IS INFLATION TRANSITORY OR NOT?

The Consumer Price Indexes with the exception of China and Japan are hitting new highs. In the USA, November's consumer inflation rose to 6.8% and an unexpected 5.1% in the UK. The question, which is teasing economists, is given the acceleration in prices during October and November, will they continue to rise, or will they soften in the New Year?

In my first article on Modern Marxist Monetary Theory I anticipated prices peaking in August. While the upward trend in prices did decelerate, they picked up speed once again in October and November. The reason I had anticipated a peak then was that the preliminary data which had pointed to a normalization in the components making up M2 (the commonly used metric for the supply of money).

Given the pick-up in inflation I revisited recent data to determine whether the normalization had reversed. It had. To understand this phenomenon we need to evaluate each component. A read of my first article on Modern Marxist Monetary Theory would therefore be useful because the fundamental concepts are explained there. https://theplanningmotivedotcom.files.wordpress.com/2021/05/mmmt-part-1-1.pdf

To précis this article. Typically around 90 – 92% of M2 comprises unspent National Income. In turn National Income represents the monetization of past labour, or better still it represents unspent legacy value. Thus what token or symbolic money, either in paper or electronic form does, is to mobilize this legacy value to circulate present day value (value newly added). Thus while state based money itself has no intrinsic value, it holds legacy value in one hand and current value in the other, before swopping hands.

The balance of M2 consists of temporary money (bank credit and non-governmental bonds), new permanent money (fiscal deficits) and that part of capital gains cashed in and spent in the real economy. On this last point, my original article postulated a figure of 10%. According to the M.I.T. study which I found afterwards, that figure appears to be 3.2% of GDP or about 3.7% of National Income. https://scholar.harvard.edu/files/chodorow-reich/files/crns_published.pdf

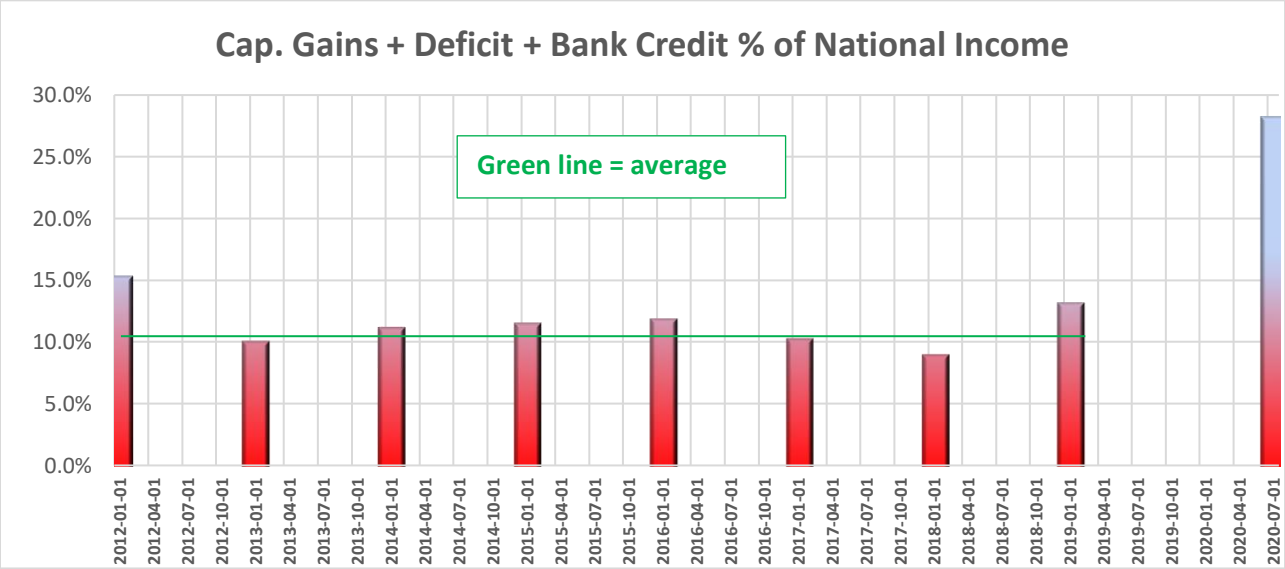
Historical data shows that provided the share of M2 composed of unspent National Income stays above 90% of M2, the rate of inflation tends to be below 2%. The reason being that once value is monetized and converted into revenue, that revenue is fixed, it is invariable. It thus acts as the ballast for M2 keeping prices stable. However, if the other variables increase so that unspent National Income falls below 90% then price stability is lost because the money supply is being expanded by non-value means.

