

SEASONAL ADJUSTMENTS. WHEN UP IS DOWN AND DOWN IS UP. The intriguing case of January U.S. retail sales.

Seasonal adjustments are needed to smooth monthly and quarterly data. The reason being that the number of selling or working days varies per month because months differ in length and because public holidays affect some months and not others. Thus the goal of these adjustments is to arrive at a weighted average working day which smooths monthly totals, so that months can be compared as though they each shared the same number of working or selling days.

Recently these seasonal adjustments have become exaggerated, positively Ukrainian. I am not the only one to point this out. Despite the Bureau of Labour Relations acknowledging that an additional 3 million workers had lost their jobs in January, or were temporarily laid off, or were working fewer hours, the BLS headline figure indicated a sharp rise in employment. Michael Roberts on his Website in an article The Sugar Runs Out had this to say: *"Again, the cry was that the US economy was making great strides in recovering from the pandemic slump. But again, the headline figure hid some of truth. The reason for the sharp jump in the official figure was a revision of the census data which had been underestimating the number of Americans already at work in 2021. That was adjusted for by upping the November and December estimates. After accounting for this one-off census adjustment, jobs in January actually fell by 272k, while the household survey (another measure of jobs) showed a fall of 90k – the worst drop since the beginning of the pandemic."* <https://wordpress.com/read/feeds/313842/posts/3816216353>

Every news outlet praised the jump in retail sales announced on Wednesday by the US Census Bureau. *"Retail trade sales were up 4.4 percent (± 0.4 percent) from December 2021, and up 11.4 percent (± 0.7 percent) above last year. The November 2021 to December 2021 percent change was revised from down 1.9 percent (± 0.5 percent) to down 2.5 percent (± 0.3 percent)."* Core sales which feed GDP, registered even higher growth. https://www.census.gov/retail/marts/www/marts_current.pdf

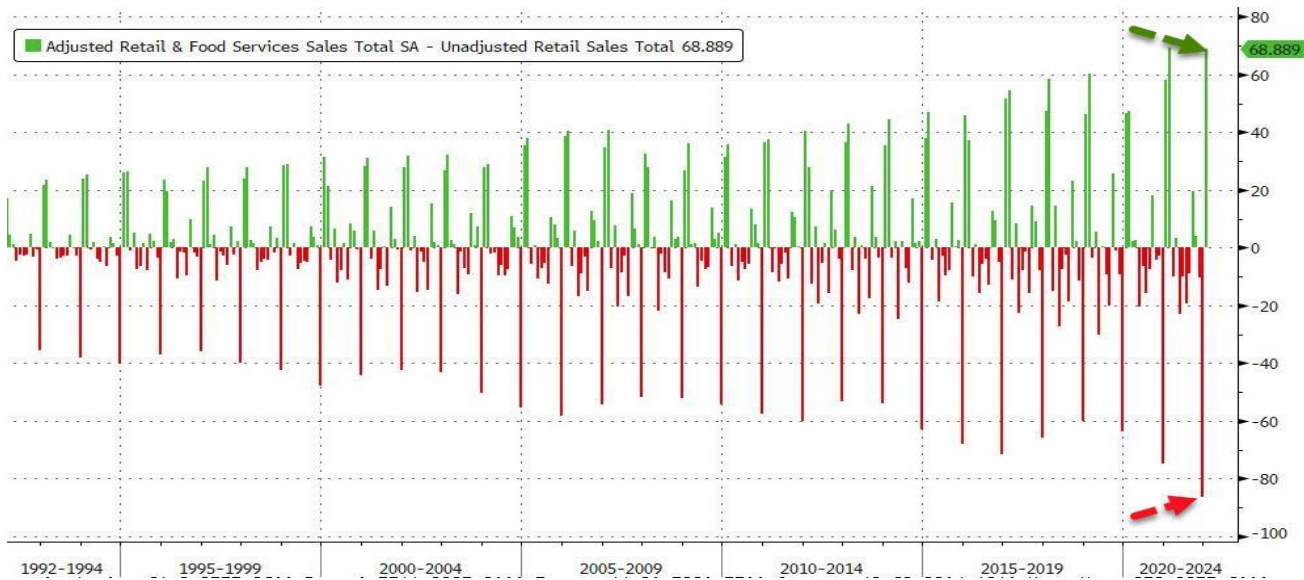
Predictably, this headline figure fed the narrative that the consumer was in rude health and not shy to spend all those dollars they had secreted under their mattresses during lockdown. And of course it boosted predictions about the expected GDP growth over this quarter. The Atlanta FED with its *GDPNow* forecast raised its prediction to a growth for the quarter of 1.5% having started with a prediction of just 0.1%.

