International Monetary Monitor

Date: 02/09/2022
Newsletter No. 4

Can Japan Escape its Low Interest Rate Equilibrium?

By John Greenwood

Introduction and Overview

- Central banks can make two kinds of mistakes with interest rate policies: they can cut rates but fail to increase money growth, or they can raise rates but fail to slow money growth. The Bank of Japan (BOJ) made a critical error of the first type in the early 1990s and has never been able to reverse its effects.
- The BOJ's QE policies have been a case of wasted ammunition. By purchasing securities from banks instead of non-banks, BOJ failed to create money and therefore monetary policy never had the stimulative effect widely expected.
- The reason for the BOJ's failure to correct its policies is that BOJ officers and economists are in the grip of Keynesian orthodoxy. When they think about the transmission mechanism, they have in mind the downward-sloping Liquidity Preference Function or the IS/LM curves, the former being in direct conflict with world experience and the latter being too theoretical to be of policy use.
- The problem is that although interest rates can be a driver of monetary developments, they are also a symptom of them, and in this latter respect, they lag far behind changes in money growth. This means central banks need to focus primarily on money growth, and only secondarily on interest rates.
- A series of market-relevant conclusions stems from this analysis: low inflation with continued yen weakness, subdued asset prices, low bond yields, and 0.5% annual real GDP growth at best – i.e., after the current brief episode of just over 2% inflation, the low-rate equilibrium of the past 30 years will resume.

"*Monetary policy is not about interest rates; it is about the growth of the (broad) quantity of money*" (Milton Friedman)

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The IMM Newsletter offers economic research written by John Greenwood, founder and Chief Economist of International Monetary Monitor Ltd. John was also the publisher, editor and lead author of **Asian Monetary Monitor**, a bi-monthly publication that he operated for 20 years from Hong Kong between 1977 and 1996. He was a pioneer of monetary research in Asia. From 1999 to 2021 he was Chief Economist at Invesco, based in London.

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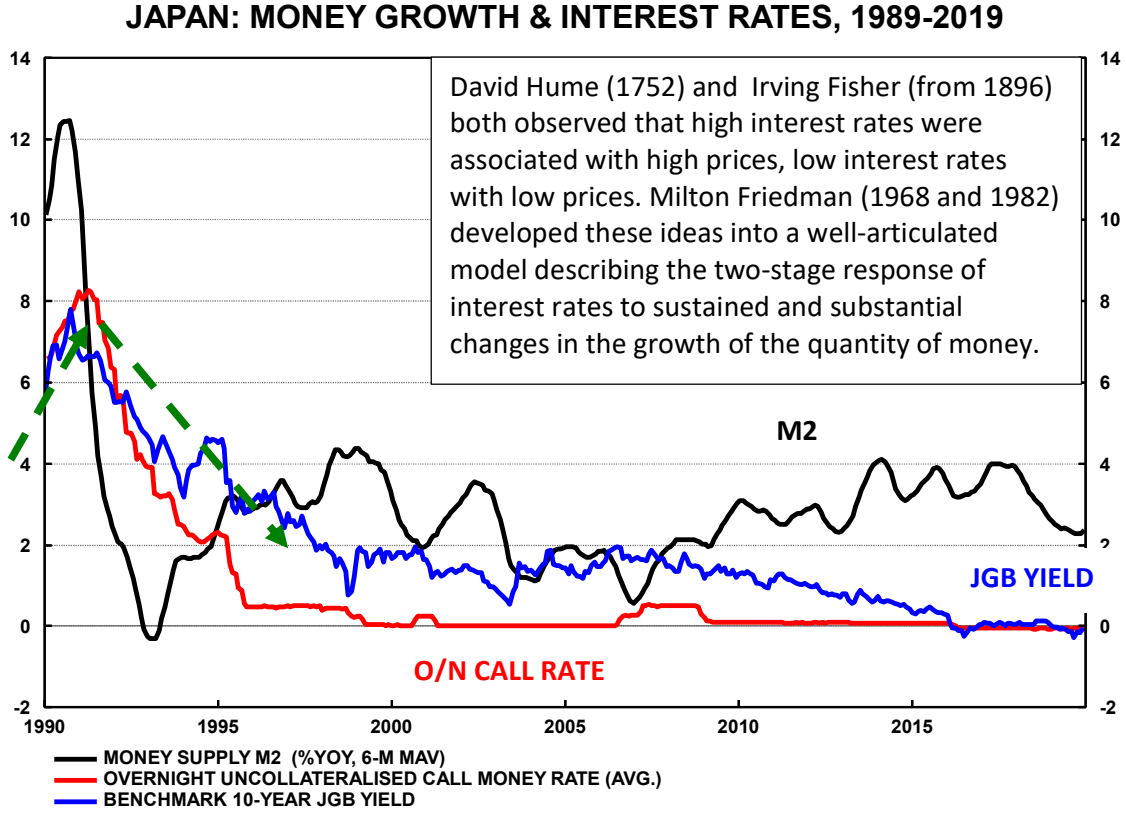
1. Introduction: The 2-Stage Process for Interest Rates and the Mistakes Central Banks can Make[1]

Japan was not always a low interest rate economy. Until the July-September quarter of 1977 Japanese short-term rates and long-term yields always exceeded US rates. However, from that date onwards Japanese interest rates have generally always been below US interest rates. The reason is that Japanese money growth has been held down, inflation has therefore fallen very low, and consequently since 1977 Japanese interest rates have almost always been below US interest rates. Low interest rates are a ***symptom*** of slow money growth, ***not*** an indication that money is easy. Crucially, the low interest rate environment of the past 30 years came about as a result of a series of policy choices or errors by the Bank of Japan (BOJ) in the early 1990s – decisions that the BOJ has never been able to reverse. We need to understand why.

