

Japanese Monetary Policy Again

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1. Introduction

At our last meeting of the Shadow Open Market Committee, in April, I discussed Japanese monetary policy. Specifically, I argued (i) that it has been overly restrictive for almost a decade, (ii) that the Bank of Japan's policy changes of March 19, 2001, are welcome but probably insufficient, (iii) that a desirable strategy would be to create new base money more rapidly by unsterilized purchases of foreign exchange, and (iv) that such a policy would not be detrimental to the U.S. or Asian economies and should not be opposed by the United States. In addition, some incomplete and highly preliminary estimates of the effects of such a policy were offered. Since that time, the Japanese economy has moved toward outright recession and calls for additional stimulus from the Bank of Japan (BOJ) have become more prominent.

In the current paper, accordingly, I will continue this discussion of Japanese monetary policy. The specific issues to be covered are as follows. First, for a proper understanding of the current situation it is important to recognize that purchase of non-traditional assets is necessary for monetary policy to be helpfully stimulative. Second, the BOJ has been very reluctant to purchase the most promising type of asset—foreign exchange—partly because of a belief that such a policy would be inconsistent with its legal charter. Third, that interpretation is debatable since there seems to be an inconsistency in the law; in any case an

impediment from this source could almost certainly be easily overcome. Fourth, it is highly unfortunate that exchange rate policy is widely regarded as something basically different from monetary policy. In fact, monetary and exchange rate policies are so closely linked that it is probably best to think of them as two aspects of the same basic policy.

2. The Bank of Japan's Difficulty

Recent commentary in publications including the Economist, the Financial Times, and the Wall Street Journal has been increasingly critical of the BOJ for not providing more monetary stimulus to aggregate demand in Japan. It is right, of course, that more stimulus is needed and has been needed for years, but much of this commentary fails to recognize the difficulty of the problem facing the BOJ. It is not just stubbornness that has prevented the BOJ from providing such stimulus, for the nature of monetary policy actions is sharply different when short-term interest rates are effectively equal to zero. It is not the case that there is “nothing more that the BOJ can do,” but what needs to be done is different than in normal conditions and the policy actions are more difficult to design.

For some years, the BOJ took the position that nothing more could be done, beyond lowering its overnight call rate below one percent and finally almost to zero. These statements were incorrect and possibly reflected a fundamentally misguided tendency to think of levels of nominal interest rates as direct indicators of monetary conditions, with low rates representing loose money. In fact, nominal rates will be low (for given real rates) when expected inflation is low; thus low rates are in large part an indication that monetary policy has been tight in the past, not that it is loose at the present. Recognizing this last point, several critics have argued that the BOJ should gauge its actions in terms of monetary base growth rates, rather than interest rates, and should provide stimulus by increasing the growth

¹ I am indebted to Marvin Goodfriend, Gregory Hess, Allan Meltzer, and Edward Nelson for helpful comments.

rate of the monetary base. In my previous SOMC paper, it was mentioned that my own base-growth-oriented policy rule would have called for about 12 percent (per annum) growth rates recently, rather than the values of about half that magnitude that have actually been observed.

But just expanding the base growth rate will not be effective, in the face of zero interest rates, unless non-traditional assets are purchased. Normally, open market operations are conducted by exchanging base money for short-term government bills. But when short-term interest rates are near zero, such purchases will have virtually no effect. One way to see this is to recall that both base money and bills are nominally-denominated assets that are virtually free from default risk. What then is the difference between them as assets; why do people and firms hold money when bills normally provide the holder with a higher rate of interest? The answer, of course, is that money is a generally accepted medium of exchange that provides transaction-facilitating services to its holders—services not provided by bills.² Rational economic agents then adjust their holdings of these two assets so as to equalize their net benefits at the margin. The sum of pecuniary interest earnings plus transaction-facilitating services is equated at the margin, for the two assets, with interest earnings being lower and services higher for base money assets.

But when short-term interest rates fall to zero, then there is no difference in the interest component of the net yield for the two assets, so their marginal service yields will also be equal. This condition is brought about by holders choosing to keep on hand so much money that its service yield at the margin is driven down to zero. But then, at the margin, base money and bills become perfect substitutes—the distinguishing characteristic of base money is lost (at the margin, not overall). Consequently, open market operations that exchange bills for money in private portfolios have effects that are like those of replacing a

billion dollars worth of \$5 bills with a billion dollars worth of \$10 bills.³ To an approximation, in other words, there is no effect.

