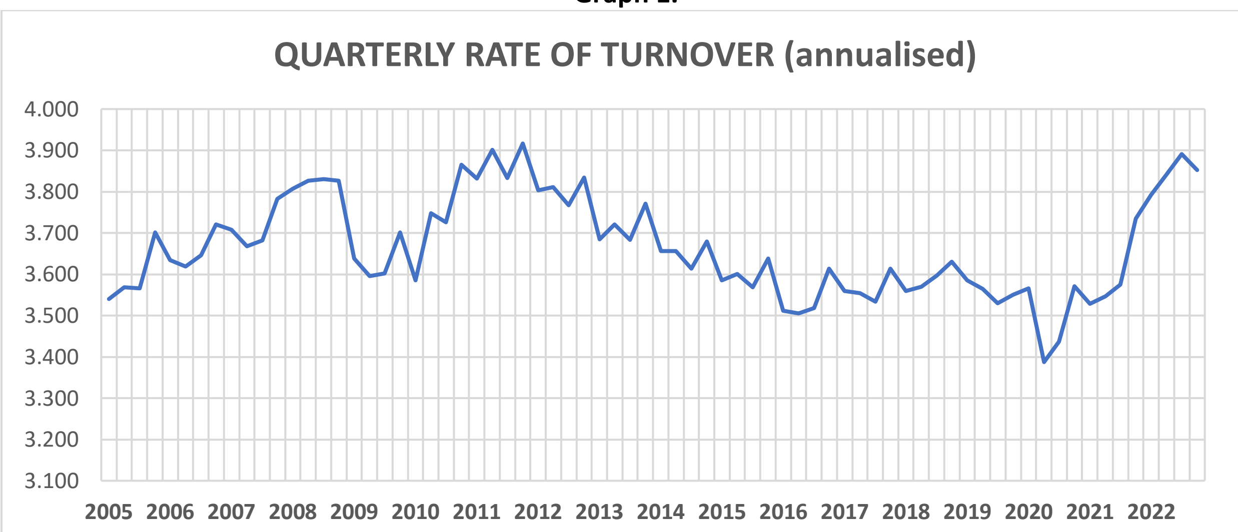
RATES OF PROFIT AT YEAR END: GERMANY, JAPAN & THE UK.

I have previously produced quarterly rates of profit for the US and China up to the end of 2022. This article adds Germany, Japan and the UK. They all show the same trend, down in H2 2022.

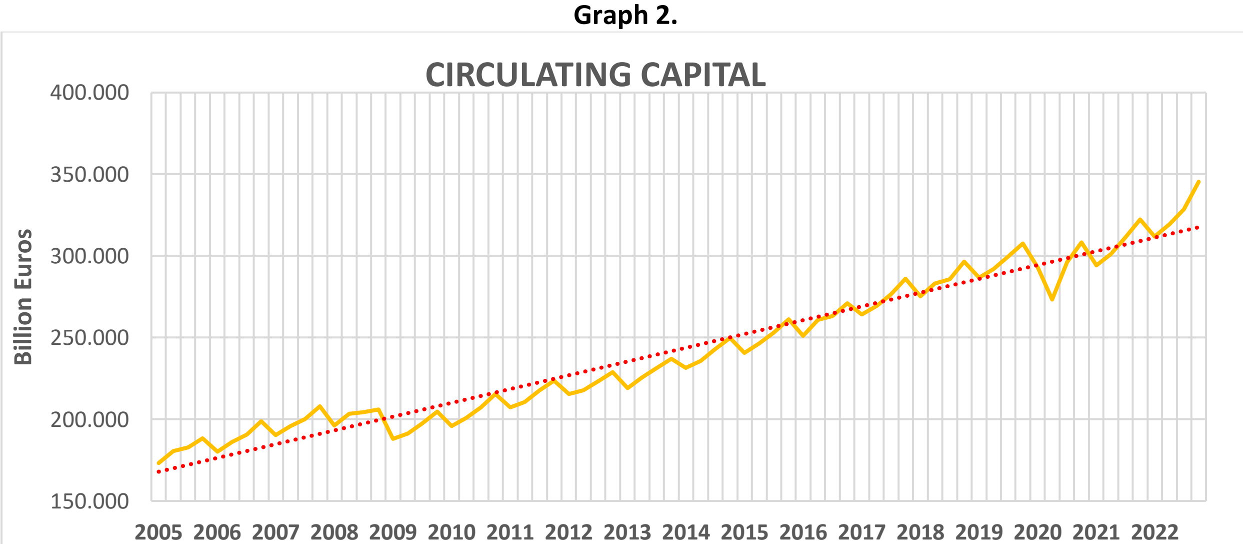
The trend in profitability reinforces the viewpoint that September was the inflection point for the global economy. Growth stopped expanding and reversed into contraction thereafter. Now the reason is clearer. Profitability globally stopped expanding after the second quarter of 2022 and started falling in the third quarter. It was this unseen fall that began to bear down on global production and trade. During the second half of 2022 the lingering impact of the pandemic, in terms of its stimuli, had dissipated. This can be seen in the three countries analysed here with data extending up to Q4 2022 with the exception of the UK whose data only extends up to Q3.

