

Money trends in spring 2016 in the main countries/jurisdictions

What are the latest money growth trends in the main countries? And what is the message for global economic activity over the next year or so, and for inflation/deflation over the medium term thereafter? The table below summarizes the key numbers. For detail, it is recommended that the reader looks at the individual country comments below. Beneath the table I make an overall assessment, and later make some comments on recent banking and monetary developments in the USA and the UK.

Name of country/ Jurisdiction	Share of world output, in purchasing-power-parity terms, %	Growth rate of broad money, in last three months at annualised rate, %	Growth rate of broad money, in last twelve months, %	Comment:
USA	16.1	5.1	3.9	Annual money growth moderate, at about 4% - 5% annual rate, despite regulatory attack on banks.
China	16.9	16.8	13.4	Credit easing Q1 2016, recent money growth steady at high rate similar to 2015.
Eurozone	11.9	6.2	5.0	QE has had positive effect on M3 growth, now at ideal 5% rate.
India	7.1	9.1	10.5	Monetary policy is steady, although March money growth weak.
Japan	4.3	2.8	2.9	Broad money growth low but stable, with QQE to be continued.
UK	2.3	6.5	4.8	Recent money growth higher than in most of 2013 – 15

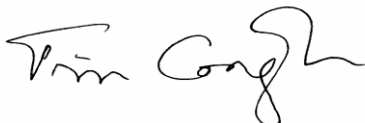
In the 60 years to 2007 the main driver in today's developed economies of growth in bank balance sheets, and hence of the bank deposits which constitute the bulk of the broadly-defined quantity of money, was new bank lending to the private sector. (When banks increase their loan portfolios, they add identical sums to both sides of their balance sheets. The new loan is a claim on the borrower and an extra asset, while the borrower has a new deposit which is an additional bank liability. The borrower spends the deposit, which is then money in another agent's hands. The money can then circulate an indefinitely large number of times.) For most of this 60-year period financial systems were being liberalized, and ratios of capital to risk assets, and of cash and other liquid assets to total assets, were falling. That allowed the banks to make reasonable profits, even as loan margins were reduced. Meanwhile the growth of inter-bank lending enabled banks to enter new territories and to lend, even if they did not have branch networks to collect deposits.

These processes were checked by the drastic and abrupt change in bank regulations which came with and after the Lehman collapse in September 2008. The change in bank regulations – agreed at an international level under G20 auspices and implemented with technical help from the BIS – consisted in official demands for higher rates of both capital and cash/liquidity to assets, and for less dependence on wholesale inter-bank funding. In most jurisdictions the stock of bank lending to the private sector fell heavily for a period of some years from 2008.

The first country to break from this pattern was the USA which from 2013 has seen resumed growth in bank lending to the private sector. The pace of growth has been fairly consistently above 5% at an annual rate in recent quarters, somewhat ahead of the growth of broad money. The numbers differ from month to month, but it seems reasonable to me to project 5%-a-year growth in US broad money into 2017. Given the long-run relationship between real money and real output, steady growth in demand is to be expected while broad money growth is at this sort of figure, and it is difficult to see why marginal changes in Fed funds rate (of 25 basis points) should make much difference. (But a sharp tightening of bank regulation would matter much more.)

Signs are now emerging that the UK also is breaking out of the credit contraction/stagnation consequent on the Great Recession. In the three months to March the annualised growth rate of M4Lx (which means lending by monetary institutions, i.e., banks and building societies, excluding lending to and by intermediate other financial corporations) was an impressive 11.0%. Changes in tax – specifically, stamp duty on buy-to-let home purchases – were a special stimulatory influence here. Even so the number needs to be noticed.

If bank lending to the private sector continues to expand in the USA and the UK at rates in excess of 5% annualised, broad money growth will remain robust, the economies will recover further and central banks will need to “normalise” monetary policy. In other words, central bank rates will rise towards at least the 2% - 3% levels that have historically been regarded as routine.....Yes, the data need to be watched!