Accordingly, for increased growth rates of base money to be stimulative it is necessary that the assets bought from private portfolios be ones that are not perfect substitutes for government bills (or for money). Longer term government bonds represent one possibility. But to me it seems likely that long-term government bonds are quite close substitutes for government bills. According to the expectations theory of the term structure, which says that long-term interest rates are appropriate averages of short-term rates, long-term and short-term government securities are perfect substitutes. There is evidence suggesting that this theory is not accurate, but there is no widely accepted alternative to rely upon. And even if the short-term and long-term securities are not perfect substitutes, it is not obvious that purchases of the latter would have a stimulative effect on the macroeconomy.

Consequently, I have been arguing for a couple of years that the best course of action would be for the BOJ—or any central bank in a similar situation—to purchase foreign exchange.⁴ Lars Svensson (2000) has made a closely-related proposal.⁵ It is obvious that the purchase of enough foreign exchange would depreciate the value of the yen. With prices in Japan not rising as much as the price of foreign exchange,⁶ a real exchange rate depreciation would result, and this would stimulate exports and inhibit imports. Both effects would tend to increase Japanese income and production. That is what is needed—to increase

² Or provided to a lesser extent.

³ In this sentence the word “bills” refers to currency notes, not government securities.

⁴ See McCallum (2000, 2001).

⁵ It should be noted that a few economists including myself, Marvin Goodfriend, Allan Meltzer, and John Taylor have been urging a more expansionary policy for the BOJ since 1995. Our first proposals did not, however, emphasize purchases of foreign exchange per se.

⁶ Even in the unlikely event that Japanese domestic prices increased along with the price of foreign exchange, there would be a benefit—this would raise nominal interest rates, leading to an escape from the “liquidity trap” situation described above.

Japanese spending and income.

It is important to keep in mind, furthermore, that increases in income have strong and reliable positive effects on imports. Indeed, the strength of income effects on imports is probably strong enough that the overall effect of the stimulative policy would be to increase Japan's imports (in real terms) from its trading partners.⁷ Under that assumption it is not the case that the recommended policy would tend to depress aggregate demand in other nations. Fear of that outcome should not be permitted to discourage stimulative monetary policy.⁸

Recently, the BOJ has taken actions that indicate an intention to pursue a more stimulative policy than in the past. To date, however, it has not given any official consideration to the possibility of purchasing foreign exchange as a way of providing a more stimulative monetary policy.⁹ We need to look into the reasons for this attitude.

3. Bank of Japan Law

Only recently, in 1998,¹⁰ did the BOJ gain monetary policy independence, i.e., the right/duty to conduct monetary policy as judged appropriate by itself (rather than by the Ministry of Finance). The provisions of this independence are codified in a legal document that, in English, is termed "The Bank of Japan Law." The provisions of this law are of strong relevance because the BOJ evidently sees the Law as an obstacle to a policy of the type recommended above. Purchases of foreign exchange, it is contended, are the province of the Ministry of Finance, not the BOJ. An unofficial English translation of the Law, made

⁷ After some short time lag, probably.

⁸ It is my impression that this fear did keep the International Monetary Fund from supporting policy proposals of the type expressed here, until recently.

⁹ In an interview with Bloomberg reported on July 19, Dr. Kunio Okina, Director of the BOJ's Institute for Monetary and Economic Studies, suggested that the BOJ should consider purchase of foreign exchange as a tool of monetary policy, while leaving exchange rates to the currency market. But on July 25, Mr. Sakuya Fujiwara, Deputy Governor of the BOJ, indicated (in a question-and-answer session at the Tokyo Foreign Correspondents' Club) that Okina's suggestion does not reflect BOJ policy.

by the BOJ, can be found on the BOJ's web site (<http://www.boj.or.jp>). The following comments and interpretation are based on that version, as amended January 6, 2001.

The BOJ Law mentions foreign exchange purchases in Articles 15, 40, 41, and 42. These all presume that such purchases will be made either for the purpose of “cooperating ... with foreign central banks and international institutions...” or else “to stabilize the exchange rate of the national currency.” Those activities, furthermore, are to be conducted in a manner specified by the Ministry of Finance. So viewed alone these passages do indeed suggest that the BOJ has no mandate to purchase foreign exchange in the manner suggested above, i.e., for macroeconomic demand management.