Beginning with Germany.

Graph 1.

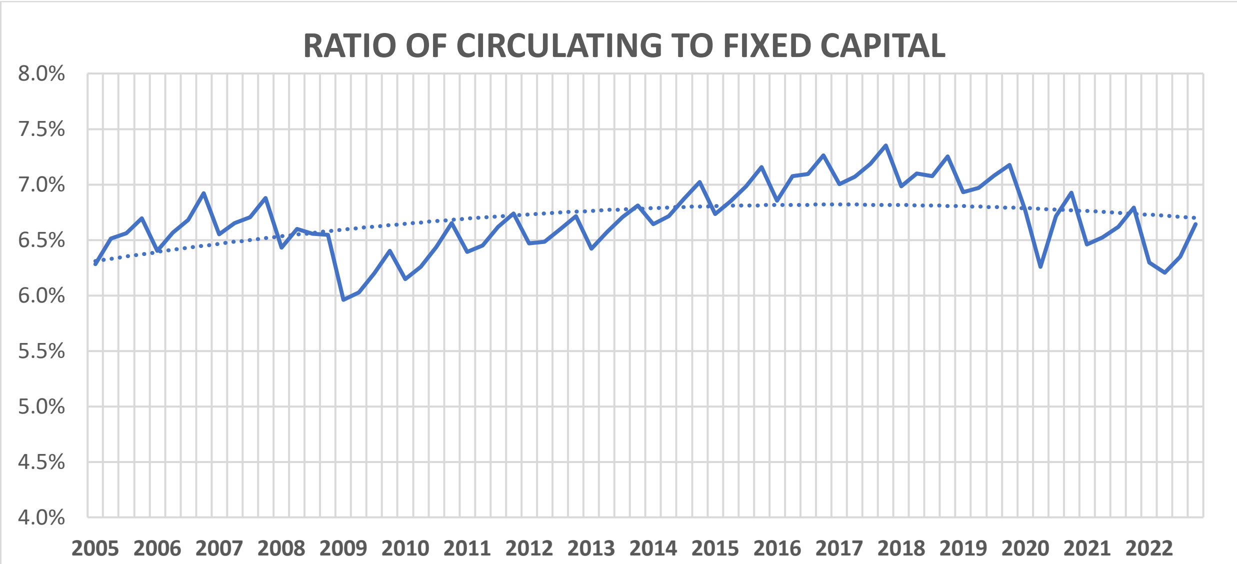


Graph 2.