This can be seen below in Graph 1. For the period 2012 to early 2020, the share of M2 belonging to temporary money, new permanent money and capital gains spent in the economy was 10.6% annualised. This was composed of new temporary money amounting to 6.5% (bank credit 5% and net bond issuance 1.5%), permanent money (fiscal deficits on average 3.5%) and cashed in and spent cap-gains of 0.9%. This left National Income's share at 89.4%, slightly outside the longer-term average range of between 90-92%

However, when we look at the pandemic period beginning Q2 2020 this jumps to 28% driving down the contribution of National income to a mere 72%. This is both a product of slumping National Income caused by lockdowns as well as a rise in absolute terms in the fiscal deficit as well as the extraordinary increase in share prices over this period. This resulted in an increase of >14% in the fiscal deficit, 3% in new money and 1.4% in capital gains. All of this data and calculations can be found in the attached spreadsheet

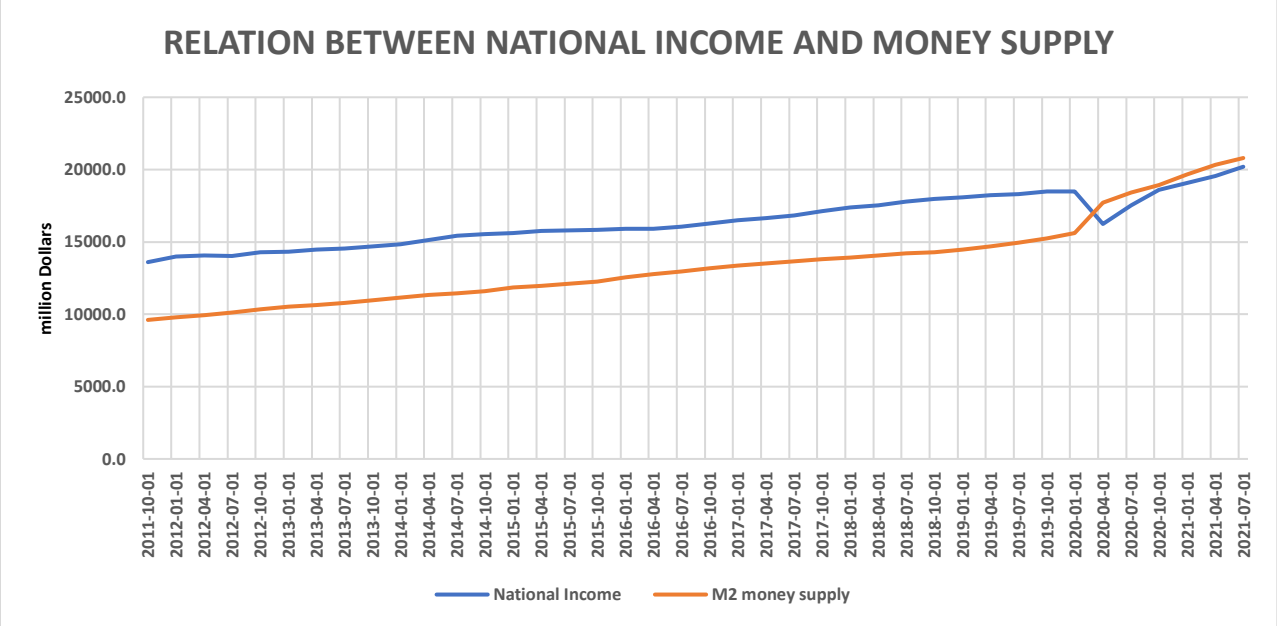
'NATIONAL INCOME QUARTERLY' which should be consulted. Note all percentages given are annualised. As the original data was quarterly, the percentage figures are multiplied by 4 to align them with National Income which is always annualised regardless of whether it is presented monthly or quarterly.

Graph 1.