But all is not what it seems. We are truly viewing this data through the looking glass. The first graph below, which I came across, shows the enormity of the seasonal revision this month. It exceeds anything that has come before, but when it comes to USA posturing, this time in Ukraine, nothing is allowed to show that the US is not operating from a position of economic strength. The variation of 150 pts is exceptional to the point of being unbelievable.

It is also worth mentioning that over the course of 12 months, a calendar year, the total adjusted and unadjusted figures should equalize because the variations only occur within a year and not between years, except when there is a leap year. In 2019 that was the case, but unusually in 2021, there was a 5% discrepancy. Expect major revisions in the years to come.

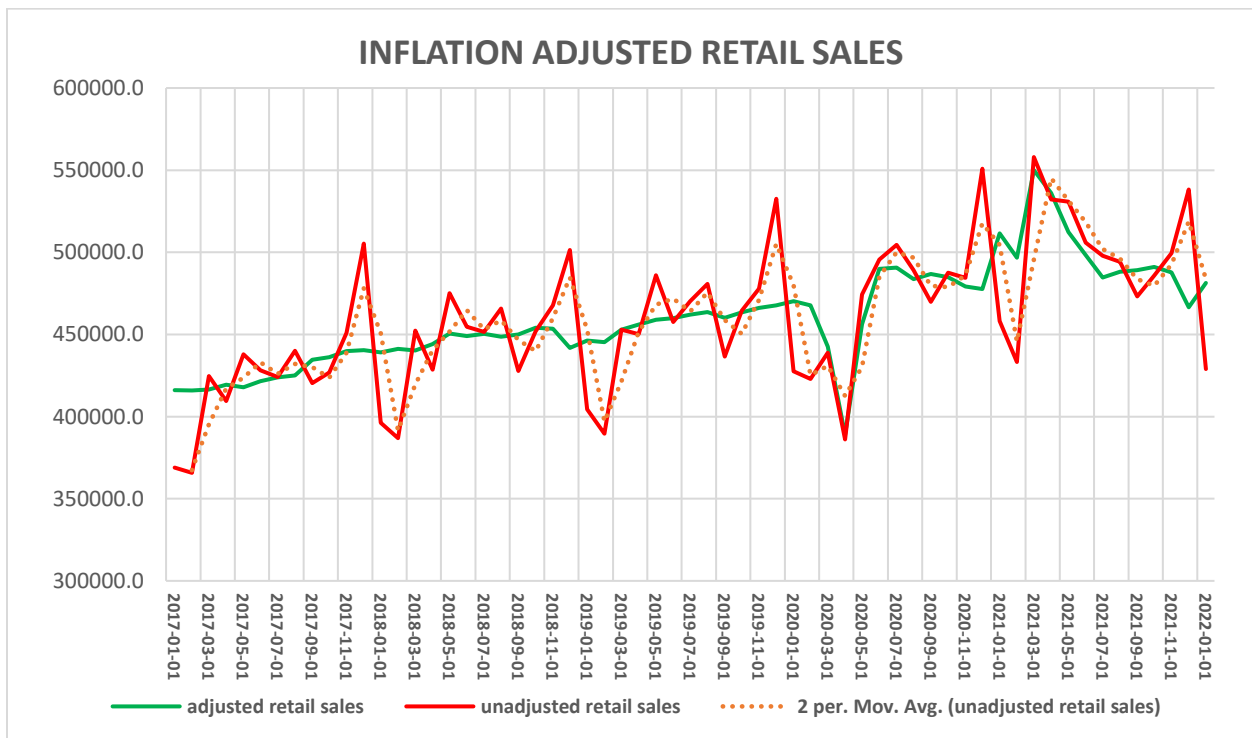
As we are about to see far from strengthening the US economy is weakening.

