T.

The basic lesson I have gleaned from this symposium is that Keynes' adage, "In the long run, we are all dead," is bad economics. The key to doing stabilization policy right is to take a long-run view, while Keynes' adage suggests otherwise and encourages a focus on short-run stabilization

The need for a focus on long-run issues in the design of fiscal policy comes out clearly in the papers by Alan Auerbach and Matthew Canzoneri, Bob Cumby, and Behzad Diba and the discussion that followed. Expectations are central in all of the analyses, and so long-run considerations are critical to understanding what effects fiscal policy will have. It, thus, follows that to make sure that fiscal policy has the intended effects and is beneficial, it needs to be designed with long-run considerations in mind.

The same is true for monetary policy. The discussions of monetary policy in presentations by central bankers Otmar Issing, Guillermo Ortíz, Yutaka Yamaguchi, and David Dodge also puts great stress on a long-run focus in the proper design of monetary policy. Indeed, the paper by Christina and David Romer makes it quite clear that monetary policy was only successful when it focused on long-run considerations. Only when the Federal Reserve recognized that there was no long-run tradeoff between output and inflation and pursued the goal of price stability seriously, as it did in the 1950s and early 1960s and after

1979, did good outcomes result. The 1970s, when monetary policy focused more on short-run considerations, was not a happy decade for monetary policy because inflation spiraled out of control.

## II.

A focus on the long run in the conduct of monetary policy is a good principle, but what does it mean in practice?

Clearly, policymakers should care about output fluctuations as well as inflation fluctuations when setting monetary policy, and this is reflected in the standard loss function for the monetary policy authorities that we see in Lars Svensson's paper. Given that output fluctuations enter policymakers' objectives, it seems sensible that central banks should operate along the lines of a Taylor rule in which the policy interest rate responds to the output gap as well as to the inflation gap. I want to argue that this seemingly obvious conclusion is not the right one.

There are three basic problems with a focus on stabilizing the output gap in the conduct of monetary policy. First, as has been emphasized in the papers and discussion at this symposium, there is a great deal of uncertainty about the level of potential output and, so therefore, about the size of the output gap. This uncertainty not only stems from the fact that output data are revised substantially after the fact, but also because our theoretical understanding of the concept of potential output is actually quite limited. It is no surprise then that our estimates of the output gap are often way off, and then a focus on the output gap can get you into real trouble.

Indeed, this is exactly what happened in the 1970s in the United States as is illustrated by the Romer-Romer paper here at the conference and also in several papers by Anathasios Orphanides, who is on the staff at the Board of Governors of the Federal Reserve. The Fed got into trouble during this period because Arthur Burns put too much weight on the output gap in setting monetary policy when the output gap was grossly underestimated. Because Burns erroneously believed that the economy had a lot of slack (i.e., the output gap was negative).

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when he saw that inflation was not declining or might even be rising, he came to the conclusion documented by the Romers that monetary policy was ineffective in constraining inflation. Indeed, Burns repeatedly stressed that inflation fluctuations were due to special factors rather than monetary policy. As the Romers point out, the result was that the Fed pursued overly expansionary monetary policy, which led to the great inflation of the 1970s.

A focus on the output gap in the last half of the 1990s would have been equally disastrous for monetary policy. When I entered the Federal Reserve System in 1994, the standard view both at the New York Fed, the Board of Governors, and elsewhere was that the NAIRU was around 6 percent. However, when economic growth looked like it was above sustainable levels and the unemployment began to fall below 6 percent, inflation remained low (and even kept to a slight downward path). In this situation, the Fed did not tighten as would have been suggested by a focus on the estimated output gap because the Fed, instead, kept its eye on the inflation ball. It was willing to entertain the possibility that the output gap might be seriously mismeasured and so ignored the inappropriate signal from its output gap estimates. The result was a highly successful monetary policy that did not choke off the very high growth rates of this period and yet saw the Fed attain a CPI inflation rate around 2 percent, which most central bankers view as being consistent with the holy grail of price stability.

The second problem with a monetary policy focus on reacting to output fluctuations is that it can have undesirable consequences for central bank credibility. A focus on output fluctuations may lead economic agents to believe that the monetary authorities will try to eliminate any decline in output below potential. As a result, it is more likely that workers and firms will raise wages and prices because they know that the monetary authorities are likely to accommodate these rises by pursuing expansionary policy to prevent unemployment from developing. The result is that a self-fulfilling equilibrium can occur in which wages and prices rise, then monetary policy accommodates this rise, and this leads to further rises in wages and prices, and so on, thus leading to a new equilibrium with higher inflation without a reduction in output fluctuations.

The third problem with a focus on the output gap is that it can complicate and hinder the central bank's communication process with the public, markets, and politicians. When the monetary authorities explain their monetary policy actions by indicating that they are trying to shrink the output gap, the public is more likely to focus on short-run considerations (job, jobs, jobs) rather than long-run considerations (controlling inflation). The result is that there might be more political pressure for the central bank to fall into the time-inconsistency trap and pursue overly expansionary monetary that results in inflation but does not actually create jobs.

My concerns about a monetary policy focus on output suggest that the Federal Reserve's "bias" statement that it currently makes at the conclusion of every FOMC meeting might be problematic. In this statement, the Fed assesses the balance of risks, whether they are toward higher inflation or toward a weaker economy. The problem with this statement is that if for a substantial period of time it states that the balance of risks are toward weakness in the economy, it may create the impression that the Fed has a short-run focus on preventing economic downturns. This could then lead in the future to increased political pressure on the Fed to pursue short-term rather than longterm policies. Furthermore, it could lead to a weakening of the Federal Reserve's inflation-fighting credibility. Neither of these problems might be severe currently, but in the future they could lead to a worsening of the tradeoff between output and inflation fluctuations, thereby worsening economic performance. To prevent this outcome, the balance of risks statement might be better couched in terms of risks toward a deflationary economic environment rather than toward a weaker economy.