Figure 1: How Japan Entered its Low Interest Rate Equilibrium



Source: Refinitiv Datastream

The first concept to understand is that during the business cycle interest rates follow a two-stage process, initially observed by David Hume and Irving Fisher, and later developed into a formal model by Milton Friedman. If monetary policy (i.e., money growth) is tightened, the first effect of slower money growth is for all rates to ***rise***, but the second and more important -- more permanent -- effect is for market interest

[1] The author is grateful for helpful comments from Prof. Steve H. Hanke on an earlier version.

rates to ***fall***. Conversely, if monetary policy (i.e., money growth) is eased, the first effect of faster money growth is for all rates to ***fall***, but the second and more permanent effect is for market rates to ***rise.***

How can it be that rates rise as a result of easier money? Because, in the second stage, after asset prices increase, the economy accelerates, the demand for credit expands, and ultimately inflation rises. The combination of stronger demand for credit and higher expected inflation together ***raise*** market interest rates.

Conversely, how can it be that rates fall as a result of tight money? Because, in the second stage, after asset prices fall, the economy slows, the demand for credit declines, and ultimately inflation falls. The combination of weaker demand for credit and lower expected inflation together ***reduce*** market interest rates.

The latter process was exactly the sequence that Japan went through after the asset bubble burst in 1989-91. The first stage, indicated by the first green dashed arrow in Figure 1, was when the BOJ raised the Official Discount Rate between May 1989 and August 1990 from 2.5% to 6.0%, and M2 started slowing dramatically from 12% year-on-year in late 1990 and to 2.5% by December 1991. Interest rates, including market rates, increased in 1990 and stayed high in 1991 due to slower money growth.

The second stage followed in 1992-95 (and beyond that), as illustrated by the second green dashed arrow in Figure 1. The uncollateralised overnight rate fell from a peak of 8% in June 1991 initially to 2% in the spring of 1994, but M2 money growth continued to slow from 2.5% in December 1991 ultimately to -0.3% by December 1992. ***Money growth was now very tight, but interest rates were falling for the reasons cited above.***

At this point it was important for the BOJ to make the right decisions about the future. The Governor of the Bank of Japan, Mr Hayami, was insistent that inflation, which had reached 4% in November 1990, should be brought down. This meant—at least initially in 1991-92 — that the BOJ kept money markets tight. Although the equity market had peaked in December 1989 and real estate prices peaked over a year later, the Bank of Japan continued raising interest rates through August 1990 and did not start to lower them until July 1991. Instead of easing up as the economy weakened and inflation fell below 2% in 1992, the BOJ had moved too slowly.

On the face of it, the BOJ seemed to be doing the right thing: while 10-year JGB yields had fallen from almost 8% in September 1990 to 4.6% by December 1992, and the overnight call rate had fallen to 3.9%, the BOJ's Official Discount Rate (ODR) had already been lowered to 3.25%. It appeared that the BOJ was leading market rates downward. However, in the background, money growth had collapsed at an unprecedented rate. M2 – the fuel for the preceding asset bubble – had slowed from over 12% year-on-year growth between March and September 1990 to negative year-on-year between October 1992 and March 1993 (see Figure 1). But the BOJ did not react to this disaster by accelerating its rate cuts. In effect, it was making the mistake outlined in the lower right corner of the matrix in Figure 2, following market rates downward.

Figure 2: Matrix of Possible Mistakes by Central Banks (or, When Interest Rate Policies Can Go Wrong)

	SUCCESSFUL POLICIES When CB Leads the Market	UNSUCCESSFUL POLICIES When CB Acts in Line with the Market or Follows the Market
CB RAISES RATES	**Tightens monetary conditions *AND* Reduces Money Growth**	**MCIs tighten, *BUT* Money Growth remains unchanged** Examples: US in 1965, 1984-85 and 1994-95
CB LOWERS RATES	**Eases monetary conditions *AND* Increases Money Growth**	**MCIs ease, *BUT* Money Growth remains unchanged or declines** Examples: (1) BOJ in 1991-95. (2) The GFC when interest rates were reduced to the zero bound, but money growth collapsed.

Note: *MCIs refer to monetary conditions indices, constructed indices that typically contain yields, spreads, asset prices, and exchange rates but seldom, if ever, quantitative measures of money growth. CBs are central banks.*

The right thing to do would have been for the BOJ to cut rates more aggressively ahead of market rates, making sure – possibly by conducting open market purchases of securities – that M2 money growth remained positive, or better still, between 4-6% year-on-year. This would have reduced the severity and duration of Japan's first post-war episode of extended negative real GDP growth. More importantly, it would have reduced the risk of decline into deflation in 1994-2007, a process that was interrupted only briefly by the hike in the Consumption Tax in April 1997 which pushed the CPI up for a year.

Instead, Japan's M2 money growth, short-term interest rates, and bond yields have remained low ever since the early 1990s. On the basis of the analyses by Irving Fisher and Milton Friedman, Japan's current low interest rates today are ***not*** an indication of an easy monetary policy, but rather reflect the second stage effects of persistently tight monetary policies – i.e., that at any point in time money growth rates over the preceding two years have been too low, going all the way back to the early 1990s. In Irving Fisher's terms, and to repeat, Japan is therefore ***not*** in the first stage of an easy money policy; rather it is still in the second stage of a tight money policy.

Yet economists, central bankers and journalists almost universally still refer to BOJ policies as exceptionally loose (see box below). **These observers do not appear to understand that not only is inflation a lagged effect of past monetary**

growth, but so too are interest rates. As with many things in monetary economics, the lagged effects of money growth are a source of major confusion to policymakers and analysts who act as though the current level of policy rates is set exclusively by the central bank in real time, whereas in truth the prevailing rate is an amalgam of the impact of past money growth rates, the current supply and demand for funds, and expectations for inflation which are also indirectly a product of past money growth rates.

