Challenges for Monetary Policy¹

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Good monetary policy is both simple and complicated. The principles for good monetary policy are simple: Perform *flexible inflation targeting*, which means aiming to stabilize inflation around an explicit low positive numerical inflation target with some weight also on stabilizing the output gap, that is, stabilizing output around a measure of potential output. Because of the lags between monetary-policy actions and the effect on inflation and output, the way to do this is to look forward and perform forecast targeting, that is, to set the central bank's instrument rate such that the inflation and the output-gap forecasts "look good," which means that the inflation and output-gap forecasts approach the inflation target and zero, respectively, some 1-3 years ahead. The practice of constructing these forecasts and deciding on the appropriate instrument rate (or rather, instrument-rate plan) is quite complicated, though, and requires the collection and processing of vast amounts of data, thorough analysis, and skillful combination of judgment and model results. Since monetary policy works via the expectations of future instrumentrate settings rather than the current instrument rate, and since expectations of future inflation and output matter for the private sector's current pricing and production decisions, monetary policy is to a large extent the management of expectations. Therefore, the transparency and public understanding of monetary policy, including the inflation and output-gap forecast that guide it, increase the effectiveness of monetary policy; the explicit inflation target also provides an effective anchor for inflation expectations. Explicit objectives and transparency are also important for the accountability of central banks, which is of independent value in a democracy but also provides stronger incentives for central banks to achieve their objectives.

Interestingly, central banks in a few small and medium-sized countries have been leading monetary-policy developments in the past decade and have come to represent international best practice, for instance, the Reserve Bank of New Zealand, the Bank of England, and Sweden's Riksbank, and an increasing number of central banks in other countries have chosen to follow their leads. In contrast, the central banks in the G3 are lagging behind in this development—although they may follow internal procedures similar to forecast targeting with internal objectives not disclosed to the general public. The ECB—although having recently improved its definition of price stability and reduced the role of monetary aggregates—has chosen to be less transparent, for instance, in its publishing of forecasts. The Fed and the Bank of Japan have even declined to announce explicit objectives, an effective and well-known way to avoid accountability.

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Flexible inflation targeting, where each country pursues its own inflation and output-gap targets, means that any explicit *international coordination* of monetary policy is unnecessary. Instead, there is implicit coordination; each country responds to monetary-policy actions in other countries only to the extent to which those actions affect the country's inflation and output-gap forecasts. This seems to work very well.

What are the current challenges for monetary policy? The largest, I believe, are the disturbances caused by U.S. fiscal policy, including the associated fall and instability in the dollar and the uncertainty about the necessary future correction of the U.S. fiscal and current-account deficits. U.S. fiscal policy is arguably the worst and most reckless among advanced countries in modern memory (see, for instance, Gale and Orzag [2] and Mühleisen and Towe [3]). Because this is not fiscal policy in a small developing country but in the largest economy in the world, it has large consequences for the rest of the world, including for monetary policy. Another challenge is the risk of deflation and a liquidity trap. I believe such risks have subsided in the world except in Japan, where the liquidity trap remains a reality. Since Japan is the second largest economy in the world, the liquidity trap there remains a formidable challenge.

The fall in the dollar is contractionary for countries with flexible inflation targeting and floating exchange rates. It reduces the competitiveness of their exports and thereby leads to lower output forecasts. It depreciates the value of the dollar-denominated assets held in those countries. It reduces inflation forecasts in those countries through several channels, including cheaper imports. Everything else being equal, under flexible inflation targeting in those countries, such changes in inflation and output forecasts call for more expansionary monetary policy. Thus, the fall in the dollar leads to a monetary expansion in those countries.

So, the response to the dollar fall occurs in a sense automatically, even though there is no independent exchange-rate target under flexible inflation targeting. Each country instead responds to exchange-rate movements, regardless of their size, to the extent that they affect inflation and output-gap forecasts. I believe this is the best way to respond to the fall in the dollar, indeed, the only response that makes sense.

Furthermore, any open-mouth operations (announcements of desired or undesired exchangerate developments) and sterilized interventions are normally ineffective, except possibly in the very short run. In some cases they may be counterproductive. They may give the impression that central banks undertaking such actions do not understand economics, and they will sometimes lead to humiliation and reduced credibility of those central banks. Instead, if the exchangerate movements are deemed to affect the inflation and/or output-gap forecasts, the appropriate response is an instrument-rate adjustment, that is, a non-sterilized intervention.²

² As open-mouth operations I have in mind statements expressing various views on exchange rates without much analysis and motivation. This is different from publishing careful—and difficult—analysis of what are reasonable equilibrium levels of exchange rates and why current market exchange rates might be out of line. Publishing the central bank's judgment and assumptions on exchange rates and other asset prices used in inflation and output-gap forecasts is part of the transparency flexible inflation targeting.

Regarding the risk of deflation and a liquidity trap, there seems to be little risk that any new countries or regions fall into a liquidity trap. The frenzy of the spring of 2003 among media, international organizations and some central banks has also subsided by now. Only Japan is in a liquidity trap. Indeed, some of the media seem to believe that Japan may soon be out of its liquidity trap.

