



Economist.com

[Articles by subject](#): [Topics](#): Japan's economy

BY INVITATION

## Wading in the yen trap

Jul 22nd 1999

From The Economist print edition

**The origins of Japan's deflation lie not in the domestic economy, but in the movements of the yen, writes Ronald McKinnon\***

IN THE 1990s, the inability to diagnose Japan's prolonged economic slump, with private investment and consumption languishing and the banking system in perpetual crisis, has become the great failure of modern macroeconomics. Massive public spending programmes seem to have given the economy a fillip. In the first quarter, GNP growth of 1.9% (7.9% on an annual basis) surprised everybody. But that still leaves the level of GNP no higher than it was a year ago; and private investment continues to slump.

Moreover, the state of the public finances has become so precarious, with the current deficit over 10% of GNP, that such fiscal stimuli are unsustainable. Because there is no consensus on what else to do, Japanese political leaders, and senior officials in the Ministry of Finance, Bank of Japan (BOJ) and elsewhere, can hardly be faulted for their failure to take "resolute action" to end the slump. The cause of the deflationary psychology that depresses private demand, and compresses nominal interest rates on yen assets toward zero so as to destroy the profitability of the banks, should first be properly identified. In a recent book†, Kenichi Ohno of the ADB Institute in Tokyo and I developed the idea that mercantile disputes between Japan and the United States eventually led to the "syndrome of the ever-higher yen". Incessant pressure—implicit and explicit—from the United States to make the yen appreciate from 360 to the dollar in 1971 to just 80 in 1995 is the historical origin of Japan's deflationary psychology today.

In mid-1995, American policy changed. The Treasury announced a "strong dollar" policy and, since then, the yen has come down from its peak. Nevertheless, the unbalanced political-economic interaction between the two countries instils the fear that this relief is only temporary.

In mid-1999, the BOJ is desperately trying to hold the exchange rate down to around 120 yen to the dollar—close to current purchasing-power parity (PPP) with the United States and surrounding East Asian countries. But upward pressure on the yen in June 1999 caused Japan's reserves to jump by \$23 billion (a 10% increase in just one month) and even more in July.

I will argue that the BOJ is quite right to want to put a lid on yen appreciation (and a floor under substantial depreciation). However, I will also argue that this spot market intervention is likely to be insufficient (as it has been in the past) to quash the expectation that the yen will be higher five, ten or 20 years from now than it is today. Something more dramatic, requiring American co-operation, is needed to end the resulting deflationary psychology.

First, however, note that the expectation of an ever-higher yen is of long standing. For more than 20 years, international arbitrage based on this expectation has forced Japanese interest rates about four percentage points or so below American ones. True, the yen began rising even earlier, in August 1971 when President Nixon closed the gold window and demanded that other countries' currencies should appreciate against the dollar. Not until the second big appreciation of the yen against the dollar in 1978, however, did the expectation of an ever-higher yen become sufficiently strong to drive Japanese nominal (but not real) interest rates persistently below those in America (see [chart 1](#)).

Relatively lower nominal interest rates were not a problem for the Japanese so long as American rates remained high, because of inflationary expectations. But when the Federal Reserve convincingly stabilised the price level by the mid-1990s, and interest rates came down, Japanese rates were driven toward zero. Thus, in the late 1990s, the liquidity trap in Japan has been *externally imposed*—as an incidental, rather than deliberate, outcome of American policies.

Taking this long-term exchange-rate expectation as given, consider Japan's current monetary-policy dilemmas. The BOJ cannot use the ordinary instruments of monetary policy to reflate the economy. Nominal interest rates on yen assets

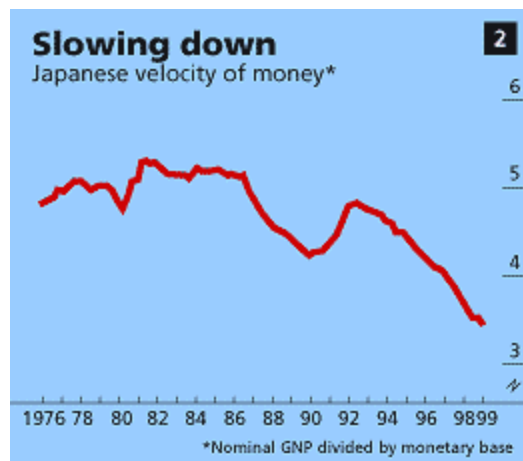
cannot be reduced below zero. Nor can the present “equilibrium” value of the yen depreciate significantly in the face of Japan’s large trade surplus. Let us discuss each dilemma in turn.