The FT of July 4, 2022 carried a long article by Kana Inagaki and Leo Lewis entitled, **"Global Inflation: Japan faces a moment of truth. The collapse of the yen piles pressure on the central bank to change course after decades of loose monetary policy."** Global inflation: Japan faces a moment of truth | Financial Times

In response to their in-depth article, I submitted this to the Comments on the article:

This entire article makes the classic mistake of using interest rates to judge the stance of monetary policy. Low interest rates do not necessarily indicate an easy money policy.* From 1992 until the onset of Covid, Japanese monetary growth (M2) averaged just 2.6% p.a. -- about half the rate required to reach the 2% inflation target. Yield curve control and negative rates are both misdirected policies. The fundamental problem is that when the BOJ buys JGBs it buys them from banks instead of non-banks. If, like the Fed or the BOE, it bought them from nonbanks, this would create new money. Instead, by buying from banks it has simply done an asset swap with banks but created no new money. Until Governor Kuroda corrects this error, deflation or low-flation will persist.

**To check the truth of this, ask yourself which countries of the world have the lowest interest rates. The answer is countries like Switzerland, the Eurozone and Japan. Why? Is it because they have the easiest monetary policies? No, it is because they have been operating "tight" money policies in the sense of keeping down the rate of monetary growth, and low interest rates reflect the fact that they have deflation or low inflation as a consequence. Interest rates are a symptom, not a cause or driver.*

2. Japan's First Attempt at QE Policies, 2001-06

Throughout the 1990s the Japanese authorities (the government and Bank of Japan together) relied primarily on Keynesian fiscal policies in a futile attempt to pull Japan out of its slump. Year after year they planned large headline deficits for the main budget, followed by supplementary budgets that increased the deficits. As a result. the ratio of government debt to GDP began to increase. But Keynesian fiscal pump-priming failed to revive the economy or restore price stability. For its part, the Bank of Japan presided over historically low rates of growth of M2 (the black line in Figure 1) and as a result interest rates (in red) and bond yields (in blue) also stayed low. The result was the first "lost decade" of sluggish economic growth with deflation.

With interest rates being lowered to zero – known as "ZIRP" – in the 1990s, the Bank of Japan seemed to have reached the limits of conventional interest rate policies

available to central banks. On March 19, 2001, the BOJ embarked on the first experiment in quantitative easing (QE) in the 21st century, a policy which was maintained until its abandonment in April 2006.

To implement the policy the BOJ purchased government debt, mainly in the form of short-term bills known as *tegata*. However, instead of purchasing the bills from the government (which was outlawed by legislation introduced during the post-war occupation) or from savings institutions such as life insurance companies and pension funds, the BOJ chose to purchase the debt largely from banks. The reasons given were legalistic and simplistic: (1) only banks and government entities were permitted to maintain accounts with the BOJ, so it would not be feasible for the BOJ to deal with other entities, and (2) Japan's financial system was dominated by banks, with only a small or minor role for non-bank finance, and therefore it was natural for banks to be the counterparties when the BOJ purchased securities.

This choice has turned out to be disastrous not only for the first attempt at QE in 2001-06 under Governors Hayami and Fukui, but also for the reluctant adoption of QE under BOJ Governor Shirakawa in 2010-13, as well as during the much more ambitious and grandiosely named "QQE" (quantitative and qualitative easing) conducted under BOJ Governor Kuroda as part of PM Abe's "Abenomics" from March 2013.

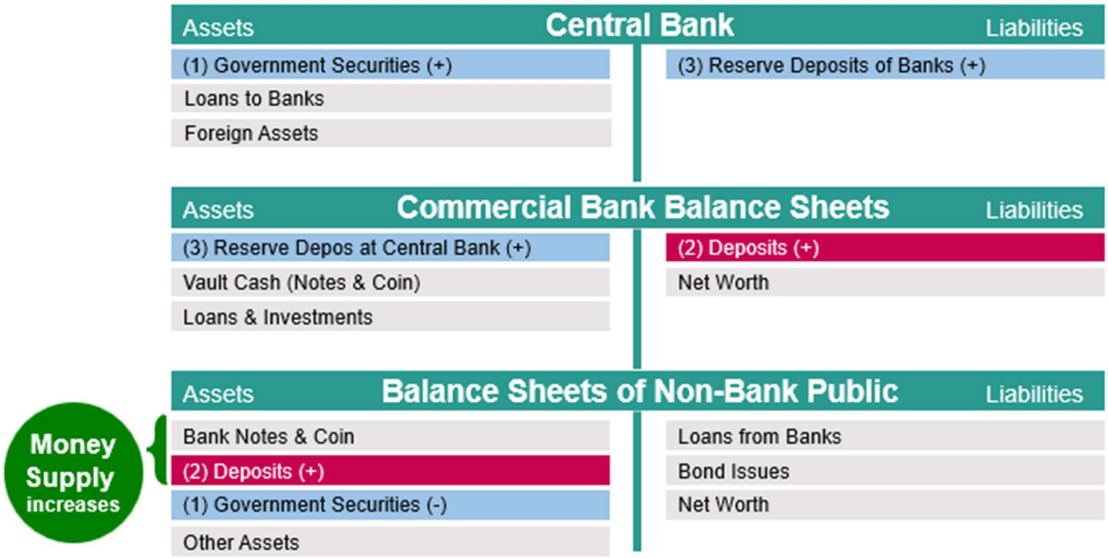
To see why, it is necessary to work though the transactions resulting from a set of QE purchases to see their impact on the balance sheets of the central bank, the commercial banks, and the balance sheets of the non-bank public (Section 3). Having spelled out the direct impact of the transactions, we will then try to explain (Section 4) why the Bank of Japan has remained so resolute or stubborn in the face of its persistent failure to reach its 2% inflation target, and then turn (in Section 5) to what the monetary interpretation implies for the future of Japan's economy and financial markets.

3. QE Transactions and their Impact on Money Growth

To explain the difference between the Bank of England (or Fed) operations on the one hand and the BOJ (or ECB) operations on the other we will review the impact of the central bank's transactions on the balance sheets of the banks and the non-bank public.

