



[The Institute of International Monetary Research is a research institute with charitable status. This note is being e-mailed to people and organizations interested in global money trends, and the relationships between money and banking on the one hand and macroeconomic outcomes on the other. It is not business or investment advice, and the Institute accepts no responsibility for decisions taken in the light of the analysis given.]

Monthly e-mail from Tim Congdon and John Petley – 24th March, 2020

Global money round-up in spring 2020

Last month this summary concluded its first paragraph, “There has to be at least a possibility that world output will...fall in 2020.” The certainty of a fall is now conventional wisdom, with debate being about its size. The output fall is then being described as “a recession”. However, it is an unusual recession, in that it is largely due to supply-side disruption, not to a drop in aggregate demand. That has not stopped governments reacting as if it were a demand-deficiency recession. A range of measures will widen budget deficits by several percentages of GDP. The enlarged deficits will be financed to a significant extent from banking systems, leading to an acceleration in broad money growth. When the coronavirus outbreak comes under control, the larger budget deficits and the excess money balances will still be present. An inflationary boom is to be expected.

The dimensions of the boom, and the extent of the inflationary damage, are uncertain at this stage. Much will depend on the money growth in the course of 2020, and we will of course track the numbers in the main countries. Discussion in the country notes below suggests that policy is likely to be particularly lax in the USA, which is hardly surprising in a presidential election year. The annual rate of broad money growth may well move into the double digits in coming months. But even in Germany there has been an intellectual somersault, with its government now envisaging a €150b. increase in public debt in response to the economic problems created by the coronavirus. Enormous figures are being given across Europe for the size of government loan guarantees. Many comparisons are being made with “war”, as if the coronavirus were a military rather than a medical threat. Wars are routinely followed by inflationary booms – and something similar seems all too plausible in several leading countries in the next two or three years.

Money trends in early 2020 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. At present the covid-19 coronavirus outbreak dominates the news, and is causing havoc with both the world economy and global macroeconomic forecasts. The damage to travel – and then to related industries, such as hotels, leisure, catering and conferences, and also to the demand for travel-related commodities (oil, for example) – is severe and far-reaching. Equity markets have crashed, inflicting losses on investors which will crimp consumer expenditure and aggregate demand. The official response has varied between countries and it is too soon to be confident about the impact on world output in 2020. But the probability has now to be significant fall, perhaps of as much as 5%. The probability must also be that a vaccine is available by mid-2021, that testing, self-isolation and quarantine measures become more effective, and that in coming months better treatments are made available, and that fewer infected patients die. By late 2021 the epidemic should be under control, and a big bounce-back in financial markets, and in aggregate demand and output, is to be envisaged.

In assessing the likely vigour of the bounce-back, money trends remain important. Some of banks' customers will suffer cash-flow strain, but governments have offered remarkably generous loan guarantee arrangements and – in contrast to 2008 – central banks are trying to help banks rather than to punish them. It must be emphasized that – if the aggregate quantity of money is given – cash-flow shortfalls in some parts of the economy will be exactly offset by cash-flow abundance in others. Indeed, if the aggregate quantity of money is growing, many sectors will have excess money balances, relative to the temporarily lower level of output. The table below shows the latest money growth numbers in the main jurisdictions.

Name of country/ jurisdiction	Share of world output		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	15.1	23.3	7.7	8.5	Strong money growth, partly due to monetary financing of large budget deficit in 2019.
China	18.7	16.1	9.3	8.8	Money growth steady & inflation under control, PBOC concerned to maintain steady growth.
Eurozone	10.6	16.4	2.8	5.2	Money growth low, with weak domestic credit expansion.
Japan	4.2	5.9	2.7	2.4	Credit and money growth down from the 3% figure seen for much of last decade, and very low.
India	7.7	3.3	10.4	10.0	Credit and money growth steady at high rates, amid social tension
UK	2.2	3.4	5.6	4.3	Money growth recovering to moderate rate.

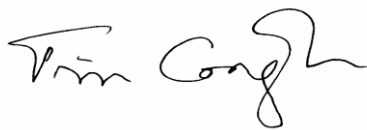
The main messages from the table this month are much the same as last month, with the obvious contrast between high money growth in the USA and weak money growth in the Eurozone, while the money growth rates in the two big developing economies, China and India, are stable. If it had not been for the coronavirus outbreak, our prognosis for 2020 – of roughly trend growth of world demand and output, in the context of modest inflation – would make sense. However, the coronavirus outbreak changes the analysis dramatically.

The policy responses in the different jurisdictions are discussed both in the introductory section of this e-mail package and in the country notes below. My verdict is that by late 2020 the annual rates of money growth in the four advanced jurisdictions will be as follows,

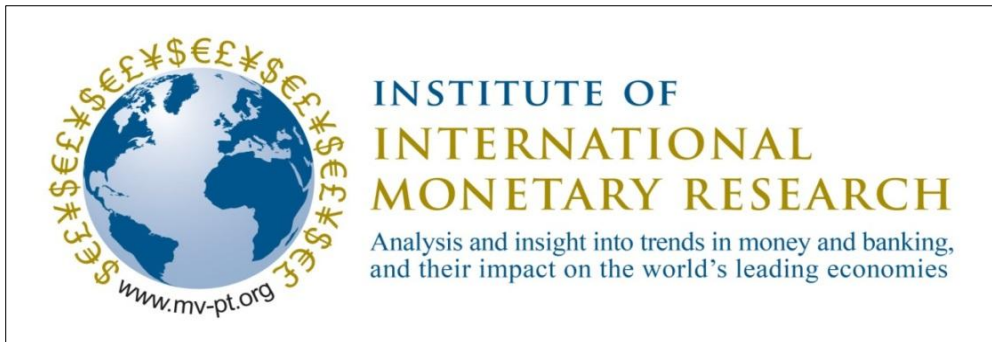
- | | |
|------------|-------------|
| - The USA | 10% - 12 ½% |
| - Eurozone | 6% - 10% |
| - Japan | 3% - 4 ½% |
| - The UK | 8% - 10% |

