



INSTITUTE OF
INTERNATIONAL
MONETARY RESEARCH

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

On negative interest rates, the 'liquidity trap', and how money affects the equity market

*A presentation by Professor Tim Congdon CBE,
Chairman of the Institute of International Monetary Research,
in October 2020*

Can central banks run out of ammo?

- Two kinds of economic ailment – of pathologies of capitalism – said to be responsible for the exhaustion of monetary policy.
- **PATHOLOGY I: The zero lower bound**, i.e., the central bank rate cannot fall much beneath zero.
- **PATHOLOGY II: The liquidity trap**, idea developed by **J. M. Keynes** in his 1936 *General Theory*, i.e., the long bond yield cannot fall beneath a certain figure because expectations of a future yield rise would deliver a capital loss. (The phrase came from **D. H. Robertson**.)
- In either case policy-makers appear to be stumped....if you believe that monetary policy is defined by movements in ‘interest rates’.

The zero lower bound is not a problem 1.

- Contrary to much media commentary, the ZLB does not signify the exhaustion of monetary policy. It remains open to the central bank (and indeed the government) to create new money balances – i.e., new bank deposit liabilities to the non-bank private sector – when the central bank discount rate has dropped to zero.
- The addition of new money balances increases the equilibrium levels of national income and wealth proportionately, more or less,...in normal circumstances over the medium term.
- **The relationship between money and national income is more reliable than that between any interest rate term or notion and national income.**

The zero lower bound is not a problem 2.

- **The central bank – or the government – can always create new money balances, whatever the level of interest rates.**
- **It has merely to borrow from the commercial banks and to use the loan proceeds to purchase something – indeed, anything – from the non-bank private sector.** That adds to the private sector non-banks' deposits (i.e., the quantity of money)...etc.
- It is not even necessary for the government to run a budget deficit. One advantage of these operations – central bank asset purchases from non-banks, 'quantitative easing', under-funding or whatever they may be called – is that they can deliver macro stimulus in the context of strong public finances.

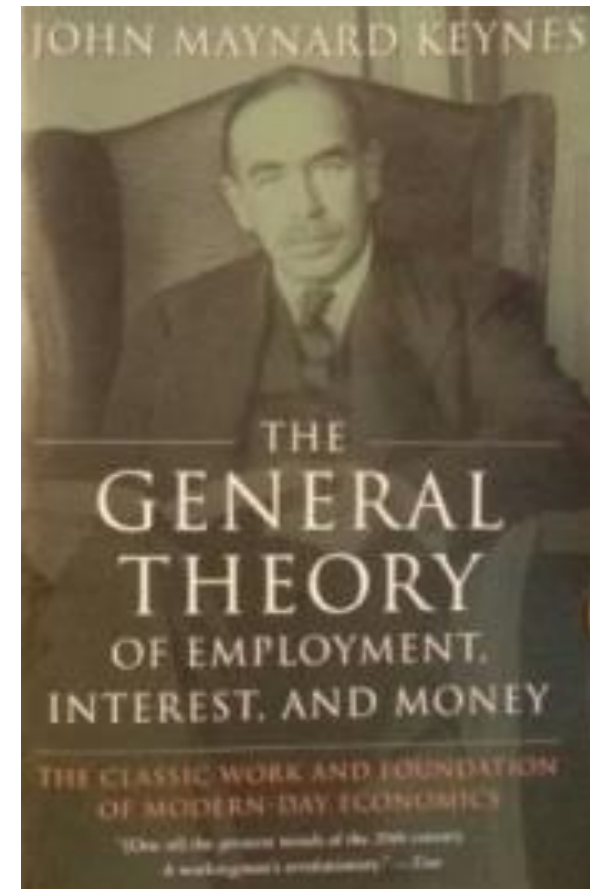
Negative interest rates are never needed – and may be counter-productive

- **Negative interest rates – which in practice amount to levying a small fine on banks' cash reserves – are always unnecessary and may be counter-productive.**
- The aim of the policy is to force banks into acquiring non-cash assets (e.g., loans to the private sector) by making them have losses on cash assets.
- But i. negative interest rates mean, in practice, **a levy on banks' cash reserves**, which hits their profits (and hence their ability to retain profits and build up capital, to support new lending), and ii. negative interest rates also **lower the return on the interest-bearing part of banks' assets**, reducing the so-called 'endowment effect' from having non-interest-bearing deposit liabilities, which again hits profits (and hence their ability...etc.).
- Notice that nowadays – under the Basel III rules – banks have high capital loadings on some risk assets. They are punished by those high capital loadings if they lend; and they are punished by the fine on their cash reserves if they don't lend... **No wonder that in most developed countries banks are valued by stock markets at less than their underlying asset value (i.e., the apparent net worth of their capital and retentions).**

But what about our 2nd pathology?