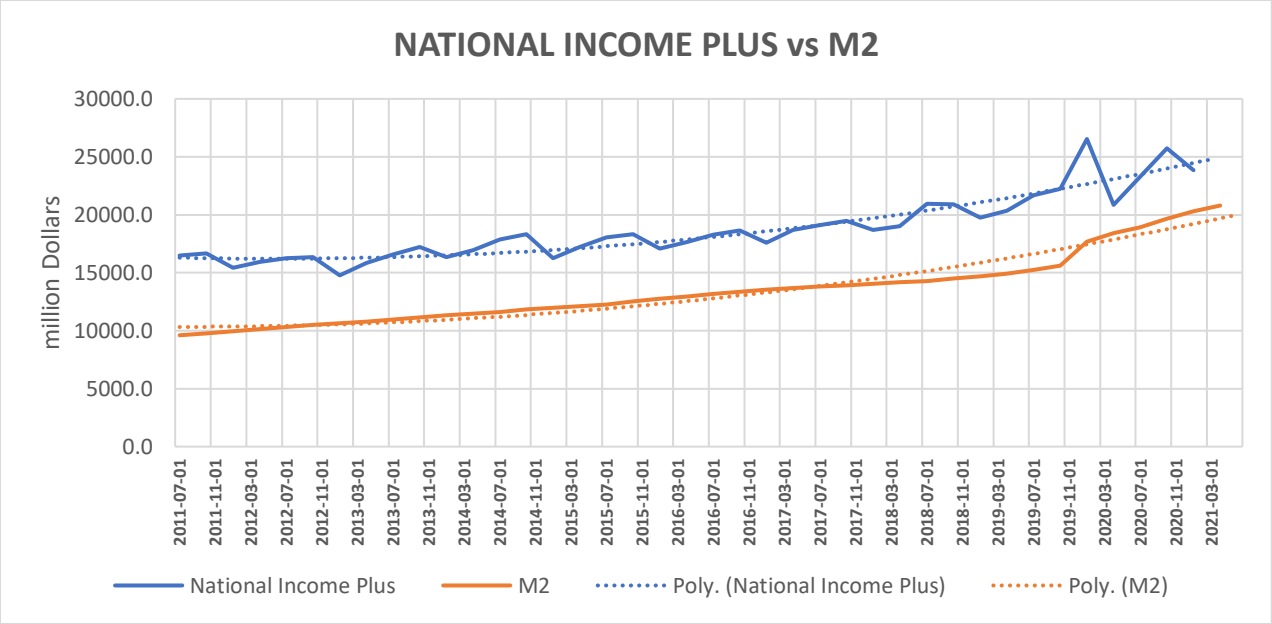
Another way of looking at the relation between National Income is to examine its size over time relative to M2. This is done in Graph 2 below. We note that until the pandemic, National Income was larger than M2, approximately 30% larger. Measured against N.I. it would have been correct to say that the velocity of circulation was about 1.3 but this velocity turns negative in 2021-04-01.

Graph 2.



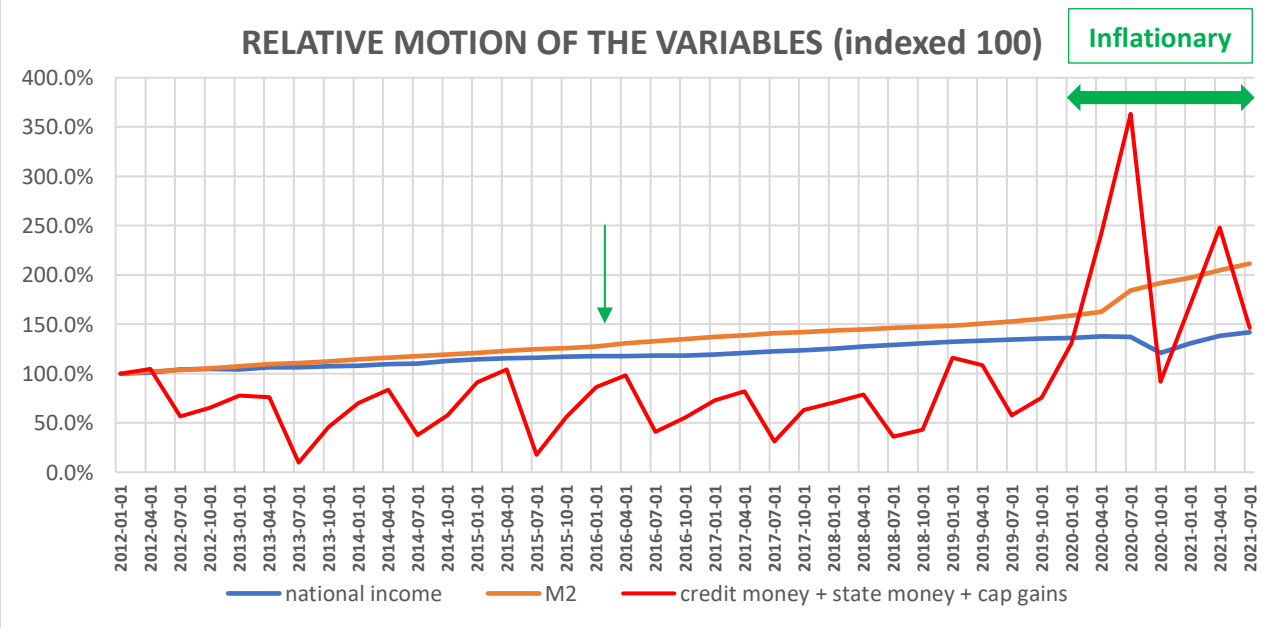
Now is the time to introduce what I call 'National Income Plus'. National Income Plus includes credit money plus new money plus cashed in gains as described above. While the money supply crosses over National Income in Graph 2 above, once the addons are included we find that at no time does M2 cross over. In fact what we see are parallel movements. It would stretch the concept of velocity beyond breaking point to say that the velocity remained above 1, but because there was no cross over there was no slump, and instead of slump there was the opposite, a spike in inflation. This needs to be emphasized.