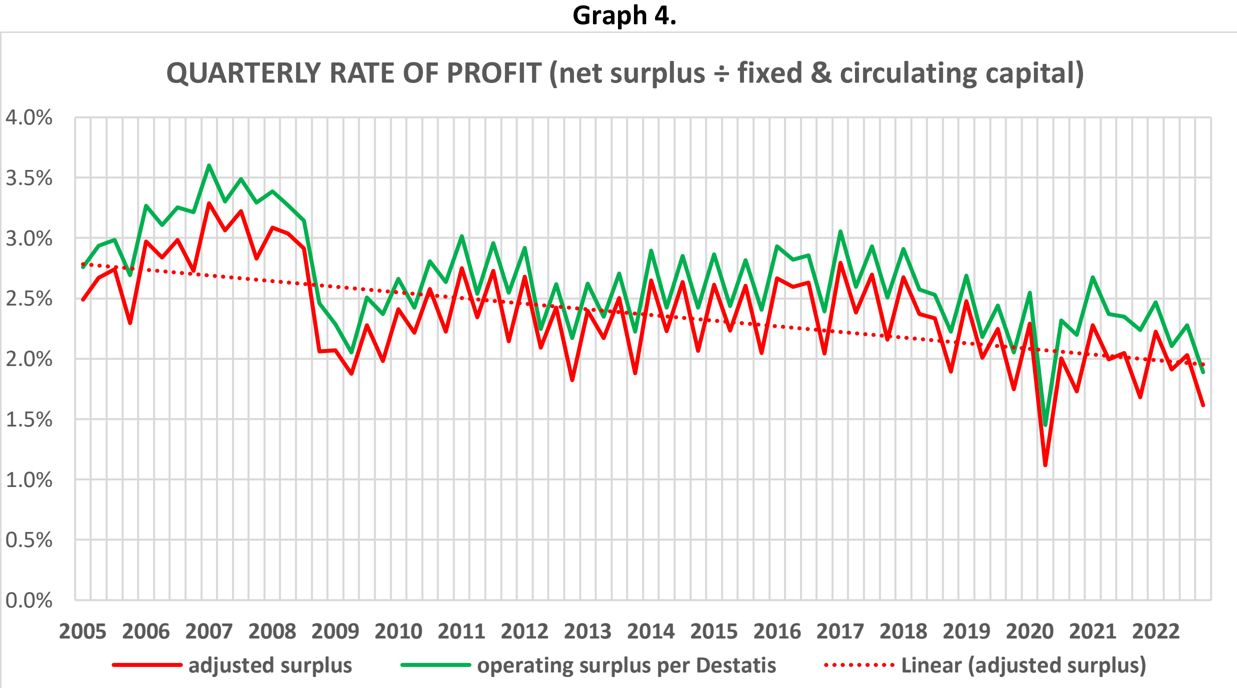
In the fourth quarter, the rate of turnover fell from its recent high, having risen to a peak last seen in 2011 when Germany was riding the Chinese investment wave. This fall in turnover combined with the high levels of inflation (the Producer Price Index rose on average by 26.7%) served to drive up the amount of circulating capital in absolute terms (Graph 2) and relative to Fixed Capital where investment was weak.

Graph 3.



This resulted in a sharp fall in the rate of profit to levels below that found in the Financial Crash. The numerator used here is based on the operating surplus. The adjusted surplus is output less wages while the Destatis operating profit is the one provided in the tables by the German Bureau of Statistics. (All data can be found in the accompanying spreadsheet 'GERMAN DATA Q4 2022 WORKPAGE with Graphs')

Graph 4.



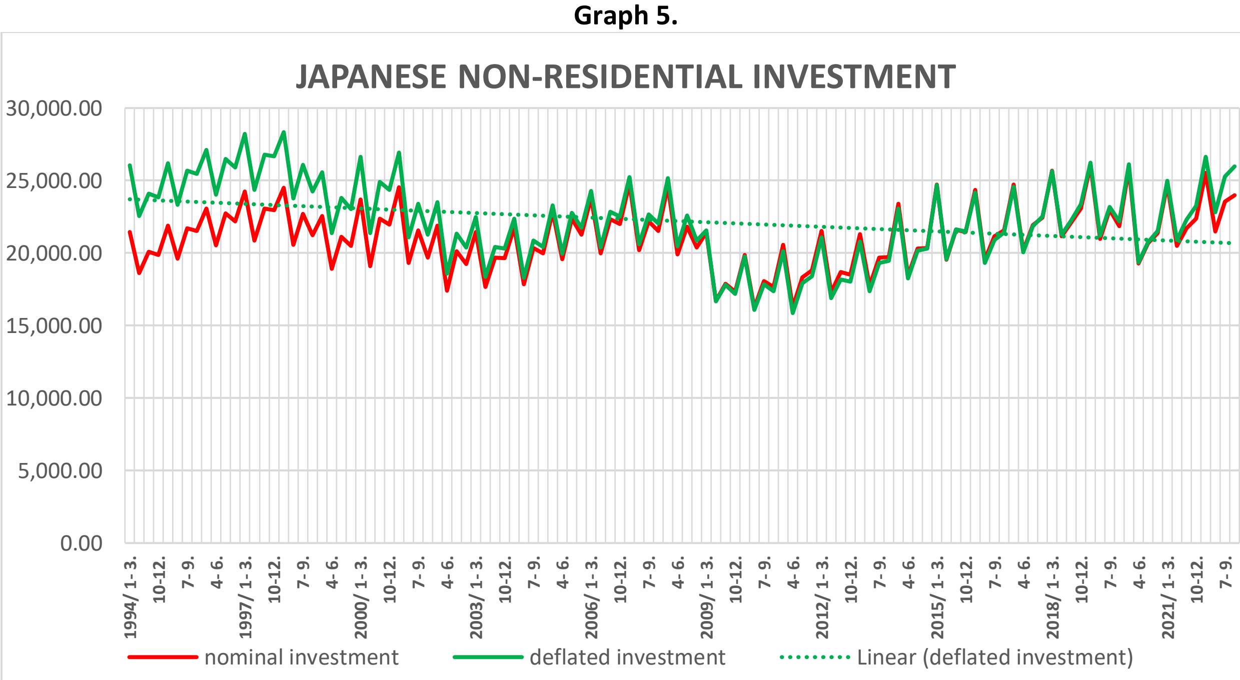
We should also note that the longer term trend is down and that currently the rate of profit is below trend. As we move on to Japan, one issue emerges. In the case of China, Japan and Germany, their rates of profit are well below that found in the USA and the UK which are both similar and higher. It seems having had or still having Empires does not hurt.