Graph 1.



The same can be seen in the graph below which I meticulously prepared. To deflate retail sales I used the CPI for durable goods and the CPI for non-durable goods. As there is no joint CPI, I had to combine the two series and did so by giving a weighting of 2/3 to non-durable and 1/3 to durable in accordance with how many dollars are spent on average for non-durable goods compared to durable goods. (Sources: durable goods CPI Fred Table CUSR0000SAD, non-durable goods CPI Fred Table CUSR0000SAN) Data for adjusted and non-adjusted advanced retail sales are provided by the Census Bureau.

Graph 2.



The green graph is smoother than the jaggedly red graph because of the seasonal adjustments. Given the problematic nature of current seasonal adjustments I have included a two month average trend for unadjusted (or the raw) retail figures. I believe the two month trend is a more accurate measure of the current state of sales and interestingly it coincides with adjusted retail sales figure for January.

Readers of this website will recall that I predicted that retail sales could fall 5% returning real sales back to within 5% of pre-pandemic levels. So was I right? Broadly yes. In December 2019 adjusted retail sales peaked at a monthly total of \$468 billion which compares to \$481 billion in January, providing a gap of less than 3%. However, compared to the Pandemic peak in March 2021, retail sales have actually fallen by 13%. Taking the more authoritative 2-month average, retail sales which combines the December fall with the January rise, shows the trend of current sales to be now below the peak in 2019 and departing the plateau to which it rose when Covid Relief Funds and lockdowns encouraged goods purchases at the expense of services. It is likely this trend will continue in the future falling to 2019 levels and then below as the scarring from the Pandemic takes effect.

The reason I anticipated the fall in retail, unlike the overpaid pundits on Wall Street was the view that there were no drivers for retail in January. Covid Relief Funds were exhausted (the savings rate had normalised), inflation had eroded earnings, personal debt was up, the stock markets were down, and an above average number of applicants for credit were being turned down. Nonetheless, it is likely that the rise in the headline rate together with the employment rate which has been swallowed hook, line and sinker by Wall Street, will fuel the narrative that the economy is strong and the consumer robust. It is likely these headline figures will continue to dupe retail investors.

More data.

The FED issued January's preliminary data for industrial production and manufacturing. Industrial production increased because of the increase in Utilities (cold weather) but fell predictably for manufacturing. I always smile how it is, that the FED includes Utilities under the heading 'Industry' but the BEA includes it under the heading 'Services'. Unlike total industrial production which rose, Manufacturing production fell. However, the sharp increase in manufacturing output during November and December was not undone by the smaller fall in January which meant that over the three months, as the graph below shows, the output of manufacturing broke out of its range to reach 102.5. To put this spike in context, it means that in volume terms, over the last five years, output has only risen by 2.5%.