31st May, 2016



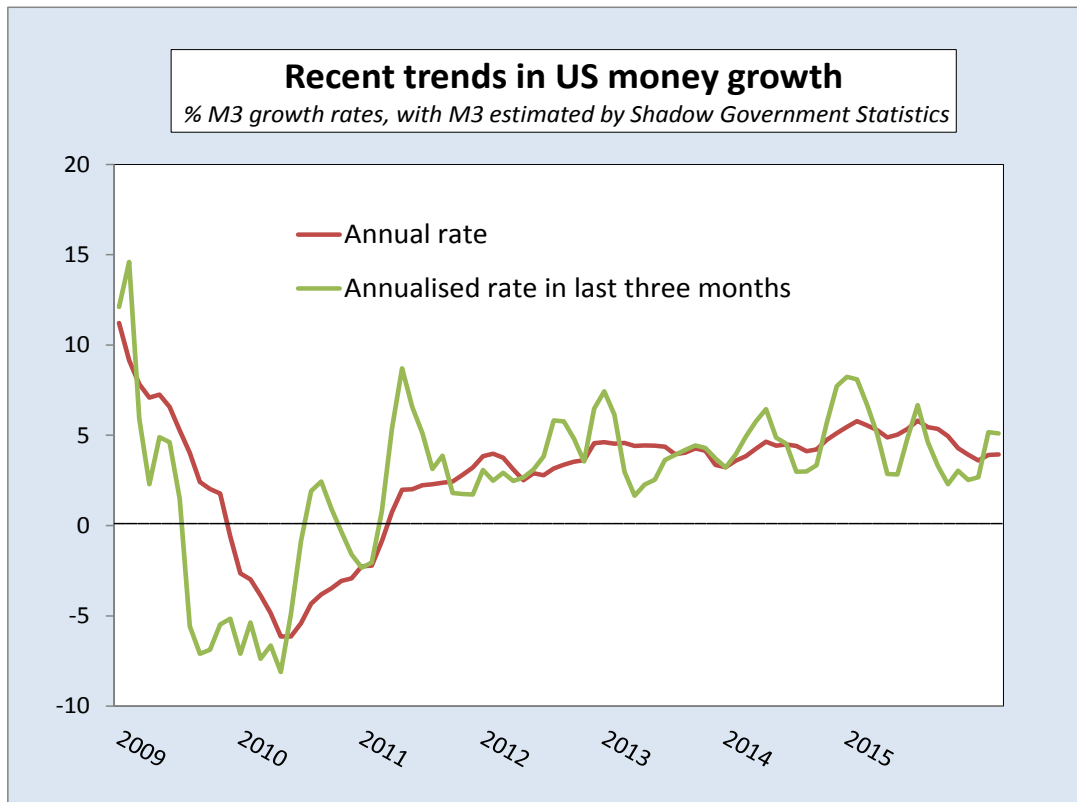
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USA

	% annual/annualised growth rate:	
	M3	Nominal GDP
1959 - 2015	7.5	6.6
Four years to 2015	4.3	3.8
Year to April 2016	3.9	n.a
Three months to April 2016 at annualised rate	5.1	n.a.

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



M3 growth has improved from late 2015 dip

Summary: In the three months to April 2016 US M3 grew at an annualised rate of 5.1%. April itself saw an increase in M3 of over \$40b., down from a very strong increase in March. US broad money growth is reviving from a dip in late 2015, which was due to the Fed's preparedness to run down the stock of assets acquired in its "quantitative easing" operations. Bank credit to the private sector continues to be quite buoyant, despite the regulatory attack on big commercial banks. (Note that the M3 data used in this note are from the Shadow Government Statistics research company.)

Late 2015 saw a dip in US broad money growth, which was attributed in the analysis here to the Fed's preparedness to run off some of the assets acquired by the Fed in its QE programmes. If the Fed had sustained its stock of QE assets, broad money growth would have been higher and short-term macro conditions more positive. For four years now, the important driving force behind money growth has been bank lending to the private sector. In early 2016 that continued to expand at annualised rates above 5%. In April banks' cash assets increased. With bank credit to the private sector still moving ahead and the Fed's activities being less negative for money expansion, broad money growth has picked up from the rather weak numbers in late 2015.

It should be emphasized that these quarter-by-quarter wobbles in broad money growth have been associated since 2011 with steadiness in the annual growth rate. As the chart shows, the annual rate of growth of broad money has been impressively stable. In the 52 months from January 2012 to April 2016 the average annual rate of growth of M3 has been 4.3%, with a high of 5.8% in a couple of months in 2015, and a low of 2.5% in May 2012. By long-run past standards the last four/five years are remarkable for both the lowness and stability of money growth. As Milton Friedman would have expected, the low and stable growth of money has been accompanied by negligible inflation, and steady growth in demand and output, while unemployment has dropped.

In these notes concern has been expressed that the ongoing regulatory attack on the banks might cause them to check the expansion of their risk assets, particularly their loans to the private sector. The data need to be watched, but so far such fears have been misplaced. "Loans and leases to the private sector" at all US commercial banks advanced by 0.5% in February, 0.4% in March and 0.6% in April (i.e., at annualised rates of 6.8%, 4.8% and 7.7% respectively), which implies no slowdown in the pace of credit expansion despite regulators' jibes that banks have not provided adequate "living wills" to the Federal Reserve and the Federal Deposit Insurance Corporation. A 25 basis point increase in Fed funds rate seems likely at the June meeting of the Open Market Committee.

