovery. Graph 7 is more pertinent to our discussion because it focuses on the effect of industrial production on the mass of profits. But before proceeding to this discussion it is worth looking at Chinese Export performance.

Graph 7.



Graph 8.

I would like to digress a moment by focusing on Graph 8 and in particular on 2011. The issues facing the Chinese economy from 2011 was not related to a crisis in its foreign trade. Exports continued to grow up to 2014, when the USA amongst other major economies, experienced a fall in their respective rates of profit which in turned reigned in production. This can be seen in the below trend growth in production between 2015 and 2017 (Graph 7.)

Returning to Graph 8, the reader will note the significant drop in Chinese exports in 2015. This is when the Global economy, not only the USA, was reduced to a crawl. Hence the designation that the world economy experienced a pseudo-recession during the last quarter of 2015 and the first quarter of 2016. The reason a full-blown recession was averted, as has been said before, was due to the interventions by both the FED and the PBC (People's Bank of China) infusing the economy with liquidity.

We are now in a position to examine the question of profit. Profits arise from the production and sale of commodities. A commodity is anything produced for sale. It is surrounded by two exchanges, the purchase followed by the sale. In the first exchange of money, the private producing capitalist purchases the factors of production from the rest of the economy and hires workers. Once production is complete, the capitalist sells his or her privately produced products back into the economy and is rewarded with money. Because surplus value has been produced, they receive back more money than paid out. Money thus forms the billions of bridges whereby the products of society move into private production only to reverse course once their change in form is complete when they move back into social consumption. Money resolves the contradiction between the private and the social.

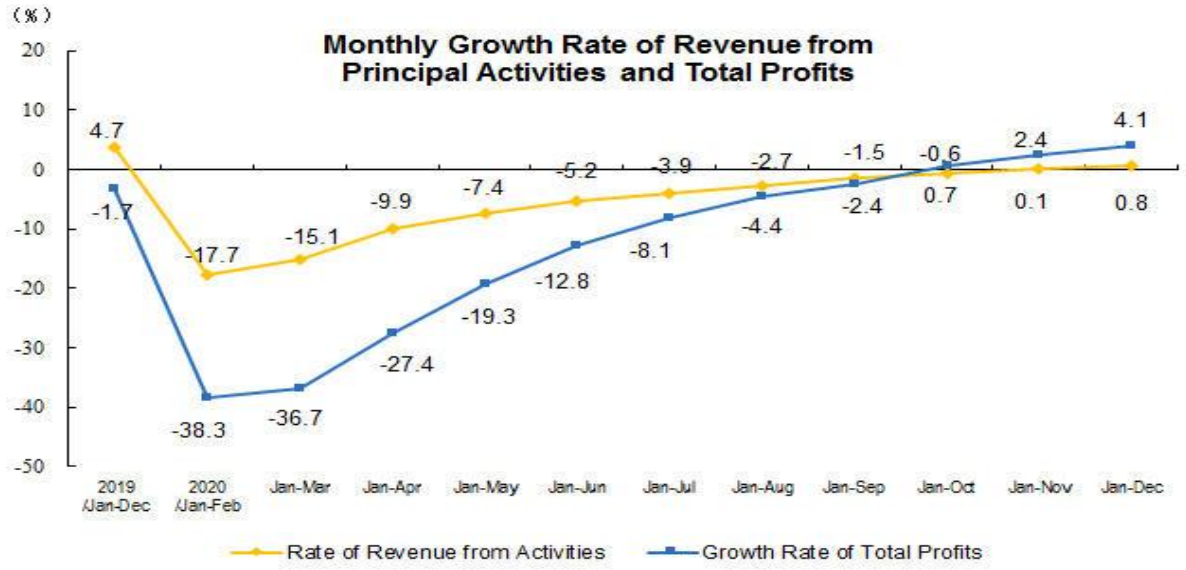
A commodity is not defined by its form, by its use value or by utility. Talking utility, is it not interesting that the Utility Sector (power producing sector) is now part of the service sector purely because electricity is consumed as soon as it is produced, that it is transient. I wonder what will happen when solid state batteries become commonplace and electricity is stored and not consumed, will it revert back to goods production or just the batteries. Oh, the statistical bureaus do get themselves into a tangle because they are steeped in the vulgarity of utility.

