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Monthly e-mail from Tim Congdon and John Petley – 27th September, 2022

Global money round-up in autumn 2022

Money growth has fallen in most advanced “Western” nations, but China – still afflicted by Covid-19 and an inept official response to it – is seeing credit relaxation and an acceleration in money growth. Money tightening is particularly severe in the USA, where M3 broad money was more or less unchanged in the seven months to August. **So US money growth – which was at a post-war record high in spring 2020 – has now come to a halt. With inflation still high, real money balances are being squeezed, and asset prices and economic activity are suffering.** The Federal Reserve has also engineered increases in Fed funds rate which are large by the standard of the period since the Great Recession of 2008 and 2009. In the Eurozone the European Central Bank has to behave more gingerly than the Fed, because a large rise in interest rates would translate into higher government bond yields and result in greatly increased debt interest costs, notably in Italy. In the three months to June M3 increased at an annualised rate of 5.4%, much less than in 2020 but clearly still positive. The ECB does not intend to reduce the asset pile accumulated in the Covid period. Indeed, it has said that it may use redemption proceeds from maturing bonds to increase holdings of sovereign bonds, where yield differentials show signs of dangerous widening. **The main European economies are – like the USA – suffering a squeeze on real money balances, but it is not so severe. (UK money growth is volatile from month to month. See pp. 16 – 17.)**

The patterns in Asia are different. In China money growth is rising, with the authorities concerned to temper the damage from the end of the generation-long housing boom. Meanwhile the Bank of Japan has started to check the yen’s slide on the foreign exchanges. In the year to August Japan’s M3 was up by a 3.0%. **The drift towards monetary policy tightening is not universal. 2023 may therefore see growth in output at the global level, although not much.** The surge in European natural gas prices from the Ukraine situation has led to government intervention in the energy market and inflation will be only slightly affected.

Money trends in mid-2022 in the main countries/jurisdictions

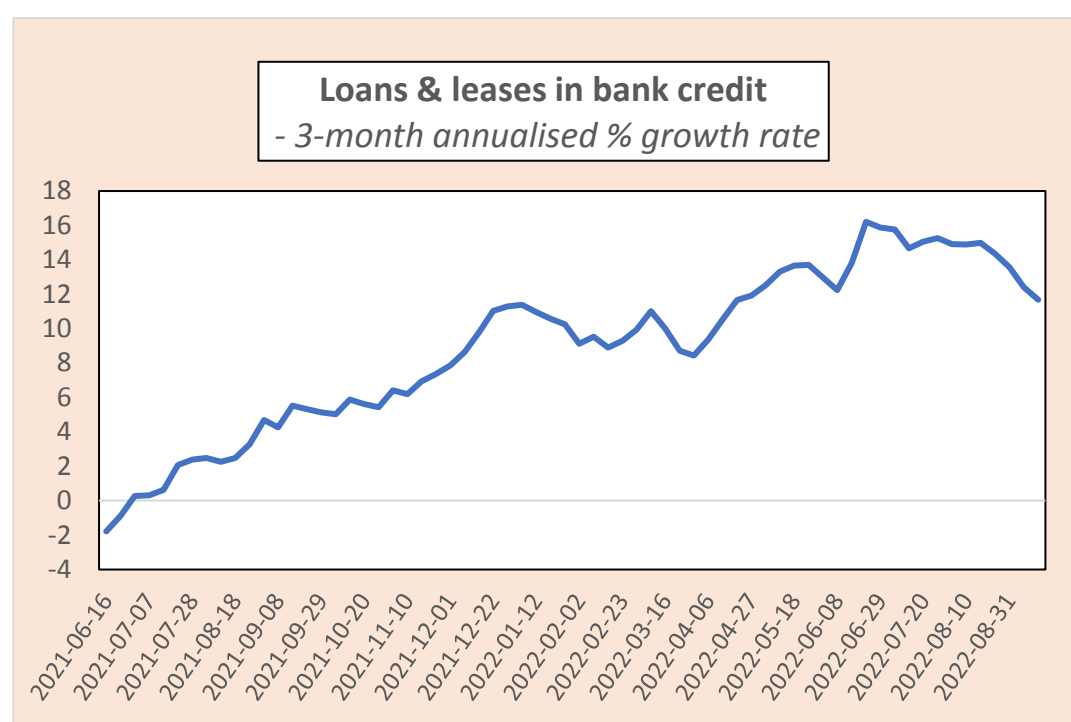
The Institute of International Monetary Research focuses on the relationship between trends in the growth of the quantity of money, broadly-defined, and macroeconomic outcomes. The Institute's consistent analysis since spring 2020 – that money growth acceleration would lead to an inflationary boom and an upturn in inflation – has proved correct. The new areas of debate are the duration of above-normal inflation, with normality seen as an annual increase in consumer prices of 2% a year, and the severity of the coming recession. Key principles here are that,

- i. The rate of inflation is equal to the rate of increase in nominal GDP minus that of real GDP,
- ii. Over the medium term, growth rates of broad money and nominal gross domestic product will be similar, although only rarely identical, and
- iii. Just as a correlation holds between nominal money and nominal GDP, so one holds between real money and real output, and falls in real money are often associated with asset price weakness and recessions.

Much will therefore depend on rates of broad money growth in coming months and quarters, with the table below summarizing recent patterns in the leading nations. The table shows pronounced money growth reductions in the developed countries from the remarkable 2020 peaks. China is following its own path, with money growth rising somewhat. In 2023 recessions in North America and Europe may still be reconciled with positive output growth at the global level. In the UK M4x bounced back in July..

| Name of country/ jurisdiction | Share of world output in 2020 | | Growth rate of broad money | | Comment |
|----------------------------------|---|--|---|-----------------------------|--|
| | In purchasing- power parity terms, % | In current prices and exchange rates, % | In last three months at annualised rate, % | In last twelve months, % | |
| USA | 15.4 | 24.7 | 1.5 | 5.2 | Money growth stopped in spring 2022, implying severe squeeze on real money balances. |
| China | 18.3 | 15.4 | 12.4 | 11.9 | Money growth rising, amid property bust scares. Policy being eased, no official inflation concern. |
| Eurozone | 12.1 | 17.4 | 5.4 | 5.5 | Money growth moderating, as ECB worries about widening sovereign debt spreads. |
| Japan | 3.7 | 6.0 | 3.5 | 3.0 | Credit and money growth back to pre-Covid norms, implying little inflation in medium term. |
| India | 6.8 | 3.1 | 8.8 | 8.7 | Money growth moderating, as RBI seeks more capital in banking. |
| UK | 2.2 | 3.3 | 4.9 | 4.8 | Money growth erratic from month to month, but mostly moderating. |