– The liquidity trap

This arises when increases in the quantity of money do not lower bond yields (i.e., they do not lower 'the rate of interest' in this sense, which is quite distinct from the central bank rate). The explanation is that – at a very low bond yield – investors expect the next move in bond yields to be upwards, delivering a capital loss.

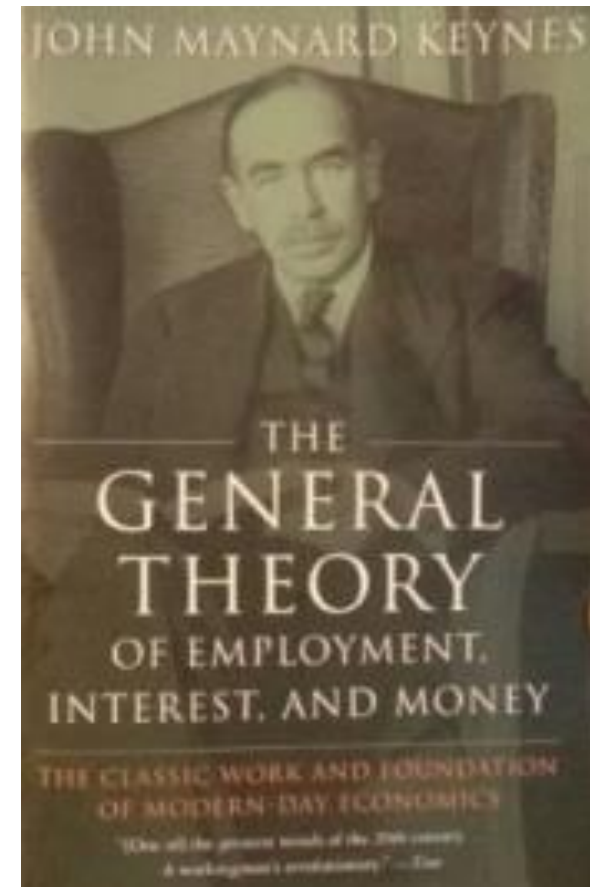


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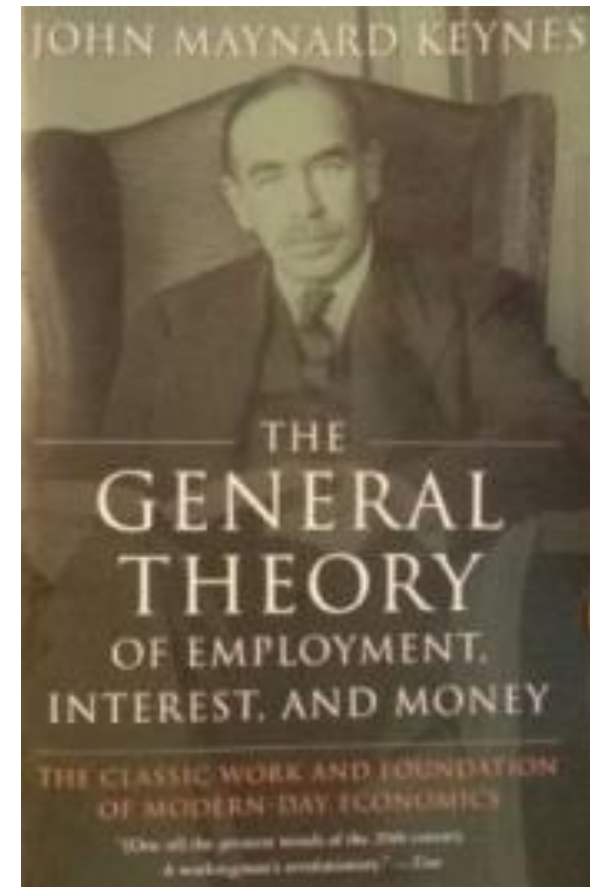
- In Keynes' words, "...money might be the drink that stimulates the system to activity", but "we must remind ourselves that there may be several slips between the cup and the lip. For whilst an increase in the quantity of money may be expected, *cet. par.*, to reduce the rate of interest, this will not happen if the liquidity preferences of the public are increasing more than the quantity of money."