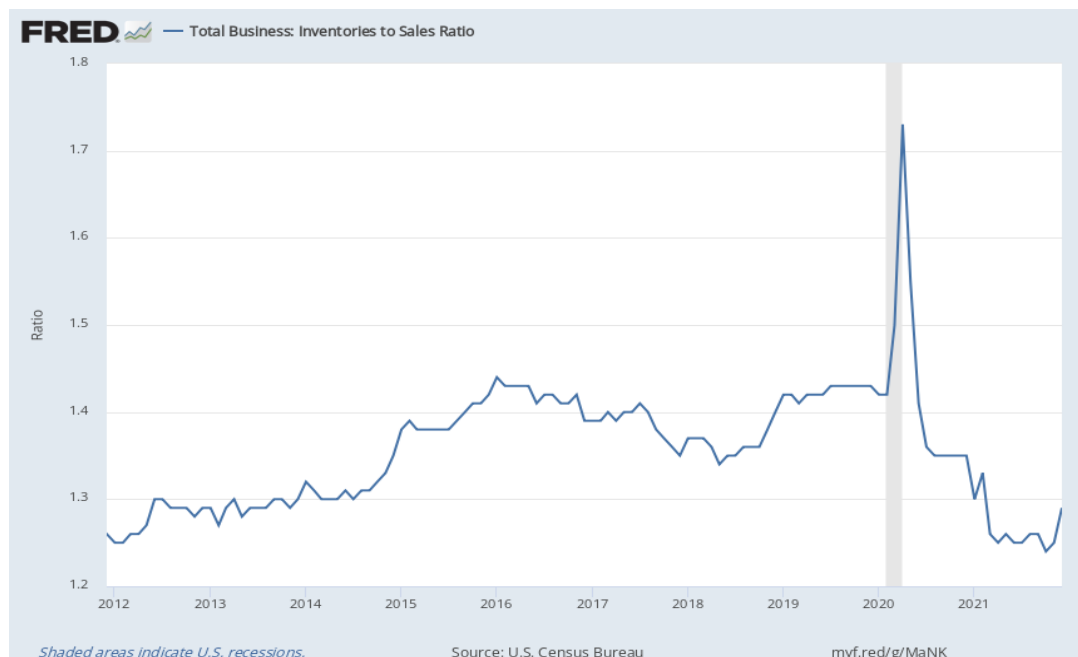
I continue to expect the great inventory reset to hammer production. Another nominal fall of 20%, as experienced in January, will drop retail sales into a zone well below that found before the pandemic. That combined with a rise in inventories will spell trouble for the economy.

Graph 3. (Adjusted - Table IPCONGD)



Data for December's inventory to sales ratio for Total Business was also released. Total Business includes manufacturing, wholesale, and retail.

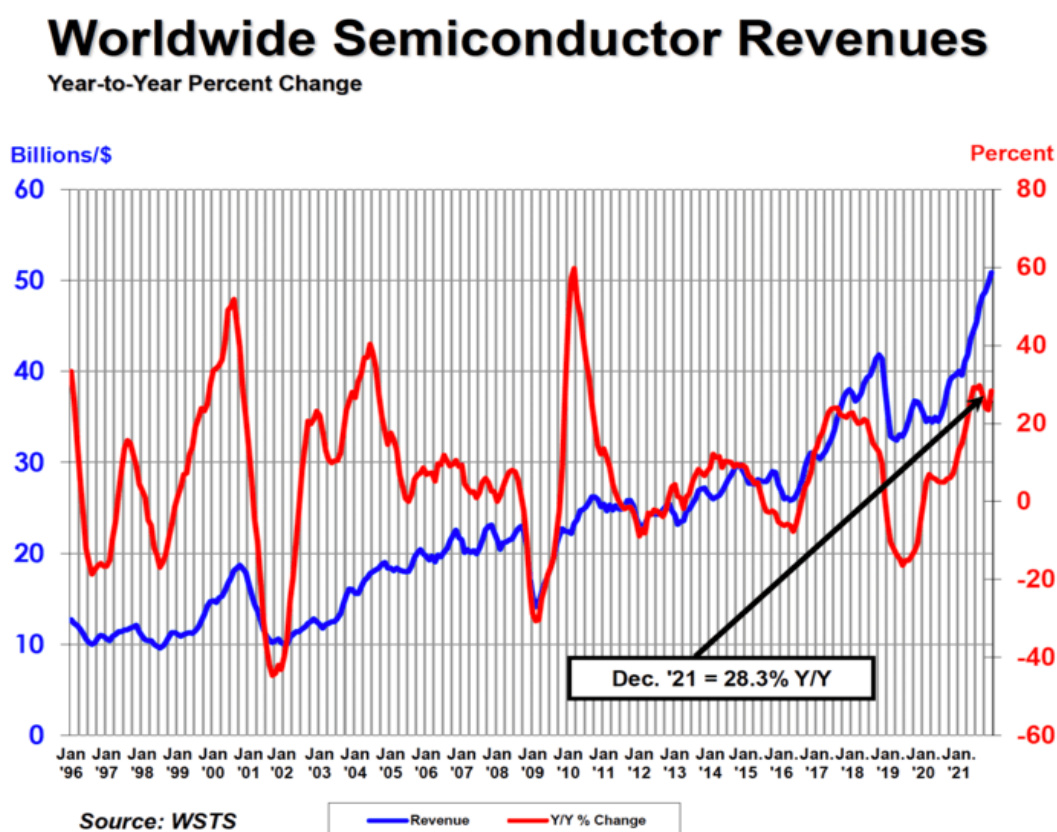
Graph 4. ((ISRATIO))