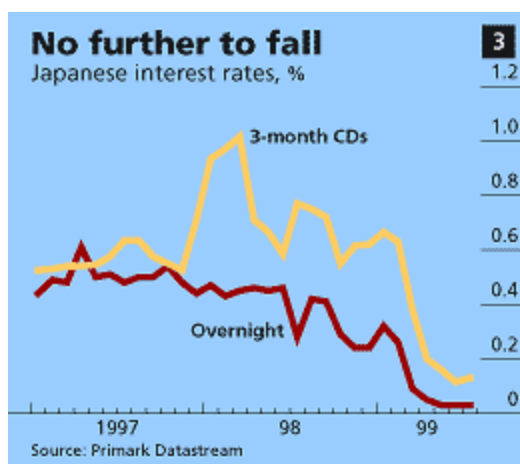
## The trap door

In its most general sense, a “liquidity trap” is a situation in which the central bank can expand the monetary base *indefinitely* without affecting any important price in the economy, or relaxing some significant liquidity constraint and so increasing aggregate demand. Chart 2 shows that, since 1995, the BOJ has been expanding base money much faster than nominal GNP—the velocity of circulation of money is falling.

From the perspective of domestic financial markets, a low interest-rate trap is one where nominal interest rates are bounded from below by zero. As long as people may hold non-interest-bearing cash balances, and commercial banks may hold excess reserves at zero interest with the central bank, open-market interest rates cannot be forced below zero. After 1995 the interbank overnight rate among Japanese commercial banks was about 0.5%; it has fallen, in effect, to zero in 1999 (see [chart 3](#)). Household purchases of safe-deposit boxes for surplus cash are booming, and excess reserves of commercial banks are building up.



How does this affect Japan’s seemingly unending banking crisis? When nominal interest rates are compressed towards zero, lending margins for private commercial banks to good credit risks become unprofitable. The prime loan rate in Tokyo and Osaka has been forced down to just 1.4%. The reluctance of commercial banks to lend at low interest-spreads further dampens aggregate demand; and banks’ low profits on new lending mean that they cannot recapitalise themselves. Indeed, low profitability in commercial lending has led a desperate government to nationalise



much of the flow of financial intermediation. Public trust funds based on the huge postal saving system and the central bank itself are now lending directly to private trade and industry.

Even so, because the deflationary psychology gripping the economy points to continuing declines in wholesale prices and in land values, “real” rates of interest remain too high to stimulate aggregate demand. Indeed, real interest rates (suitably risk-adjusted) in Japan cannot be very different from those prevailing in the much more buoyant American economy without provoking massive capital flight.

In the Great Depression, John Maynard Keynes was obsessed with why *long-term* nominal interest rates might be stuck significantly above zero—even though short rates were nearly zero, and there appeared to be excess liquidity. In July 1999 the volatile interest-rate on ten-year Japanese government bonds is just 1.7%—and longer-term rates remain about 2%.

But properly risk-adjusted, Japanese long rates are still close to “zero”. As nominal interest rates on long-term bonds become low, their market prices become extremely sensitive to tiny changes in open market interest rates. Because of this price volatility, the perceived riskiness of holding them rises. In addition, Keynes also believed that, at very low interest rates bounded from below by zero, people expect that bond prices are more likely to fall than rise—ie, that interest rates will rise in the future.

This reluctance to hold long-term bonds has two effects: a big risk premium gets built into long-term interest rates, and what Keynes dubbed the “speculative demand for money” increases. Any new injections of base money by the central bank are simply absorbed by this speculative demand with little or no effect on short or long-term interest rates. This is the so-called liquidity trap.

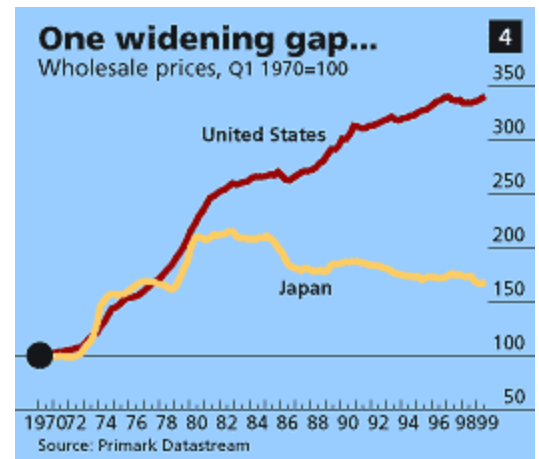
## The international trap

To understand more fully why a liquidity trap is sustainable without exchange controls in an open economy such as Japan’s, the definition of the “speculative” demand for money needs expansion. Beyond the ordinary transactions and precautionary demands for money, people hold speculative cash balances in anticipation of two events, whose timing is uncertain:

- Domestic bond prices suddenly fall (domestic interest rates rise) and so present a better buying opportunity.
- The currency rises in the foreign exchanges and so presents a better opportunity for buying foreign-currency bonds.