Tim Congdon
31st May, 2016

	% annual growth rate:	
	M3	Nominal GDP
1960 – 2014	7.6	6.7
1960 – 1970	7.7	7.7
1971 – 1980	11.4	10.7
1981 – 1990	7.7	7.7
1991 - 2000	5.6	5.6
2001 - 2010	7.1	3.9
Four years to 2015	4.3	3.8



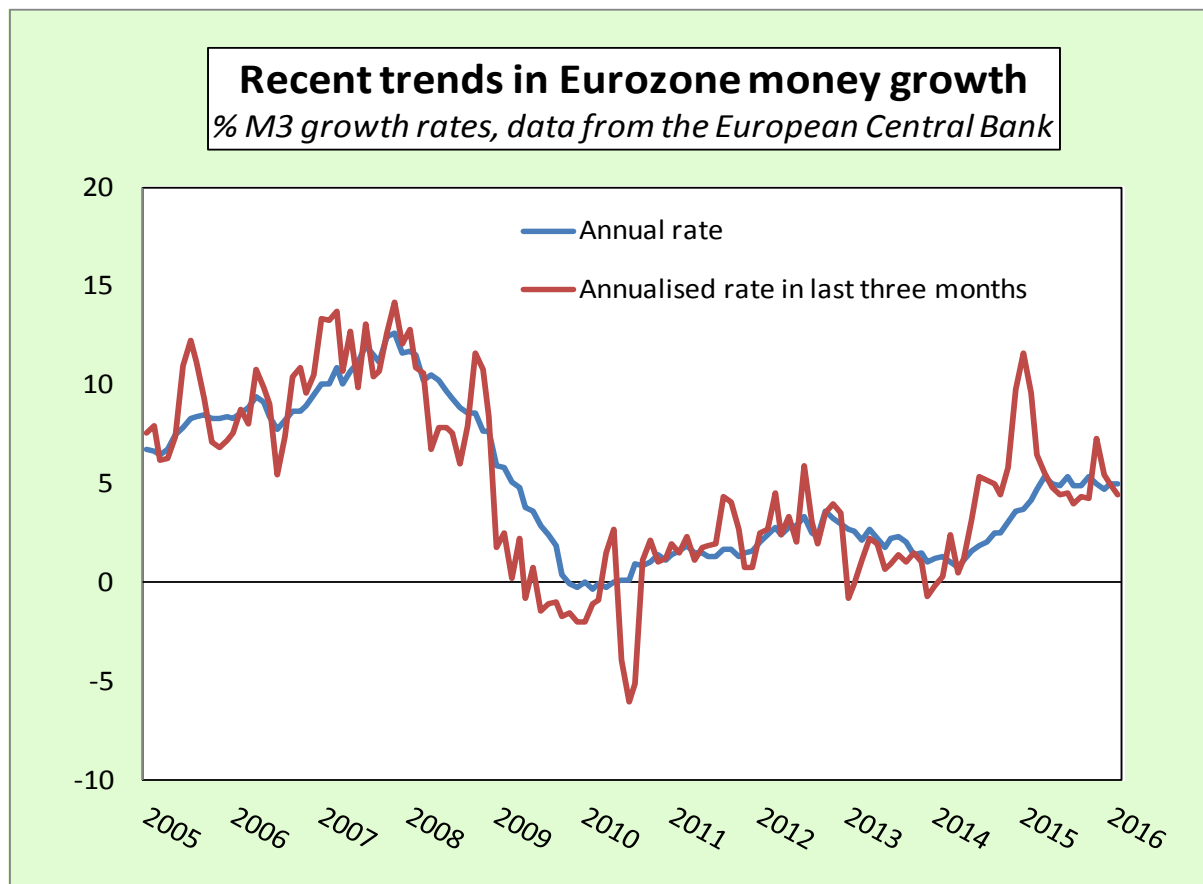
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Eurozone/Euroland

	% annual/annualised growth rate:	
	M3	Nominal GDP
1995 – 2015	5.3	3.1
Five years to 2015	3.0	1.6
Year to March 2016	5.0	n/a
Three months to March 2016 at annualised rate	6.2	n/a

Sources: European Central Bank and International Monetary Research Ltd. estimates



Money growth very satisfactory at the start of 2016

Summary: In the three months to March 2016 the Eurozone's M3 quantity of money grew at an annualised rate of 6.2%. Meanwhile the annual rate of broad money growth has remained at about 5% - a more or less ideal number in view of the persisting deflation fears – since spring 2015. The ECB's "quantitative easing" programme has been successful. Annual broad money growth has risen from its 2009 – 2013 average (of a mere 2% or so), helping the Eurozone to achieve a clear cyclical rebound.