Graph 3.



Graph 4 below explains graphically how the addons powered National Income Plus.

Graph 4.



Graph 4 is interesting. It shows how the gap between N.I. and M2 opened up after 2016 when the pseudo recession took place, but one which never developed into a full scale recession because of easy monetary conditions fueled by FED credit. (Vertical green arrow) While there was a deceleration in the growth of N.I. there was none for M2 because of the FED. The gap only narrowed in 2018 with the Trump Bump when N.I. had a temporary fillip.

Next, we turn to the red graph. Though it fluctuates in each quarter it does not exceed 100 until the pandemic breaks out. (Average was 70%) Thereafter, if we smooth the peaks and troughs, it averages 212% during the pandemic. This is clearly inflationary. The question which is now posed is: why is this inflationary because nothing much can be detected from Graph 3 where the trend lines run parallel. The "velocity" has not changed. The answer is that credit money and fiscal money is not the result of produced value. Only National Income represents real value because it is crystalized legacy value as yet unspent.

Marx always spoke about reproduction not production. Capitalist production is composed of connected periods of production. Money is laid out for the factors of production then put to work produce new commodities which when sold returns more money. For our purposes we will use an annual rate of turnover of 2.9. This is the rate found for all Private Industries as they appear in the GDP-by-industry, KLEMS Tables. So every 126 days money goes out and returns representing the average period of production and circulation.

In normal times not much happens every 126 days. If US GDP and N.I. grew by 4.0% & 3.9% in nominal terms respectively between 2011 and 2019 then the average nominal growth rate between periods was a steady 1.35%. Thus the preceding period plays a stabilizing role on the subsequent period provided there are no disturbances to the money supply as in Graph 4.

Notes on methodology.

I have chosen National Income rather than the usual Gross Domestic Product which together with M2 forms the usual velocity of circulation. Admittedly GDP = domestically produced c + v + s whereas National Income = all income earned in the USA or v + s. The reason I do not use GDP in this instance has to do with depreciation or c which equals past labour passed on to current domestic production. This is not a netted out figures unlike v + s where inventories at the beginning of the calendar year are deducted from inventories at the end of the years to reduce final sales to newly produced value. Were this not done, then final sales which forms the basis of GDP could not be adjusted for sales which belong to the previous year because they represent the sale of the inventory brought forward, or sales which will belong to the following year because of inventory carried forward.

The problem with depreciation is different because it is a sinking fund. When allocated it adds to labour newly added raising the total amount of labour consumed. However, some of that labour will now be congealed in new fixed investment which will be carried forward to be consumed in subsequent years giving rise to future depreciation. Thus the proper treatment would be to deduct depreciation brought forward, from gross fixed investment carried forward, yielding net new investment. A new metric comprising net investment added to value newly added (v + s) would arise. This would yield a figure about 10% lower than GDP.

To avoid these problems I use National Income on its own which is derived from total sales less adjustment for inventory at the beginning and close of the year, less depreciation. It's much cleaner particularly when

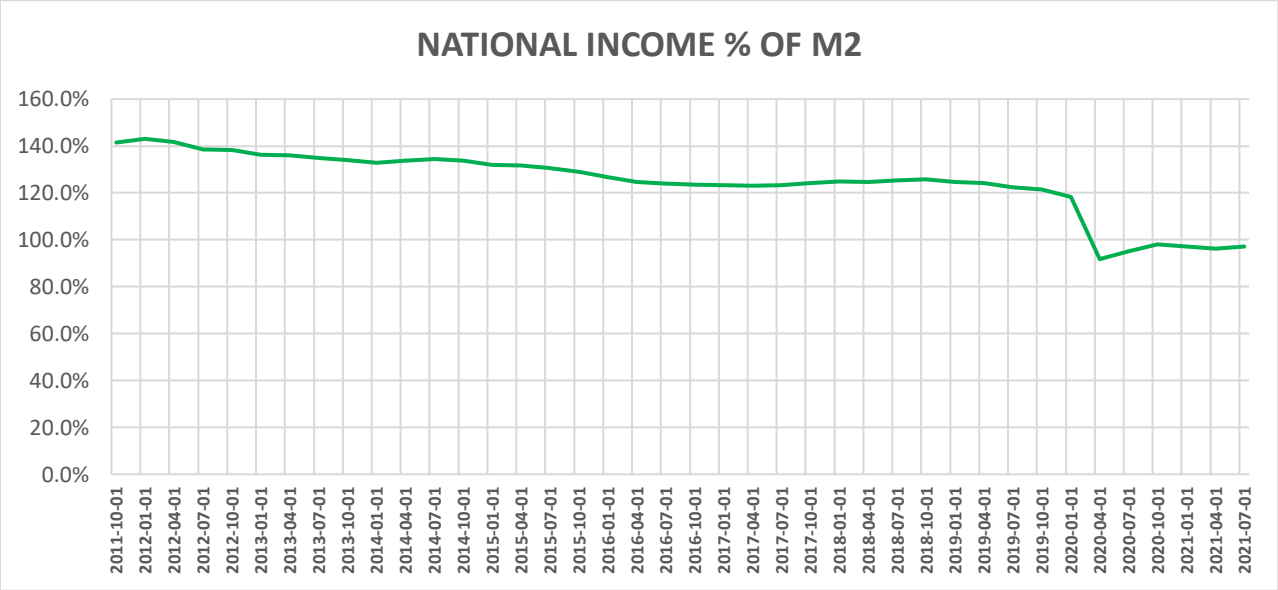
we consider that depreciation is itself now mired in Intellectual Property adjustments which does not affect the money supply because they are based on imputed or fictitious sales, a statistical trick.