Johnson and Moggridge (eds.) *Collected Writings of John Maynard Keynes*, vol. VII, *General Theory*, p.173.



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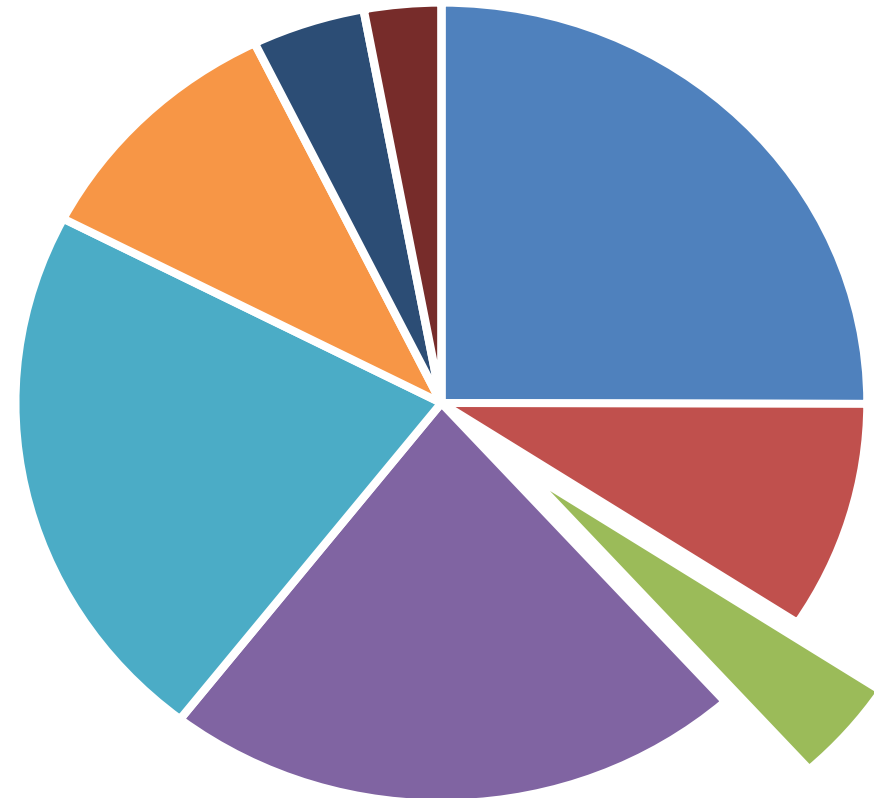
Notice that Keynes was not disputing the ability of the monetary authorities to increase the quantity of money. Not at all.



The gross wealth of US households at the end of 2019

- Real estate
- Unquoted business equity
- Bonds
- Life insurance & pension assets
- Equities (inc. mutual fund shares)
- Money held by households
- Consumer durables
- Other assets

Bonds, directly held by US households, were only 4.1% of their total assets.



The composition of US household wealth at end-2019

	<i>Value, at end- 2019, in \$ trillions</i>	<i>% of gross household wealth</i>
Real estate (houses, mostly)	33.5	25.0
Equities (inc. mutual fund shares)	29.6	22.1
Life insurance & pension assets	26.6	19.9
Unquoted business equity	12.3	9.2
Money held by households	13.6	10.2
Other assets	6.9	5.1
Consumer durables	5.8	4.3
Bonds	5.5	4.1
Total	133.9	