The comentariat (of journalists, investment bank analysts and so on) continues to lambast the ECB, on the grounds that Eurozone demand growth is too weak, with persisting deflation worries. Silly talk about the need for negative interest rates and even "helicopter money" was still being heard until a month or two ago. In fact, the ECB's QE programme has worked almost to perfection. Since its announcement in February 2015 the annual growth rate of M3 has moved up to 5% and stayed there with some consistency. In the five years to end-2014 the annual growth rate of M3 had averaged under 2%. The contrast in money growth between the pre- and post-QE-announcement periods is clear. Further, the credit counterparts data show that the money growth upturn reflects increased bank acquisition of government securities, just the pattern to be expected with a large-scale QE programme.

Eurozone stock markets have not had a great time in the last 18 months. However, they moved ahead strongly in late 2014 in anticipation of QE's effects on money growth and asset prices, and then from asset prices to economic activity. Without question, the Eurozone economy has performed better since early 2015 than in previous years. In the first quarter of 2016 Eurozone GDP increased by 0.6% (i.e., at an annualised rate of 2.4%), following a gain of 1.6% in the year of 2015. (The 2015 GDP increase was the best since 2010, which was artificially high because of the recovery from the recession-hit 2009.) Admittedly, inflation remains well beneath the 2% figure widely seen as an appropriate target for central banks in a low-inflation era. But disappointment on this front is misplaced. In his work on the relationship between money and inflation, Milton Friedman always warned that money affects inflation only after long and unpredictable lags.

One feature at present is that money growth in Germany is above money growth in other Eurozone member states. In the year to February Germany's M3 soared by 8.2%, whereas it went up only 4.0% in the rest of the Eurozone. When allowance is made for the damage to German exports from the partial closure of the Russian market (because of sanctions and the oil price collapse), the German economy has enjoyed robust demand conditions and growth in 2016. That has been a helpful development for the over-indebted economies on the Eurozone periphery, although anxieties have returned in recent months about the long-run viability of Greece's public finances.

Tim Congdon
31st May, 2016

	% annual growth rate:	
	M3	Nominal GDP
1995- 2015	5.3	3.1
1995 – 2000	4.5	4.0
2001 – 2010	6.7	3.4
Five years to 2015	3.0	1.6

Broad money growth in early 2016 same as in early 2015

Summary: In the first three months of 2016 China's M2 expanded by 3.9%, or at an annualised rate of 16.4%. This compares with an increase of 3.8% (and an annualised rate of increase of 16.1%) in the first three months of 2015. However, money growth in late 2015 was higher than in late 2014. The bias of Chinese monetary policy-making has been towards ease over the last year or so, and the economy seems to be responding. Worries about excessive indebtedness in China have been recurrent over the last 15 or 20 years, but the steady rate of growth of the banking system and broad money argue against too much pessimism.

Money growth in China has a seasonal pattern, with the first quarter tending to see faster growth than the rest of the year. Much of the Chinese banking system is state-owned and subject to bureaucratic direction. The start of each year sees the allocation of credit limits for particular borrowers (themselves also often state-owned) and a burst of money expansion. 2016 has been no exception. In line with newspaper reports of an easing of credit allocation criteria, M2 jumped by 3.8% in the first three months of the year. This was much the same as in the same period of 2015, but it needs to be noticed that money growth (on a month by month basis) in late 2015 was higher than in late 2014.

As a result, the growth rate of M2 in the year to March 2016 was 13.4%, whereas in the year to March 2015 it was 9.9%. The conclusion must be that Chinese monetary policy has been relaxed significantly. Although this relaxation has been much less marked than in 2009, it has had similar consequences qualitatively. House price increases have accelerated, while retail speculation in iron ore futures has caused much derogatory comment.

The debate about the future of the Chinese economy is tied up with anxiety about the banking system and indebtedness, but that has been true now for many years. According to *The Economist*, a recent article in *The People's Daily* may give an important signal to policy thinking. An "authoritative person" warned that future growth of demand and output must not rely too much on debt. Observers surmised that this "authoritative person" was Liu He, who is an economic adviser to Xi Jinping, China's president. If so, the larger message is that banks must not step extending easy credit to the wasteful state-owned sector. However, the People's Bank of China has retained target for M2 to grow by 13% in 2016. In practice that target seems to be driving the course of events rather than Mr. Liu's strictures. The Chinese economy is undoubtedly still growing fast by the standards of the rest of the world, even if the growth is less resource-intensive than a few years ago.