The recent halt to money growth in the USA – and the moderation in money growth in the Eurozone, Japan and the UK – implies that during 2023, and particularly in 2024, inflation will come down towards levels closer to the norms of the 2010s. However, the lags are such that 2022 will feature annual inflation rates typically above 4%. The recent falls in energy prices make consumer inflation above 10% unlikely in 2022 in the USA and the Eurozone. The Ukraine tragedy has added awkward twists to the inflationary spiral, but it is best interpreted as a one-off and reversible shock to the price level. It is certainly not the fundamental cause of the inflation of the early 2020s. This inflation episode – like all the others – is to be attributed to excessive growth of the quantity of money (in the USA, the Eurozone, the UK, Canada and Australia), which was most marked in spring and summer 2020, but rolled on into 2021. In 2022 the combination of falling growth in nominal money (and even the risk of outright falls in the quantity of money) and still high inflation implies declines in *real* money balances. A standard cyclical pattern is that such declines are accompanied by weakness in both asset prices and aggregate demand, and all too often by recessions (i.e., falls in output lasting longer than six months). As noted here in recent months, crucial to money growth in the rest of 2022 will be the behaviour of bank lending to the private sector. In the two years to the first quarter of 2022 high or very high money growth in the main Western economies was almost entirely due to central bank asset purchases and monetary financing of budget deficits. The Institute’s analysis has suggested that, as central bank asset purchases stop and budget deficits decline, money growth will decelerate *unless bank lending to the private sector revives strongly*. The decelerations in money growth are evidently occurring, but the patterns of bank asset acquisition have still to be monitored and assessed.



In the USA bank credit to the private sector has been growing briskly. Interest rates have been very low, while banks have ample capital to support balance sheet expansion and their low-return cash holdings have been much too high. But the increases in Fed funds rates – combined with the surge in bond yields which will affect mortgage rates – may now be checking the boom. “Loans and leases in bank credit” (mostly bank lending to the private sector, and constituting over half of US commercial bank assets) were flat during the period of Covid-19 uncertainty in late 2020 and early 2021, but started to increase from June 2021. The accompanying chart shows the three-month annualised rate of increase in “loans and leases” since then.

Although it may be early days, the chart suggests that there was a turning-point in June and July this year. Until then the pace of the credit boom was accelerating; subsequently it has been decelerating. If the deceleration continues and intensifies, that may remove an important positive influence on money growth. Further, the intended Fed sales of securities (i.e., “quantitative tightening”) – of as much as \$95b. a month from September– could reduce the M3 quantity of money by perhaps \$50b (about 0.2%) a month. The combination of money stagnation and persisting rather high inflation implies a squeeze on real money balances. As so often in past cycles, that has been accompanied by weak asset markets and a slackening in demand growth. With the Fed pushing up interest rates, dearer money is another check to the economy. A recession in 2023 is now widely forecast, and understandably so.

Over the medium term the growth rates of real money and real output are similar, a feature of all economies that reflects the underlying stability of agents’ money-holding behaviour. In the USA the velocity of circulation of money fell remarkably in 2020. But velocity is a mean-reverting series. Now, on schedule and in line with expectations, it is rising at an exceptional pace. These developments are a clear vindication of ideas that have long been basic to the quantity theory of money, although recent speeches from top Federal Reserve officials hardly suggest they are interested in these ideas.

In the Eurozone the stock of credit to the private sector was 5.2% higher in July 2022 than a year earlier. The stock of loans for house purchase was up by 5.3% in the year to July, whereas loans to non-financial corporations (i.e., industry and commerce) advanced 6.6% in the same period. One interesting feature of the latest monetary press release from the ECB is that in July a *reduction* of €20b. in the banking system’s holdings of government securities was a contractive item in the money arithmetic. That was so, although the ECB has said that – for the present – it has no plans to reduce its assets pile, but the policy may soon come under review.

In Japan bank lending to the private sector surged in the opening months of the Covid pandemic, but the loans have been largely repaid with the return of medical normality. Lending to the private sector is weak.

In the UK bank regulators seem to believe that the higher are bank capital/asset ratios, the safer is the banking system and the better is the outlook for the economy. With inordinate amounts of capital required in commercial banking, banking groups have drawn up plans to allocate capital to other activities. Large banks are not hiding their reluctance to commit new capital to mainstream UK commercial banking. The problem is being made worse by decisions taken by the Financial Policy Committee and the Prudential Regulation Authority, at the Bank of England. At its latest meeting the FPC decided that banks must have a 2%-of-assets counter-cyclical capital buffer, with effect from July 2023.

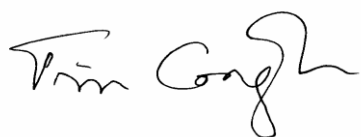
The 2% rate is supposed to pre-empt future shocks to the economy. To quote from its latest *Financial Stability Report*, “the global and UK economic outlook has deteriorated significantly” since the end of 2021, when it announced the rate was to go from zero to 1% by the end of 2022. The imposition of the extra capital requirement is, however, deflationary in the first instance. It will discourage the growth of risk assets and hence of banks’ deposit liabilities. The new Truss government has removed regulatory constraints on the insurance industry’s asset composition, a change made possible by Brexit. It remains to be seen whether a new open-mindedness on banks’ regulation leads to a more relaxed regime for them. There is no doubt that the extra capital requirements associated with Basel III have resulted in a large fall in the ratio of banks’ lending to companies to gross domestic product.

The post-2008 regulatory environment has been particularly hard on lending to small- and medium-sized enterprises.

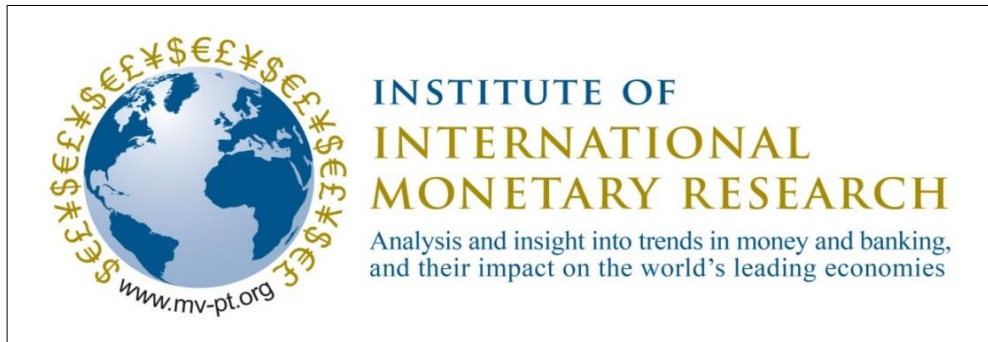
Loan growth has been erratic in recent months. UK bank lending to the mainstream, non-intermediate financial sector jumped in March, May and July. It seems likely that exceptional, non-recurring transactions were responsible, as April and June saw offsetting falls. A new trend was not established. The stock of loans to non-financial corporates was almost exactly the same in July 2022 as a year earlier. The stock of bank lending is growing in the UK, but not rapidly.