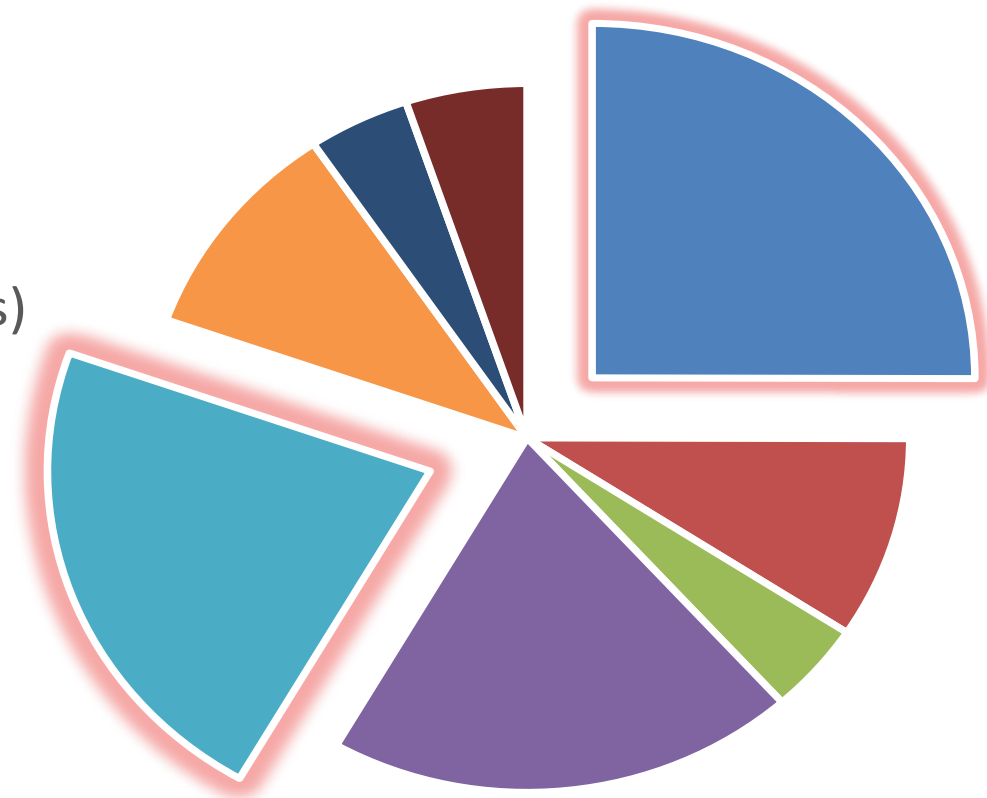
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The gross wealth of
US households at the end of 2019

**Real estate (houses)
and directly-held
equities were together
over 47% of wealth.**

- Real estate
- Unquoted business equity
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- Other assets