A liquidity trap is a situation where the instrument rate is at its minimum, zero, but the real interest rate (the nominal interest rate minus expected inflation, that is, plus expected deflation) is still too high. The economy is caught in a recession (a negative output gap), and inflation forecasts are lower than desired. That is, there is a gap between the real interest rate and the optimal real interest rate. If the central bank could, it would lower the real interest rate by, as usual, lowering the nominal rate. This would increase aggregate demand and output, increase expected and actual inflation, depreciate the currency, and finally get the economy out of recession and inflation back to target. When the instrument rate is already at zero, this cannot be done. Conventional monetary policy is ineffective; nonconventional monetary policy is needed.

Since Krugman [1], it is well understood that the optimal monetary policy in this situation is to reduce the real interest rate by creating inflation expectations, by a credible commitment to a higher future price level when the liquidity trap is over some time in the future. The benefit of a reduced recession at the present time is worth the cost of overshooting the inflation target in the future. As Krugman emphasized, a big problem with the optimal policy is how to make the higher future price level credible, especially if the central bank, like the Bank of Japan, has demonstrated a strong preference for low or even zero inflation. An expansion of the monetary supply is not enough, since it may not be perceived as permanent. As explained in Svensson [5], expectations of an increased future price level would show up as a current currency depreciation. The "quantitative easing," the about 50% expansion of the monetary base in Japan since the spring of 2001, has not led to any depreciation of the yen. Hence, it has failed to create any expectations of a higher future price level.

As explained in Svensson [4] and [5], the best way to make the higher future price level credible is to depreciate the currency and peg it at a level consistent with the desired higher future price level, as in the Foolproof Way to escape from a liquidity trap that I have proposed.³ This policy achieves, through a different route, the same currency depreciation and higher future price level that a lower instrument rate would achieve, if it were possible. The Foolproof Way is just another way to achieve the expansionary monetary policy that is optimal in a situation with too low inflation and output-gap forecasts. It works fine, as long as the rest of the world

³ The Foolproof Way consists of the announcement and implementation of: (1) a price-level target path that increases at the rate of a long-run inflation target and starts above the current price level with the price gap to be undone, which price gap corresponds to the accumulated overshooting of the inflation target; (2) a currency depreciation and a (crawling) peg that is consistent with the price-level target; and (3) an exit strategy by which the peg is abandoned for flexible inflation or price-level targeting once the price-level target path has been reached.

is not in a liquidity trap, which is indeed the case for Japan. The Foolproof Way belongs to the toolbox of emergency policies of all central banks, to be used if they were unfortunate to fall into a liquidity trap.

The nature of the optimal policy in a liquidity trap has been well known to the Japanese authorities since 1998 and Krugman's [1] much noted article. The Foolproof Way as the most effective way to achieve the optimal policy has been known to these authorities since it was presented in Svensson [4] at a conference at the Bank of Japan in July 2000. Before that conference, Bernanke, McCallum, Meltzer and other scholars had in different ways emphasized the potential of exchange-rate policy in a liquidity trap. The failure of the Japanese authorities to follow the recommendations they have received from a number of economists, organizations and authorities all around the world arguably represents the worst monetary-policy mistake since the Great Depression. It has kept the Japanese economy in unnecessary recession and deflation for more than half a decade since the publication of Krugman [1].

One possible reason for the failure of the Japanese authorities to act is actual and/or anticipated opposition to a yen depreciation from U.S. authorities. It is therefore a grim irony of history that the the U.S. authorities have recently welcomed and arguably even encouraged a weakening of the dollar as way to stimulate the U.S. economy. Japan had been better off if the Japanese authorities had considered the welfare of their own citizens regardless of the reactions of other countries. This illustrates the statement above, that any international monetary-policy cooperation is best done implicitly, by doing flexible inflation targeting in each country without regard to exchange-rate effects on other countries.

I believe that Japan still needs more expansionary monetary policy and that the Foolproof Way is the most effective way to do it. A growing economy and positive inflation would also make it easier to undertake the vast structural reforms, especially of the financial sector, that Japan needs. The Foolproof Way can be applied in spite of the current real depreciation of the dollar, since the Foolproof Way does not attempt to change long-run equilibrium real exchange rates; it achieves an increase in the future price level by a *nominal* depreciation, without affecting the future real exchange rate.

Even if the Japanese authorities do not take effective measures to escape from the liquidity trap, the liquidity trap will eventually end, because the natural interest rate rises back to normal and the economy slowly gets back to more normal conditions. This would not mean that policy has been right, or that policy has contributed much to recovery. Instead, it would mean that recovery comes much too late, and that many years of output, income and employment are lost for ever.

Against this background, the monetary-policy questions mentioned in the agenda for the meeting can be answered very briefly:

Is there any sign that the effectiveness of monetary policy has been lost at currently prevailing

low interest and inflation rates? Should the case for unconventional interventions be revisited?

The standard transmission mechanism works as long as interest rates are positive. In a liquidity trap, nonconventional policies are called for. Nonconventional interventions that are supposed to affect relative asset prices via various risk premia are likely to have only second-order effects. Exchange-rate policies like the Foolproof Way, which work via a commitment to a peg representing a depreciation of the currency, will have first-order effects.

Should central banks adopt an asymmetric response to inflation and deflation risk, responding aggressively to the latter on the grounds that once deflation sets in it can be very hard to reverse and therefore very costly? Or is inflation as intractable as deflation and every bit as costly?

A positive inflation target reduces the risk of falling into a liquidity trap. There is no need for an asymmetric *target* but, under forecast targeting, the probability of a liquidity trap for negative shocks will reduce *mean* inflation and output-gap forecasts and thereby imply the appropriate asymmetric *response* to such shocks.

References

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