I expect the ratio will have increased to above 1.3 in January from 1.29 currently. Once it hits that mark then it can be said that, with exceptions, inventory levels will have normalized. Were the unadjusted sales figures to be used for the January Index, the ratio could well be closer to 1.4.

The key item of inventory, computer Chips, has had a field year. Total revenues came in at \$556 billion in 2021, a rise of 26.2%. Revenues did not decelerate in the last quarter as the graph below shows. Total shipments rose from 0.98 trillion (Statista) to 1.15 trillion units a 17% rise, indicating inflation accounted for around 10% of the revenue increase. Given that the volume of chips shipped increased by 17% and given that many markets for the chips were stagnant to falling, or at least showed a volume increase well below 17%, it is difficult to explain the generalized shortage of chips.

Graph 5.

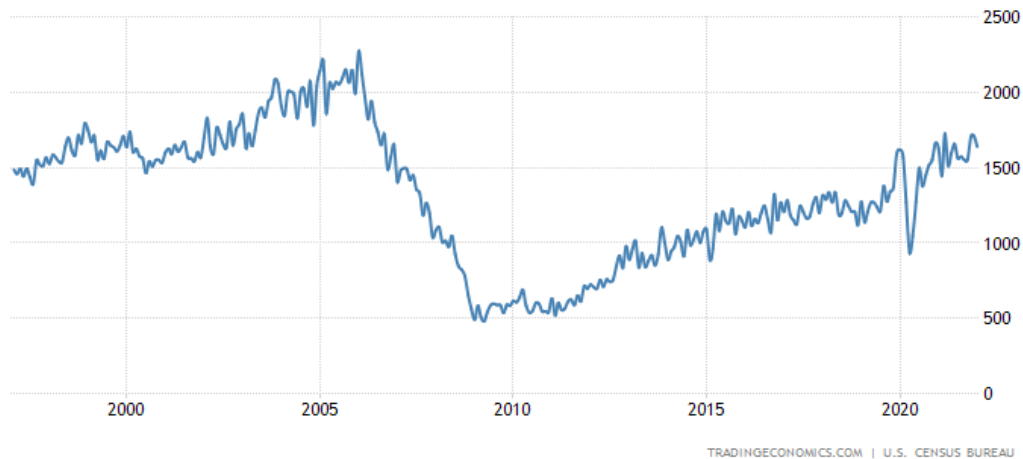


Here is a breakdown of chip production. Note high end chips, as found in smartphones, represents only 15% of the total. “Analog, a type of semiconductor that is commonly used in vehicles, consumer goods, and computers, had the highest annual growth rate of 33.1%, reaching \$74 billion in 2021 sales. Logic (\$154.8 billion in 2021 sales) and memory (\$153.8 billion) were the largest semiconductor categories by sales. Annual sales of logic products increased by 30.8% compared to 2020, while sales of memory products were up 30.9%. Sales of micro-ICs — a category that includes microprocessors — increased 15.1% to \$80.2 billion in 2021. Sales of all non-memory products combined increased by 24.5% in 2021. Sales of automotive ICs increased 34.3% year-over-year to a record high of \$26.4 billion.” <https://www.semiconductors.org/global-semiconductor-sales-units-shipped-reach-all-time-highs-in-2021-as-industry-ramps-up-production-amid-shortage/>