Note that within the three sets of consolidated balance sheets there are paired items that have the same coloured backgrounds which are affected by the transactions, and separately there are items that have a grey background that are unaffected by the transactions.

Figure 3: A Well-Designed Asset Purchase Plan – Liquidity Enhancing



The numbers in Figure 3 above and in the text below correspond to the paired transactions set out in the T-form balance sheets above.

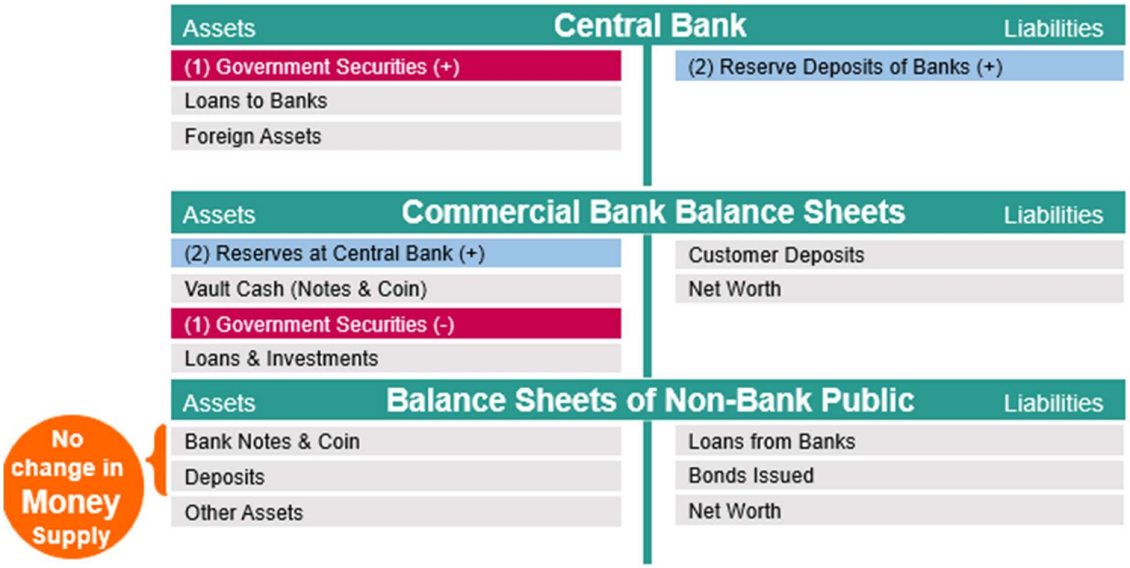
(1) The central bank purchases government securities from **non-bank** entities. Non-bank entities (e.g., insurance companies, pension funds, individuals, corporates, mutual funds, or foreigners) sell government securities to the central bank.
(2)The sellers receive new deposits from the central bank in settlement of their sale, which expands deposits in the banking system, i.e., the **money supply.** The sellers deposit their newly acquired funds in commercial bank deposit accounts.
(3) The banks deposit the payment drafts they receive from the sellers of government securities with the central bank. Banks' reserve deposits at the central bank are credited with an amount which exactly matches the central bank's initial purchase.

Note that after these transactions, both sides of the central bank and commercial banks' balance sheets have expanded, with increases in assets matched by increases in liabilities. **However, at this stage, the consolidated balance sheet of the non-bank public has not increased -- it has simply become more liquid, as government securities are replaced with new deposits.** The key point about this series of transactions is that **the money in the hands of the non-bank public (M2 in Japan or the US, or M4x in the UK) has now increased**, and, given that interest rates are at the zero bound, the holders of money will almost certainly wish to spend the proceeds either to purchase new investments (equities, real estate etc), kick-starting the portfolio re-balancing effect, a wealth effect or (less likely) directly leading to increased consumption or investment spending.

Another key point, given that QE is likely to be initiated after a financial crisis of some kind, is that this "liquidity-enhancing" type of QE facilitates deleveraging and

balance sheet repair. With the injection of new funds by the central bank, overindebted private sector borrowers are more easily able to repay debt, facilitating de-leveraging in the economy, while commercial banks have not needed to make more loans to increase the money supply.

Figure 4: An Asset Swap Operation – Not Liquidity-Enhancing



Next, consider the effects of another type of central bank operation such as those conducted by the BOJ or ECB, either via "QE" or under the LTRO and Targeted-LTRO programmes. Once again, the numbers in the text below correspond to the paired transactions set out in the T-form balance sheets in Figure 4 above.

(1) The central bank buys government securities from the commercial banks. Commercial bank holdings of securities decline; central bank holdings increase.
(2) Commercial banks receive a credit from the BOJ or ECB for their sale of securities, increasing their reserve deposits at the central bank.

Note that after these transactions both sides of the central bank's balance sheet have expanded, with increases in central bank assets matched by increases in liabilities. However, commercial banks have merely undertaken **an asset swap**; they now hold less government securities, but more deposits at the central bank. The size of commercial banks' balance sheets remains unchanged.