Having looked at any omissions to National Income Plus particularly foreign flows from and into the US economy, I am of the opinion that the National Income Plus presented above is better than 95% of the total picture, good enough to reveal all the relationships that need revealing.

The second question that needs to be addressed is this: why is National Income bigger than M2 under normal conditions? The primary reason for this is the turnover of capital as I have pointed out earlier in my articles on Marxist Monetary Theory. Earlier we saw that the operative annual rate of turnover yields a period of circulation of 126 days. Wages represent currently 55% of National Income (NIPA Table 1.13). The capitalists require sufficient variable capital for only 126 days and not for 365 days over which National Income is measured. This is a common mistake when annual renumeration is used.

Thus the money supply can be less full because of the reduced requirement for variable capital due to the turnover of capital which is measured from the time money goes out to the time money returns with an additional increment representing surplus value. In fact the faster the rate of turnover, the less variable capital required, the faster will be the velocity of circulation of money itself, and vice versa. Since 2014 there has been a gentle deceleration in the ratio or velocity of N.I. to M2 coinciding with the deceleration in turnover.

Graph 5.



Michael Roberts & Guglielmo Carchedi are in the process of writing a book on inflation. I do not know what the final form will be because in discussion with Michael it appears the original formulas may be modified. Where they do have a point is describing the effect that the reduction of wages as a share of National Income will have on the money supply and therefore inflation. Not only does turnover reduce variable capital but so too does a reduction in total wages and employment. Some of this is going under the radar because the wage growth of the top 10% of wage earners and particularly the top 1% which includes directors and officers of corporations, has been rising sharply. Their spending habits will differ from the bulk of workers who are paid much lower wages and therefore do not have the option of

spending or not. Most workers live from paycheck to paycheck or if you like pay cheque to pay cheque. Thus the smaller the share of National Income claimed by ordinary workers, the slower will be the velocity of circulation. The bigger their share the faster M2 will be consumed because it only represents unspent revenue. In other words the more rapidly annualized National Income is spent, the greater the reduction in the Money Supply, the higher the velocity of circulation.

It is also worth pointing out that when we strip out the addons, M2 would reduce by 10% and the velocity of circulation would rise from 130 to 145% or from 1.3 to 1.45. Thus anything that increases the addons relative to unspent National Income would reduce the velocity of circulation offsetting any reduction in unspent N.I. itself.