To repeat the point I have been making here so far this year, in 2022 and 2023 the vigour – or lack of vigour – of bank credit to the private sector is crucial to interest rate prospects. The market consensus is that interest rate rises will occur in most developed countries once the pandemic-related weakness in aggregate demand lies in the past. Central banks are now ending asset purchase programmes and in some instance are starting to reduce their asset piles. A reduction in money growth is a condition of the return of moderate inflation. Robust bank lending to the private sector is in many ways desirable, because of its contribution to wider economic efficiency. But fast expansion of banks' loan portfolios will make it more difficult to deliver the needed reduction in money growth. If bank lending to the private sector were increasing at an annual rate of 5% or less, it will be easy for central banks to keep money growth under control. Pointers to future lending growth therefore deserve to be monitored carefully in the next few months. Despite very low nominal interest rates, and indeed extremely negative real interest rates, a big boom in private sector bank credit is not imminent in Japan or the UK. A strong recovery in such credit in the USA has occurred, but Fed interest rate rises and the wider change of mood may now be bringing the recovery to an end. In the Eurozone banks have been adding at a moderate pace to their risk assets, but the ECB may soon imitate the moves being taken by the Fed and the Bank of England to reduce their bloated asset piles.

Extra uncertainty has been created in the UK, where the adventurous tax cuts of the new Conservative Chancellor of the Exchequer, Kwasi Kwarteng, will widen an already large and unsustainable budget deficit. Rising yields on gilts – by increasing future debt interest costs – will aggravate the UK's medium-term fiscal unsustainability.

A handwritten signature in black ink, appearing to read 'Tim Conger', with a stylized, cursive script.

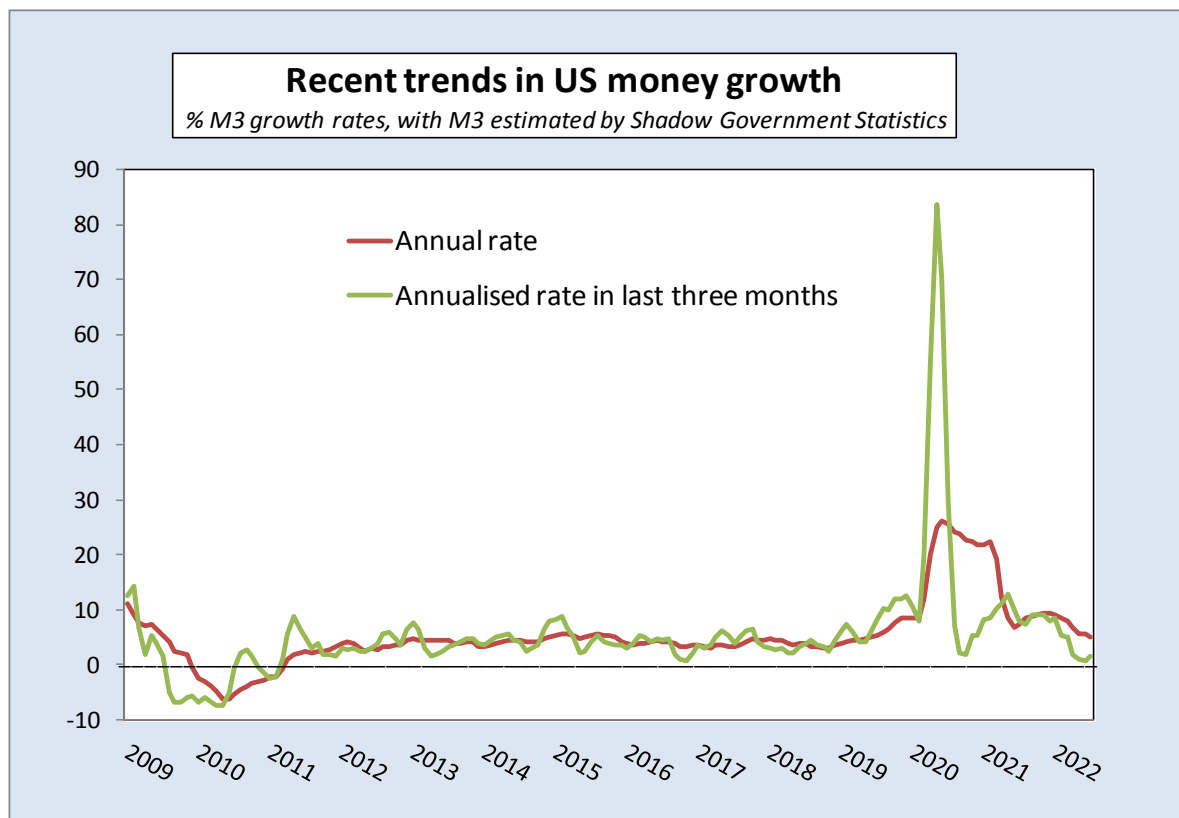
27th September, 2022



USA

| | % annual/annualised growth rate: | |
|--|----------------------------------|-------------|
| | M3 | Nominal GDP |
| 1961 – 2020 | 7.7 | 6.3 |
| Ten years to 2020 | 6.2 | 3.4 |
| Year to July 2022 | 5.2 | n.a |
| Three months to July 2022 at annualised rate | 1.5 | n.a. |

Sources: Shadow Government Statistics research service for M3 after 2006 and US Bureau of Economic Analysis for GDP



Virtual stagnation of US broad money

Summary: US M3 broad money grew at an annualised rate of only 1.5% in the three months to July 2022. This is actually an increase on June's reading of 0.8% but still an extremely modest rate of growth by recent standards. In July itself M3 grew by \$44b. This is the largest increase since February, but still \$12b. lower than the average monthly reading for 2018, the last year before broad money growth started to track upwards. The annual growth rate fell from 5.6% in June to 5.2%, the lowest value in three years. (Our M3 data come from Shadow Government Statistics.)