Moreover, on this occasion, the balance sheets of the non-banks are unaffected. The key point is that the money holdings (M2, M3 etc) in the hands of the non-bank public have **not** increased. In addition, given the starting point of risk aversion by the banks, there can be no assurance that the banks will expand their lending, or increase their deposits by making new loans. Equally, new investment or consumption spending is unlikely to follow. Even if banks were to expand their lending, this would be accompanied by a parallel **increase in leverage** by firms or

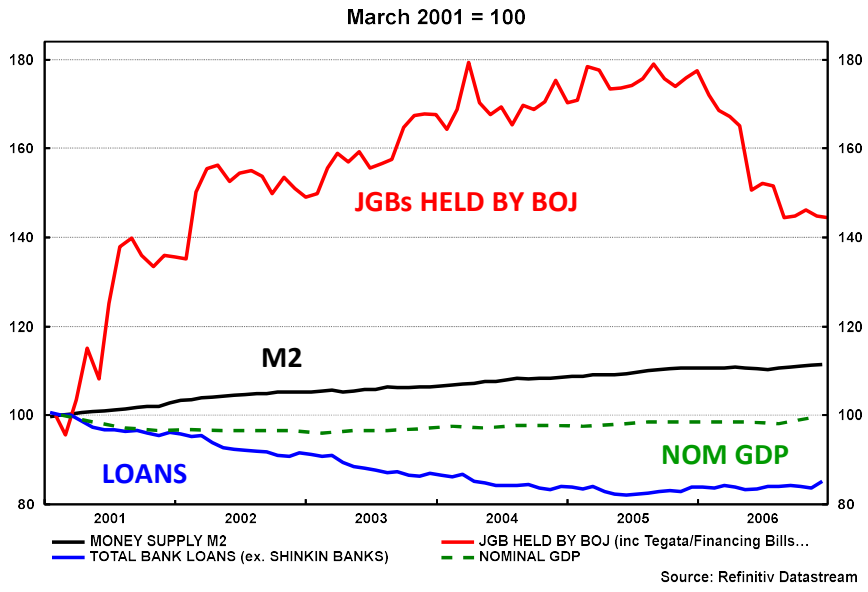
households – the opposite of the balance sheet repair process that policymakers are likely to be seeking to achieve.

In short, only purchases of securities from non-banks are consistent with balance sheet repair *and* enhanced liquidity in the hands of firms and households. By adopting the inferior, non-liquidity-enhancing brand of QE, the BOJ has inevitably, even if unintentionally, undermined the beneficial effects that its QE and QQE policies would otherwise have had in promoting the recovery of the economy (in the short-run) and the inflation rate (in the longer run).

4. Why has the BOJ been so Stubborn in the Face of the Failure of QE & QQE to Raise Japan's Inflation to 2%?

Examining the 17-year record of the BOJ in implementing QE and QQE (5 years in 2001-06, 3 years under Governor Shirakawa in 2010-2013, and 9 years under Governor Kuroda in 2013-2022), even the most casual observer must conclude that the policy has been a dismal failure. The BOJ's balance sheet has swollen from 16% of GDP in mid-2000 to 135% in 2022 Q1, yet with one brief exception to be discussed below (p. 13), inflation has persistently failed to reach the 2% target for consumer prices on either a "core" (ex-fresh foods) or "core-core" (ex-food and energy) basis.

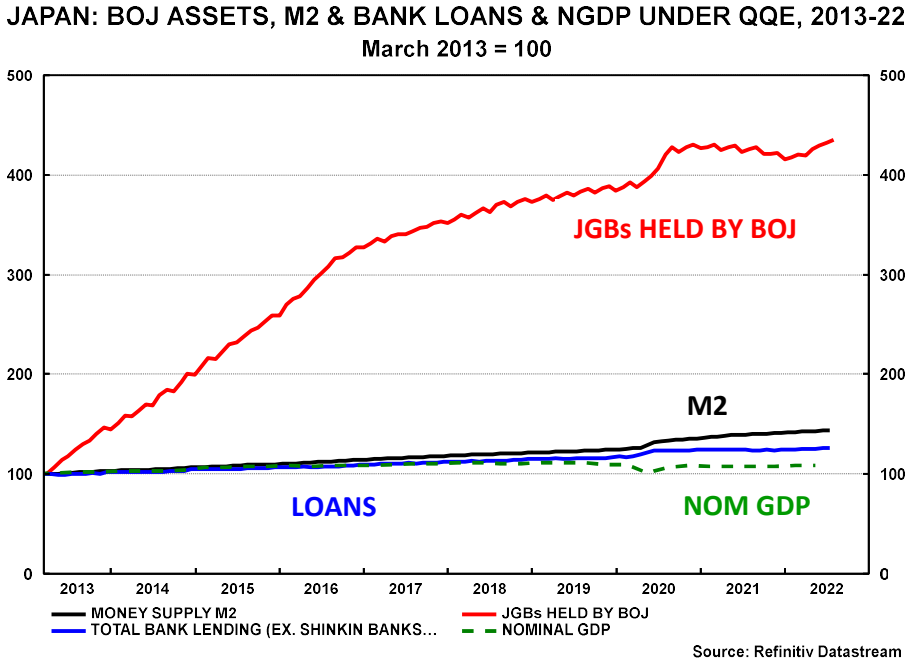
Figure 5: Japan's QE1 in 2001-06 Failed to Boost M2 or Nominal GDP



During QE1 BOJ holdings of JGBs and other government securities (*tegata* or financing bills) increased by 80%, but M2 expanded only by 11% over the five years, and nominal GDP ended where it started with no increase at all. One reason was that banks reduced their lending by 15% over the period, but if the BOJ had been using the alternate brand of QE, the decline in lending could have been offset. Instead, headline CPI inflation in January-March 2006 was -0.1% year-on-year, as was core

CPI (ex-fresh foods on the Japanese definition), and both averaged just over -0.4% year-on-year over the full 5-year QE1 period.

Figure 6: Japan's QQE in 2013-22 has Largely Failed to Boost M2 or Nominal GDP



Similarly, during "QQE" under Governor Kuroda from 2013 to 2022, BOJ holdings of JGBs and other government securities increased hugely, this time by 330%, but M2 expanded only by 44% over the nine and a half years, averaging just 3.3% p.a. while nominal GDP expanded by an anaemic 8.4% in total. This time the banks did not reduce lending (as they had done under QE1), but only grew their loans by 26% over the entire period. The BOJ's "ammunition" (its asset purchases) was largely wasted.

