

## A note on recent money trends in the Eurozone and Japan

Dear former subscribers to International Monetary Research Ltd.,

One of my consistent themes is that the money aggregate relevant to the determination of national income *and wealth* – and so of the price levels of goods and services, *and assets* – must be broadly-defined to include *all* relevant bank deposits. This insistence on the all-inclusiveness of the chosen aggregate is driven by two considerations.

Analytically, the key propositions in monetary economics are implications of a branch of economics known as ‘general equilibrium theory’. This body of theory is general, in that it embraces *all* the categories in a hypothetical economy and sees how they fit together. (Indeed, changes in broad money are the fundamental long-run driver of asset prices, which is the reason that the subject matters so much in the investment management world.) To exclude any type of money – such as time deposits or wholesale balances – would not only be contrary to the spirit of the exercise, but would also beg the question of why the excluded types of money were not relevant to national income or wealth.

### G20 - money and nominal GDP growth rates, 1980 - 2013

% average annual growth rates

	Broad money	Nominal GDP
Argentina	18.5	16.3
Australia	9.5	7.7
Canada	6.9	5.6
China	17.1	13.5
Eurozone	5.4	3.2
Germany	6.3	4.4
France	6.1	5.1
India	16.5	14.4
Indonesia	17.5	18.4
Italy	6.7	7.4
Japan	4.1	2.1
Mexico	23.6	20.8
Russia	31.2	25.2
Saudi Arabia	10.2	9.7
South Africa	14.3	13.5
South Korea	17.9	12.1
Turkey	55.8	50.9
UK	9.1	6.4
USA	6.5	5.6

Source: IMF *International Financial Statistics*

Empirically, the matter is more straightforward. When long runs of data are examined, broad money fits the facts much better than narrow money. Friedman and Schwartz found this result in their long-run empirical work, and – in my view – it is inescapable to anyone open to the evidence.

But a large number of economists are deluded by a textbook theory which claims that the quantity of money (i.e., a broadly-defined aggregate, dominated by bank deposits) is a multiple – indeed, a stable and predictable multiple – of ‘the monetary base’. The monetary base can itself be defined in more than one way. It corresponds to the liabilities of the central bank that are either legal tender (i.e., the note issue) or readily convertible into legal tender (i.e., the balances maintained by banks at the central bank, also known as their ‘cash reserves’). It is usually equated with the central bank’s total liabilities, whether held by banks or non-banks, a concept which therefore includes the note issue in circulation with the general public, banks’ own vault cash (i.e., cash ‘behind the counter’) and banks’ cash reserves. But economists sometimes see the monetary base as consisting, above all, of banks’ cash reserves. They then proceed to claim that banks’ overall balance-sheet size is a multiple of these cash reserves and hence as ‘determined by the monetary base’.

The above may sound rather dreary and abstract. But the numerous economists who believe in the textbook multiplier view of money supply determination tend to recommend that central banks target the monetary base, not the quantity of money. The real-world consequences can have enormous importance. Indeed, it is critical in understanding the diverging paths at present of Eurozone and Japanese monetary policy, and hence in recognising the ultimate drivers of the relative inflation rates in the Eurozone and Japan, the cyclical behaviour of asset prices and demand, the exchange rate and so on.

In Japan one of the three arrows of Abenomics has been a programme of monetary easing, which has concentrated on *the doubling of the monetary base* in the two years from April 2013. The Japanese authorities characterised their actions as ‘qualitative and quantitative easing’, or QQE, perhaps because they thought (wrongly, as we shall see) their programme as akin to the QE programmes of the Federal Reserve and the Bank of England.

In the Eurozone matters are different, perhaps very different. The 22<sup>nd</sup> January QE announcement from the European Central Bank was silent on whether the ECB was targeting the base or the quantity of money. Its actual words were as follows,

The ECB will buy bonds issued by the euro area central governments, agencies and European institutions in the secondary market against central bank money, which the institutions that sold the securities can use to buy other assets and extend credit to the real economy. In both cases [i.e., the second- and third-round purchases of assets with the new money, and the extension of new credit], this contributes to an easing of financial conditions.