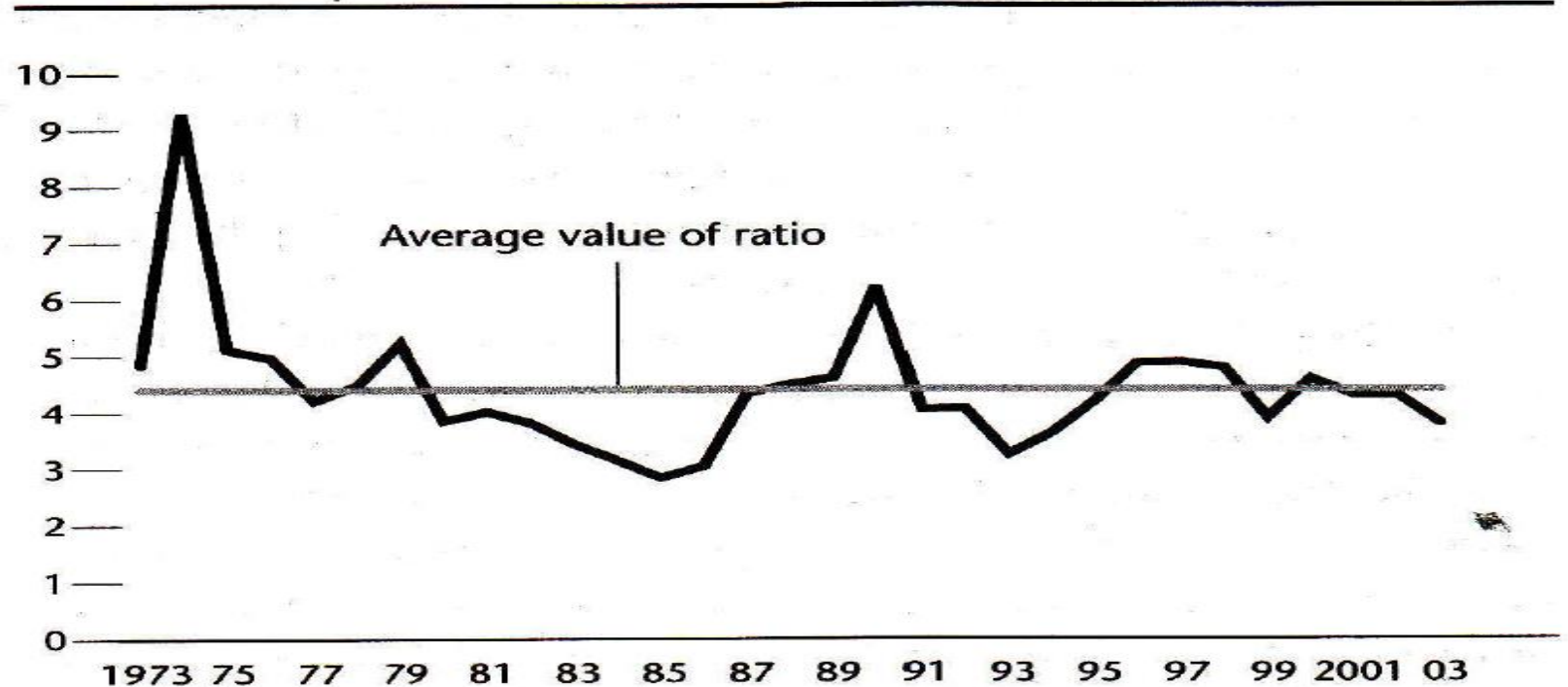
Money and asset prices

- When the quantity of money increases, that raises the equilibrium value of all assets, including
 - **Equities and real estate**, which have variable income (dividends and rents) that usually – although not always – grows in a dynamic capitalist economy,
 - Sometimes long-lived **‘things’ with a use value**, which obviously includes consumer durables, but also such items as works of art, vintage wine, vintage cars, copyrights etc., and
 - **Fixed-interest bonds**, which may be claims on either the government or private sector companies.

From Tim Congdon's *Money and Asset Prices in Boom and Bust*

In this 30-year period both the money held by UK long-term savings institutions and their total assets rose by 50 or so times. But the ratio between the two was much the same at the end as at the beginning.