In other words, a major acceleration of money growth lies ahead, and some quarters in 2021 and 2022 will enjoy – if “enjoy” is the right word – an inflationary boom. The monetary interpretation of inflation is everywhere neglected in central banks today, even though the evidence for its validity and effectiveness is as robust as ever. Central bankers are at present doing their damndest to indicate support for government measures to ease the massive economic pain being caused by many countries’ coronavirus lockdowns; they seem to be casual about the money creation that is implied by the generosity of these measures. There are evident risks that 2020 and 2021 will prove a large-scale if unintended experiment in Modern Monetary Theory.

A shift in policy-making attitudes – towards awareness that increases in budget deficits may result in more monetary financing of those deficits, and then in higher money growth and inflation – is several quarters away. Thinking tends to lag events. Lags in commentariat discussion will slow the return of intellectual support for anti-inflationary policies, and lags in different countries’ policy-making “machines” will slow the conversion of elite beliefs into anti-inflationary policy-making.



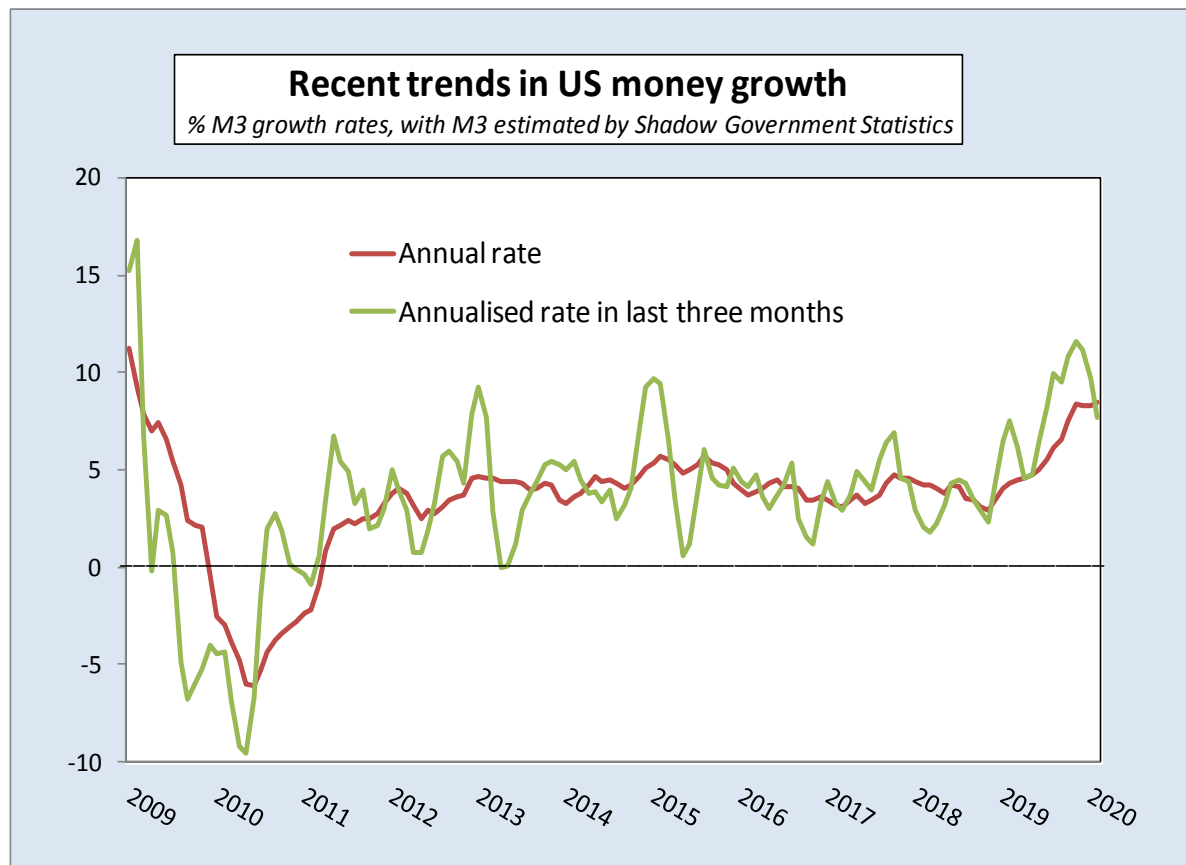
24th March, 2020



USA

	% annual/annualised growth rate:	
	M3	Nominal GDP
1960 – 2018	7.4	6.5
Eight years to 2018	4.0	4.0
Year to February 2020	8.5	n.a
Three months to February 2020 at annualised rate	7.7	n.a.

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



US broad money growth slows, but remains strong and will rise further

Summary: Strong broad money growth has continued into 2020 in the USA. In the three months to February US M3 broad money grew at an annualised rate of 7.7%. The 7.7% figure is the lowest reading on this metric since June 2019, but still unusually high by the standards of the last decade. (Note that our M3 data come from Shadow Government Statistics.) But even higher – perhaps much higher – money growth rates now seem likely, given the surge in the fiscal deficit as the USA tackles the coronavirus epidemic.