Tim Congdon
31st May, 2016

	% annual growth rate:	
	M2	Nominal GDP
1991 - 2000	20.3	15.8
2001 - 2010	15.2	12.8
Four years to 2014	14.1	11.6



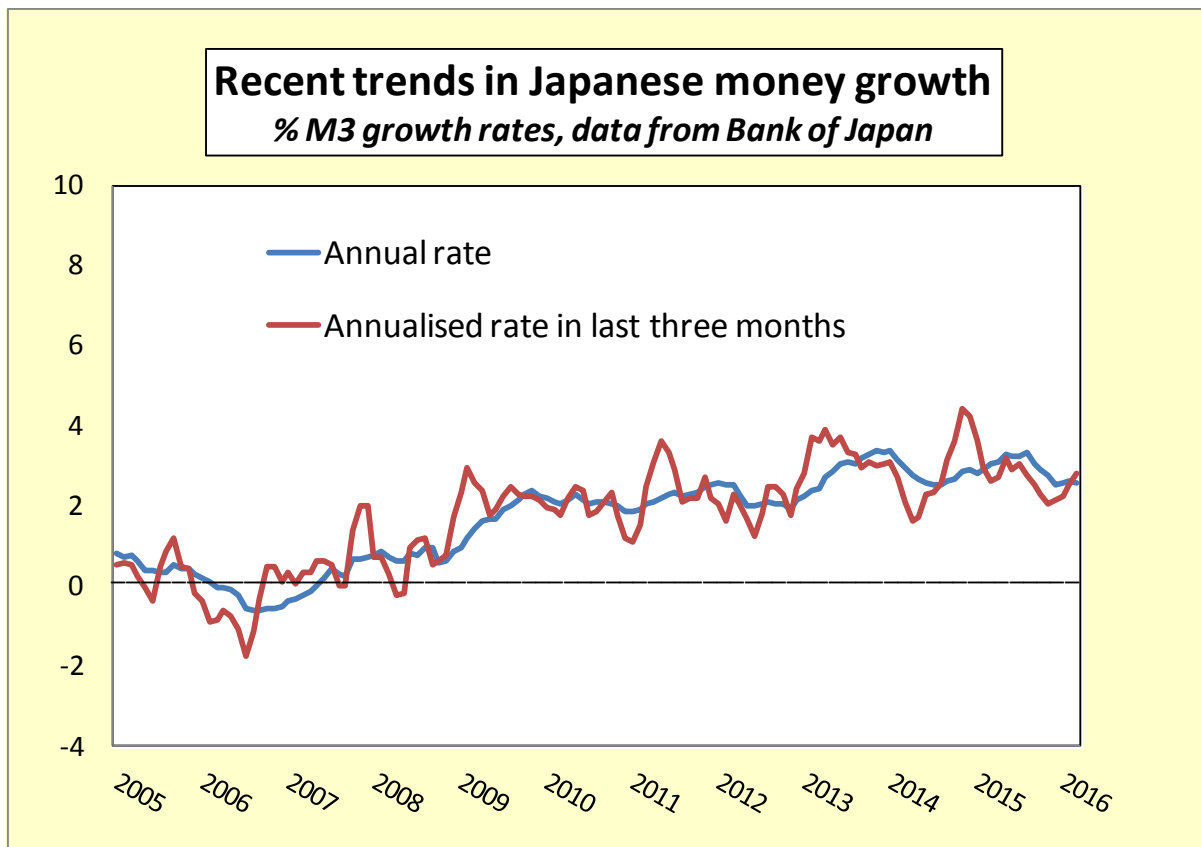
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Japan

	% annual/annualised growth rate:	
	M3	Nominal GDP
1971- 2015	6.3	4.3
Five years to 2015	2.7	0.4
Year to March 2016	2.9	n/a
Three months to March 2016 at annualised rate	2.8	n/a

Sources: Bank of Japan for M3 and IMF for GDP



Broad money growth is moderate

Summary: In the first four months of 2016 Japanese M3 grew at an annualised rate of 3.2%. (In April itself M3 was up by 0.3%, i.e., at an annualised rate of 3.6%.) These numbers are similar to those in recent years, but are – if anything – a little higher than those seen for most of 2015 and in that sense are an improvement. The Bank of Japan persists with its programme of so-called “quantitative and qualitative easing”, now with “negative interest rates” tacked on. QQE consists mostly in central bank asset purchases. To the extent that assets are being purchased from non-banks, the effect is to boost M3 growth. **The BOJ’s governor, Haruhiko Kuroda, has said that BOJ may purchase more “exchange traded funds” (i.e., packages of equities), which would indeed be predominantly from non-banks.**

The BOJ focus in their QQE announcements has been on the monetary base and bank credit, not on the quantity of money, broadly-defined. But any unbiased observer can see from the evidence that broadly-defined money is the relevant aggregate in the determination of Japan’s national income in nominal terms, just as it is in all countries. After the 2001 – 06 QQE exercise, Japan remained trapped in deflation. This time round, BOJ Governor Kuroda sought to double the monetary base. He achieved this target in January 2015, while the monetary base has grown substantially since then. Given these huge increases, the modest demand growth Japan has enjoyed in the last three years is ample proof that the monetary base does not necessarily have a strong bearing on the wider economy.