The point to address is this. The goods producing sector on average has a much higher composition of capital than does the service sector. Of course this is no reason to distinguish the one from the other, but it is a matter of fact. That being so, the averaging out of the rate of profit, must mean that the mass of profits realised in the goods producing sector must be higher than that found in the service sector. Thus when we use the data found in NIPA Table 6.1D to obtain net value added for 2019 and then subtract worker compensation using the KLEMS table we arrive at the net surplus per sector. When this net surplus is then divided by gross output (KLEMS) or what is the same thing, the revenue found in the sector we arrive at the net surplus margin, or the undivided profit margin.

Having done this we confirm Marx's hypothesis. The undivided profit margin found in the goods sector in 2019 is 34.8% versus only 20.8% in the service sector. Thus the mass of profit per dollar of revenue is higher in the goods sector and needs to be if the averaging out of the rate of profit is to be real. From this we can draw a second conclusion. If the goods sector has been swelled by the pandemic, while the service sector has been diminished, the gains in profit from the goods sector should exceed the losses from the service sector on the basis of an equivalent gain or fall in revenue.

This hypothesis seems to be borne out by the data from China. In 2019 profits fell by 1.9% whereas in 2020 they grew by 4.1% despite the pandemic, or maybe because of it. Its really a tale of two halves, with the second half producing more profits than was lost in the first half.

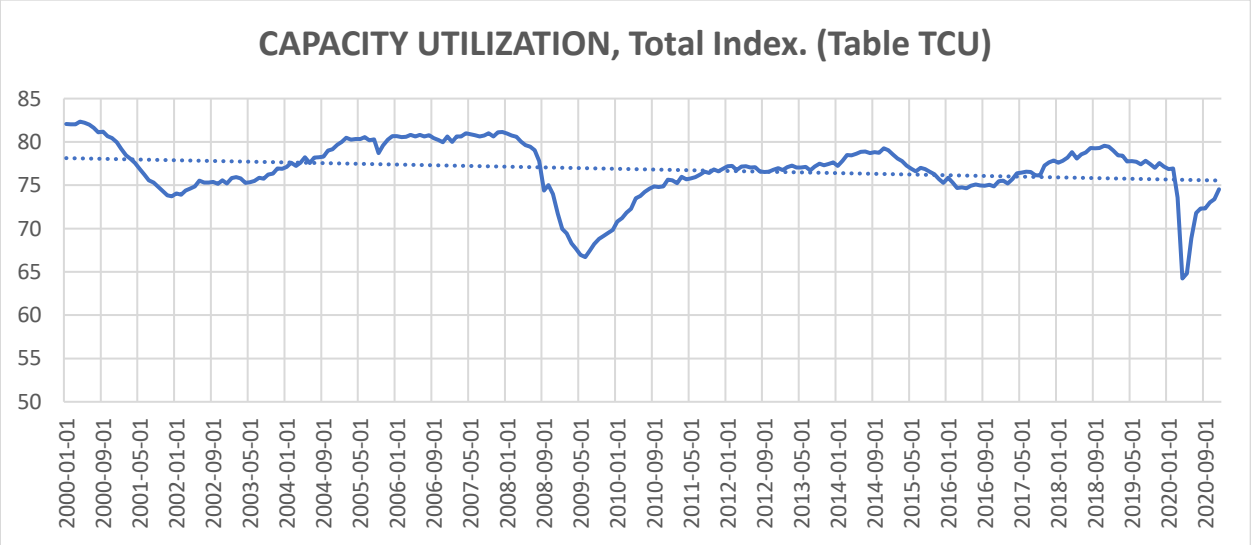
Graph 8.