As recently as 10th February, Patrick Harker, president of the Philadelphia Fed, insisted that the reductions to the Fed funds Rate in 2019 had achieved their objective. “My own view is that we should hold steady for a while”, he said, emphasizing that the economy was “in good shape.” Less than a month later two reductions to the Fed funds rate have been implemented, taking it down to under ¼%, the same level at which it stood following the Great Recession. Of course, the economic impact of the coronavirus epidemic is the explanation. There has been little, if any, criticism of the Fed’s rate cuts. Further, negligible media criticism has been levelled against its plans to resume “quantitative easing” (to the tune of \$700b.) and its announced readiness to finance the enormous budget deficits now planned. The Federal deficit was originally expected to be just over \$1,000b. in 2020, but a package of stimulus measures costing \$1,200b. a year seems imminent.

Large-scale monetary financing of the budget deficit is inevitable. That might not be accompanied by an acceleration in money growth if banks shrank their claims on the private sector, as they did towards the close and in the aftermath of the Great Recession. But no such shrinkage seems in prospect. The Federal government may offer loan guarantees to sectors particularly vulnerable to the ramifications of the coronavirus (airlines, travel and so on). Moreover, in a move unconnected with the coronavirus, the Fed announced on 4th March a simplification of capital ratio rules in larger banks. In the Fed’s own words, the change would “increase capital requirements for the largest and most complex banks, and decrease [them] for less complex banks.” This may boost bank lending, at least in the longer term.

Before the coronavirus hit, the first quarter of 2020 was coming along well. Inflation had been above the Fed’s 2% target for a few months, unemployment had dropped back down to its 50-year low of 3.5%, employment growth was strong, and the real estate market showing signs of strengthening. But that now lies in the past. The growth of broad money increased in 2019 and now seems certain to increase again in 2020.

Tim Congdon and John Petley
20th March, 2020

	% annual growth rate:	
	M3	Nominal GDP
1960 – 2018	7.4	6.5
1960 – 1970	7.7	6.8
1971 – 1980	11.4	10.3
1981 – 1990	7.7	7.7
1991 - 2000	5.6	5.6
2001 - 2010	7.1	3.9
Eight years to 2018	4.0	4.0



INSTITUTE OF INTERNATIONAL MONETARY RESEARCH

Analysis and insight into trends in money and banking,
and their impact on the world's leading economies

China

	% annual/annualised growth rate:	
	M2	Nominal GDP
1991- 2018	19.2	15.1
2010 - 2018	13.6	11.2
Year to February 2020	8.8	n/a
Three months to February 2020 annualised rate	9.3	n/a

Sources: People's Bank of China for M2 and Institute of International Monetary Research estimates



Money growth stable

Summary: In the three months to February 2020 China's seasonally adjusted M2 grew by 2.1% or at an annualised rate of 8.6%. This is down on December's reading of 9.1%, which was the highest in 15 months, but still slightly above the 2019 average of 8.4%. Chinese broad money growth has exhibited remarkable stability in recent years. The annual growth rate has remained within the 8% - 9% band for 18 months now.

The broad money figures do not reflect the disruption to the country due to the coronavirus outbreak. At the start of the year, as usual, new credit allocations were made and the stock of loans to the private sector rose significantly, with almost 3 trillion yuan of extra lending. Even so, lending by Chinese banks was only up by 12.1% on the year in both January and February, the lowest figure for over a decade. The People's Bank of China has continued to respond proactively to the crisis, reducing banks' reserve ratios further in March, thus releasing \$79b. of liquidity in an attempt to encourage more lending to SMEs.

Some indicators are already highlighting the scale of the disruption faced by the Chinese economy. In the final months of 2019, retail sales were growing at an annual rate of 8%. In January and February, they were 20% below the corresponding figures for 2019. Chinese exports recorded a year-on-year fall of 17.2% in the first two months of the year, as supply chain disruptions in the wake of factory shutdowns took their toll. Overall industrial production was 13.5% lower in January and February than 12 months earlier. The domestic automobile market saw the most dramatic decline with new car registrations falling from 1.61 million in January to a mere 224,000 in February, a decline of approximately 85%. The housing market, which was showing signs of overheating in the early months of 2019, continues to cool, with prices only up by 5.8% on the year to February. Initially, analysts estimated that the outbreak could push the annual GDP growth rate down from the 6% reading in the final quarter of 2019 to a mere 4% in the first quarter of 2020. But media reports indicate a far more profound setback is under way. Economic statistics in China are massaged by officialdom to hide bad news, but it seems inescapable that national output in Q1 2020 will be much lower than a year ago and the same may be true for the entire first half.

In the last week, the infection rate has slowed dramatically, especially outside the epicentre of the outbreak in Wuhan. Most of the recently reported cases involve travellers returning from abroad. In some cities where no infections have been reported, including Shanghai and Hangzhou, factories, offices and restaurants are re-opening. Whether this attempt to return to normality will trigger a new wave of infections remains to be seen, but – thus far – it appears that the swift and drastic lockdown proved effective. Unfortunately, with much of Europe now in lockdown and restrictions elsewhere, demand for Chinese goods is likely to be muted for some months. Even so, China may be the first major economy to recover from the pandemic.