Kuroda’s principal objective was to raise inflation to 2%, but this has not happened. Deflation has been kept at bay, but only just. Once the effects of April 2014’s 3% hike in the sales tax had worked its way through the figures, the annual consumer price inflation rate drifted downwards from 0.6% in April 2015 to zero in September. It touched zero again in January 2016, rising to plus 0.3% in the year to February, but was minus 0.3% in April. Of course the falls in energy prices have been a one-off, non-recurring influence here, but the BOJ may be more concerned by the strength of the yen. Roughly speaking, the yen has appreciated by over 10% since August 2015, which will tend to weaken upward pressure on prices.

Bank lending to the private sector has been not been responsive to the excess bank cash reserves created by QQE. Throughout the programme Japanese banks have been sitting on their greatly-increased cash assets. In view of the perhaps too gentle pace of demand growth, the BOJ remains committed to policy easing. Kuroda has said that the BOJ may step up its purchases of ETFs, which would have the effect of boosting broad money directly. However, there is no sign in any of BOJ policy statements or documents of any realization that the growth rate of nominal GDP is determined by the growth rate of the quantity of money, broadly-defined.

Tim Congdon
31st May, 2016

	% annual growth rate:	
	M3	Nominal GDP
1981 – 1990	9.2	6.2
1991 - 2000	2.4	1.3
2001 - 2010	1.1	-0.5
Five years to 2015	2.7	0.4



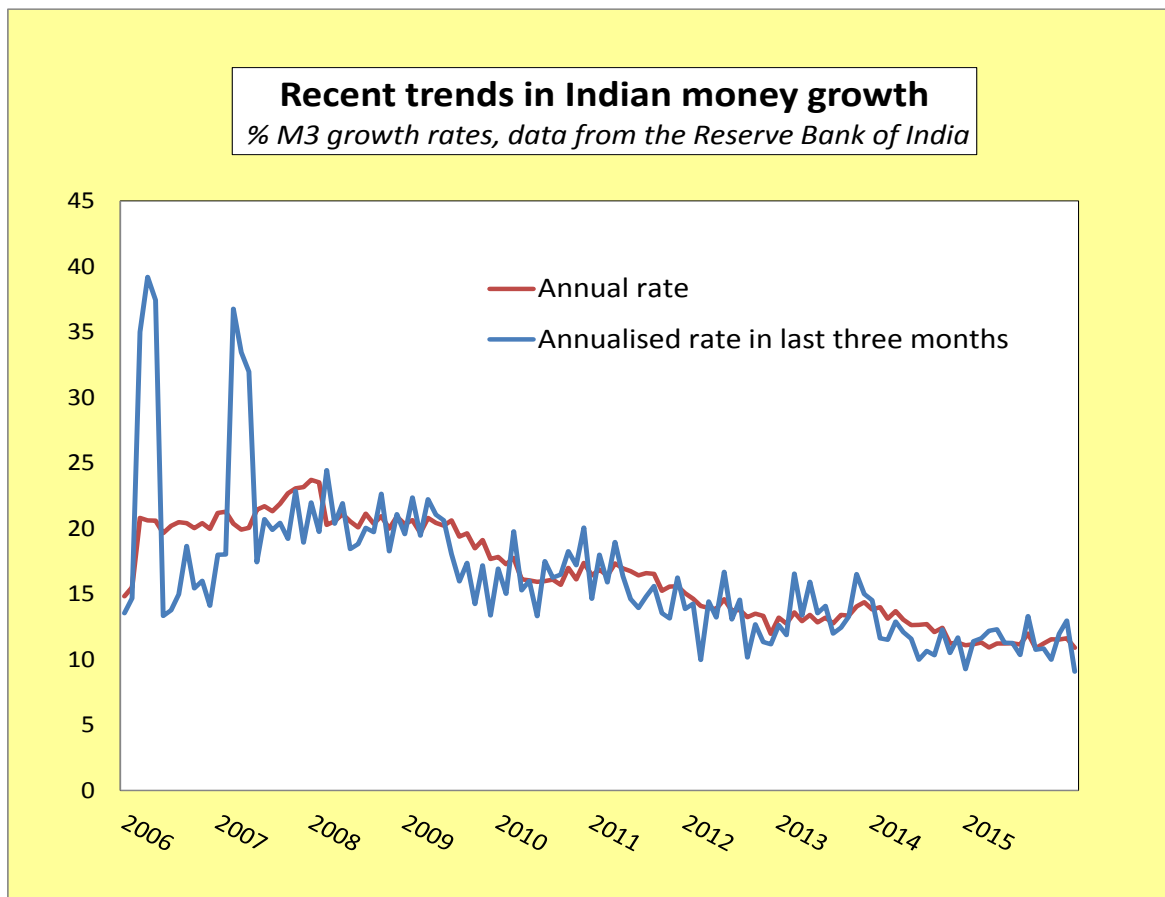
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India