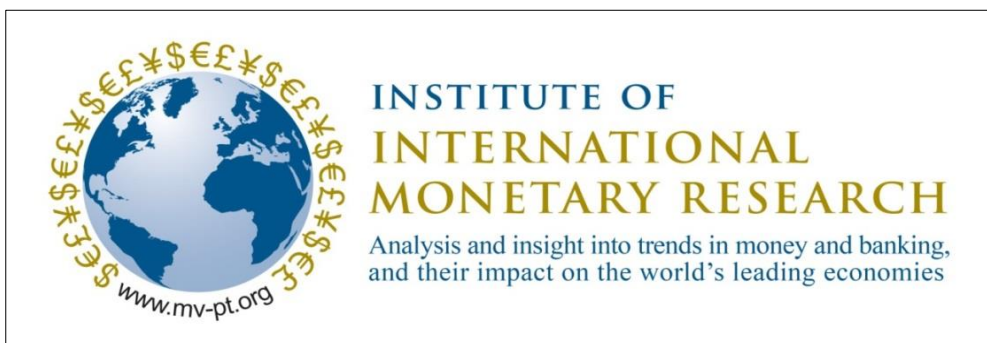
With the Fed now firmly committed to tightening monetary policy, the rate of broad money growth in the next few months will be largely determined by the creation of new bank credit to the private sector. The Fed's own statistics indicate that there has been a significant acceleration in "loans and leases in bank credit" - a category dominated by lending to the private sector - since the second quarter of 2021. In the year to 31st August loans and leases increased by 11.1%, well above the typical figure in the 2010s, while in the six months to 31st August the annualised rate of increase was somewhat higher at 12.3%. Given the buoyancy of this item in banks' assets, the stagnation of broad money liabilities is surprising. Much of the explanation is that banks are trying to reduce their relatively unprofitable cash holdings, which accords with the Federal Reserve's policy of shedding the assets it acquired in 2020 and 2021. Also relevant is that US banks have been funding themselves by borrowing from foreign banks.

The Fed now recognises that its policies - notably its asset purchases - were too expansionary in the Covid period. The pace of so-called "quantitative tightening" - sales of the assets mistakenly acquired in 2020 and 2021 - is to be accelerated in September, when the asset pile is supposed to fall by \$95b. (Some reduction in the Fed's holdings of Treasury bills is another feature to mention.) To the extent that asset sales are to non-banks (or that non-banks pay from deposits to redeem maturing securities), the quantity of money falls. It is not to be precluded that money balances decline in the USA in the final months of 2022, but the position needs to be watched from month to month. The Fed has now raised its fund rates to over 3%, the highest figure since 2008, and is widely expected to hike it at least one more time. The combination of an unchanged quantity of money and interest rates at almost 15-year peaks is deflationary, and numerous forecasts of recession in 2023 are gaining credibility. The number of mortgage applications has been declining for much of the last two months, as borrowing costs start to increase. (Mortgage applications numbers are from the Mortgage Brokers Association of America.)

The annual rate of increase in consumer prices has fallen from 9.1% in June to 8.3% in August, but this will not change the Fed's policy. Commodity prices have come off the boil, with both oil and gas now some distance from their highest figures in the current cycle, despite the energy crisis in Europe.

Tim Congdon and John Petley
22nd September, 2022

| | % annual growth rate: | |
|-------------|-----------------------|-------------|
| | M3 | Nominal GDP |
| 1961 – 2020 | 7.7 | 6.3 |
| 1961 – 1970 | 8.0 | 7.1 |
| 1971 – 1980 | 11.4 | 10.3 |
| 1981 – 1990 | 7.7 | 7.7 |
| 1991 - 2000 | 5.6 | 5.6 |
| 2001 - 2010 | 7.1 | 3.9 |
| 2011 - 2020 | 6.2 | 3.4 |



China

| | <i>% annual/annualised growth rate:</i> | |
|---|---|-------------|
| | M2 | Nominal GDP |
| 1991- 2020 | 18.4 | 14.5 |
| 2011 - 2020 | 11.7 | 10.0 |
| Year to August 2022 | 11.9 | n/a |
| Three months to August 2022 annualised rate | 12.4 | n/a |

Sources: People's Bank of China for M2, IMF for GDP



Broad money continues to increase at a faster rate than in 2021

Summary: In the three months to August 2022 China's seasonally adjusted M2 grew at an annualised rate of 12.5%, This represented a decline on July's figure of 13.3%, but was still the eleventh consecutive three-month period when the increase in broad money at an annualised rate exceeded 10%. By contrast, the figures for late 2020 and much of 2021 were mostly below 10%. The annual rate of increase rose from 11.7% in July to 11.9%, the highest value since June 2016, over six years ago.

The Chinese authorities continue to pursue a "zero Covid" policy, enforcing tight lockdowns even if nothing more than a handful of positive tests for the virus has been recorded in a given area. In mid-September, 20% of China's population were facing some form of coronavirus-related restrictions, including Chengdu, a city of no fewer than 21 million people. Whether this stringent policy will be relaxed after the Chinese Communist Party's 20th congress next month remains to be seen. But over the last year or so this policy has wrought a great deal of damage to the economy and undermined popular respect for China's rulers. In the second quarter of 2022 China's GDP contracted by 2.6%, with the Covid restrictions largely to blame.

The People's Bank of China (the central bank) is loosening monetary policy, in an attempt to stimulate demand and output. Both the one-year and five year loan prime rates were reduced in August. Growth in bank credit fell from 11.0% in the year to July to 10.9% a month later. The five months from April 2022 have in fact seen the weakest increase in the stock of new bank loans in over a decade. The government is also using fiscal measures to try to revive the economy. On 24th August, for example, the Chinese State Council authorised a new stimulus package worth 300b. yuan (or \$43.8b.) aimed particularly at power companies and farmers.

China is facing a number of economic problems at the moment. Strenuous efforts are being made to revive the housing market following the collapse of a number of large construction companies. This includes a fund worth \$44b. set up by the PBoC to bail them out. After rising at an annual rate of over 10% in 2019, property prices in China's 70 largest cities fell by 0.9% in the year to July, the third consecutive month of falling prices. On 12th September, it was reported that 38 construction project undertaken by the failed property giant Evergrande had still not been re-started and some homebuyers have been refusing to pay their mortgages until their new properties are completed. Problems are also being experienced by China's rural banks. Two such banks in Liaoning collapsed in early August and 234 arrests have been made in Henan Province in the wake of protests by savers unable to access their cash. Frozen funds in the local banks here are believed to amount to \$5.8b. The retail sector has also been hit by the lockdowns. Monthly sales growth rates have averaged barely 0.25% in the last four months, while in April consumer confidence plunged to its lowest level in over 24 years. The money numbers hint that the Chinese economy will pick up, but possibly not by very much in the short term.