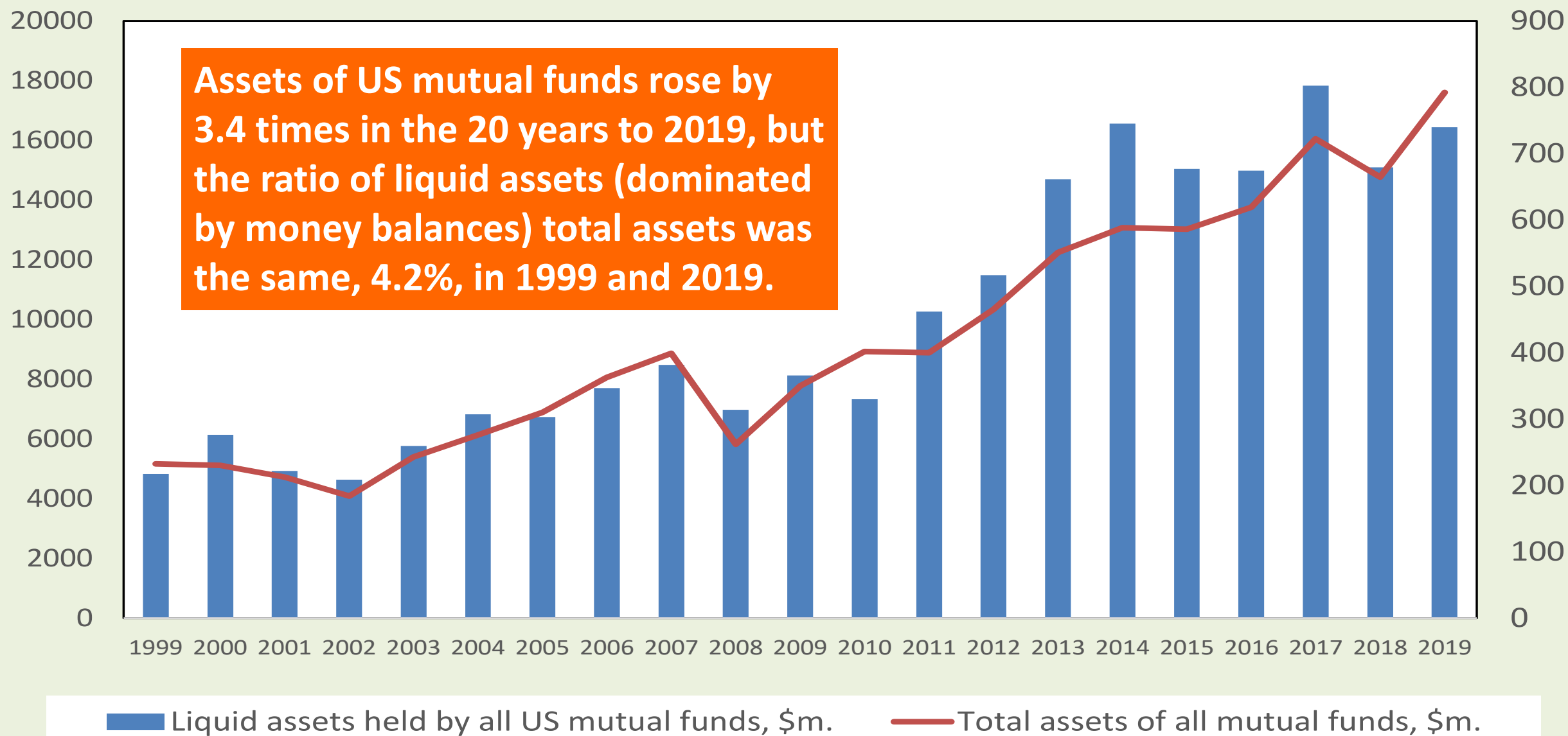
Figure 1 The institutional 'liquidity ratio' in the UK, 1973–2003
Ratio of liquid assets to total assets for life assurance companies and pension funds combined, %



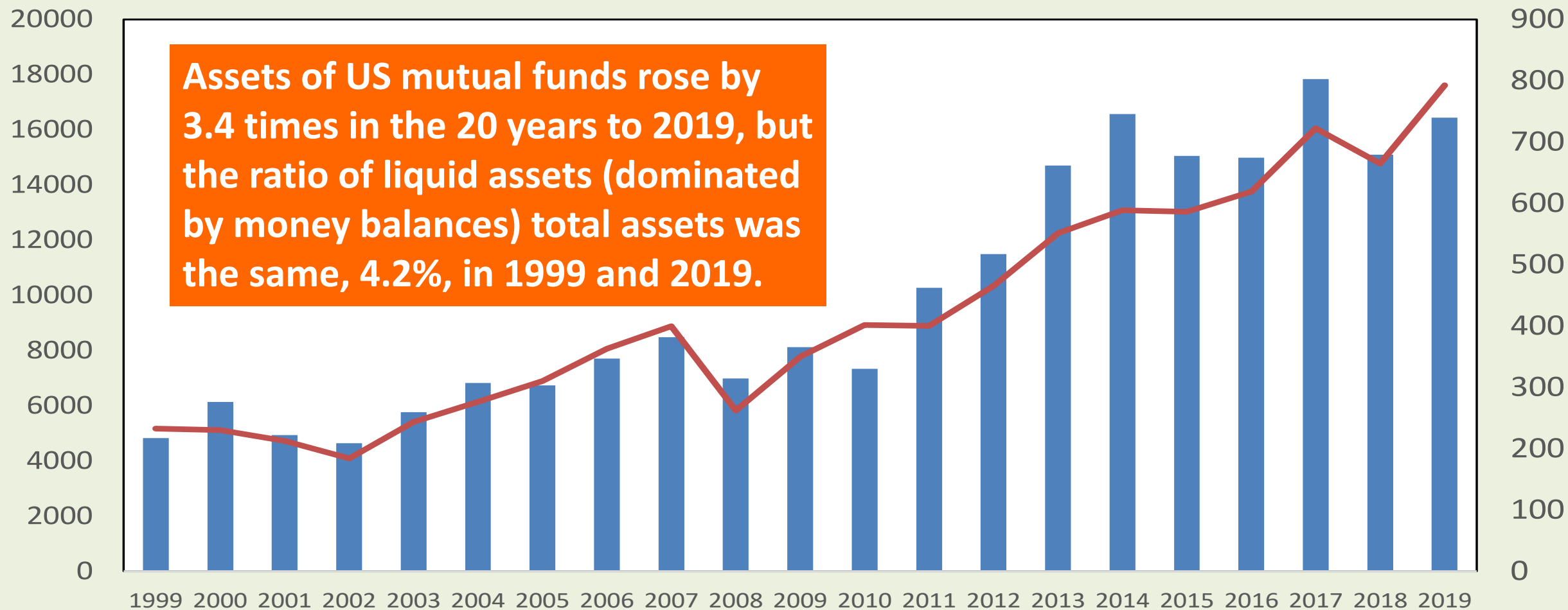
Sources: *Financial Statistics* (London: Office for National Statistics), various issues, and author's calculations