	% annual/annualised growth rate:	
	M3	Nominal GDP
1991- 2014	16.5	13.8
2010 - 2014	14.2	14.4
Year to March 2016	10.5	n/a
Three months to March 2016 at annualised rate	9.1	n/a

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



Money growth slips in March, but inflation still a worry

Summary: Indian money growth has a seasonal pattern, with March usually being a month recording an above-average increase. In March 2015 M3 climbed by 1.3% before seasonal adjustment. **But in 2016 the increase was only 0.3% on the same basis. The result was a fall in the annual rate of increase to 10.5%, which compares to an annual rate of increase for most of 2015 of 11% or more. The March dip in money growth may be a blip, but it argues against expectations of any growth acceleration from India's current benign macroeconomic situation.**

The Reserve Bank of India has pursued an anti-inflationary monetary policy in recent years, with gradual but persistent declines in the rate of broad money growth. (See the chart opposite.) The current RBI governor, Raghuran Rajan, a former chief economist at the International Monetary Fund, assumed office in September 2013 during a period of rupee depreciation and anxieties about rising inflation. He is regarded as a successful governor, as the rupee has stabilized and inflation has moderated.

The increase in the consumer price index was 5.4% in the year to March, above the target of 5% for March 2017, if not dramatically so. However, hopes of further reductions in interest rates were not helped by the latest inflation news. India has seen an interesting debate in the last few years about the relative significance of the consumer price index (which has been rising) and the wholesale price index (which has been falling). But the wholesale price index may soon be edging upwards again, as the benefits of the falling oil price to January 2016 are replaced by the oil price rise that has been under way since then.

In the last few years the annual rate of broad money growth has been remarkably stable, in the low double digits, on its downward trend. Given that the "banking habit" is still spreading in India (which causes money to grow faster than GDP) and that the trend rate of real GDP growth may be 6% or more, a broad money growth rate of 10% - 13% a year is consistent with low inflation, and steady growth in demand and output. In March money growth was positive, but weak by Indian standards, and the annual rate of growth fell to 10.5%. The figure may be a blip, but the data need to be watched.

The Reserve Bank of India followed up the four rate reductions in 2015 with a further quarter-point reduction on 5th April. Even at 6.5% India's benchmark rates remain much higher than in many developed economies. Governor Rajan has become a controversial figure, as he has ventured remarks on policy issues distant from money and banking, and it is not certain he will be re-appointed for another two-year term.

Tim Congdon

31st May, 2016

	% annual growth rate:	
	M3	Nominal GDP
1991 - 2000	16.9	14.4
2001 - 2010	17.3	13.6
Four years to 2014	13.4	12.9