Tim Congdon and John Petley
13th September, 2022

| | M2 | Nominal GDP |
|-------------|------|-------------|
| 1991 - 2000 | 24.5 | 18.5 |
| 2001 - 2010 | 18.4 | 15.2 |
| 2011 - 2020 | 11.7 | 10.0 |



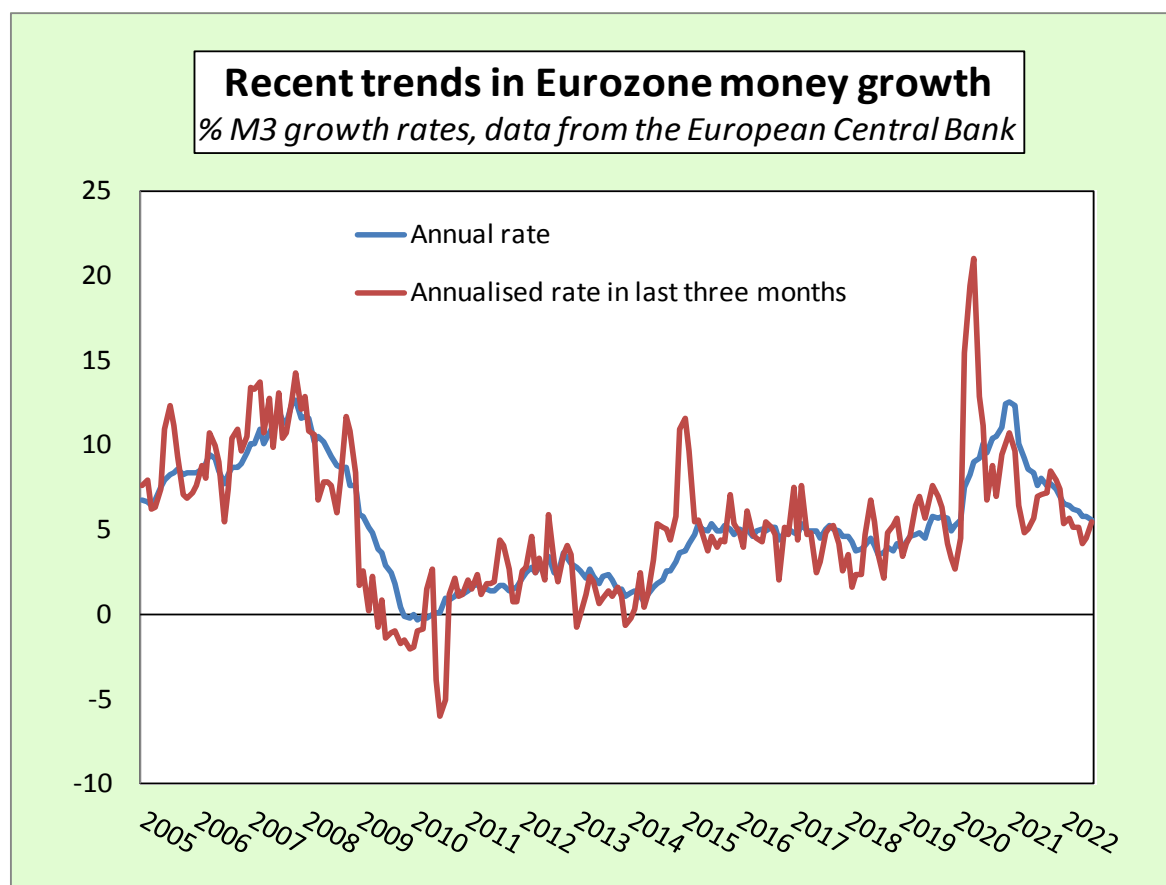
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Eurozone

| | % annual/annualised growth rate: | |
|---|-------------------------------------|-------------|
| | M3 | Nominal GDP |
| 1996 – 2020 | 5.5 | 2.7 |
| Ten years to 2020 | 4.6 | 1.6 |
| Year to July 2022 | 5.5 | n/a |
| Three months to July 2022 at annualised rate | 5.4 | n/a |

Sources: European Central Bank for M3 and Eurostat for GDP



Money growth picks up a little, driven by more credit to private sector

Summary: In the three months to July 2022 the quantity of M3 broad money in the Eurozone grew at an annualized rate of 5.4%, the second consecutive month in which it has ticked up after declining to 4.1% in May. Broad money grew by €86b. during the month, only slightly lower than June's figure of €87b. which was the largest monthly increase so far this year. The annual growth rate nonetheless continued its steady decline, falling from 5.7% in June to 5.5%, the lowest reading since January 2020.

Broad money growth accelerated in July. This was despite the absence of asset purchases by the European Central Bank for the first time since the Asset Purchase Scheme (APS) was introduced in 2019. The ECB has now implemented two rate rises in quick succession. A 0.5% increase on 21st July was followed by a further 0.75% increase on 8th September. The press release following the ECB Governing Council's meeting in September stated that further rate rises are likely in order to dampen demand and prevent the entrenchment of high inflation expectations. The ECB has as yet made no plans to sell off the assets it purchased during the 2019-22 period, however. When they mature, the money will be used to some extent to buy assets from countries under stress, mainly Italy and Spain. These purchases will come under the auspices of the Transmission Protection Instrument, a new *ad hoc* bond purchase scheme announced on 21st July. Its objective is to prevent the re-emergence of the wide spreads between sovereign bond yields which were such an embarrassing feature of the Eurozone debt crisis a decade ago. Yields on Italian 10 year government bonds are nonetheless creeping up to 4% due to political uncertainty in the country, whereas 10-year German bunds offer only 1.6%.

Bank credit to the business sector has increased significantly in recent months and bank lending to the private sector is now the main driver of broad money growth. Eurozone companies borrowed €47b. in July, 6.6% more than the corresponding figure for July 2021. The housing market also continues to record reasonable growth, with the stock of mortgage loans in July 5.3% higher than a year previous. The money numbers from the ECB will merit close scrutiny in the coming months. A key issue, in particular, is whether higher borrowing costs will curtail the recent increase in demand for new bank credit. A number of member states, notably Italy and Germany, have introduced fiscal support packages to mitigate the worst effects of high energy prices on companies and households. As these are likely to be financed by the banking sector, the resultant deposits would boost broad money growth.

Consumer prices rose by 9.1% in the year to August, the highest reading since the introduction of the single currency. With producer prices rising by 37.9% in the year to July, inflation is likely to rise higher in the short run, as companies cannot be expected to absorb increased costs on this scale. One notable factor behind the sharp increase in producer prices has been the surge in energy prices, particularly gas. Germany, which imported almost one third of its gas from Russia in 2021, has been particularly vulnerable. Russia – or rather its president, Vladimir Putin - has now in effect cut off gas supplies to Western Europe altogether.