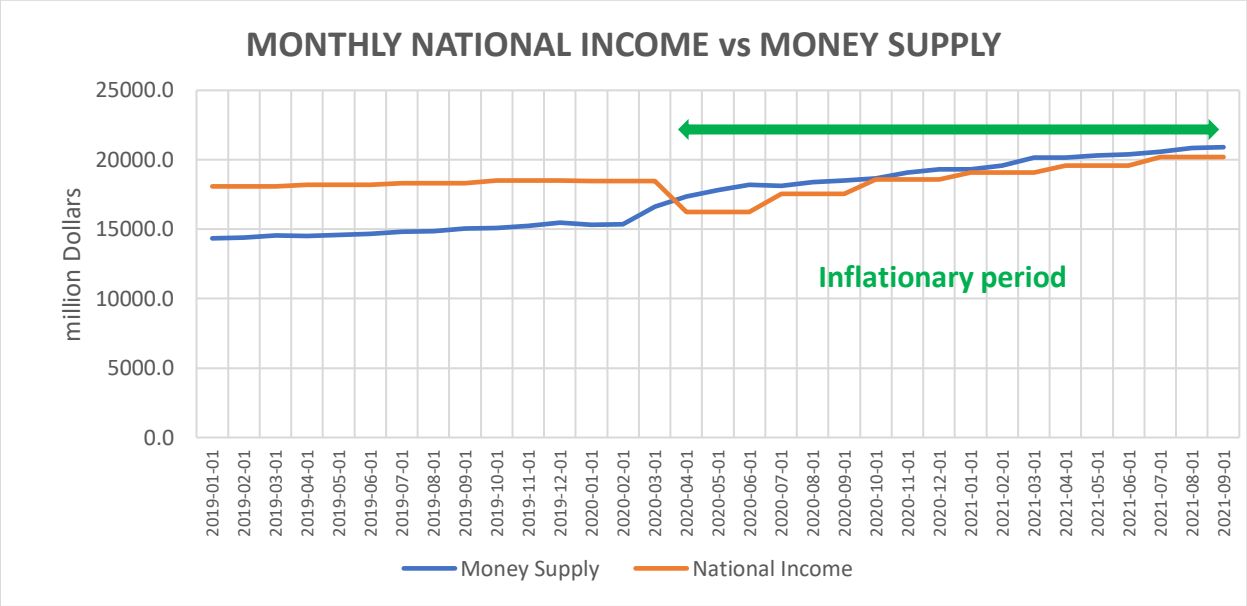
To sum up. To make indices and metrics commensurate they are generally measured over a calendar year and not per period. This is the accepted convention. That applies to National Income which is an annual figure. While the figure for N.I. is the amount of revenue produced over the course of the year, it is the case that this revenue is being continuously produced and consumed. (Note 1.) The more rapid and extensive consumption is relative to production, the less unspent National Income will be found at any time. As that unspent revenue forms the bulk of the money supply, the ratio between it and National Income at any time represents the rate of exchange and thereby the rate whereby old revenue converts currently produced value into new revenue. The capitalists call this the velocity of circulation because they see money as a thing. Poor them, they are only seeing a glimpse of reality. The notes and coins are incidental, there to ensure this unspent revenue can convert value into new revenue. The buyer uses their previously monetized revenue to purchase new products which now forms the seller's new sales revenue. This is the repeated metamorphosis of value into revenue through the continuous process of reproducing commodities.

The outlook for inflation.

I have added in a spreadsheet which records monthly details, i.e. the most up to date data – 'working paper M2 vs N.I. monthly'. The fiscal deficit for the first two months of the current financial year – October & November – is running hot at an annualized figure of $2.1 trillion or double the rate before the pandemic. Bank credit and corporate bond issuance is also running hot, for Oct and Nov they are growing at an annualized $1.9 trillion rate. Finally, until Omicron raised its spike, markets were continuing to scurry upwards, though it must be said that latterly this was only true for the top 10 stocks. It appears the bottom 50% of the S&P 500 are having a bit of heartburn. Still given that the WILSHIRE 5000 hit a new peak as recently as the third week of November and remains close to it, the contribution from cashed in gains was still above the historical average.

All of this can be summed up by examining Graph 6 below. We note that the money supply continued to reside above National Income, meaning we remain in inflationary territory, at least on the demand side. Until National Income once again rises above the money supply this will continue to be the case and for this to change, the gusher of temporary and permanent money as well as the contribution from capital gains must subside. National Income must once again provide 90%+ of M2, at which point it will reverse the order of the graphs and we should exit the realm of inflation provided supply chain disruptions are not overwhelming.

Graph 6.



Interest rates would reduce National Income Plus closer to National Income. Firstly, rising interest rates would put a damper on the issuance of credit money and non-gov bonds. Secondly, it would hammer the Stock Markets leading little or no contribution from capital gains. It would have the opposite effect on the fiscal deficit everything else being equal because rising interest rates would increase the amount of interest being paid by the government on its mountain of debt, enlarging its deficit. Nevertheless it would appear to be the case, based on past experience, that raising interest rates should compress the addons more that National Income itself.