John Petley
18th March, 2020

	% annual growth rate:	
	M2	Nominal GDP
1991 - 2000	24.5	18.4
2001 - 2010	18.5	15.2
Seven years to 2017	12.8	10.3



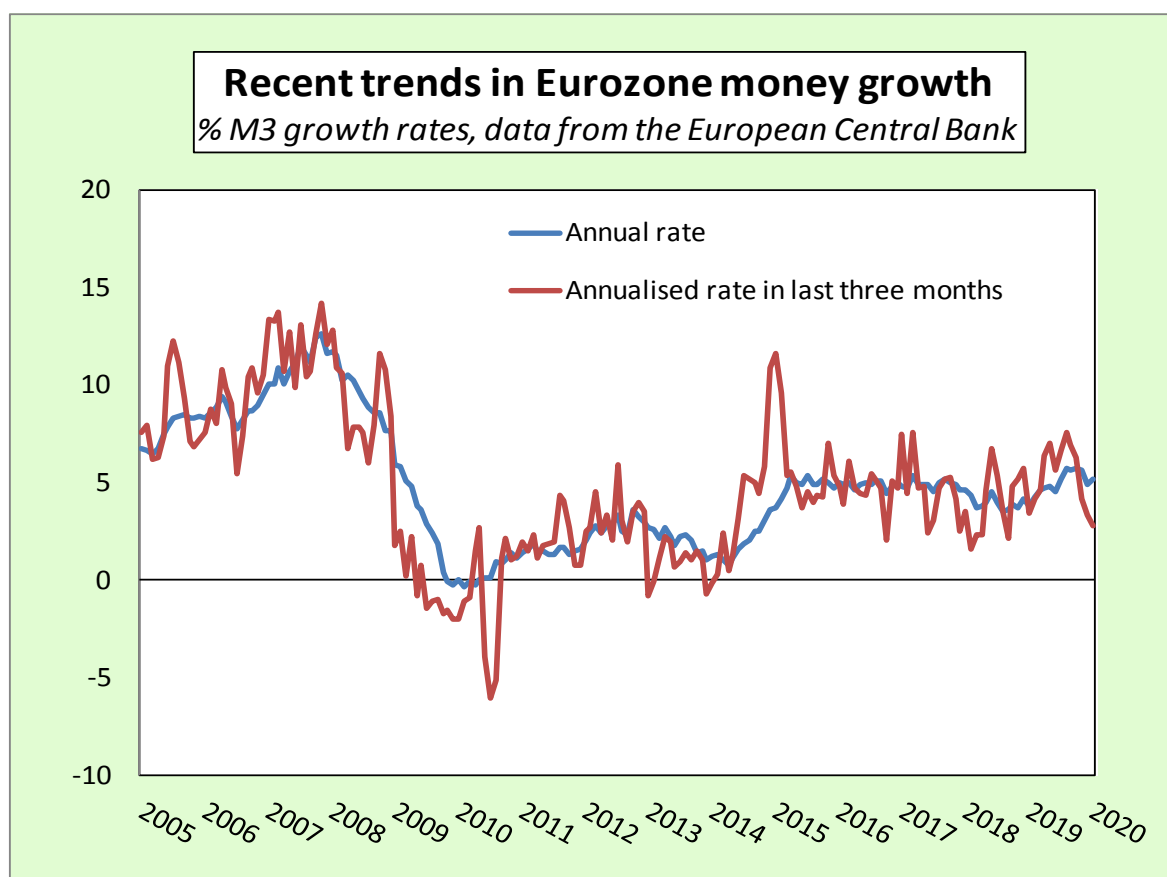
INSTITUTE OF INTERNATIONAL MONETARY RESEARCH

Analysis and insight into trends in money and banking,
and their impact on the world's leading economies

Eurozone/Euroland

	% annual/annualised growth rate:	
	M3	Nominal GDP
1996 – 2018	5.2	3.1
Eight years to 2018	3.7	2.5
Year to January 2020	5.2	n/a
Three months to January 2020 at annualised rate	2.8	n/a

Sources: European Central Bank and Institute of International Monetary Research estimates



Money growth slowdown until January, but acceleration ahead

Summary: In the three months to January 2020 annualised broad money (M3) growth in the Eurozone fell to 2.8%. The 2.8% number was the lowest on this metric since September 2018. In January the quantity of money grew by €47b. or more than 0.3% (i.e., at an annualised rate of approaching 4%). But a radical shift in policy has been announced, as the European Central Bank – working in tandem with Eurozone governments – mitigates the effects of the coronavirus.

This sustained slowdown in M3 growth was raising concerns about the rate of money expansion well before the effects of the coronavirus began to affect the economy of the 19-nation Eurozone bloc. Most key macroeconomic indicators did not point to much of a revival in the Eurozone economy in 2020. Bright spots, such as the French housing market, were offset by areas of weakness, with suggestions of a manufacturing recession in Germany. Broad money growth in recent months had been kept at a reasonably positive figure only because of external influences, with – for example – the current account surplus helping to drag in money balances from abroad. The ECB had announced the resumption of asset purchases in September and this should have increased banks' claims on general government. Surprisingly, they instead fell in the final quarter of 2019, with little sign of a pickup in January.

The ECB has responded to the coronavirus outbreak by ramping up its asset purchase programme, increasing it by \$120b. on 12th March and then announcing a massive further increase of \$750b. six days later. The asset purchases may be of mostly private sector paper, but hints of purchases of Italian and Greek government debt have been made. With the ECB's deposit rate already negative by ½% and its refinancing rate at zero, a further cut in interest rates is precluded. However, a new series of long-term loans at favourable rates have been made available to Eurozone banks, while regulators have reduced banks' capital requirements on cyclical grounds. Massive bank loan guarantee schemes have been announced (of over €500b. euros in Germany, more than €300b. in France, etc.) A reasonable verdict is that underlying bank lending to the private sector will grow slowly in 2020, but that the asset purchases should add perhaps 3% - 4% to broad money, while some indirect financing of budget deficits and positive external influences on money raise the money growth figure towards 7% or so.