## III.

Given my criticisms of a monetary policy focus on output gaps, should a central bank not be concerned at all about output fluctuations? The answer is no, and Lars Svensson's paper shows how this can be done without falling into the traps outlined above. First, a central bank should pursue a target rule of flexible inflation targeting, rather than an instrument rule of the Taylor type. Second, it should

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embed its output stabilization goal in its flexible inflation-targeting regime by adjusting how quickly it tries to approach the long-run inflation target, depending on preferences about the tradeoff between output versus inflation fluctuations.

It is also important that the central bank make clear to the public that it does indeed care about output fluctuations, and this is why it will not try to achieve its inflation target too quickly. Because almost all inflation-targeting central banks have found themselves close to their long-run inflation targets in recent years, they typically explain their target rule by saying that they are attempting to hit the target over an eighteen-month to two-year period. This horizon, I suspect, is quite close to the policy horizon, the time it takes for monetary policy to affect inflation, and it is reasonable to have this horizon when actual inflation is not far from its long-run goal. However, if shocks to inflation drive it substantially away from this long-run target, then a longer horizon should be used to achieve this target, given that a nonzero weight is put on output fluctuations in the objective function. Central banks might, thus, want to make it clearer that if inflation is driven much farther away from its long-run target than has been the case in recent years, then the approach to this long-run target will have to be slower than the current eighteen-month to two-year horizon. In this way, they can demonstrate that they do care about output fluctuations, but are optimizing monetary policy in a long-run rather than a short-run context.

In addition, central banks can demonstrate that they care about output as well as inflation fluctuations by emphasizing that the prevention of undershoots of the inflation target is every bit as critical as preventing undershoots of the targets. As the book I wrote with Ben Bernanke, Tom Laubach, and Adam Posen demonstrates, the Bank of Canada has been particularly effective at communicating that it is serious about avoiding undershoots of the inflation target, and this has increased public support for the Bank of Canada. [I have also argued elsewhere that having a target for inflation (taking out any measurement bias) that is slightly above zero also would help demonstrate the central bank's concern about output fluctuations and would also provide some insurance against deflation, which has costly consequences.]

## IV.

A critical element of successfully conducting a flexible inflation targeting regime is central bank transparency and a successful communication strategy. Svensson advocates further increases in transparency over what even the most transparent central banks do currently. But can you take central bank transparency too far?

This issue reminds me of the famous quote from the fashion designer Chanel, "You can never be too rich or too thin." It may be true that you can never be too rich (but maybe your children can be), but you certainly can be too thin. After all, anorexia and starvation can be killers. Indeed, I think that Svensson advocates a degree of transparency that does go too far. And although I usually agree with Lars and think that, on the whole, his paper is excellent, here I have to strongly disagree with him. Matti Vanhalla and other participants at the symposium have also expressed their doubts about pushing transparency too far, and I want to delve into this issue further.

Svensson wants central banks to increase transparency in two ways: First, he suggests that central banks should explicitly describe their objective functions by announcing to the public their numerical weights on output versus inflation fluctuations, as well as potential GDP and the inflation goal. Second, he advocates that central banks announce the expected future policy path for the interest rate instrument. The big problem I have with these proposals is that they violate the KISS (Keep It Simple Stupid) principle.

The big advance in central bank thinking in recent years is simplification of the communication strategy with the markets, the public, and the politicians. This has been achieved by focusing on price stability, which puts the appropriate emphasis on what monetary policy can do (promote price stability) and not on what it cannot do (create jobs in the long-run through expansionary monetary policy). Svensson's suggestions would very much complicate the communication process.

Having a central bank specify the weights in its objective function is far from simple. Although being an economist, I try to be rational and Overview 445

maximize my welfare, I would find it very hard to specify my objective function. I suspect that most people, and even economists, would be in the same boat. Thus, I don't think that it would be at all simple for the members of the policymaking board at a central bank to do this. Also, if most people have trouble quantifying their objective function, is it unlikely that the public would understand what the central bank was talking about if it quantified its objective function.

Furthermore, who should choose the numerical weights for the objective function? Should it be the central bank, as Svensson seems to suggest? Why shouldn't it be the government who, in a democratic system, is usually thought of as the best entity to set the goals for its agencies?

In addition, specifying the objective function requires the central bank to announce values for potential GDP. However, as already mentioned, potential GDP is extremely hard to measure. Announcing the central bank's projections for potential GDP may lead to these projections being interpreted as targets and may promote too much of a focus on the output gap, which, as I have discussed, leads to all sorts of difficulties.

The bottom line is that having a central bank specify the weights in its objective function opens up a can of worms and it should be avoided. Specifying a policy interest rate path is also a complicated exercise, and I was not convinced by Svensson's "simple proposal" for the policymaking board to do this. When I began my stint in the Federal Reserve System in the fall of 1994, the Board staff's greenbook forecast was constructed conditional on a future path of the federal funds rate. The members of the FOMC found that this complicated discussion of monetary policy at their meetings and, as a result, the forecasting procedure was changed so that the forecasts were conditioned on the current value of the federal funds rate, which was left unchanged for the horizon of the forecast. I, thus, agree with the view expressed by Charles Goodhart, a past member of the Monetary Policy Committee of the Bank of England, that having the policy board agree on a future expected path of the policy rate and then announcing it would not enhance monetary policymaking practice.

## V.

The bottom line from the presentations and discussion at this symposium seems to me to be the following: In the long run, we might all be dead. But if we do not focus on the long run, then we might get pretty sick in the short run. Therefore, a focus on the long run in conducting both monetary and fiscal policy for stabilization purposes is imperative.