John Petley
12th September, 2022

| | % annual growth rate: | |
|-------------|-----------------------|-------------|
| | M3 | Nominal GDP |
| 1996 – 2020 | 5.5 | 2.7 |
| 1996 – 2000 | 4.6 | 4.1 |
| 2001 – 2010 | 6.8 | 3.1 |
| 2011 - 2020 | 4.6 | 1.6 |



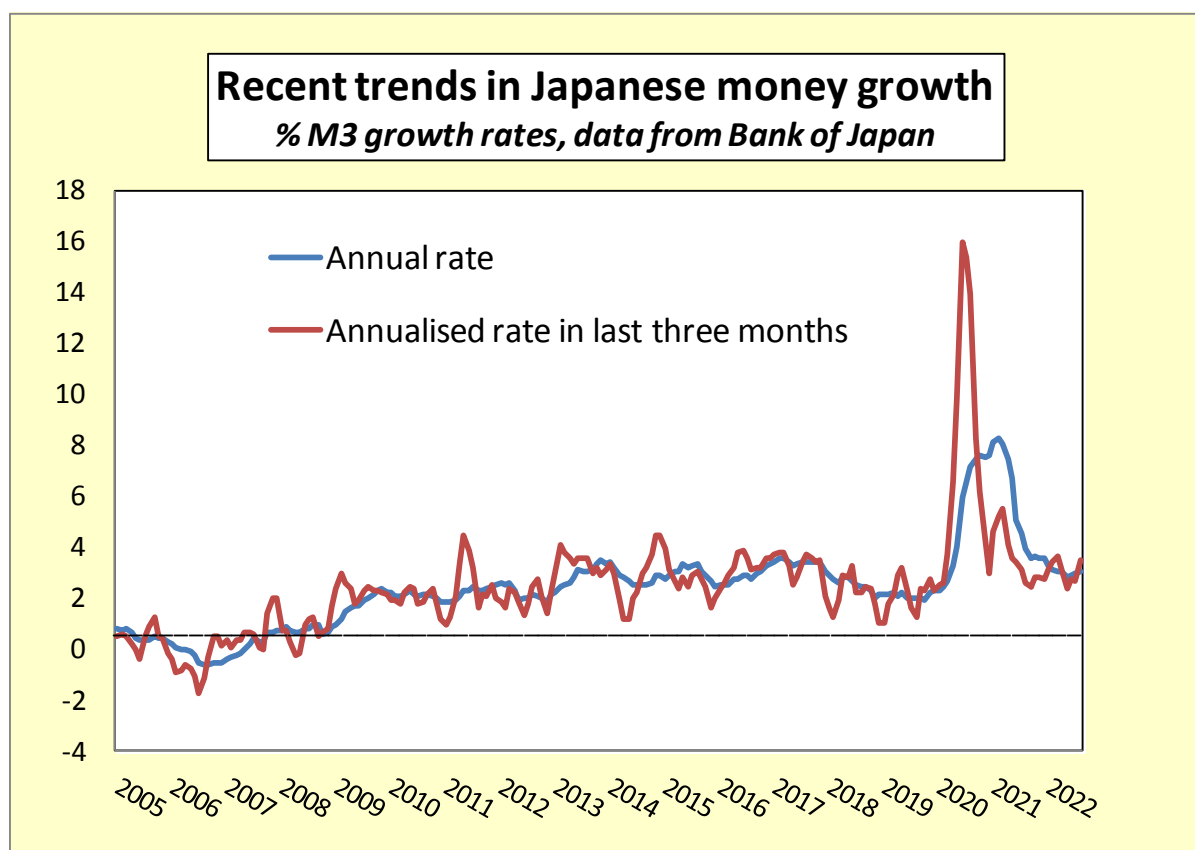
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Japan

| | % annual/annualised growth rate: | |
|---|-------------------------------------|-------------|
| | M3 | Nominal GDP |
| 1981- 2020 | 3.9 | 1.7 |
| Ten years to 2020 | 3.2 | 0.3 |
| Year to August 2022 | 3.0 | n/a |
| Three months to August 2022 at annualised rate | 3.5 | n/a |

Sources: Bank of Japan for M3 and IMF for GDP



Broad money growth picks up slightly in August

Summary: The three months to August 2022 saw Japanese M3 increase at an annualised rate of 3.5%, higher than July's reading of 2.7% and the most rapid rate of growth since March. Broad money increased by 39 trillion yen in August itself, which also lifted the annual rate of growth from 2.9% to 3.0%. These values are very similar to the level of broad money growth during the last decade.

Perhaps the biggest difference between the decade of the 2010s and the current macroeconomic picture in Japan is the weakness of the yen. As other central banks raise interest rates, the Bank of Japan continues to reaffirm its ultra-loose monetary policy. Governor Kuroda has insisted that higher prices are being largely driven by higher food and energy costs which he believes to be transitory. He therefore sees no reason to tighten monetary policy even though his stance caused the yen to hit a 25-year low against the US dollar in mid-September. Indeed the yen has declined by 25% against the American currency since the start of the year.

Inflation stood at 2.6% in the year to July, the highest reading since April 2014. The spike in producer prices seems to have peaked, however, with August's reading of 9.0% notably down on April's 9.8%. The scale of the monetary and fiscal stimulus in Japan during 2020 in response to the coronavirus pandemic was relatively modest compared with other developed countries. Consequently, two years later the inflation rate has not risen to the same degree. Broad money growth may pick up in the coming months as a result of an increase in bank lending. After two years of very sluggish credit growth, Japanese bank lending grew at an annual rate of 1.9% in August, the third successive month of acceleration. (May's reading was only 0.7%). It is still lower than the peak of over 3% during the years 2017-19. This increase in bank credit is being driven at least in part by companies needing to deal with higher raw material costs. After a year of relatively strong growth by Japanese standards, the property market is slowing. Housing starts declined by 5.4% in the year to July. The retail sector still continues to record a modest level of growth, however, with sales up by 2.4% year-on-year in July.

Monetary growth may be given a small boost by another so-called fiscal stimulus package currently being prepared by Prime Minister Kishida. It is likely to be financed by the banking sector, creating new deposits which are money. Since coming into office, Mr Kishida has already pushed similar packages through the Diet. Their impact on broad money growth has been modest but may be a factor behind the occasional figure which has been higher than the typical levels of the previous decade. With no indication of any substantial change in monetary policy by the Bank of Japan, inflation may fall back below 2%, with the Japanese economy following the same steady-as-she-goes trajectory as in the 2010s. However, crucial will be the rate of money growth from here. The current slight uptick in money growth is probably of little significance, but there is no alternative to watching the numbers month by month. Exports have been performing well in recent months, helped by the slide in the yen. Global demand may well soften in the coming months thanks to the effect of higher energy prices and interest rates in many developed nations.