No doubt budget deficits will rise in the Eurozone in 2020 and no doubt the deficits will be financed to some extent from the banks. All the same, the emphasis in the Eurozone has been less on the fiscal side of the picture than in the USA and the UK. Instead the ECB seems concerned that the banks are able to survive, despite cash flow hits to companies and possible credit downgrades. Big falls in output are to be expected. In an article in the *Financial Times* (of 20th March), Christine Lagarde, ECB president, conceded that, "economic activity across the euro area will decline considerably". But – given that this decline was due to government restrictions on movement which are a supply-side constraint – she warned that, "public policies cannot prevent this".

Tim Congdon
20th March, 2019

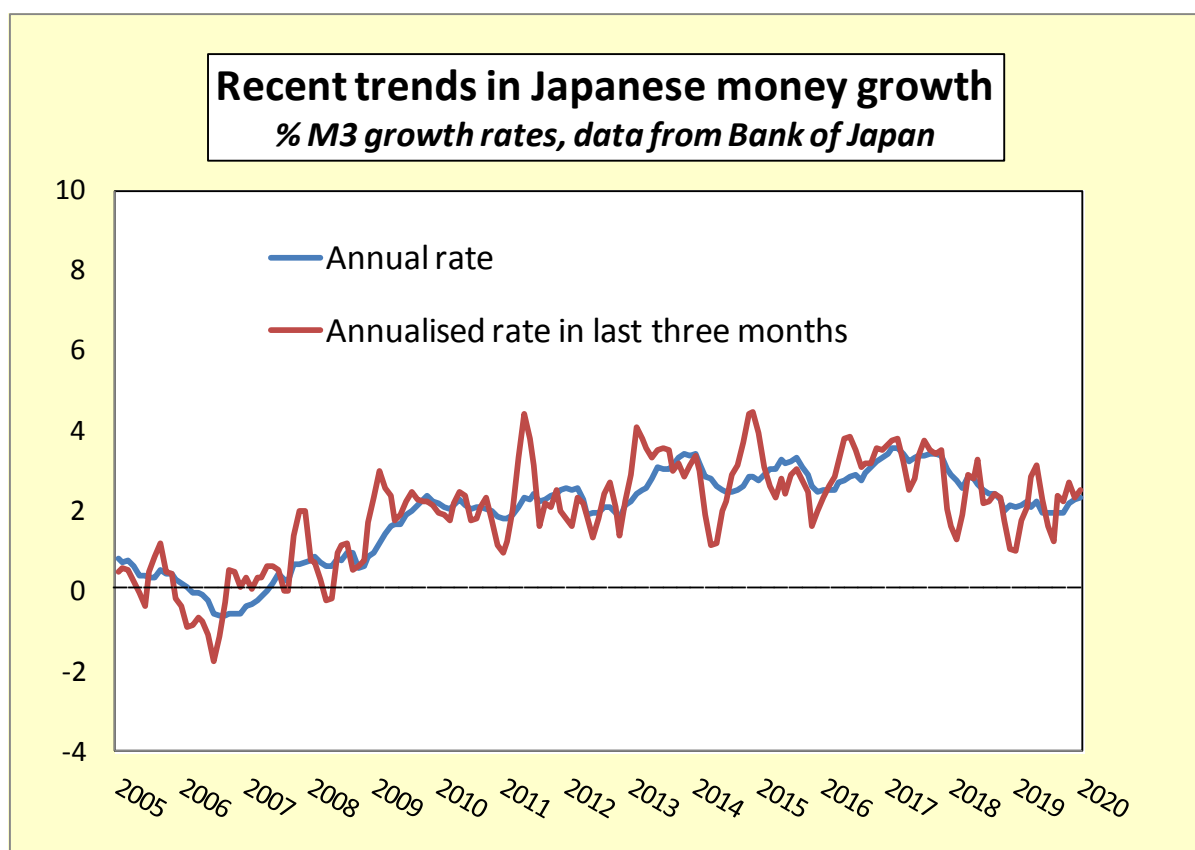
	% annual growth rate:	
	M3	Nominal GDP
1996 – 2018	5.2	3.1
1996 – 2000	4.6	4.1
2001 – 2010	6.8	3.1
Eight years to 2018	3.7	2.5



Japan

	% annual/annualised growth rate:	
	M3	Nominal GDP
1981- 2018	4.0	1.9
Eight years to 2018	2.8	0.6
Year to February 2020	2.4	n/a
Three months to January 2020 at annualised rate	2.7	n/a

Sources: Bank of Japan for M3 and IMF for GDP



Broad money growth strengthens again, but only imperceptibly

Summary: In the three months to February 2020 Japanese M3 broad money rose at an annualised rate of 2.7%. This is the highest reading for three months, but still beneath May's figure of 3.1% which was a local peak. February saw the quantity of money, broadly defined, increase by 48 trillion yen, the highest reading since April 2018. The scale of this improvement, however, is very modest. The dominant message remains very low money growth within a narrow range.