Even when the yen is not appreciating, the possibility of upward ratchets in the dollar value of the yen further induces Japanese households and firms to hold large speculative domestic cash balances. In effect, Keynes’s speculative demand for money is augmented. Chart 1 shows the yen’s historic climb. But sudden upward movements can also occur more quickly. On October 6th, 1998, the yen ratcheted up from 135 to 115 to the dollar in the space of a few hours.

Although Japanese nominal rates of interest are trapped close to zero, “real” rates remain high and the economy is depressed because of expected future falls in the price level. Our book showed that, even when nominal rates in Japan were persistently below those in the United States in the 1970s into the 1990s, international financial arbitrage roughly equated real rates of interest at medium and longer terms because the Japanese price level fell relative to America’s (see [chart 4](#)). In the late 1990s, however, Japanese real interest rates, as seen by domestic business firms and households, could even be somewhat above American. As nominal interest rates approach zero and so cause yen bond prices to become exceedingly volatile, the risk premium increases.



## The constraint on yen depreciation

I have argued that the spot yen need not naturally depreciate in the face of “excess” domestic liquidity, so long as the future yen is expected to be higher. However, there are other constraints on how much the spot value of the yen can be manipulated by the government to depreciate in real terms. Suppose, to stimulate the slumping but very large Japanese economy, unrestrained monetary expansionists aimed for a sharp depreciation of the yen below its current PPP rate. There are several reasons why such an effort would be doomed to failure:

- The domino effect. Other Asian currencies would be forced to depreciate (further). In particular, the finely balanced position of China’s yuan, which has been stable against the dollar for more than five years, would be undermined.
- Protectionist responses from other industrial countries. Already in 1999, a major trade dispute is brewing over a surge in Japanese steel exports into the American market.

- The expectations effect. After an engineered depreciation, the fear of future yen strength would remain. Indeed, the fear might even be heightened.

Particularly in view of Japan's large trade surplus, almost all protagonists in the current debate recognise that it might be a calamity if the yen were to depreciate sharply from its current PPP rate of about 120 to the dollar. So Japanese monetary policy is trapped in two important respects: nominal interest rates cannot be reduced further, and nor can the spot value of the yen go down in the foreign exchanges.

But it is the yen's *forward* value, and not the spot value, which is too high. Thus stabilising the future (dollar) value of the yen could rid the economy of deflationary expectations and spring the liquidity trap. This would allow nominal interest rates on yen assets to rise to world levels, while real interest rates could fall as risk premia are reduced. The current spot rate, provided it remains close to PPP need not (best not) change much.

## Changing expectations

In our book, Mr Ohno and I discuss policies that would cure the syndrome of the ever-higher yen by rationalising the mercantile-monetary interaction between Japan and the United States. At the risk of oversimplification, our proposed economic pact between the two countries boils down to two complementary sets of policies:

- A commercial agreement limiting bilateral sanctions in trade disputes and ending (future) pressure from the United States to get the yen up.
- A monetary accord to stabilise the yen/dollar rate over the long term: the principle of virtual exchange-rate stability.

A commercial agreement between the United States and Japan is a necessary condition for a credible exchange-rate accord. Since 1971, numerous trade disputes have been ameliorated by getting the yen to rise in the foreign exchanges. For example, the last great run-up of the yen from 100 to 80 to the dollar in the spring of 1995 was linked to a fierce dispute over cars—America was demanding numerical targets for imports of US car parts into the Japanese market. In such disputes, American officials often tried to “talk the yen up”. Their economic advisers thought (incorrectly) that this would reduce Japan's current-account surplus.

Thus, the markets need a formal pact to provide long-term assurance that American policy has changed permanently, and that the future dollar value of the yen is likely to be no higher, and thus the Japanese (wholesale) price level no lower, than today. But once agreed to, how would such a pact be implemented? The two governments would jointly announce a formal benchmark target, close to today's PPP rate (the exact number is not too important) of 120 yen to the dollar. Then, when the yen/dollar rate moves sharply away from 120, the Fed and the BOJ would jointly intervene to nudge it back. Without trying any short-term fix, the authorities would jog the rate toward its long-term benchmark in an unmistakably concerted fashion. In people's minds, the yen's long-term upward drift would cease.