John Petley
15th September, 2022

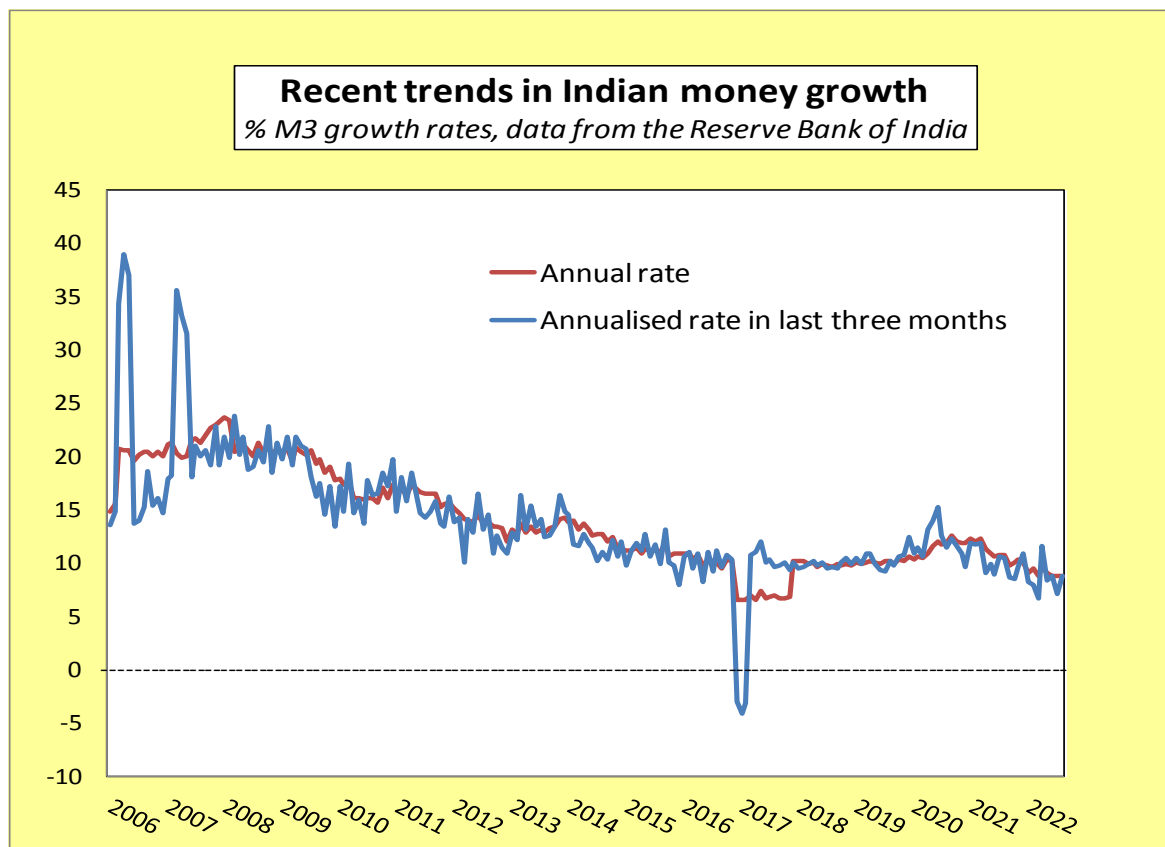
| | % annual growth rate: | |
|-------------|-----------------------|-------------|
| | M3 | Nominal GDP |
| 1981 – 1990 | 9.2 | 4.6 |
| 1991 - 2000 | 2.4 | 1.1 |
| 2001 - 2010 | 1.0 | 0.8 |
| 2011 - 2020 | 3.1 | 0.3 |



India

| | % annual/annualised growth rate: | |
|--|----------------------------------|-------------|
| | M3 | Nominal GDP |
| 1981- 2020 | 15.8 | 12.9 |
| Ten years to 2020 | 11.3 | 9.8 |
| Year to August 2022 | 8.7 | n/a |
| Three months to August 2022 at annualised rate | 8.8 | n/a |

Sources: Reserve Bank of India for M3 and IMF for GDP



Broad money increases at a moderate rate

Summary: In the three months to August 2022 India's seasonally adjusted M3 grew at an annualised rate of 8.8%. This is a higher rate of growth than July's reading of 7.1%, but is still significantly lower than the typical numbers over the last decade. In the 2010s the annual rate of broad money growth rarely fell below 10%.

This relatively modest level of broad money growth is of less concern to the Reserve Bank of India (the central bank) than the inflation data. As far back as 5th April, the RBI that it would prioritise bringing inflation down to the target range of 4% with a 2% band either side, even if this meant slower growth. There have been three increases in the RBI's key repo rate, the main interest rate, since April, the most recent being a 0.5% rise in August. Further increases are likely as the RBI is deemed to have "failed" if inflation remains outside the 2%- 6% tolerance range for nine consecutive months. Consumer prices rose by 7.0% in the year to July. This is a higher figure than July's 6.7% and the eighth consecutive month of inflation above 6%. Although the rate of increase of producer prices has declined from April's peak of 16.7% to 12.4%, it is unclear whether the inflation rate is about to decline significantly. If inflation stays above target, the RBI will be required to submit a report to the government explaining why it has failed to meet its inflation mandate. It must provide details of the proposed remedial actions to bring inflation down to target, along with how long this is expected to take.

So far, the RBI's monetary tightening has not choked the increasing demand for bank credit. In the second half of August, the value of new lending by Indian banks was up by 15.3% on a year earlier. This was comparable with the highest readings of 2019, the year which saw fastest growth in bank credit since 2014. (The RBI reports bank lending figures on a bi-monthly basis). While the resultant new deposits will help boost money growth, the decline in India's foreign exchange reserves will have the opposite effect. Since reaching a peak of almost \$650b. in late 2021, these reserves have declined by almost \$100b. thanks to efforts to defend the rupee, which hit an all-time low against the US currency in July. With the US Federal Reserve looking likely to implement further increases in the Fed Funds Rate before the end of the year, the rupee could well decline still further, making energy imports all the more expensive.

The Indian banking system is also facing a raft of new regulations designed to force commercial banks to operate with capital levels close to the international norms determined by the Bank of International settlements (the so-called Basel III rules). At the same time, however, the RBI is pressurising banks to adopt a stricter approach to loan defaults. These moves between them could lead to a reduction in bank lending and thus, with fewer deposits created, slower growth in the quantity of money. Perhaps a more positive development is the Indian government's plan to privatise its public sector banks, which have not performed well and indeed have been losing money. The first two banks will be offered for sale in the coming financial year. A more efficient banking system may benefit the Indian economy in the longer term, but the money numbers do not suggest than any immediate uptick is likely.