Once again, this is really beside the point. If the BOJ had been using the alternate brand of QE, M2 growth could have been boosted to whatever figure was deemed necessary to boost M2 without banks making any loans at all. Instead, headline CPI inflation and core CPI (ex-fresh foods on the Japanese definition) averaged +0.68% and 0.60% respectively over the nine and a half years. (Note that these figures include the 3-percentage point increase in the Consumption Tax in April 2014 and the smaller 2-percentage point increase in October 2019.[2])

Why has the BOJ been so impervious to the failure of its QE and QQE policies? After all, as Mervyn King, a professional economist and now-retired Governor of the Bank of England, and also a regular past participant in the annual monetary conferences hosted by the BOJ's Institute for Monetary and Economic Studies, gave a lecture in

[2] The Consumption Tax was first introduced in Japan in 1989 at 3%. It rose to 5% in 1997, a hugely unpopular move which helped bring down the government of the day. PM Abe raised it to 8% on April 1, 2014, and it was raised again to 10% on October 1, 2019.

November 2021[3] in which he said, "Quantitative easing is an expansion of the money supply, although most central banks are reluctant to describe it as such…" It must have been abundantly obvious to BOJ Governors, Policy Board members and staffers alike that their policy was failing, yet they have steadfastly refused to adjust their approach or revise the details of QE or QQE implementation. The question is why?

The answer, I believe, is for one overwhelming reason. Based on their Keynesian training in undergraduate and graduate colleges around the world, a large majority of economists and central bankers do not believe or agree that broad money plays any significant role in the transmission of monetary policy. They have learned that the quantity of money depends on the downward-sloping Liquidity Preference Function which features the quantity of money on the horizontal axis and interest rates on the vertical axis. This dogma, though directly contradicted by experience around the world and by the findings of Fisher and Friedman as explained above, is nevertheless reflected in the methodology adopted by the Bank of Japan in conducting its two "Assessments" of QQE published in September 2016 and March 2021.

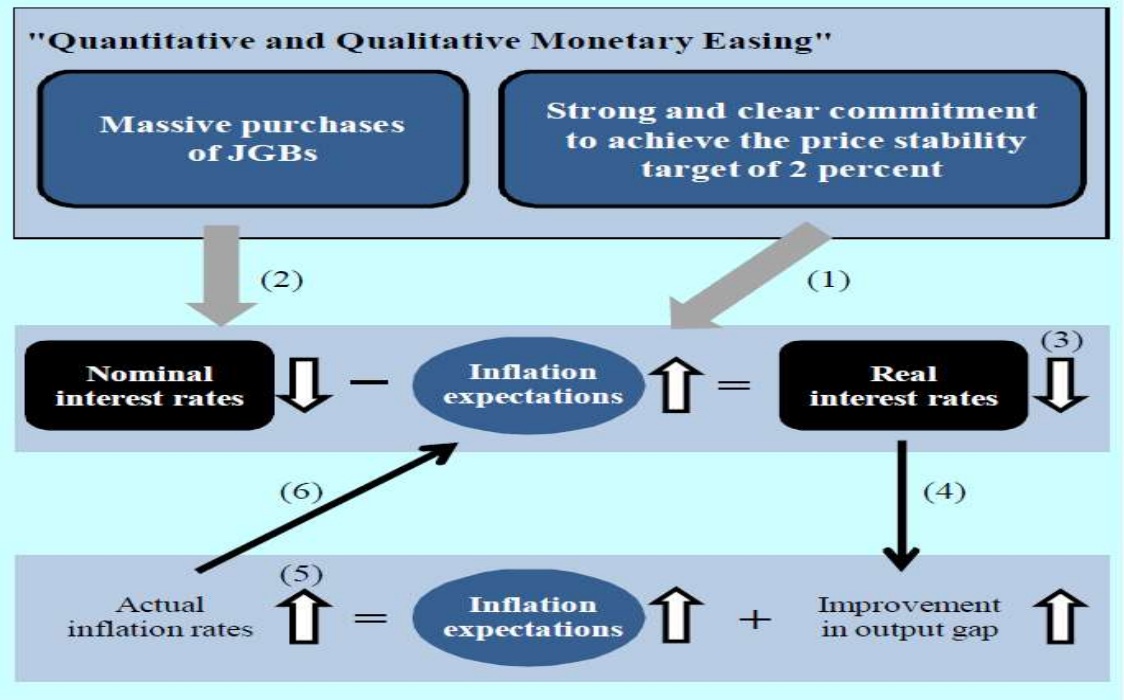
The first "Comprehensive Assessment", a 65-page document issued in September 2016, consisted of 19 pages of text, with the remainder containing charts and tables supported by other separately published research papers. The report asserted that: *"QQE has lowered real interest rates by raising inflation expectations and pushing down nominal interest rates. Although the natural rate of interest has followed a downward trend, real interest rates have been well below the natural rate of interest, leading to an improvement in financial conditions. As a result, economic activity and price developments improved, and Japan's economy is no longer in deflation, which is commonly defined as a sustained decline in prices."*

At the time, three and a half years after the start of QQE, the Bank mainly blamed "exogenous" factors for its failure to achieve the inflation target:
"Exogenous developments, including (1) the decline in crude oil prices, (2) the weakness in demand following the consumption tax hike in April 2014, and (3) the slowdown in emerging economies and volatile global financial markets, have lowered the observed inflation rate. And second, amid this decline in the observed inflation rate, inflation expectations -- after having been largely flat -- weakened, reflecting the fact that expectations formation in Japan is largely adaptive, that is, backward-looking."

In other words, it was not the BOJ's monetary policy that was to blame. The authors of the document claimed that monetary policy works through lowering real interest rates and inflation expectations. By reducing rates below the "natural rate" BOJ officials believed they could revive the economy and raise inflation to the 2% target.

[3] "Monetary policy in a world of radical uncertainty," a lecture published by the Institute of International Monetary Research, January 2022. Available from www.mv-pt.org

Figure 7. BOJ's View of the Transmission Mechanism of QQE, Sept 2016 and March 2021.