National monetary policies must eventually support any such long-run exchange-rate target. But, once the expectation of an ever-higher yen was quashed, almost all monetary adjustment would be in Japan. Little or no change in the Fed's policy of stabilising the American price level, the independent anchor, would be necessary or desirable. Because the purpose of long-term stabilisation of the exchange rate is to end deflationary pressure and to spring the liquidity trap in Japan, that is where the main monetary adjustment would take place. What would the transition look like?

## After the trap is sprung: the transition

An international pact to stabilise the yen/dollar exchange rate over the long term is politically difficult but technically straightforward. In contrast, once expectations begin to shift away from continuing yen appreciation and deflation, managing domestic Japanese monetary policy in the transition will be technically intricate. For analytical purposes, let us suppose deflationary expectations end suddenly—as with the exchange-rate pact we propose. Then, without going into detail, what would happen?

- Nominal Japanese interest rates would rise (and real interest rates fall) to world levels as the wholesale price level stabilises. Holders of long-term yen bonds would take a beating.
- New bank lending becomes profitable, even though bank balance-sheets remain a mess. But now a clean-up makes more sense. The banks can be “denationalised”.
- Private investment increases as fear of sudden yen appreciation and overvaluation is eliminated.
- Private demand for new housing surges as the fear of continuing decline in land values ends, and the price level stabilises.

- The BOJ may actually have to cut the money supply to allow nominal interest rates to rise while keeping the exchange rate steady.

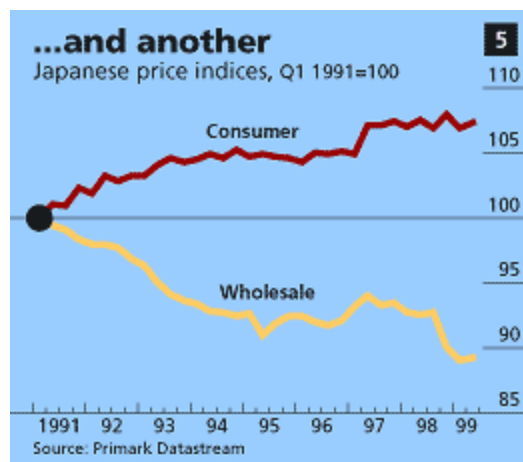
When the liquidity trap is sprung, nominal interest rates must increase—even though “real” rates will come down toward American levels as risk premia in Japanese bond markets decline. Private investment should be further stimulated when the fear of future yen appreciation declines, and the constraint on new bank-lending diminishes as bank profit-margins widen. House purchases should become more attractive for these reasons, and because home-buyers see an end to the slide in property values.

Once the foreign-exchange value of the yen and future Japanese price levels are securely anchored, whether the BOJ should “tighten” or “ease” monetary policy is, paradoxically, no longer clear. The possibly sharp increase in nominal interest rates would tend to reduce demand for base money.

On the other hand, if the economy recovers sufficiently fast and the banking system is quickly recapitalised, the demand for base money would on balance increase. Reprivatisation of bank lending should proceed naturally as commercial banks offer positive nominal interest rates and bid funds away from the postal saving system. So, in the transition, the BOJ must stand ready either to withdraw or to inject base money into the system—always being guided by pressure in the foreign exchanges.

After a successful transition with this exchange-rate anchor, Japan’s wholesale-price index (WPI)— but *not* its CPI—would become stable. The WPI has fallen since 1985, even when, in recent years, the CPI has been stable (see [chart 5](#)). This reflects the so-called Balassa-Samuelsen effect: the prices of services in Japan have risen relative to those of goods. In the last decade, the BOJ has been deceived by the stability in its CPI—while the WPI has fallen substantially and better reflects deflationary pressure (along with falling land prices) in the economy overall.

Consequently, the WPI is a better (although not perfect) deflator for converting nominal into “real” interest rates. It is also more directly affected by the exchange rate. In the new steady equilibrium with exchange-rate stability, the system would settle down to higher growth in Japan’s CPI—say 2-3% a year— while the WPI remained approximately stable in the American way.



\* Ronald McKinnon, the William Eberle professor of international economics at Stanford University, has just completed six months as the Houbton-Norman visiting fellow at the Bank of England. Our regular column, Economics focus, will return next week.

+“Dollar and Yen: Resolving Economic Conflict Between the United States and Japan”, MIT Press, 1997.