John Petley
16th September, 2022

| | % annual growth rate: | |
|-------------|-----------------------|-------------|
| | M3 | Nominal GDP |
| 1981 - 1990 | 17.3 | 14.7 |
| 1991 - 2000 | 17.2 | 14.1 |
| 2001 - 2010 | 17.3 | 13.6 |
| 2011 - 2020 | 11.6 | 9.9 |



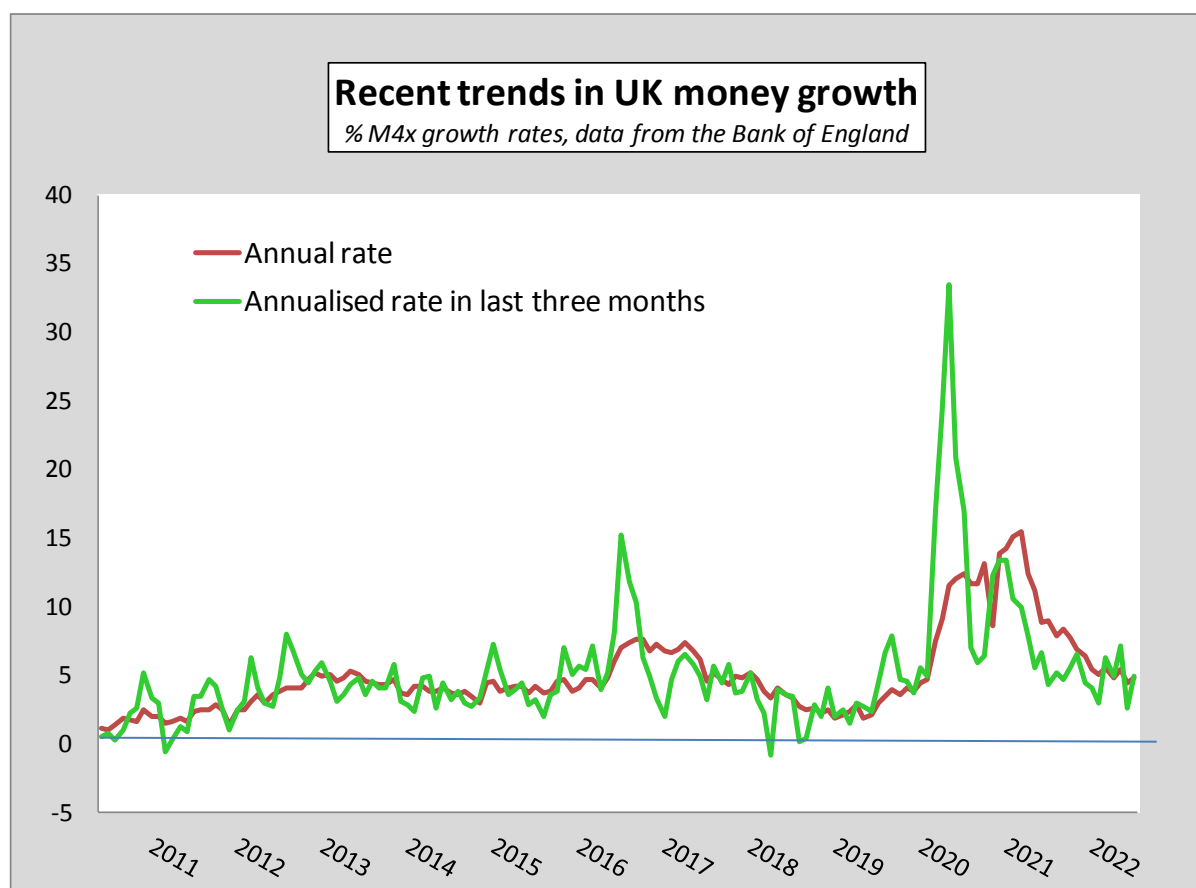
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UK

| | <i>% annual/annualised growth rate:</i> | |
|---|---|-------------|
| | M4x/M4 before 1997 | Nominal GDP |
| 1961 – 2020 | 9.3 | 7.6 |
| Ten years to 2020 | 5.2 | 2.3 |
| Year to July 2022 | 4.8 | n/a |
| Three months to July 2022 at annualised rate | 4.9 | n/a |

Sources: Bank of England and Office for National Statistics



Expansion of budget deficit risks more monetisation of public debt

Summary: UK broad money increased at an annualised rate of 4.9% in the three months to July. This figure is considerably higher than June's reading of 2.6% and has been driven by an increase in M4x amounting to over £16b. in July itself, following a contraction of £5.7b. in June. With May's exceptionally high reading (£22.4b) dropping out of the calculations next month, broad money growth is likely to appear to slow. The annual growth rate rose from 4.4% in June to 4.8%.

As with other months which have recently recorded a strong increase in the rate of broad money growth, July's reading was affected by significantly high borrowing by the financial sector, an extra £12.5b in total. This demand for extra credit is often connected with large corporate finance developments in London and is sometimes reversed soon afterwards. More fundamental is the number of new mortgage approvals. This also picked up in July, with new loans totalling £26.1b., higher than June's figure. Mortgage repayments also increased, however. The annual increase in the stock of mortgage credit slipped from 5.2% to 5.1%.

Conflicting forces affect broad money growth at present. If Prime Minister Truss's fiscal support package to help households with their energy bills is likely to be partly financed by the banks, this will increase broad money growth. On the other hand, the Bank of England's decision to raise commercial banks' countercyclical buffer (i.e., an additional cushion of capital to guard against losses) to 1% last December with a further rise to 2% in July 2023 is likely further to dampen appetite for risk, although the new government's re-think on its energy policy may encourage new investment in this particular sector. Members of the Bank of England's Monetary Policy Committee want a more aggressive increase in the Bank rate. They remain concerned about the high levels of inflation. Its decline from a 40-year high of 10.1% in July to 9.9% a month later is unlikely to alter their attitude. After the MPC meeting on 22nd September a new strategy was announced for reducing its "asset purchase facility" (i.e., the pile of gilts bought by "quantitative easing" operations). The net sales over the next year are to total £80b., with about two-thirds of this figure being of medium- and long-dated, and so likely to be to non-banks. The implied fall in broad money might be of the order of £50b. - £55b.

The UK economy is already showing signs of deceleration. GDP contracted by 0.1% in the second quarter of 2022. The retail sector has recorded four consecutive months of year-on-year contraction, although July's figure of 3.4% was the smallest annual decline. Consumer confidence is at a record low and business sentiment is also very negative. Unemployment fell to a 48-year low of 3.6% in August, but this figure looks likely to rise before the end of the year. In June, the total number of job vacancies fell to its lowest level since January. Industrial output fell by 0.9% in the month to June. Inflation looks unlikely to fall back to the Bank of England's 2% target in the short term, but money growth is falling. The Truss government's widening of the budget deficit will lead to increased tension with the Bank of England, which has to avoid undue monetisation of the public debt.

John Petley
12th September, 2022

| | % annual growth rate: | |
|-------------|-----------------------|-------------|
| | M4/M4x | Nominal GDP |
| 1961 - 2020 | 9.3 | 7.6 |
| 1991 - 2000 | 6.4 | 6.0 |
| 2001 - 2010 | 6.5 | 3.9 |
| 2011 - 2020 | 5.2 | 2.3 |