Simultaneously, strong statements by BOJ officials would persuade the public to shift their inflation expectations upward. The document does not mention the money supply or the quantity of money even once and directly contradicts Friedman's dictum at the head of this newsletter that "Monetary policy is not about interest rates; it is about the growth of the quantity of money."

A key diagram summarising the Bank's view of how the transmission mechanism of monetary policy was supposed to work through lowering real rates and inflation expectations was published as Chart 1 in the report (p. 40 of the pdf) and is reproduced above in Figure 7. The same chart was again published by the BOJ in March 2021 in its "Assessment for Further Effective and Sustainable Monetary Easing" as Chart 2 on p. 44 of that 69-page report.

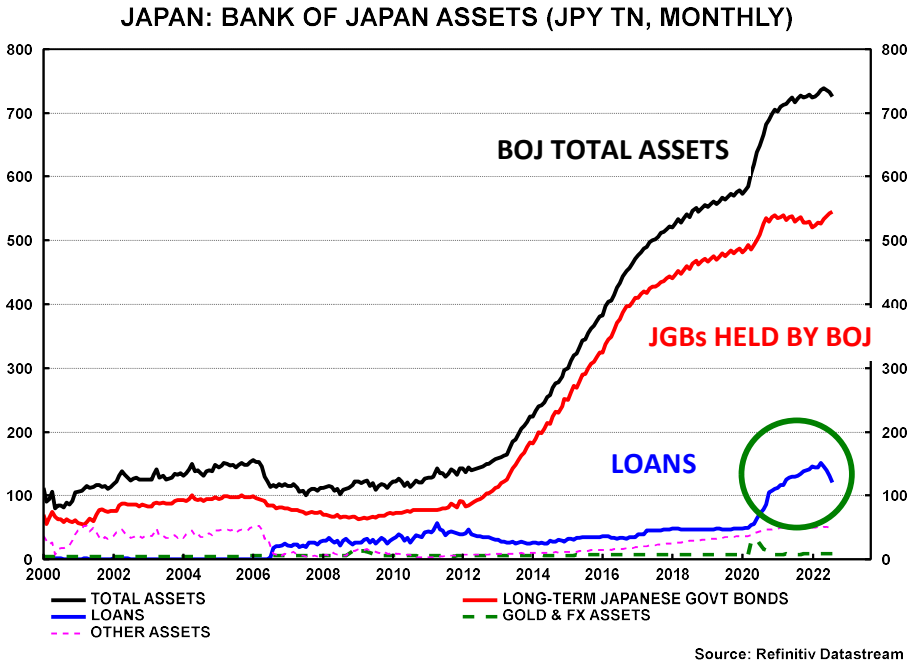
Instead of acknowledging that QQE has not worked, the Bank used its findings -- that pursuit of interest rate targets and broader control of interest rates was the right strategy -- as a basis to shift to "a new policy framework, QQE with Yield Curve Control" (YCC). However, five years later in March 2021 the Bank was again compelled to admit in the second "Assessment" that it had failed to reach the inflation target, but nevertheless continued to blame exogenous factors, not its own monetary policy:

"Following the Comprehensive Assessment [of 2016], the situation where the inflation rate does not rise easily has continued, mainly because (1) the mechanism of adaptive inflation expectations formation in Japan is complex and sticky, (2) elastic labor supply has constrained wage increases, and (3) a rise in firms' labor productivity has absorbed upward

pressure on costs. The impact of the novel coronavirus (COVID-19) has put downward pressure on prices recently…"

Once again, as in September 2016, the BOJ used the occasion to shift policy, expanding an existing lending scheme, this time in the form of a plan modelled on the Bank of England's Term Funding for Lending. The plan, designated an Eligible Fund Provisioning Scheme to Promote Lending, was designed to incentivise bank lending by providing BOJ loans to commercial banks at cheap rates. In the event, this scheme proved quite effective in increasing M2 since bank lending is a direct counterpart of the bank deposits that form the money supply. Figure 8 shows that most of the increase in BOJ assets in 2020-21 was accounted for by such lending (shown by the circled blue line), not by QQE purchases (the red line).