Japanese capitalism both investment and demographics are falling.

It is often thought that it was only the collapse of the Japanese property boom at the end of the 1980s which devastated the Japanese economy and led to the lost decade in the 1990s. Less attention is given to the impact of US pressure on the Yen beginning in 1985 (Plaza Accords) which forced up its exchange rate eroding Japanese export competitiveness and the *Semiconductor Agreement* in 1986 which destroyed the Japanese lead in electronics. Here is an instructive report by the Centre for Strategic and International Studies. *"Amid growing dissatisfaction in the U.S. with perceived unfair trade practices from Japanese industry, the United States began pushing for trade concessions from the Japanese government. The Japanese, concerned over the risk of being shut out from the U.S. market entirely, made concessions under the U.S. Japan Semiconductor Agreement in 1986. The agreement gave the U.S. government the authority to set minimum fair market prices for chips in the U.S., while also increasing the foreign share of the Japanese semiconductor market from 10 percent to 20 percent. These two stipulations simultaneously eroded Japanese competitiveness in foreign as well as its own semiconductor market and enabled semiconductor companies in the U.S., South Korea, and other countries to gain most of the world semiconductor market share."*

The resulting loss of profit created a disincentive to adapt to the information age in the 1990s compounded by the recession within Japan itself. The failure to fully participate in the information age revolution, from chips to mobile phones, to computers to servers was one of the reasons for the depressed state of investment in Japan itself. Real investment today is still lower than the depressed levels found in the early 1990s (green graph and trend line).

Graph 5.



The irony is that Japan is now colluding with the USA to impose even worse strictures on the Chinese electronics industry, compared to the the one which was imposed on Japan in 1986. For a country which invaded China causing unimaginable pain, to then collude with the USA in this aggressive manner, must be galling to the Chinese and unforgivable.

Turning to profits. I have used data from both the Japanese Finance Ministry as well as the Bank of Japan. From our perspective it is the data for the second half of 2022 which is the most important in terms of trend. Although the data is different both show a downward trend over this period. The first table below is taken from the important TANKAN survey conducted by the Bank of Japan. It shows that in H2 (the second half of 2022), profits which rose by 21.6% in the first half then fell by 5.4% in the second half. This is quite a sharp turn.

Table 1.

8. 企業収益（1） Corporate Profits (1)

（前年比%）
(Percentage changes from the previous year)