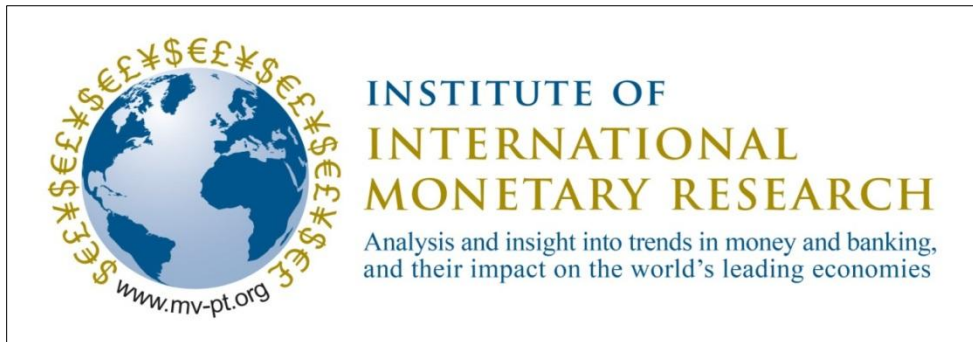
In the final quarter of 2019 the Japanese economy shrank by 1.6%, equivalent to an annual rate of contraction of 6.3%. This downturn was blamed on a combination of special shocks including a period of very weak retail sales in the wake of a 2% increase in sales tax on 1st October and an unusually severe typhoon season, which did result in some factories having to shut down during the most extreme of the weather conditions. In addition, exports were affected by the increase in trade protectionism during the latter months of 2019. Hopes that Japan's economy would recover in early 2020 and thus avert a recession may well prove to be premature. Since its peak on 20th January, the Nikkei index has fallen by over 30% in two months. In January 2020, exports fell by more than 17% in a month, dropping to a three year low, retail sales continued to contract and the housing market recorded its seventh consecutive monthly decline. The first two months of the year saw a slight increase in the growth of the stock of loans by Japan's banks, but February's figure of 2.1% remains significantly below the 3%-3.3% levels seen in 2017.

The Bank of Japan's monetary policy committee (MPC) responded to the coronavirus crisis at its regular meeting on 16th March by doubling its monthly purchase of Japanese government bonds (JGBs). In addition, the Bank will provide a new loan facility for companies affected by the downturn, which will be available for the next six months. The statement issued by the MPC, however, stressed that it would "not hesitate to take additional easing measures if necessary". The previous stimulatory measures - so-called "quantitative and qualitative easing", negative interest rates and "yield curve control" - have been in force for several years. They do cause banks' cash reserves to rise and may prompt banks to expand their balance sheets, boosting M3 broad money, but the effects until now have been fairly marginal.

The monetary easing was introduced to raise annual consumer price inflation to 2%, but has never come near reaching its target. Inflation hit an eight-month high of 0.8% in December, only to fall back to 0.4% two months later. The recent steep fall in the price of oil may push prices lower still, given that Japan relies heavily on imported energy. The spread of the pandemic seems to be slower and more limited in Japan than in other countries, but its economy will inevitably be affected by the impact of the virus elsewhere, including missing the Olympics boost if the games are cancelled.

John Petley
19th March, 2020

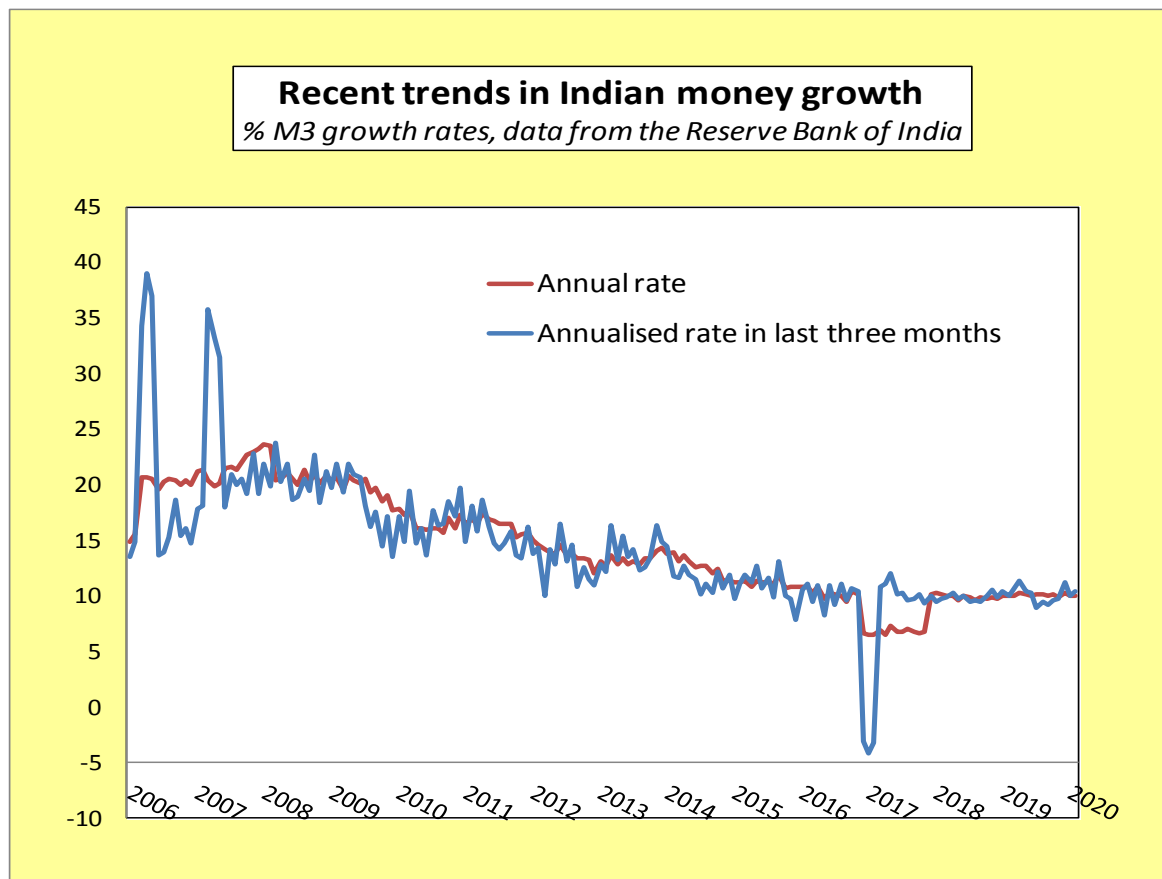
	% annual growth rate:	
	M3	Nominal GDP
1981 – 1990	9.2	4.6
1991 - 2000	2.5	1.1
2001 - 2010	1.1	0.8
Eight years to 2018	2.8	0.6