Figure 8: Bank Lending by BOJ Grows more than QQE During the Pandemic

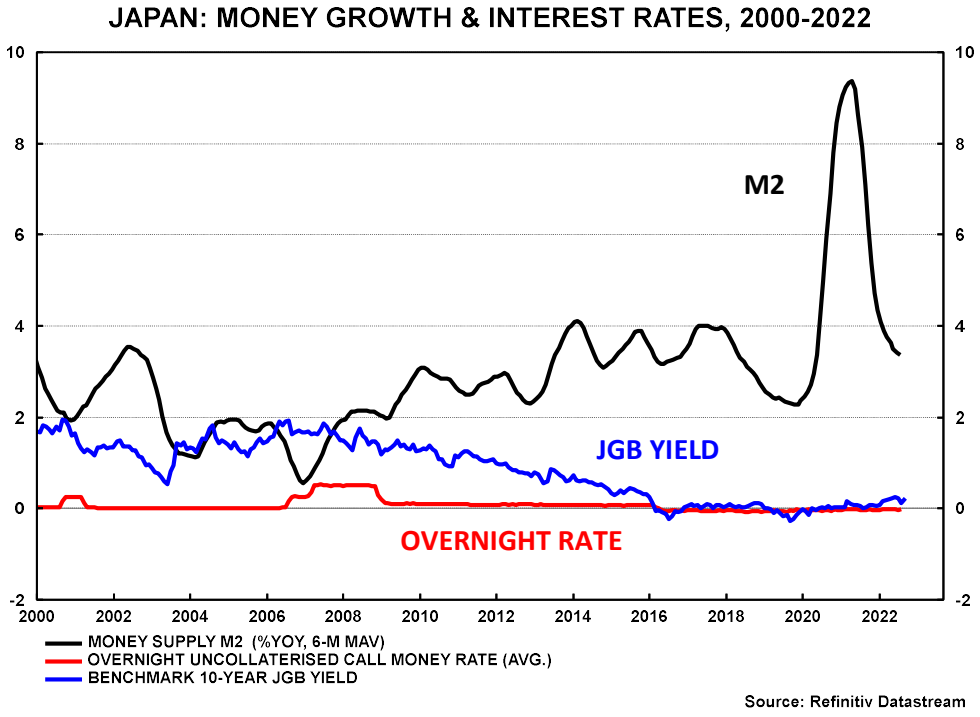


5. A Monetary Interpretation of Recent Japanese Trends

It was this increase in BOJ lending (circled in green) that has carried through to the brief upward spike in M2 growth in 2020-21 shown in Figure 9 below. However, now that the emergency phase of the Covid-19 pandemic is past, the BOJ seems to be losing its appetite for ever more balance sheet expansion. Moreover, Governor Kuroda will almost certainly be replaced when his current term expires in March 2023. Unless the new Governor is very innovative and prepared to throw out decades of adherence to Keynesian orthodoxy – an unlikely combination in Japan – chances seem high that Japan will revert to the low money growth rates, the low inflation, and, recalling Fisher and Friedman, consequently the low interest rates of the past three decades.

However, in the meantime the weak yen and the brief surge of M2 money growth through 2020 to a peak of 9.6% in February 2021 is temporarily pushing up overall inflation in 2022-23, led by the relative prices of imported oil, natural gas, and food prices due to the war in Ukraine. In July the headline National CPI hit 2.6% year-on-year, the highest rate since the hike in the Consumption Tax in 2014 (which should not be called inflation), and in April the Producer Price Index hit 10.0% year-on-year, but has started to fall back, slowing to 8.6% in July. Mr Kuroda may just be able to leave office claiming that he reached the 2% target for a year, but it will be a brief flash-in-the-pan, not a sustainable rate of inflation. It should also be noted that the GDP deflator, the broadest measure of inflation, was still -0.4% on a year-to-year basis in 2022 Q2.

Figure 9. A Brief Spike in M2 Growth – Enough to Hit the 2% Inflation Target Temporarily, but not to Maintain Inflation at Target Rates



In order to hit the 2% inflation target on a sustained basis, I calculate that Japan needs at least a 5% annual growth of M2, nearly double what it has experienced over the past thirty years.

Japan's equity and real estate markets will likely be subdued in the absence of further monetary acceleration. Although the deflationary curse of the last 30 years has been temporarily lifted, it is highly doubtful if sufficient purchasing power has been injected into the economy to carry asset prices upwards on any sustainable track.

The bond market will continue to be distorted by the BOJ's YCC operations. In an ideal world the BOJ would abandon YCC, allowing or encouraging M2 to grow by about 5-6% p.a. As spelled out in Section 1, this would lead to the 2-stage reaction of

yields to faster money growth – a temporary decline followed by a more permanent increase in yields, perhaps to 2.0-2.5% for the 10-year JGB In other words, a temporary rally followed by a sell-off to a yield level which would generate a small positive real yield for long-term investors such as Japanese households, pension funds and life insurance portfolios.

Japan's real GDP and economy were never likely to see the kind of surge in activity witnessed in the US or elsewhere in the developed world (UK, Eurozone, Canada, Australia, or New Zealand) over the past 12-18 months, simply because Japan had nowhere near as large a monetary stimulus (in the sense of monetary growth). Growth of real GDP will likely revert to the average rate of about 0.5% p.a. experienced by Japan over the past decade since 2012, driven largely by demographics, productivity, and limited immigration. This is not a criticism of monetary policy; monetary policy has little impact on real GDP growth except in the short run, meaning 12 to 18 months.

Concluding with inflation, the rise in Japan's headline CPI has resulted from the short-lived boost to M2 growth, which in turn came from the BOJ's lending scheme, not from its QQE purchases or its YCC antics. The chances that BOJ and other government officials have absorbed this lesson is, in my view, negligible. Partly as a result, M2 growth has been slowing back toward the low growth rates experienced over the past 30 years. In July the year-on-year growth rate was 3.4% only, already well below the desirable 5% minimum annual growth rate. It was this slow growth of broad money that was the fundamental source of many, if not all, of Japan's "nominal" problems – i.e., problems achieving a positive inflation rate, problems for companies achieving positive nominal sales and profits, problems in maintaining positive nominal interest rates, and hence problems for banks and other financial institutions in maintaining positive spreads.

Summary of Financial Market Conclusions

- M2 growth to continue to slow and remain in a 2-3% range, with BOJ unlikely to attempt to boost it in any serious manner.
- Asset markets (equity and real estate) to remain subdued with an emphasis on the search for yield. Neither multiples nor earnings can be expected to increase much while the US Fed is raising rates and Japanese money growth remains continuously below its ideal 5% growth rate.
- The JGB market will continue to be distorted by the BOJ's YCC policies unless Governor Kuroda's successor brings some very radical ideas to the Governor's office. Since the BOJ is purchasing the bonds largely from banks, the standard theory about artificially low rates resulting in excess growth of the money supply does ***not*** apply (see pp. 6-8 above).
- Real GDP growth to revert to the 0.5% trend of the past decade. There is little that monetary policy can do about this.
- Inflation is temporarily elevated due to the spike in M2 growth during 2020-21. Except for any strictly temporary *relative price movements* in the prices of imported oil, LNG, or food, *overall inflation* will decline through 2023. With

M2 growth already back to 3.3% year-on-year in July, I expect Japanese CPI inflation to be back in the 1-2% range by the end of 2023 and heading lower in 2024.

- Finally, I expect the yen to remain weak and therefore to be a good candidate for funding carry trades as long as market participants expect the Fed to continue raising rates. But this is a treacherous area. Caveat emptor! – or perhaps it should be Caveat debitor!!