http://www.stats.gov.cn/enGliSH/PressRelease/202101/t20210128_1812863.html

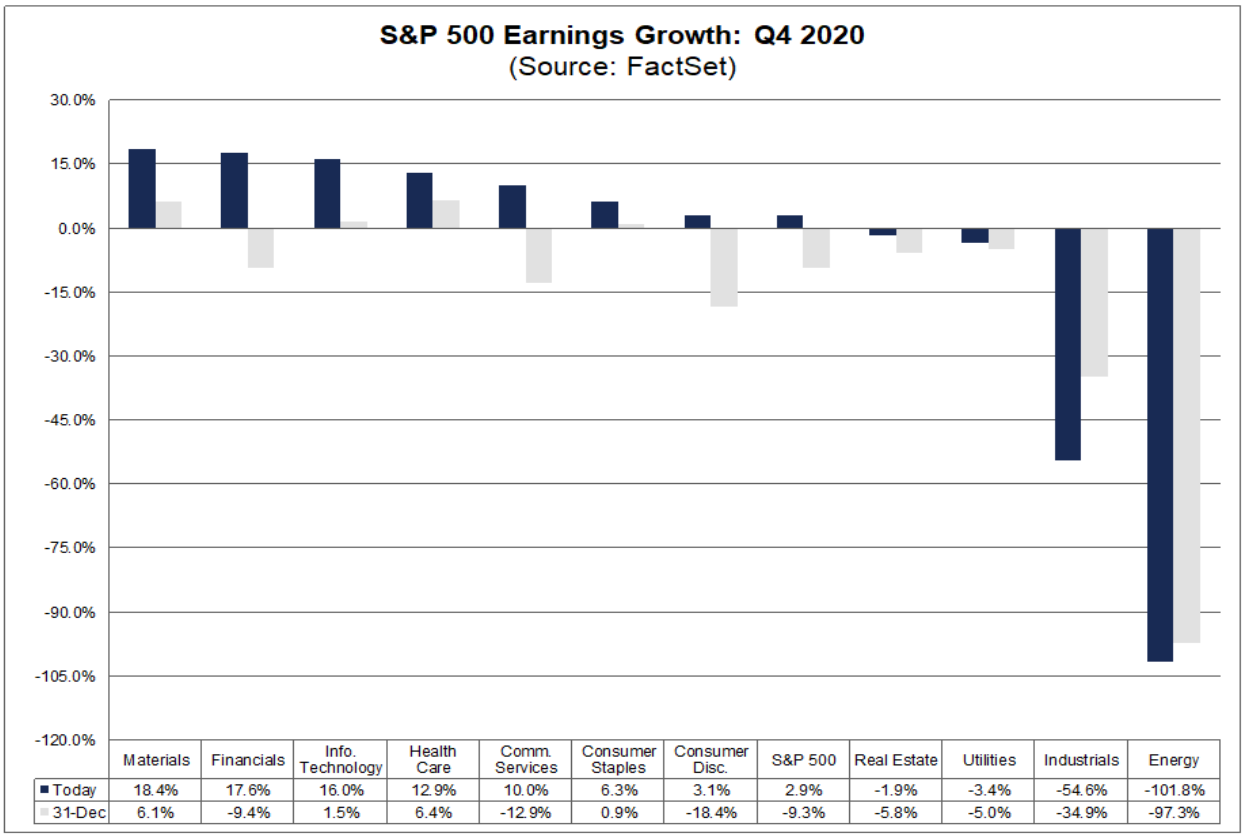
We can expect similar results from goods producing sectors elsewhere. The increased demand for industrial goods from smart phones to building materials is likely to have increased capacity utilization which is always bound up with an extra production of profit. The graph below shows the rebound in capacity utilization in the USA despite the country having not yet come out of complete lockdown. Together with the rise in capital goods orders, this is suggestive of capacity utilization bottlenecks.

Graph 9.



This rise in the mass of profits will be good for the stock markets. I do not have up to date figures, but two years ago nearly 60% of S&P 500 profits originated in the goods producing sector. FactSet's most recent release on Earnings Per Share shows that profits per share already exceeds the final quarter in 2019 despite the drag from the Oil Industry and before the Retail Industry has reported. (Release date 12th February with 78% of corporations having reported.) Additionally, revenue is up 2.8%. None of this would have been possible had goods production not provided the bulk of profits and revenues here.

Graph 10.



	Materials	Financials	Info. Technology	Health Care	Comm. Services	Consumer Staples	Consumer Disc.	S&P 500	Real Estate	Utilities	Industrials	Energy
Today	18.4%	17.6%	16.0%	12.9%	10.0%	6.3%	3.1%	2.9%	-1.9%	-3.4%	-54.6%	-101.8%
31-Dec	6.1%	-9.4%	1.5%	6.4%	-12.9%	0.9%	-18.4%	-9.3%	-5.8%	-5.0%	-34.9%	-97.3%

In the case of China where profits are up to date, the rise in the mass of profits has seen the complex rate of return stabilizing in 2020 despite the hit from the pandemic. Nonetheless, this is a tentative result. It leaves the key question still unresolved, what will be the effect on the global rate of profit. While we can say with a degree of certainty that the shift to industrial production will tend to raise the mass of profits, it is still too early to predict the effect on the general rate. Or whether it will endure. As and when countries emerge from lock down, consumer habits will revert back to normal, depressing the demand for industrial goods and elevating the demand for services where profits are lower.

Conclusion.

The pandemic with its wrenching restructuring of the global economy has provided a useful opportunity to examine both the production and distribution of the mass of profits.

Brian Green, 12th February 2021.