**The Limits of Monetary Policy[[1]](#footnote-1)**

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We have been asked to speak about the role of monetary policy, and in particular, about the limits to what monetary policy can achieve. I think that few people today will argue that monetary policy is not important. Central banks have played an especially prominent role in public policy over the past few years. Indeed, in many countries, the central bank has been the indispensable policy authority in dealing with the problems created by the global financial crisis.

Yet this has not in all cases resulted in an increase in the prestige of central banks and the deference shown to them. Instead, in many places, and certainly in the US, public criticism of monetary policy has greatly increased in this period. In some cases, this criticism raises legitimate issues about complex and debatable judgments that have had to be made in conducting policy in a difficult environment. But some of the criticism seems to reflect unreasonable expectations about what monetary policy can be asked to achieve. In particular, the assumption that central banks have god-like power over the economy neglects the importance of real factors that monetary policy is powerless to undo.

For example, a criticism that is increasingly raised in the US argues that the Federal Reserve’s policy that has kept the federal funds rate near zero for more than 4 years, that promises to keep it there for considerably longer, and that has also sought to lower longer term interest rates through asset purchases, is harmful to savers. It’s argued in particular that retirees that worked hard and saved an amount that was expected to be sufficient to finance their retirement now face hardship if expected to live off the income from bonds in an environment of unexpectedly low interest rates for years on end.

This in not, of course, an issue to dismiss lightly. But in asking whether the Fed should raise interest rates, one has to recognize that a higher interest return on savings will have to also mean a higher rate of interest charged to borrowers. And it is unclear whether on net, increased income for savers would do more to lower hardship associated with unexpectedly tight budget constraints than the increase in hardship on the part of indebted households, who would face unexpectedly tightened budget constraints if interest rates are increased. Thus it is unclear in which direction a consideration of the distributional impact of monetary policy should cut.

But more importantly, the supposition that interest rates are simply determined by the fiat of the central bank, and can equally well be higher or lower if the central bank wishes them to be, neglects the role of real factors. In fact, the ultimate reason for the current disappointment of savers in the US is a situation in which fewer households and firms have been willing to spend, at a normal level of interest rates, owing to increased concern to reduce their levels of indebtedness, and increased uncertainty about future conditions. Under these circumstances, the equilibrium real rate of interest is lower than its usual level, for reasons unrelated to Fed policy; and in a world of perfectly flexible wages and prices, the real rate of return received by savers would fall regardless of monetary policy. It would be unfortunate to be a saver intending to live off the return of one’s past savings in such a state of the world; but this would not be the fault of the central bank, nor a problem that monetary policy could solve. It would have to be addressed by some combination of better retirement planning, social insurance programs, and state-contingent fiscal policy.

In a world with sticky nominal wages and prices, instead, it’s no longer true that monetary policy can’t affect real rates of return. Still, it is important to recognize how it affects them. Monetary policy can achieve a temporary departure of the market real rate from the natural rate only by causing the level of aggregate real activity also to temporarily depart from the natural rate of output. Specifically, it is possible for the central bank to keep the market real rate of return from falling, when a shock of the kind that I’ve described occurs, only by pursuing a contractionary policy that would keep output below potential for a time. This means that preserving the incomes of savers would require not merely a corresponding reduction in others’ incomes, but a reduction in *aggregate* income --- so that the incomes of others would fall by *more* than the amount by which the incomes of savers would increase, if indeed a net increase in the incomes of savers would even be achieved, given the likely effect on them of the sharper contraction in economic activity.

This example illustrates one reason why people demand more from central banks than they can possibly deliver—the simple fact that people have conflicting interests. But this cannot, by itself, explain why the degree of controversy about monetary policy has increased so much recently. I think part of the reason may relate to the way that central banks have responded to the global financial crisis.

One source of outsized expectations about what monetary policy should accomplish may be the degree which some central banks have emphasized their power to stimulate the economy despite the unusually difficult circumstances recently faced. Central bankers have sought to assure the public that monetary policy is not impotent, that they have not “run out of ammunition,” even when their traditional policy tools have reached their limits. The reason for this, doubtless, has been a desire to avoid the possibility of self-fulfilling pessimistic expectations. It’s feared that if the central bank were to admit that there were limits to its ability to further stimulate aggregate demand, the result would be deepening gloom about coming deflation, and continuing low incomes, which then would further reduce what the central bank could achieve with its instruments.