年度・期 Period	短観（全国企業短期経済観測調査） (a) (b) TANKAN: Short-Term Economic Survey of Enterprises in Japan									
	売上高 Sales	うち 大企業 Of which: Large enterprises		うち 中小企業 Of which: Small enterprises		経常利益 Current profits	うち 大企業 Of which: Large enterprises		うち 中小企業 Of which: Small enterprises	
		製造業 Manufacturing	非製造業 Nonmanu-facturing	製造業 Manufacturing	非製造業 Nonmanu-facturing		製造業 Manufacturing	非製造業 Nonmanu-facturing	製造業 Manufacturing	非製造業 Nonmanu-facturing
2003 FY	0.7	1.4	0.7	2.6	-0.7	14.4	20.3	10.7	35.7	2.2
2004 FY	4.0	5.3	3.3	5.8	3.7	20.3	27.6	15.2	23.2	14.1
2005 FY	4.8	6.7	6.1	5.6	2.9	12.3	16.5	10.0	8.4	9.7
2006 FY	4.8	6.6	4.2	5.3	2.2	10.1	10.6	10.7	7.9	6.5
2007 FY	4.1	6.1	4.5	2.5	1.8	-1.0	0.8	0.3	-12.3	-1.6
2008 FY	-4.5	-9.2	-1.6	-4.7	-4.1	-42.5	-61.9	-27.6	-50.9	-26.9
2009 FY	-12.6	-12.7	-16.0	-12.9	-8.3	-4.3	-3.7	-7.7	-7.2	1.8
2010 FY	4.5	6.9	4.7	5.5	0.7	38.3	67.9	33.2	61.6	5.2
2011 FY	2.2	0.4	3.5	1.2	1.6	-3.2	-11.7	-7.2	1.7	17.5
2012 FY	0.6	-0.4	0.5	-1.5	2.1	7.2	12.4	2.3	5.9	10.7
2013 FY	5.5	7.1	5.4	4.9	6.3	28.4	48.7	24.6	15.3	21.3
2014 FY	0.6	1.3	0.5	1.2	0.0	5.9	11.5	3.7	8.6	0.8
2015 FY	-1.3	-2.3	-2.8	0.6	-0.3	4.8	-5.3	11.5	3.4	10.1
2016 FY	-1.5	-2.9	-3.8	-0.3	0.8	4.4	-0.5	5.7	16.4	5.8
2017 FY	4.4	5.6	5.9	3.2	2.4	12.0	20.8	14.3	4.0	-0.5
2018 FY	2.5	2.9	2.0	2.4	2.1	0.4	-0.9	-0.1	-1.8	1.1
2019 FY	-1.4	-3.2	-2.5	-2.7	0.3	-9.6	-17.5	-7.8	-18.1	0.7
2020 FY	-7.8	-7.8	-9.0	-7.7	-7.0	-20.1	-1.4	-37.9	-10.2	-16.1
2021 FY	4.3	10.2	2.6	7.6	3.0	42.7	53.7	44.4	45.0	21.8
2022 FY	7.7	11.3	9.6	4.2	3.5	7.5	8.2	16.3	-11.6	-2.6
2022.H1	*9.4*	*12.8*	*11.9*	*5.7*	*5.4*	*21.6*	*24.1*	*29.2*	*-5.5*	*12.6*
2022.H2	*6.1*	*9.9*	*7.5*	*2.8*	*1.8*	*-5.4*	*-8.2*	*4.0*	*-17.4*	*-12.9*

(Source: Bank of Japan)

TABLE 2 (Ratio of Profits to sales)

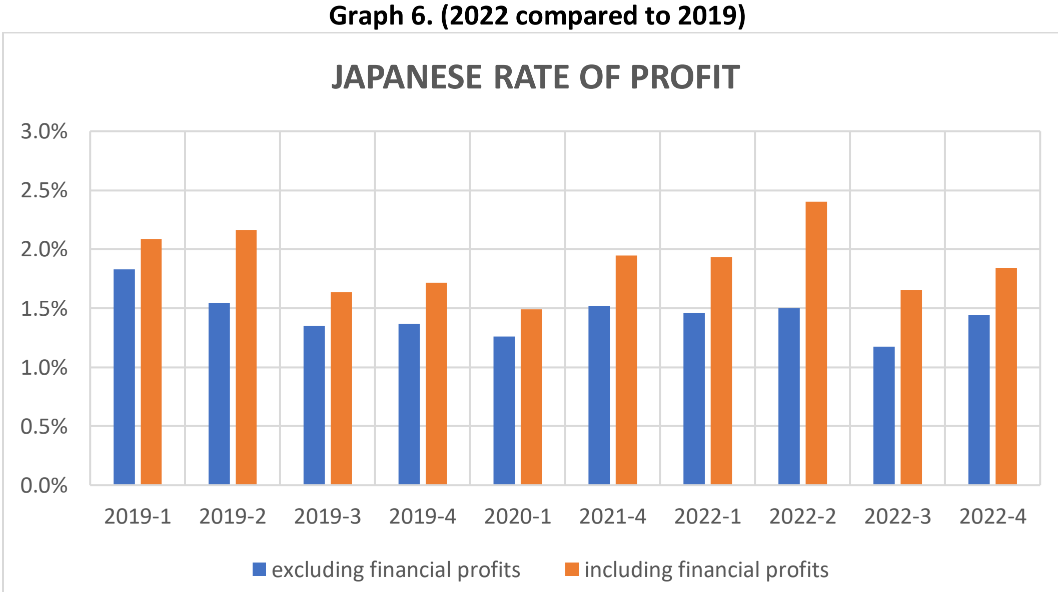
	Total	Manufacturing Large enterprises	Non-Manufacturing Large Enterprises	Manufacturing Small Enterprises	Non-Manufacturing Small...
2018.H1	6.20	9.74	7.25	4.64	3.33
2018.H2	5.24	6.77	5.86	4.41	3.68
2019.H1	5.84	8.28	7.14	4.12	3.49
2019.H2	4.64	5.73	5.24	3.48	3.56
2020.H1	3.89	6.25	4.50	2.51	2.33
2020.H2	5.09	8.50	3.96	4.76	3.93
2021.H1	6.29	11.23	6.59	4.90	3.16
2021.H2	6.15	9.81	6.06	4.85	4.19
2022.H1	6.99	12.35	7.61	4.38	3.38
2022.H2	5.48	8.19	5.87	3.89	3.58