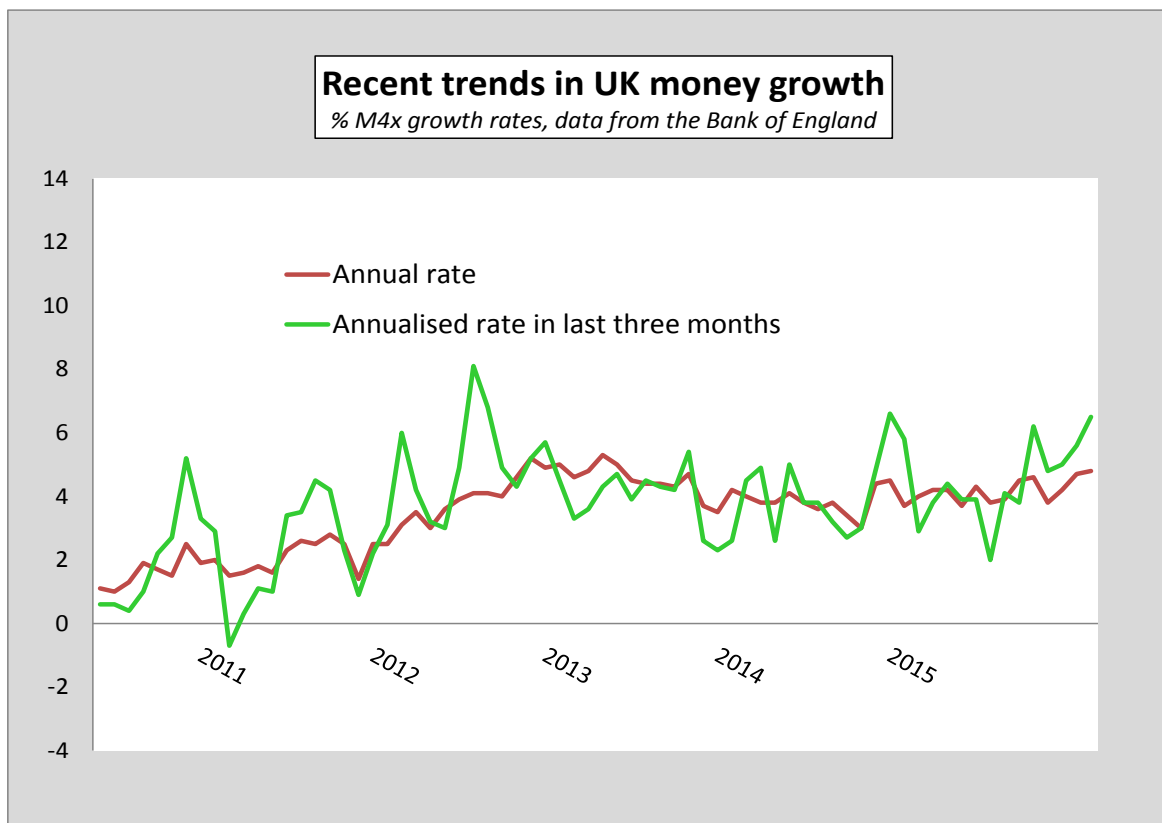
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UK

	% annual/annualised growth rate:	
	M4x/M4 before 1997	Nominal GDP
1964 – 2015	10.0	8.2
Five years to 2015	3.7	3.6
Year to March 2016	4.8	n/a
Three months to March 2016 at annualised rate	6.5	n/a

Sources: Bank of England and Office for National Statistics.



Upturn in M4x growth in first quarter of 2016

Summary: In the three months to March 2016 the quantity of money, broadly defined on the M4x measure, increased by almost £25.7b., following a rise of £21.7b. in the previous three months (i.e., in the three months to December 2015). The annualised quarterly rate of broad money growth in March was 5.6%, compared with 4.8% in December. On this basis, broad money growth is currently higher than the average for 2011-15. The numbers are quite strong and owe nothing to QE operations. In February and March bank lending to the genuine non-bank private sector (i.e., ignoring intermediate “other financial corporations”) were £20.7b. and £14.8b. respectively, two very robust figures. The lending surge – due to the stamp duty tax deadline for buy-to-let home-buying – is likely to prove temporary, but the data need to be watched.

For much of the period since the end of QE in 2012 the annual rate of M4x growth has been remarkably stable. It has fluctuated within a narrow 3% - 5% band. The monetarist argument is that low and stable money growth over the medium term would result in low inflation, with demand and output growth steady. This is what has happened. In fact, the last few years have seen the lowest increases in both nominal GDP and the price level, over a sustained period, since the 1930s.

Early 2016 has seen the recovery continue, with signs of buoyancy in credit to the private sector which is related to borrowing to beat the increase in stamp duty for buy-to-let home-buying. Mortgage approvals for house purchase fell slightly from 73,527 in January to 73,195 in February and again to 71,357 in March, but the numbers are still higher than the average of 70,990 over the previous six months. The increase in the stock of mortgage lending stood at 3.4 % in the year to March, up on the 2.8% in the year to January. Lending to corporates fell back in March, after good gains in January and February. Much-hyped fears about “Brexit” may be a consideration here, but business surveys seem to be barely affected by the headlines and media hubbub. (The latest survey from the Confederation for British Industry has similar balances on output and business optimism to those of a year ago.)

Money growth indicators are therefore healthy for the UK economy, and argue against pessimism about growth in demand and output in the rest of 2016. The annual inflation rate stood at 0.3% in the year to April, down from 0.5% in March. The recovery in commodity prices, especially oil, will hit inflation measures in the next few months, but it is worth emphasizing that downward pressures on cost persist in many parts of the economy. For example, the wholesale price of electricity has dropped to under £40 per MW hour compared with over £50 per MW hour for nearly all of 2013. Given the absence of immediate inflationary pressures, base rates look unlikely either to rise or fall in the short term. But the revival in bank credit to the private sector needs to be watched.

Tim Congdon
31st May, 2016

	% annual growth rate:	
	M4/M4x	Nominal GDP
1964- 2015	10.0	8.2
1991 – 2000	7.5	5.9
2001 – 2010	7.0	4.2
Five years to 2015	3.7	3.6