But exaggerating the power of the available instruments of monetary policy has potential costs as well. One of these is the creation of exaggerated hopes, that can then lead to disillusionment with the central bank, which in turn results in political pressure to limit the central bank’s autonomy.

Another cost, I believe, is that excessive confidence in what monetary policy should be able to achieve tends too easily to relieve fiscal authorities of responsibility for the macroeconomic consequences of their decisions. One of the reasons for the slowness of the recovery in the US, and some other countries as well, has been the fact that fiscal policy has lately been focused largely on the problem of maintaining the long-run solvency of the government, with the consequence that the government budgets and public sector employment have been slashed precisely at the time when unemployment was already high and demand already insufficient. Confidence that monetary policy should be able to manage the level of aggregate demand has helped to excuse this emphasis. Indeed, one wonders whether the UK Treasury’s enthusiasm this spring for requesting that the Bank of England review the possible use of additional, more aggressive, easing policies beyond the remarkable steps already taken there may not have been due to this motivation --- encouraging the view that monetary policy should be able to do even more provides an excuse for continuing to focus fiscal policy purely on long-run solvency concerns.

I would agree that monetary policy can do more, when the zero lower bound for short term interest rates has been reached, as it has been in the US, than to simply point out that interest rates are as low as they can get. In particular, a commitment to maintain a more accommodative stance of policy in the *future*, when conditions would ordinarily justify a policy rate above zero, should be able to increase aggregate demand now, through a variety of channels, and I believe that the Federal Reserve was right to seek to increase current demand through “forward guidance” of this kind. But there are limits to the power of this tool, particularly at a time when many households and firms are reluctant to increase their spending even if interest rates are low, owing to the state of their balance sheets and uncertainty about the future. And it is not a tool without costs: even if promises about future policy can increase demand now, they do so at the cost of constraining the central bank’s ability to achieve its stabilization objectives later. In the case of fiscal policy, it is well understood that spending more now has the cost of reducing the government’s room to maneuver in the future; hence the emphasis at present in the US and many other countries on reducing the amount of debt carried into the future. But the available means of monetary stimulus when the zero lower bound is reached constrain future policies, as well. Hence it seems a mistake to ask for no help from fiscal stimulus, simply on the ground that future policy is thought to be less constrained this way.

Another reason for increased pressure on central banks to satisfy an ever longer list of demands is likely an increased perception that monetary policy is being conducted in a discretionary fashion, with few constraints on what the central bank might choose to do, and uncertainty about what is required to justify particular policies. This represents an apparent change with respect to the most important developments of the two decades prior to the crisis, that had instead emphasized greater commitment on the part of central banks to specific but therefore limited goals.

The guiding principles behind this new approach to monetary policy in the period before the crisis were very well articulated in a paper by Stanley Fischer called “Modern Central Banking,” written in 1994 for a volume celebrating the tercentennial of the Bank of England. I realize that it is usually considered impolite to remind a public official of things that he has said in the past, and even more so when the lecture in question is from nearly two decades ago, and from a time long before he was invested with his current responsibilities. But in this case, I think that the essay stands up quite well to the passage of time, and I would still recommend it to anyone interested in central banking.

Stan’s paper argued for the importance for granting central banks operational independence in setting interest rates. But the case made for this independence was not so that they could exercise the fullest possible degree of discretion. Rather, it was so that the central bank could commit itself to clearly defined targets, pursue them deliberately, and then be held accountable, both for achieving particular outcomes and for explaining how its policies are guided by the pursuit of the announced targets.

This required limiting what monetary policy can be expected to deliver, so that it could be held accountable for delivering something. In particular, the paper argued for the desirability of an explicit quantitative target, on the order of 1 to 3 percent per year, for the long-run rate of inflation. It also argued for the importance of clarifying that the central bank was not to be responsible for “the financing of the government deficit, or management of the public debt;” and it argued for the desirability of allowing the exchange rate to float, and vesting responsibility for both interest-rate policy and exchange-rate policy in the central bank, so as not to require the central bank to conform to an exchange-rate target set by someone else.

Under this view --- that was indeed the one adopted around the world in the decade after Stan expounded it --- the case for granting the central bank independence from political interference was based on a commitment on its part to pursue definite, pre-specified goals, for which it could be held accountable. A reversion to a more discretionary approach to policy instead makes it more likely that both the public and the political branches of government will ask why central banks have so much apparently unchecked power.