We see that as a result of the sharp fall in corporate profits in H2 profit margins were squeezed and returned back to their H1 2019 levels. No doubt H1 2023 will see levels akin to 2019 H2.

The Ministry of Finance in Japan releases more granular profit figures by providing quarterly data. Having risen by 35.4% in Q3 of 2022 manufacturing profits then fell by 15.7% in Q4. The same applied to total profits, they rose by 18.3% only to fall by 2.8% in the fourth quarter. Investment which rose by 11.4% yoy in 2022 is expected to rise by only 3.9% in 2023.

Furthermore the current TANKAN survey of business conditions for 2023 released on the 3rd April, is bleak and involves sharp downward revisions to both sales and profits. YoY growth in sales is expected to have fallen to just 1.3% from 11.0% in 2022, while net income is expected to have fallen by 3.8% compared to a rise of 10.5% in 2022.

Graph 6. (2022 compared to 2019)



As the Japanese Ministry of Finance produces discontinues data, that is year by year or quarter by quarter rather than multi-year or multi-quarter, it becomes time consuming to prepare a time series graph.

Instead, to save time, I have opted to compare 2022 with 2019, the year before the pandemic. The fall in the rate during Q3 then rising in Q4 is somewhat confusing, given that profits fell in the final quarter. However taking Q3 & Q4 together, the rate of profit is no higher in H2 2022 than it was in H2 2019, the year the global economy skirted with recession. To obtain the rate of profit I used Table M1 found in the series Financial Statements Statistics of Corporations issued by the Japanese Ministry of Finance. As the denominator I have chosen Fixed Asset plus Inventories. I could have refined the denominator further by subtracting bills payable from bills receivable which would have added another 6% to capital bringing it even closer to the actual rate of profit. However, I omitted to do this as the trend is the more important and it would not have affected that trend in this restricted series.

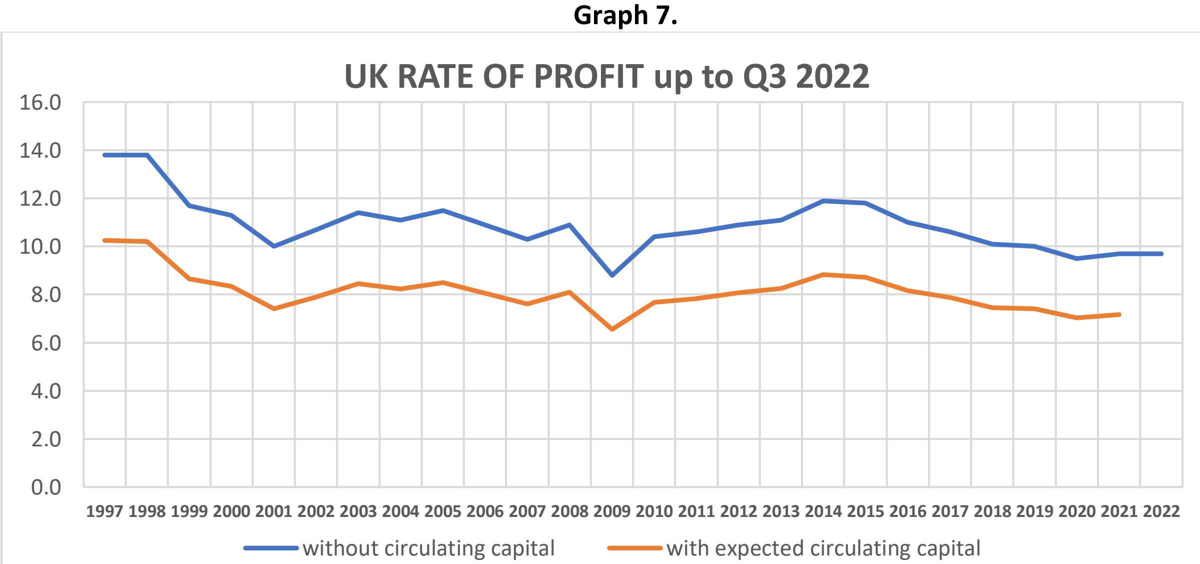
The reader will note that I have provided two rates of profit by using two numerators. The first rate is that of operating profits and the second includes financial profits. The lack of investment by Japanese corporations has come at a price. They hold the biggest hoard of money or unspent profits, not only relatively but absolutely. As Table M1 shows, at the end of 2022 Japanese corporations were sitting on a pile of cash amounting to $1.8 trillion. For those Marxists who are concerned about how financial profits impact produced profits, Japan is a wonderland and also a lesson as to what happens when capitalists squander surplus value.