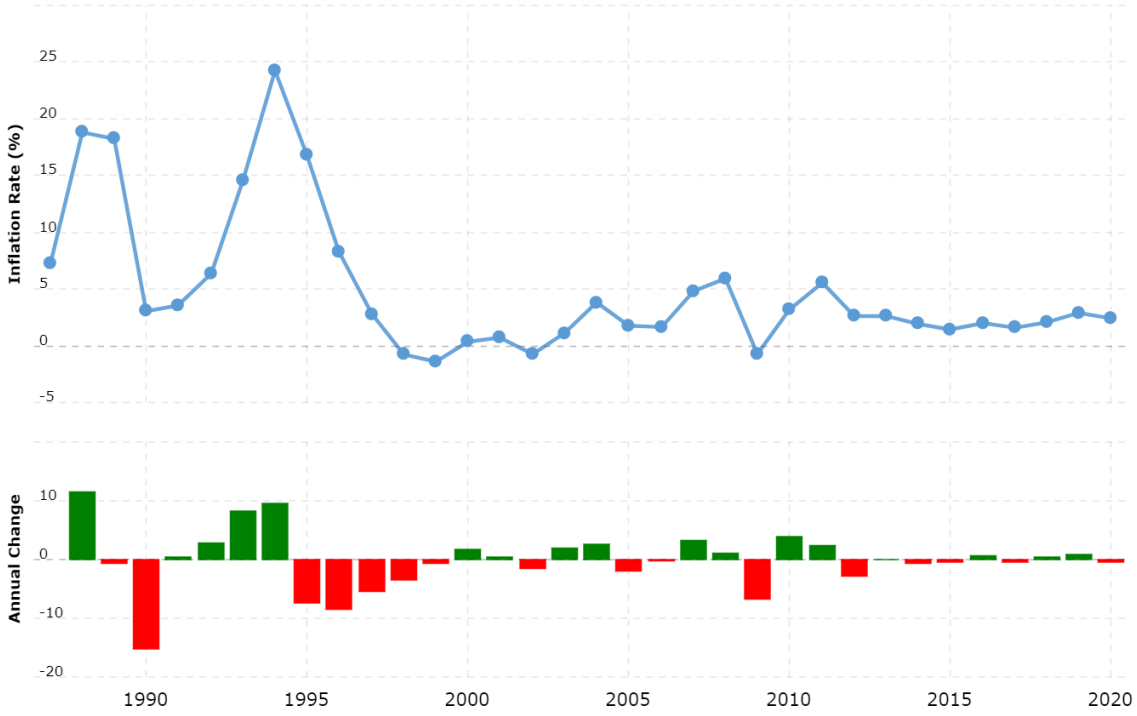
The capitalists of course do not understand National Income. They mechanically counter-pose National Income or GDP against M2 to obtain their velocity of circulation but fail to understand the content of either metric. They are completely oblivious to the origin of National Income. They assume it is simply the sum of rents, interests, wages, and profits. They do not recognise that this is the form value takes once circulated. They therefore do not understand how this (invariable) legacy value which circulates current value serves to stabilize prices, much to the consternation of the FED in pursuit of its 2% target. What they do recognize from experience is that once the addons grow inflation accelerates particularly the issue of an escalating deficit.

The one exception is China. China experienced the fastest growth in credit money of any major economy since the war. The requirement for this was the rapid growth of investment together with the economy up until the latter stages of the previous decade. The likely explanation of why credit money is needed can be found in my article on *Innate Debt* which explains how credit money reconciles differing periods of production. https://theplanningmotivedotcom.files.wordpress.com/2021/07/innate-debt.pdf It demonstrates that legacy value will be insufficient to circulate current value when both the volume and prices of the current period exceeds that of the preceding periods.

And nowhere was this more true than in China which witnessed the most rapid economic growth of any capitalist economy outside of war. Thus for reproduction to continue credit money is needed which is why Marx placed such emphasis on the development of the credit system lubricating an expanding world

economy. And it also explains the dependency of Industrial Capital on Financial Capital for its reproduction despite the fact that trade credit is the single biggest source of short term credit globally.

Graph 7. (China Inflation Rate)



MACROTRENDS.

Staying with China because most of the attention has been on the USA, we find that demand there is much weaker than in the USA. Both the Chinese and the US consumer markets, at least for goods, are about the same size measured in dollars rather than volumes where China is significantly bigger. In China retail sales released on Wednesday showed growth disappointing at 3.9% compared to the expected 4.6%. German retails sales fell 2.9% in real terms, while in Japan the rise in retail sales amounted to 0.9%. All measures are annual rises or falls. On top of the cloud hanging over retail lies the cloud over Chinese property. One indicator of the severity of the contraction in building is the halving of iron ore prices due to the 12% reduction in the production of steel, yes you guessed it, because of power shortages, and absolutely, definitely not because the building of high rises has collapsed and with it the demand for rebar.

In the USA high frequency data is pointing to weakening demand. JP Morgan's index which is a month old already showed weakening spending on many fronts based on card usage by its customers. https://privatebank.jpmorgan.com/content/dam/jpm-wm-aem/global/pb/en/insights/eye-on-the-market/S1-US-reopens-embedded.pdf The Chicago FED with its more recent *CARTS* Index released on the 10th of December paints a similar picture: "*In the fourth week of November, the Weekly Index of Retail Trade decreased 0.8% on a seasonally adjusted basis after decreasing 0.2% in the previous week.*" https://www.chicagofed.org/publications/carts/index To this can be added Adobe's report on falling sales during Cyber Monday, a first.