Note: Figure shows ratio of liquid assets to total assets at life assurance companies and pension funds combined

Liquidity in the US mutual fund industry, 1999 - 2019



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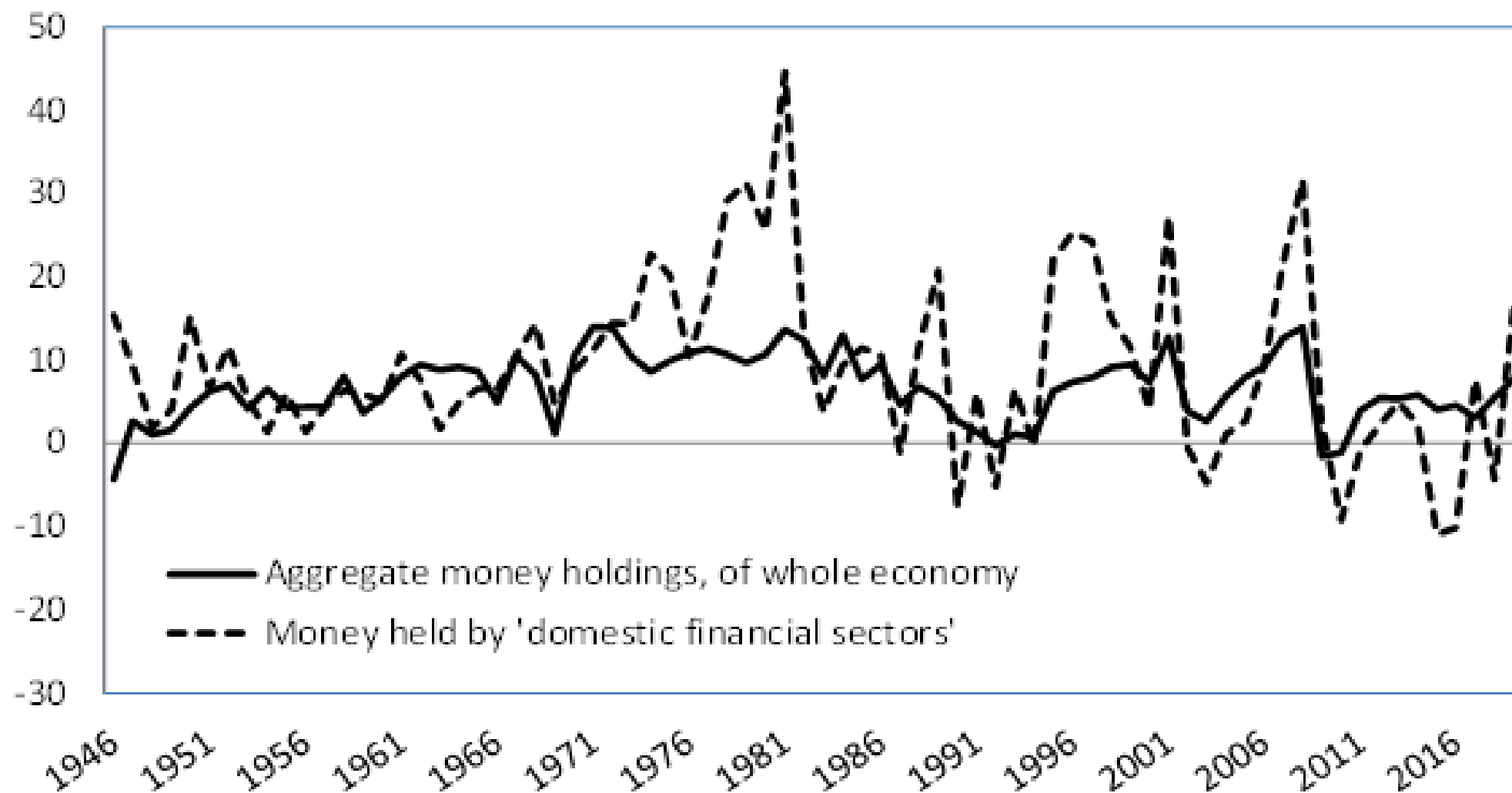