However, Articles 1 and 2 of the Law stipulate that a primary duty of the BOJ is to “carry out currency and monetary control ...” in a manner “aimed at, through the pursuit of price stability, contributing to the sound development of the national economy.” Also, Article 3 states that “the BOJ's autonomy regarding currency and monetary control shall be respected.” Thus the Law also gives support to the idea that foreign exchange purchases for the purpose of monetary control are consistent with the duties assigned to the BOJ. Evidently, there is some internal inconsistency in the Law.

Furthermore, Article 15 states that the Policy Board will decide on matters including “determining or altering the guidelines for currency and monetary control in other forms,” i.e., forms other than money-market control. This suggests, crucially, that the Policy Board already has the authority to adopt policies for exerting monetary control by the purchase or sale of foreign exchange. In that regard it is important to emphasize again that the purpose of the foreign exchange transactions in question is definitely not to stabilize the exchange rate.

¹⁰ The law was promulgated on June 11, 1997 and put into effect on April 1, 1998. It has been amended several times.

Instead, the recommended policy makes the level of the exchange rate subservient to monetary policy, with the latter directed at maintaining price stability so as to promote the sound development of the Japanese national economy. So Article 15 adds to the apparent inconsistency in the Law.

Finally, let us consider Article 43, which states that the BOJ “... may not conduct any business other than those prescribed by this Law unless such business is necessary to achieve the Bank’s objectives prescribed by this Law and the Bank obtains authorization from the Minister of Finance and the Prime Minister.” It seems clear that this article does not rule out the suggested activities per se, because they are integral to the BOJ’s achievement of its assigned objectives. Under current conditions, moreover, they might well be deemed “necessary.” Nevertheless, it would seem to be appropriate for the BOJ to seek approval from the Minister of Finance and the Prime Minister, since such a step would keep the proposed actions from conflicting with Article 43. Since the government has favored more monetary stimulus, a well-formulated proposal would probably face no difficulty in winning approval.

4. Monetary Policy and Exchange Rate Policy

That the BOJ Law does not recognize foreign exchange transactions as a means for conducting monetary policy is not actually surprising, partly because transactions involving government bills are satisfactory and desirable under normal conditions—i.e., with interest rates substantially above zero. Another important reason is that the Japanese arrangements are not at all out of line with those pertaining to central banks in other economies. In the United States, for example, it is generally understood (despite unclear legislation) that

foreign exchange policy is primarily the province of the Treasury.¹¹ That assignment has not been troublesome for U.S. monetary policy in recent years, but arguably that is because the Treasury has seen fit to let the foreign exchange value of the dollar be determined by market forces without substantial intervention. Even in the euro area, where monetary legislation for the European Central Bank is expressly designed to protect central bank independence and direct it toward price level stability or low inflation, there is an anomalous provision regarding exchange rates of the euro vis-a-vis the dollar, the yen, and other currencies. This appears in Article 109 of the Maastricht Treaty, which gives the E.U. Council of Ministers (i.e., the member nations' finance ministers¹²) the power to make agreements on an exchange-rate system for the euro (relative to non-EU currencies) or to adopt "general orientations" for exchange-rate policy. These actions are supposed not to conflict with the goal of price stability, but the provision is nevertheless an anomaly.

Despite the existence of these actual arrangements, it is a serious mistake to view monetary policy and exchange rate policy as independent entities, as they implicitly suggest. Indeed, although it would be a slight exaggeration to claim that monetary and exchange-rate policies are merely different aspects of one macroeconomic policy tool, that claim comes closer to the truth than the view suggesting independence. (In making this claim, I am assuming that the nation under discussion does not attempt to manage exchange rates by direct controls, which would of course introduce serious microeconomic inefficiencies and inducements for corruption.) To develop that argument is the purpose of the present section.

One way to begin is to recall the nature of monetary arrangements under a gold

¹¹ On this topic see Broaddus and Goodfriend (1996), which takes a position similar to that of the present section, and Hetzel (1996). The quotes on p. 21 of the latter are useful.

standard (or any other metallic standard). Any such arrangement on an international basis clearly dictates exchange rates among all nations that adopt gold-standard systems. But such arrangements are simultaneously specifications of domestic monetary standards, ones that require monetary policy to be governed by the overriding obligation of maintaining the domestic-money price of gold (and consequently the value of money in terms of gold).