And in Brexit Britain

"The net rate of return for private non-financial corporations (PNFCs) was 9.8% in Quarter 2 (Apr to June) 2022, down from 10.3% for Quarter 1 (Jan to Mar) 2022; it then fell further to 9.7% in Quarter 3 (July to Sept) 2022. "The net rate of return for manufacturing companies was 8.4% in Quarter 2 2022, decreasing to 7.9% in Quarter 3 2022; this is a total decrease of 1 percentage point from the net rate of return of 8.9% in Quarter 1 2022."

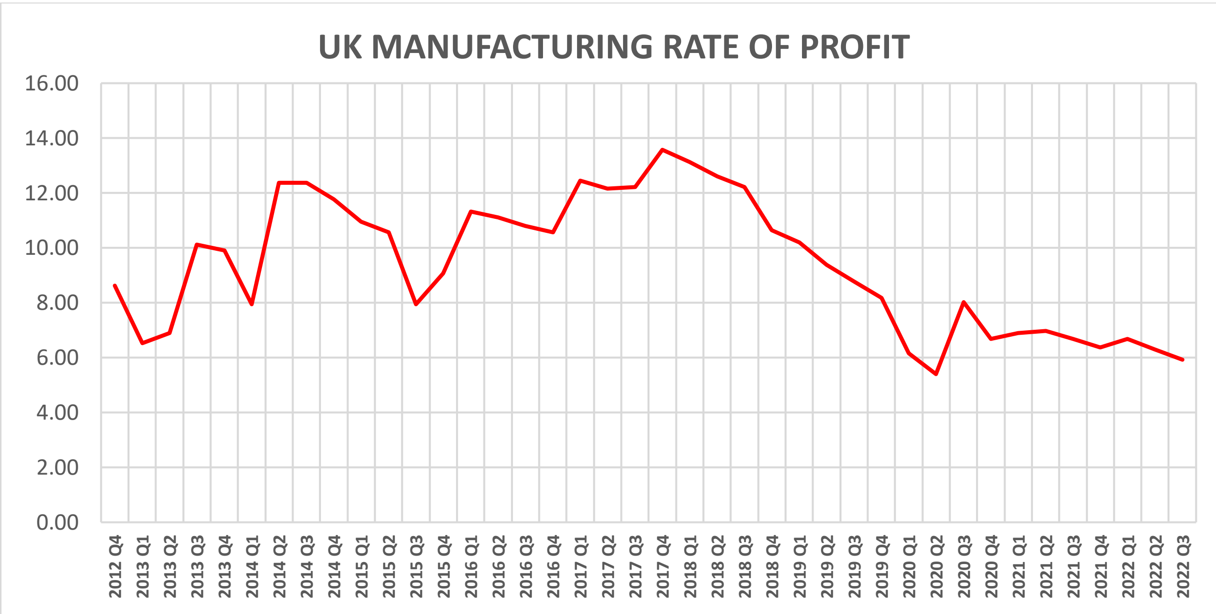
I have calculated circulating capital using the 2019 input-output tables which provides a turnover rate of 4.43 for manufacturing similar to the USA. Using these tables, compared to fixed capital, circulating capital amounts to 32.5%, slightly higher than in the USA. Using this 32.5% figure I have imputed circulating capital and by adding it to fixed capital throughout have arrived at a more accurate rate of profit of <8%.