India

	% annual/annualised growth rate:	
	M3	Nominal GDP
1981- 2018	14.8	12.4
Eight years to 2018	11.2	6.9
Year to February 2020	10.0	n/a
Three months to February 2020 at annualised rate	10.4	n/a

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



Sustained annual broad money growth, just in double-digits, continues

Summary: In the three months to February 2020 India's seasonally adjusted M3 grew by 2.6% or at an annualised rate of 10.4%. This is up on January's reading of 10.0%, but down on the 11.2% seen in December. The annual growth rate, unchanged at 10.0%, has remained within a narrow band from 9.6% to 10.3% for 27 consecutive months. India's current broad money growth pattern is consistent with macro stability.

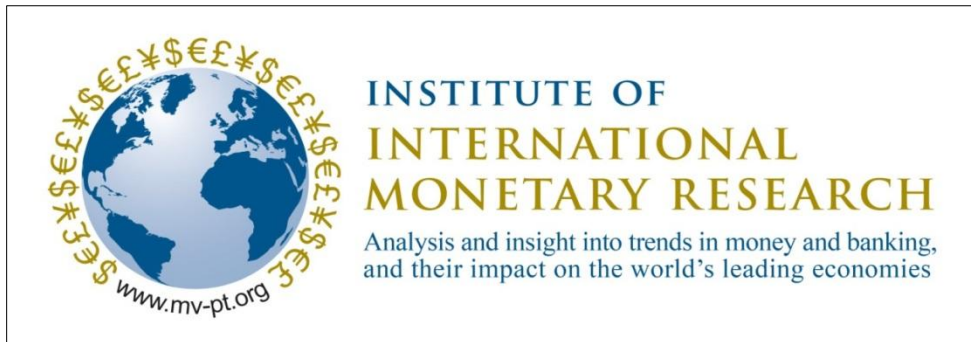
Of the six monetary jurisdictions covered in these notes, India has thus far been the least affected by the coronavirus pandemic. Interest rates have not been cut this year, while the Reserve Bank of India's Monetary Policy Committee has not felt itself under such pressure that it should bring forward its next meeting. At 20th March less than 250 coronavirus cases have been reported. The authorities are aware that the outbreak could spread rapidly, as has been the case elsewhere, but India has a young population and the Covid-19 coronavirus seems to pose a mortal threat only to the elderly.

There are other concerns about the Indian economy, including a slowdown in the growth of the stock of bank loans. This was at an annual rate of only 6.1% in February, the lowest reading since the aftermath of the November 2016 de-monetisation exercise (the mass withdrawal of 500 and 1,000 rupee banknotes from circulation), which caused annual loan growth to fall as low as 4.1%. The RBI made five cuts to base rates during 2019, but commercial banks have been slow to pass on these reductions to borrowers. The widening of loan margins should help banks' profits and enable increased profit retentions to boost capital. Worries about poor loan quality and doubtful solvency continue to dog the banking system. On 5th March, the troubled Yes Bank was taken over by the RBI to avert its collapse. Yes Bank, according to the RBI, had under-reported its non-performing assets and had failed to raise sufficient funds to cover the cost of writing off bad loans. Three days later Yes Bank's founder, Rana Kapoor, was arrested and accused of money laundering. This is the latest and one of the biggest failures in the Indian banking system in recent years. Some weaker state-run banks have already been merged with stronger ones to reduce their vulnerability. Nevertheless, banks continue to expand their balance sheets and broad money growth remains steady at annual rates close to 10%. Part of the explanation is that the Indian state has a recurrent budget deficit, which it finances to a significant degree from the banks.

In February, the annual rate of consumer price inflation fell, for the first time in seven months, but at 6.6% it remains well above the government's 4% target. This would normally limit the scope for further monetary loosening, but – if the coronavirus begins seriously to impact the Indian economy – inflation will be the least of the issues facing the RBI. India's stock market has already fallen by over 25% from a peak in late January and Indian GDP grew at an annual rate of only 4.7% in the final quarter of 2019, the weakest growth since early 2013. Thankfully, the sectarian rioting in Delhi, which claimed more than 50 lives in February, has subsided.