This was confirmed by the release of retail data on Wednesday by the Census Bureau. It showed a below inflation rise of just 0.3% month on month. What a coincidence, a less fanciful report, just as the FED is juggling with the decision whether or not to raise interest rates. This release makes it easier for them to resist raising rates thereby tanking the financial markets.

It is likely that demand driven inflation has subsided. This is predictable because of a combination of consumer fatigue and capitulation. In terms of fatigue there is mounting evidence that goods for Xmas were bought forward because of fears of shortages, while capitulation is driven by the need to budget for higher energy and food bills. It seems with Covid Funds now used up, US consumers are joining the rest of the world in retrenching while container vessels continue to queue outside ports to load and unload.

What remains is supply bottlenecks as well as gaming the system. Pipeline inflation or factory gate inflation is evident. Both the US and the UK released record or near record Producer Price Indexes. In the US the 0.8% rise propelled the yearly rate to 9.6% the highest since records began in 2010. In the UK the Index jumped to 9.1%. However, when pipeline inflation hits falling demand, it is profit margins that suffer and that is what is happening now, and it will intensify in the new year. Let us see what Goldman Sachs has to say about that.

We have entered the twilight zone where lack of demand is being blamed on lack of supply. It is likely that many importers, wholesalers and even retailers are going to be tripping over inventory in the new year because of the stocks they have built up or ordered.

Contrary to popular belief freight volumes in the USA never exceeded the levels of 2018 and 2019. https://www.cassinfo.com/freight-audit-payment/cass-transportation-indexes/november-2021 It is likely we have moved from an era of genuine supply issues caused by the pandemic, the lack of resilience, the shift in consumer preferences to goods, and on to the era of gaming the system. To blaming the lack of demand on lack of supply. The Issue of gaming is exemplified by the energy crisis. When it comes to ramping up the mining of and transporting of energy other than coal, there are few bottlenecks. The IEA in mid-November projected an impending surplus of oil now put at 1.6 million barrels a day. While oil prices retreated below $70 dollars on the news, they soon recovered some of these losses. It seems the movement of share prices is a bigger driver of oil prices, though admittedly I have yet to see a share certificate driving a two ton Ford F150 truck. Yesterday when markets leapt in gratitude to the FED, oil prices also jumped showing that it is speculation not hard evidence that is driving prices.

It is likely that given the centralisation and concentration of large corporations and evidence of engorged profit margins, that is until now, these corporations and speculators are managing supply in order to maximise profits. This is as true of OPEC as it is of GAZPROM.

The FED

The FED is such a tease. On Wednesday the policy-setting Federal Open Market Committee announced its decision. They will raise historically absurd interest rates only next year. They may even raise them three times. Such Hawkish behaviour, shame on them. And this at a time when inflation is hitting record highs. This is corruption on an epic scale.

But in 2022 the economy will no longer be running hot despite the FED projecting a growth rate of 4% for the year. The November pre-Xmas retail sales proved as much. All they are willing to do is to speed up tapering, that is slow down buying bonds. *In light of inflation developments and the further improvement in the labor market, the Committee decided to reduce the monthly pace of its net asset purchases by $20 billion for Treasury securities and $10 billion for agency mortgage-backed securities,"* So all they end their bond buying sometime in spring. Big Deal. The economy has already drowned in money, that is if you are a bank or a hedge fund or private equity.

The markets loved this act jumping with the announcement despite the growing litany of bad economic news and the spread of the virus.

The purpose of the FED is to enrich the rich and protect their richness. They have achieved that once again today. In the meantime workers are suffering severe hits to their standard of living because of inflation unrestrained by interest rates. In the USA the BLS has revealed real wages are now falling at the rate of 1.1% p.a. while in Britain that figure is 0.8% as of November. And it will get worse.

Conclusion.

Inflation is like a series of waves. Inflated revenues from preceding periods inflate current prices, but as the trigger for these waves diminishes, so does the intensity of the waves. In other words it takes time for inflation to peter out. I failed to take this into account earlier. There is no abrupt stop unless a financial crisis ensues.

I have proposed that January will be a testing time for the economy and the markets. I am more confirmed in this view. The data pre-Omicron suggested a rapid slowing down of demand and activity around the world. Omicron will only intensify this, turning a chronic development into an acute one. Unlike the FED I do not see a robust economy in the years ahead and therefore an inflationary one. We must also pay attention to what is happening in China. Economic conditions there may be more important than in the US, especially now that the Biden Administration has shown renewed determination to crush China's technical advances.

> **Note 1.** I prepared a spreadsheet which reduced all the variables to per period including National Income. The results were not significantly different, and above all, the relationship between National Income and National Income Plus was relatively unaltered. I therefore decided not to attach it to this article or to reference it within the article itself.

Brian Green, 16th December 2021.