But can the kind of framework for the conduct of monetary policy described in Stan’s 1994 essay still be considered viable today, after all that happened since the crisis in 2008? I believe that many of the principles enunciated there remain valid. The analytical case for the desirability of a policy rule, as opposed to unfettered discretion, turns on the importance of expectations of future outcomes as a determinant of current conditions, and also on the idea that central bank commitments can influence these expectations. But the importance of expectations, and also of seeking to influence them through central-bank statements, has only become more prominent in monetary policy since the crisis. Both the use of forward guidance by the Federal Reserve and the Bank of Japan’s most recent policy initiative represent examples of policies intended to affect the economy primarily by influencing expectations. And to the extent that a central bank seeks to change expectations about its future policy, it must be able to commit its future policy in advance, rather than leaving itself full discretion.

I believe that the benefits of stabilizing medium-run inflation expectations have also continued to be evident during the crisis. Inflation expectations have remained relatively stable in many countries in the face of large disturbances and dramatic changes in policy. I believe this has been an important stabilizing factor. In countries like the US, a significant disruption of the financial sector didn’t lead to the kind of deflationary spiral seen in the 1930’s; and elsewhere, large increase in commodity prices didn’t lead to the kind of wage-price spiral seen in the 1970s. In both cases, the stability of inflation expectations, relative to what had been true under prior policy regimes, made it easier for current policy to contain the disruptive consequences of these shocks.

Some aspects of the theory of inflation targeting as they were understood 20 years ago, however, do need to be modified in the light of more recent developments. Most notably, I think there is a need for greater clarification of how policy should be conducted in the short run so as to be consistent, and also to be seen to be consistent, with the central bank’s medium-run inflation target. A formulation proposed in Stan’s 1994 paper is that a central bank should always be able to project that inflation will return to the target rate if things evolve as currently expected, over a definite, fairly short horizon --- say, within two years. I don’t think this is a suitable general principle, if one allows for the kind of more serious macroeconomic disturbances encountered recently. There is no reason to think that the time that it should take for convergence back to a long-run steady-state position should be independent of the nature and the size of the economic disturbance.

There is also a problem of intertemporal consistency with a criterion that only requires a promise that the target will be reached two years in the future. If, a year from now, one expects the central bank also to be content with an expectation of reaching the target only two years further in the future, then one should not expect now that the target will be actually reached within two years, if things develop as can currently be anticipated.[[2]](#footnote-2)

A solution, in my view, would be to define acceptable short-run departures from the inflation target, not in terms of the time expected to be required to reach the target, but in terms of the presence of other imbalances that justify not proceeding more rapidly to the target rate of inflation. For example, the appropriate short-run policy stance might be defined to be the one that keeps nominal GDP as close as possible to a pre-announced target path. Such a criterion would allow for temporary departures of the inflation rate from the long-run target rate if they coincide with temporary departures of real GDP growth from the potential growth rate. At the same time, the target path for nominal GDP could be chosen so to guarantee an average rate of inflation equal to the target rate over periods of several years, as long as real GDP can be expected to equal potential on average over sufficiently long periods of time.

Defining a desirable criterion for short-term policy decisions, which can clarify the way in which alternative short-term objectives should be balanced, however, is admittedly a more difficult task than simply designing a desirable medium-run inflation target. The answer is more sensitive to specific assumptions about the structure of the economy, and so judgments about it will therefore be more controversial.

We will be fortunate indeed if someone with both the analytical capacity and the practical wisdom of a Stanley Fischer will take on the task of synthesizing what’s known about the principals of central banking in the light of more recent experience. I don’t know what Stan’s own plans are after leaving the Bank of Israel, though I was happy to see him say in a recent interview that he doesn’t intend to retire. If he were to take on the challenge of writing an updated essay on modern central banking, I for one would be very eager to read it.

1. Speech delivered at “The New Bank of Israel,” a conference in honor of Governor Stanley Fischer, Bank of Israel, June 18, 2013. [↑](#footnote-ref-1)
2. This point is developed in further detail in Michael Woodford, “Forward Guidance by Inflation-Targeting Central Banks,” paper presented at the conference “Two Decades of Inflation Targeting,” Sveriges Riksbank, June 2013. [↑](#footnote-ref-2)