Housing Starts fell 4.1% in January to an annualized rate of 1.638 million versus an expected rate of 1.702 million and below the bottom of the consensus range. (Econoday). Still I expected a bigger fall. On Wednesday the 30 year mortgage rate rose above 4.2% after FED Bullard spoke. Not only did mortgage

interest rates rise, but the average size of the mortgage increased to \$453,000. Already by the fourth quarter of last year, before interest rates rose, the average mortgage repayment consumed 25.6% of average incomes dangerously close to the critical limit of unaffordability set at 28%.

Graph 6 (Housing Starts).



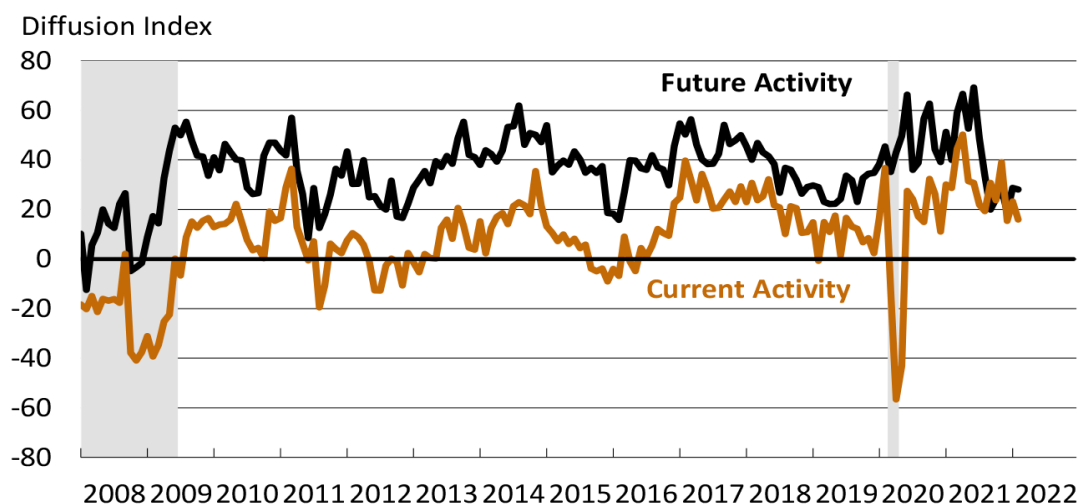
It should also be borne in mind that the square footage of the average single family dwelling remains 6% below the levels prior to 2014 thus in terms of 2014, the number of starts is around the 1.5 million mark.

In terms of soft data, the important FED Philadelphia Manufacturing Index came in at 16 below the Econoday consensus range. *“The future new orders index decreased 5 points to 24.9”*. Why is this index important? Because it is the closest the US has to a Chip (Electronic) Activity Index.

Graph 7.

Chart. Current and Future General Activity Indexes

January 2008 to February 2022



Note: The diffusion index is computed as the percentage of respondents indicating an increase minus the percentage indicating a decrease; the data are seasonally adjusted.

We note that the index for future activity is at lows last seen at the time of the pseudo recession at the end of 2015. <https://www.philadelphiafed.org/surveys-and-data/regional-economic-analysis/mbos-2022-02>

In general all the data released shows a weakening economy, not all of which can be attributed to the spread of Omicron.