This is woefully ambiguous, and is (I am afraid) open to the interpretation that the ECB cares about both the base and bank credit *in their own right*. It cares about them, in other words, not because the base and bank credit affect the quantity of money, but because they are thought *by themselves* to affect macro outcomes. However, the ECB did emphasize that long-term bonds were eligible for purchase. The essence of the expansion of its ‘asset purchase programme’ was that it would relax eligibility criteria and might even buy paper with ‘a maximum remaining maturity of 30 years’. To the extent that the ECB purchases bonds from

non-banks, it adds directly to these non-banks' deposits and hence boosts *the quantity of money broadly-defined*. (Banks' bond holdings are predominantly at the short end. A fair generalization is that the only holders of government securities with more than 10 years to redemption are non-banks.) My impression is that the ECB is indeed mostly interested in broad money, even if its economists are confused about how money affects macroeconomic outcomes. In the introductory statement to the latest press conference (i.e., the press conference of 3<sup>rd</sup> June), the 'underlying growth of broad money' is given pride of place in the discussion. It is the first variable mentioned in 'the monetary analysis' paragraph.

In other words, the Bank of Japan is interested (if we take its public statements at face value) only in the effect of QQE on *the monetary base*, whereas the ECB envisaged its QE operations as having an immediate effect on *broad money*. The distinction is critical.

I have explained elsewhere (see, in particular, essay 4 in my 2011 book on *Money in a Free Society*) that circumstances ('the narrow liquidity trap') can arise in which banks respond to large increases in their cash reserves not by expanding their total assets (so that the ratio of cash to assets is little changed or totally unchanged), but by letting the ratio of cash to assets increase without limit. The impact of the ECB's QE operations on the money numbers is still uncertain at this stage. As they began in March 2015, we have only two months of definitely relevant data. However, in the table below I set out some key statistics. I show the annualized growth rates of broad money (i.e., M3) – in both Japan and the Eurozone – in the first four months of 2015, and over the two years since end-March 2013.

<b>Recent money growth rates in the Eurozone and Japan</b>		
Annualised rate of change in broad money (M3) in the periods specified,		
	<i>Eurozone</i>	<i>Japan</i>
Two years from end-March 2013	<b>3.4%</b>	<b>2.9%</b>
Four months from end-December 2014	<b>6.6%</b>	<b>2.4%</b>
Sources: European Central Bank and Bank of Japan		

The main points are obvious enough, but to summarize

1. The Bank of Japan (and the Japanese authorities more generally) have been outspoken over the last two years about the radicalism of their drive for monetary expansion, unlike the ECB which announced a meaningful QE commitment only in January 2015. But in the two years from end-March 2013 broad money growth in Japan and the Eurozone was roughly the same, although with the Eurozone a bit ahead.
2. The ECB has published money numbers for only two months of QE (i.e., for March and April), but an impact from QE does seem already to be evident. In March itself M3 was up by just over 0.3% and in April by 0.7%, implying an annualised growth rate of M3 in the QE-affected period of 6.5%. This is clearly higher (by about 3%,

i.e., 300 basis points) than in the two years to end-March and fits in with my analysis on 22<sup>nd</sup> January of the ECB's QE announcement. By contrast, the growth of broad money in Japan has faded in the closing months of its QQE exercise.

My conclusion – in short – is that the ECB appears to understand how to implement QE (i.e., buy assets *from non-banks* in order directly to boost *the quantity of money, broadly-defined*), whereas the Bank of Japan does not see the vital importance of focussing on broad money rather than the monetary base (i.e., because it has bought mostly short-dated paper *from the banks* to increase *the monetary base*). As people who follow my work will know, my worries about the Bank of Japan are of long-standing.

Where do we go from here? The Eurozone money figures will need to be watched month by month, but my initial verdict is that – as I suggested in January – a perceptible lift in the annual rate of growth of broad money is to be expected, perhaps of about ¼% a month or at an annualised rate of 3%. (As money growth was about 3% a year in the quarters running up to the inception of QE, we should be thinking about broad money growth of about 6% a year.) With very weak inflation, that will translate into a healthy rate of growth of real money, stronger balance sheets, higher asset prices, more buoyant demand, etc. That is indeed happening. If anything, markets and some of the Eurozone economies seem to have 'jumped the gun', with improvements in asset prices and demand visible when the broad money figures themselves have only started to register a better trend.

By contrast, I don't know what will now emerge in Japan. Abenomics has generated much excitement, but the excitement is disproportionate to the shift in the money growth rate. Since the equilibrium levels of national income and wealth are anchored to broad money in the long run, a reasonable interim verdict is that rhetoric and reality have been a long way apart, and QQE has been a flop. Of course, central bank research departments meet up and debate these subjects, and it is possible that the Bank of Japan will realize it has been barking up the wrong tree.

With best wishes,

A handwritten signature in black ink, reading "Tim Congdon". The signature is written in a cursive, flowing style with a large, prominent loop at the end of the name.

Professor Tim Congdon CBE

4<sup>th</sup> June, 2015