■ Liquid assets held by all US mutual funds, \$m. (Right-hand axis)

— Total assets of all mutual funds, \$m. (Left-hand axis)

**Figure 4: The contrasting volatility in the USA of
aggregate money and money held in the financial sector**

Chart is of annual % rates of change; for explanation, see text



Why equity markets tend to overshoot

- Long-term savings institutions tend to have relatively stable ratios of money to total assets.
- The amplitude of fluctuations in the growth of money held by long-term savings institutions is greater than that of fluctuations in the growth of aggregate money.
- The combination of these two features of a capitalist economy is responsible for **fluctuations in equity markets being greater than in national income.**
- **The fluctuations impact on expenditure. This is the money-equities-interaction channel at work.**

Two real-world examples: 1. The UK in 2009

- In the UK the Bank of England announced on 5 March 2009 that it would initiate operations with the Asset Purchase Facility that had already been created. ('Markets and operations' section, *Bank of England Quarterly Bulletin* [London: Bank of England], Q2 2009 issue, p. 69 and pp. 81 – 86.) The policy adopted was widely termed “quantitative easing”. **The FTSE 100 share index hit a six-year low of 3512 in early March. By the end of the year it had risen by 54 per cent.** (Philip Scott ‘FTSE 100 rallies 22% in 2009, report for www.thisismoney.co.uk website on 31 December 2009.)

Two real-world examples: 2. The USA in 2020

- In the USA the Federal Reserve made an announcement on Sunday, 15 March, that it would over the next week acquire \$500 billion of government securities and \$200 billion of agency-backed mortgage securities. (This would by itself increase broad money by over 3%, although the Fed did not express its intentions in these terms.) In the month from 16 March the S & P 500 index rose by 16.6 per cent; in the three months from 16 March it rose by 28.5 per cent.

How plausible is Keynes' 'liquidity trap'?

- The 'liquidity trap' idea depends on the realism and practical effectiveness of the liquidity preference theory of ~~'the rate of interest'~~ bond yields.
- The liquidity preference theory of bond yields is the money-bonds-interaction channel.
- **In practice, in any real-world capitalist economy there is a money-equities-interaction channel, a money-commercial-property-interaction channel, a money-works-of-art-interaction channel and so on, for all asset classes.**
- Real-world investment choices are not wholly and exclusively between money and fixed-interest bonds. Of course not.

Monetary policy can never be exhausted – and central banks can never run out of ammo

- Even at the zero lower bound, central banks can always expand the quantity of money. Increases in the quantity of money raise equilibrium national income and wealth more or less proportionately.
- **Negative interest rates are not needed to overcome the zero lower bound.**
- Keynes' liquidity trap (which is about bond yields) is an idea separate from that of the lower zero bound (which is about the central bank rate). **The notion of a liquidity trap is viable if investors are limited to a choice between money and bonds. But that is not the real world. Allow in other asset types – equities, real estate and so on – and increases in the quantity of money always raise equilibrium asset prices and boost the economy.**