The Markets.

The influence of quarterly company financial reports has largely faded. This leaves two dominant and one neglected influence. The two dominant influences this week has been the FED and Ukraine. When it appeared that Russia was de-escalating the conflict, the markets responded positively. But when NATO, which will brook not de-escalation as part of its grand plan, contradicted Putin's offer, the markets fell. It seems that even if Putin shot himself in the head, NATO would count this as an aggressive act, because you see the gun was pointing at Europe at the time and if Putin's head had not got in the way, the bullet could have headed in the direction of Western Europe.

NATO will continue to escalate because China is the grand prize and Russia stands in the way. Lord Hasting's, NATO's first Secretary General, famously opined that the Organization's mission statement was to *"keep the Soviet Union out, the Americans in, and Germany down."* Substitute 'Russia' for the 'Soviet Union' and 'neutralized' for 'out'.

Further, keeping the US in and Germany down is exemplified by the Nord Stream 2 saga. The US is bullying Germany over this source of gas to demonstrate its hegemony over Europe and secondly to weaken the EU economically in order to make US goods more competitive and EU one's less so. If the EU capitulates then it will have re-subjugated itself to the US. Embroiling the EU in a European conflict also ensures that it cannot benefit from any conflict between the US and China. (Incidentally China is becoming much more vocal about events in the Ukraine.) The US knows that if a diplomatic solution is found, one based on mutual European security, it is the US who will be out, and NATO defunct.

On Wednesday, the FOMC minutes (The Federal Open Market Committee) covering its January meeting, the one where it should have, but did not, raise interest rates were published. They were interpreted as Dovish. As a result these minutes trumped NATO's escalation. Markets which were down by half a percent ended the day largely unchanged. This can be seen in the movement of the Nasdaq on Wednesday. The minutes were released at 14:00 hours Eastern Time.

Graph 8 (Nasdaq 16th February).



The neglected element, but the one which will ultimately prove fatal, are the economic releases. Despite surprising on the upside, the Retail Sales headline left the markets relatively unaffected. Similarly with the industrial production print.

However, in the end it is the real economy which dictates earnings and therefore the standing of the markets. The most recent FactSet Report remains pessimistic about the future prospects for earnings which are negative after factoring for inflation and share buybacks. *“At this point in time, 64 companies in the index have issued EPS guidance for Q1 2022. Of these 64 companies, 47 have issued negative EPS guidance and 17 have issued positive EPS guidance. The percentage of companies issuing negative EPS guidance is 73% (47 out of 64), which is above the 5-year average of 60%. For Q1 2022, analysts are projecting earnings growth of 5.5% and for Q2 2022, analysts are projecting earnings growth of 4.8%.”* (FactSet report dated 11th November 2022).

At the time of writing, the markets are down about 1.5% because of reports of shelling on the Ukrainian border. It seems the markets are currently riding a helter-skelter between FED speaks and Ukrainian scares.

Conclusion.

It is unlikely the Ukrainian issue will abate. NATO will continue to escalate. It will thus weigh on a market which is and will be buffeted by strengthening economic headwinds. It is unlikely that the January revisions, which allowed the data to have pink cheeks, can be repeated in February. In addition, the previous support from positive earnings' announcements will be lost. Thus the markets will remain stressed and fragile, and therefore the probability of a crash cannot be ruled out. It all depends on interest rates and the impact the inventory reset will have on production both in the USA and in China.

This article is the last of the regular articles on the markets. The anticipation was high that 2022 would break the cycle of rising share prices and it has. The climax will be reached in March, when the FOMC meets. Supported by a number of odd data releases for January, the markets have not panicked yet, but they have already fallen sufficiently to impact economic growth by limiting the personal consumption expenditures of the wealthy top 10% whose spending habits are influenced by capital gains and whose spending capacity equals the bottom 80% of income earners.

Brian Green, 17th February 2022.