Graph 7.



The rate of return and profit of non-financial corporations is heavily influenced by the oil and gas industry in the UK, where prices remained elevated up to Q3, but fell in Q4 with the likely outcome that the non-financial corporation profit rate in Q4 will fall below that found for the whole of 2020. Although the manufacturing sector is much smaller, its trend is not influenced by oil and gas profits, thus it may provide a better indicator for underlying profit trends. At under 6% it is similar to the rate found in the USA.

Graph 8.



(Source: Office for National Statistics)

As we go into the Q1 reporting season in the USA.

The forecast of earnings for Q1 in FactSet's latest report, the last before actual earnings come out, is increasingly pessimistic. "*Earnings Decline: For Q1 2023, the estimated earnings decline for the S&P 500 is -6.6%. If -6.6% is the actual decline for the quarter, it will mark the largest earnings decline reported by the index since Q2 2020 (-31.8%)." "During the first quarter, analysts lowered EPS estimates for the quarter by a larger margin than average. The Q1 bottom-up EPS estimate (which is an aggregation of the median EPS estimates for Q1 for all the companies in the index) decreased by 6.3% (to $50.75 from $54.13) from December 31 to March 30."* The main reason for this revision, double the average for the last ten years, is that energy profits will no longer add to overall profits given the fall in oil and gas prices. The same downward revision applies to total revenues. *"As of today, the S&P 500 is expected to report (year-over-year) revenue growth of 1.9%, compared to the estimated (year-over-year) revenue growth rate of 3.4% on December 31."* Given the weaker Dollar, though still up 2% on Q4 2022, the effect on exchange rate adjusted revenue for the S&P 500 will be muted. At best this adjustment will yield revenue growth of 3%. That is still well below inflation rates in most of the G7 countries including the USA. Thus if the S&P 500 is any guide, the global economy in real terms contracted in Q1.

The soggy chip industry.

The chip industry is the bellwether for global production. Semi-conducters are now found in most products from toys to cars. Therefore it can also be said they are the canary in the silicon mine. The two companies which monopolise the production of chips are the Taiwanese company TSMC and the South Korean giant Samsung. Their projected earnings for Q1 2023 are dismal.

Samsung Electronics will cut memory chip production after estimating a 96% drop in its quarterly operating profit. The chip-making giant said sales had dropped sharply due to a slow global economy and less demand after Covid. Its profit dropped from $8.54 billion to just $0.37 billion in the first quarter of 2023.

Likewise for TSMC the company which dominates global chip fabrication. Here is the projection provided by TSMC for its forthcoming investor call later this month. It's projected profit is down over 20% quarter on quarter and its operating margin by the same factor. Little wonder Warren Buffett offloaded his investment. This is what happens when a company allows itself to be bullied by a failing superpower damaging its economic prospects and long term outlook, particularly with its most dynamic customer, China.

Table 3.

	4Q22		1Q23
	Actual	Guidance	Guidance
Net Revenue (US$ billion)	19.93	19.9-20.7	16.7-17.5
Exchange Rate (USD/NTD)	31.39	31.5	30.7
Gross Margin	62.2%	59.5%-61.5%	53.5-55.5%
Operating Margin	52.0%	49%-51%	41.5-43.5%

As an aside you may recall I spoke about the economics of chip production at scales below 7nm. Moore's Law is both physical and economic. Physically it describes how many transistors can be packed onto a chip as etching gets finer but also the cost per transistor. TSMC was the first fabricator to master 3nm. Its biggest client Apple bought up the first production run for its new iPhone 15 series. Except that it has all gone wrong. TSMC is demanding a higher price, likely due to a higher failure rate in production, which Apple is refusing because the mobile market has turned and passing on higher prices is no longer an option. We shall see how this is resolved. One thing is clear, market conditions are now interfering with the race to the bottom nm. In the case of capitalism, profit will always overrule science.

Conclusion.

It appears we no longer have forecasts only sorecasts as analysts like the IMF downgrade the prospects for growth. The IMF projects the most miserable growth since the 1990s. In fact what is to come could be incomparable to any period since 1945. As I said, given climatic events I am loathe to predict anything beyond three months. I will conclude on this point. As in the USA, global profits which began to fall in H2 2022, will continue to fall at an accelerating rate in H1 2023. The projections given by FactSet can be read into the world economy. Whatever upticks there were in January and February was overwhelmed in March, another inflection point when the downward spiral accelerated.

Brian Green, 11th March 2022.