John Petley
20th March, 2020

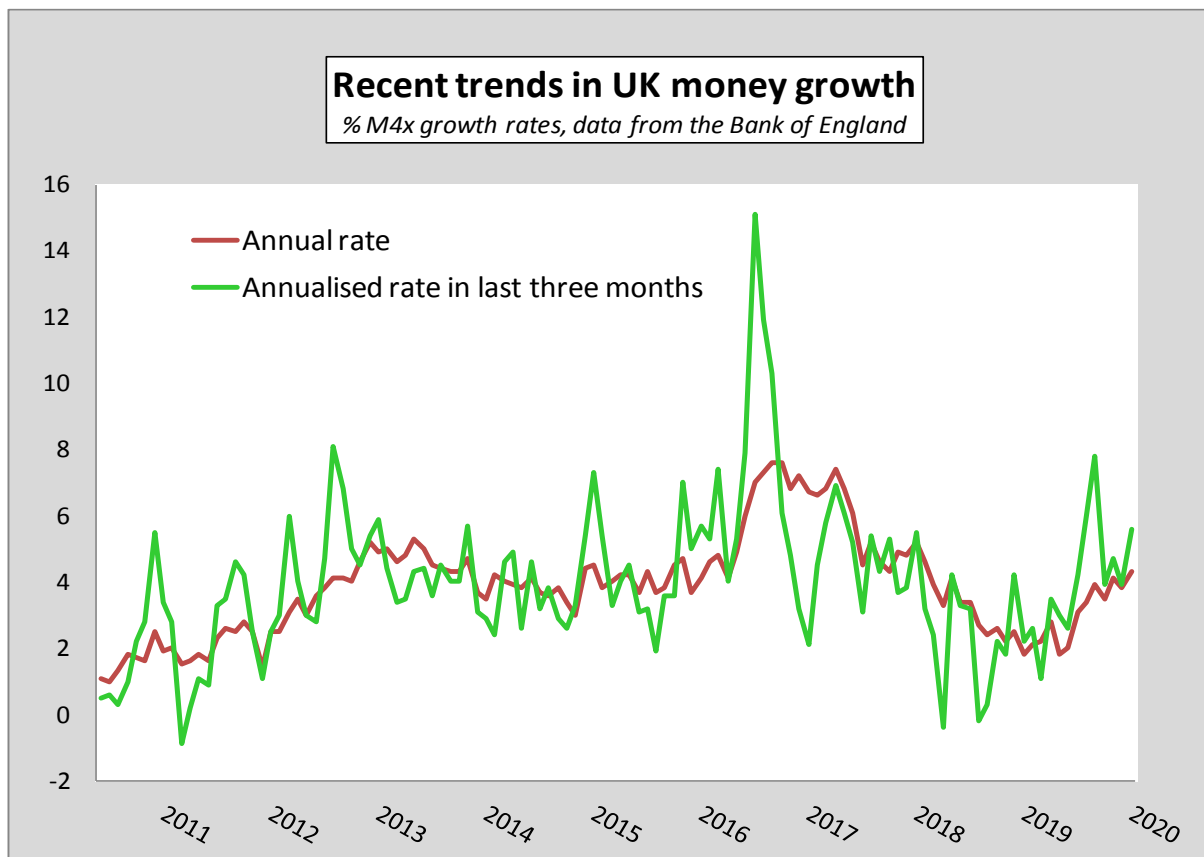
	% annual growth rate:	
	M3	Nominal GDP
1981 - 1990	17.1	15.5
1991 - 2000	17.4	14.0
2001 - 2010	17.3	14.8
Eight years to 2018	11.3	11.8



UK

	% annual/annualised growth rate:	
	M4x/M4 before 1997	Nominal GDP
1964 – 2017	9.8	8.2
Eight years to 2018	4.1	3.7
Year to January 2020	4.3	n/a
Three months to January 2020 at annualised rate	5.6	n/a

Sources: Bank of England and Office for National Statistics



Broad money growth picks up – and will rise further

Summary: In the three months to January 2020 UK M4x grew at an annualised rate of 5.6%, a reading that has only been surpassed once since May 2017. In January itself broad money growth was not particularly strong (£8.7b.), but over the last two years occasional months of strong money growth have been followed by a month of very weak or even negative growth. This has not happened since October 2019. The annual growth rate also ticked up from 3.8% to 4.3%, the highest reading on this metric since February 2018. Further acceleration of money growth is to be expected, in view of the drastic policy response to the coronavirus pandemic.

At mid-March the UK had suffered less than its European neighbours from the Covid-19 coronavirus outbreak, with fewer cases and deaths. However, the policy response has been – if anything – more drastic. Rishi Sunak's first Budget, on 11th March, signalled a large medium-term increase in the budget deficit. But that has been overshadowed by more recent fiscal largesse, justified as a response to the coronavirus. The government has placed restrictions on movement, with dire effects on, for example, the travel and hospitality sectors. Lay-offs would be likely, except that the government is to pay the bulk of small companies' pay bills. The cost of the emergency rescue package – over and above the cost of Budget changes announced little more than a week earlier – is given as £350b., but it is not clear how this figure relates to a separate figure of £330b. for corporate loan guarantees. On the face of it, the 2020/21 budget deficit (i.e., “public sector net borrowing”) – projected in the Budget itself to be £54.8b. – might be nearer £100b. or perhaps even higher. Budget-time plans were for the Debt Management Office to issue £51b. of short-dated conventional gilts, much of which would have been taken up by banks and would have implied an addition to the quantity of money. An appreciably higher figure – say, £80b. – might now make sense. If so, monetary financing of the UK's budget deficit would by itself add about 4% to the M4x money measure over the next year or so. (The Bank of England has not resisted the slide into deficit, but – on the contrary – has said that it sees its job as being to help the government with central bank finance.)

Meanwhile much is being done to ensure that cash-strapped businesses do not have to shrink operations and lay off staff. Regulators are *loosening* banks' capital/asset ratio requirements, in sharp contrast to late 2008 when they *tightened* them. The Bank of England has started a commercial paper facility which was described – in the *Financial Times*, no less – as “unlimited QE for large company financing”. The amount involved is £200b., nearly 10% of M4x. Further, a new term funding scheme has been introduced to encourage banks to lend more to small businesses. Relative to the announcements on the public finances and the commercial paper facility, movements in interest rates are of minor importance. At any rate, on 19th March Bank rate was cut to 0.1%, the lowest-ever figure. An acceleration in money growth is to be expected in the rest of 2020.

Tim Congdon
20th March, 2020

	% annual growth rate:	
	M4/M4x	Nominal GDP
1964- 2017	9.8	8.2
1991 – 2000	6.4	5.0
2001 – 2010	6.5	3.9
Eight years to 2018	4.1	3.7