For fiat money systems the relevant analytical point is that, from a long-run perspective, money stock and exchange rate paths cannot be independently controlled or managed, as a consequence of the long-run neutrality of money. Short-run non-neutralities are a fact of life, of course, so there is some scope for temporary departures of exchange rates from the paths implied by monetary policy. These departures can be effected by fiscal actions or possibly by sterilized—hence non-monetary—exchange market interventions. But since such departures can only be temporary, it is inappropriate (and dangerous) to think of them as reflecting distinct maintained policies.

A counter-argument that some might raise would point out that real exchange rates can be affected permanently by fiscal stances. A higher steady-state ratio of government spending to income tends, for example, to generate a higher real foreign-exchange value of a nation's currency. But an increased ratio of government consumption to income has a one-time effect on the real exchange rate, not a continuing or ongoing effect. Thus a monetary policy that generates an average inflation rate that is inconsistent with a fixed nominal exchange rate—or a specified nominal exchange-rate path featuring a non-zero rate of depreciation or appreciation—will eventually lead to a breakdown. Fiscal policy cannot, that is, be used to overcome long-run inconsistencies between money stock, price level, and

¹² The Council members are finance or economics ministers when the business is finance or economics, in which case the Council is known as Ecofin. For other issues, other ministers will represent the member

exchange rate paths. Useful papers elaborating on this point have been written by Bordo and Schwartz (1996), Garber and Svensson (1995), and Obstfeld and Rogoff (1995).

Furthermore, it is important to keep in mind that a large fraction of fiscal policy actions involves switches between bond finance and tax finance for given streams of government purchases. This reminder is relevant because many standard and widely-used macroeconomic models incorporate the property of Ricardian equivalence, i.e., the property that switches between bond and tax finance have no effect on macroeconomic variables of primary importance, including real and nominal exchange rates (and net exports).¹³ Admittedly, it is quite unlikely that actual economies possess this Ricardian property in full, but evidence suggests that departures are fairly minor. Thus for most fiscal policy actions, there will be at most minor or short-lived effects on exchange rates.

The other possible way of exerting a policy effect on exchange rates is via sterilized interventions, i.e., foreign exchange transactions that are offset so as to result in no net change in the economy's outstanding stock of base money. It is widely agreed by students of the issue, however, that effects of sterilized interventions are at most small and temporary.¹⁴ Thus they too cannot provide a means for escaping the long run links between money stock and exchange rate magnitudes.

Another way to put the argument of this section is as follows. Most economists agree that central banks possess only one significant policy tool. Some would describe it as control over the monetary base whereas others would emphasize setting of short-term interest rates. But that distinction is not important with regard to the issue at hand; what matters is that there is only one significant tool. Consequently, if the central bank is required (externally or

countries. When the Council is attended by the countries' prime ministers, the meeting becomes a "summit."

¹³ An early statement of this result is provided by Stockman (1983, pp. 151-2).

by its own choice) to devote that policy tool to the achievement of some target path for an exchange rate, then the tool is not available for achievement of a domestic macroeconomic objective—be it expressed in terms of inflation alone or (e.g.) some combination of inflation and output deviations from their target values. In short, legislation or arrangements that give exchange rate control to the finance ministry, or some other branch of government, are basically inconsistent with central bank independence.

5. Conclusion

On the basis of the arguments above, plus those presented in my previous papers, my suggestion is that the Bank of Japan should temporarily increase the growth rate of base money to 10-12 percent per year, with most of the newly created base used to purchase foreign exchange (the remainder being used to purchase long-term government bonds). After a growth rate of nominal GDP of 4-5 percent is achieved, policy should revert to more normal arrangements, with a target of about 2 percent inflation or 4-5 percent nominal GDP growth.

Purchasing foreign exchange for the purpose of monetary control is basically consistent with the provisions of the Bank of Japan Law that call for it to exert monetary control so as to contribute to the sound development of the Japanese economy. But since the Law does not mention this reason for conducting foreign exchange transactions, the BOJ should overcome the Law's internal inconsistencies by requesting approval from the Minister of Finance and the Prime Minister. It should also seek amendment of the Law so as to recognize the close relationship between monetary policy and exchange rate policy, thereby strengthening Japan's statutory basis for central bank independence.

¹⁴ For a survey of the literature, see Edison (1993).

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