

Asset Prices and ECB Monetary Policy*

Lars E.O. Svensson
Princeton University, CEPR and NBER
www.princeton.edu/~svensson

April 2004

Abstract

The ECB and the Eurosystem should normally take asset-price movements and potential asset-price bubbles into account only to the extent these are deemed to have an impact on the inflation and output-gap forecasts that should guide monetary policy. Asset prices should not be separate target variables, additional to inflation and the output gap. The explicit or implicit objective of financial stability, including an efficient payment system, is best handled with efficient supervision, including a regular and transparent *Financial Stability Report*, with indicators of financial stability and early warnings for appropriate regulatory and supervisory action. Then, financial stability can be seen as a constraint on monetary policy that, under normal times, is not binding and does not affect monetary policy. In crisis situations, however, financial stability may be a binding constraint on monetary policy and typically induce more expansionary monetary policy.

To what extent, and how, should monetary policy in the Euro area take asset-price movements and potential asset-price bubbles into account? I believe the answer to this question follows from the general principles for good monetary policy, as explained, for instance, in Svensson [2] and [3]. Furthermore, whereas the principles for good monetary policy are simple, the practice of good monetary policy is difficult. The same is the case for the question of how to take asset prices into account in monetary policy: the principles are simple, but the practice is difficult.

So, the principles of 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 real economy, which can be expressed more precisely as stabilizing the output gap, that is, stabilizing output around a measure of potential output.

*Briefing paper for the Committee on Economic and Monetary Affairs (ECON) of the European Parliament for the quarterly dialogue with the President of the European Central Bank. I thank Kathleen Hurley for editorial and secretarial assistance. Expressed views and any errors are solely my own responsibility.

Because of the lags between monetary-policy actions and the effect on inflation and output, the best way to do this is to look forward and perform *forecast targeting*. This means setting the central bank's instrument rate (more precisely, to choose an instrument-rate *plan*, a path for the current and future instrument rate) such that the corresponding inflation and output-gap forecasts "look good," which in turn means that the inflation and output-gap forecasts approach the inflation target and zero, respectively, normally some 1–3 years ahead (but, more precisely, the whole future forecast paths should look good, not just the forecast at some fixed horizon).

Although these principles are simple, as explained in Svensson [3], the *practice* of constructing forecasts, deciding on the appropriate instrument rate (plan), and communicating these to the general public and the market is quite complicated and difficult.

How do these principles apply to asset prices? A first issue is whether asset prices should also be considered *targets of monetary policy*. I believe they should not. The principles above refer to stabilizing inflation and the output gap as the objectives of monetary policy. Inflation and the inflation target are typically specified in terms of an index of final goods and services, a consumer price index or a variant thereof, such as a core measure. I see no good reason to include asset prices separately in the price index. Asset prices should not be separate target variables for monetary policy.

But what about *financial stability*? Financial stability, including an efficient payment system, is normally an explicit or implicit separate objective for the central bank. Clearly, asset-price movements and bubbles can threaten financial stability. I believe the best way to deal with financial stability is by efficient supervision, including a regular and transparent *Financial Stability Report*, produced either by the central bank or by a separate financial-supervision authority, with various indicators of financial stability that serve as early-warning indicators for necessary regulatory or supervisory action. With such informed and forward-looking action, under normal circumstances, the risk of financial instability will be small, and it will not be a concern for monetary policy. In line with this, I believe that the objective of financial stability and an efficient payment system can be seen as a *constraint* on monetary policy. Under normal circumstances, and with effective supervision, this constraint is *not binding* and has no effect on monetary policy. Only under abnormal circumstances, with very unfavorable shocks, gaps or mistakes in financial supervision, large financial fraud, etc., would financial stability be threatened and then be a constraint on monetary policy. Such a constraint would typically force the central bank to conduct more expansionary monetary policy, for instance, because sizeable parts of a weak

banking sector would be deemed unable to survive the higher interest payments on their normally short liabilities. But normally, with good, transparent, and efficient financial supervision, financial stability would not have any impact on monetary policy.

What role then remains for asset prices in monetary policy, and how should the central bank respond to asset-price movements and potential asset-price bubbles? I believe asset prices should be a concern for monetary policy *only to the extent* they have an impact on the target variables, inflation and the output gap. Furthermore, flexible inflation targeting provides the guidelines to how the central bank should respond to any kind of shocks and disturbances, including movements in asset prices, such as property values, stock prices, and exchange rates (Bean [1] provides a more extensive and detailed discussion along these lines).

Consequently, when an asset price moves, the *first* step is to analyze what is the source of the move, that is, the underlying shock. This first step is a so-called signal-extraction problem, that is, extracting the underlying shock and its nature. Part of this is to assess whether the shock is temporary or persistent. There is no need to emphasize that this first step is a difficult and complicated one.

The *second* step is to assess what impact the inferred shock and its nature have on the inflation and output-gap forecasts. The impact will, for instance, depend on the nature and persistence of the shock. Furthermore, estimating the impact on the output-gap forecast requires that the impact on *both* the output and potential-output forecasts is assessed. Potential output is a complicated concept. The most appropriate concept for monetary-policy purposes is the hypothetical output level that would arise in the hypothetical situation where there is complete nominal price and wage flexibility but any real distortions such as taxes, imperfect competition, and information imperfections remain in place. This is not the same as the standard trend measures of potential output. Whereas potential output normally is independent of monetary policy, it does depend on the shocks hitting the economy. Again, it is not necessary to emphasize that this second step is also quite difficult and complicated.

The *third* step is then to decide, given the shift in inflation and output-gap forecasts, what revision, if any, of the interest-rate plan is required in order to make the inflation and output-gap forecasts look good. The new current instrument setting is then the first element in the new instrument-rate plan. It follows from the above that the new instrument setting is a very complex function of the initial movement of the asset prices. It is so complex that it cannot be summarized as a simple formula. Therefore, there is no point in trying to determine a

simple reaction function for the appropriate instrument-rate response to a movement in some asset price. It all depends on the nature of the inferred underlying source of the asset-price movement. The reaction function is best left implicit, defined implicitly by the three steps I have outlined above.

The *fourth* and last step is to announce and implement the new instrument rate, and to explain the analysis and the outcome of the three steps above to observers and the general public. The latter is what is done in the monetary-policy reports by the best flexible inflation targeters.

Given the above, one can imagine situations when a dramatic rise of stock prices or property values is deemed by the central bank to be substantially in excess of any reasonable fundamental factors and hence qualify as probable bubble that will eventually burst. Furthermore, the central bank may find that a future bursting of the bubble will have an undesirable impact on future inflation and output. Typically a future bursting of a bubble would depress inflation and output and lead to too low an inflation and a negative output gap. Furthermore, a future bursting of the bubble could come after several years. This points to the observation often made in this context, namely that inflation and output-gap forecasts for fairly long horizons may be needed in order to take these aspects into account. Finally, the central bank may come to the conclusion that an early tightening of monetary policy, although it lowers the inflation and output-gap forecasts in the shorter term, by moderating the asset-price rise and likely future bursting, leads to a less depressed inflation and output gap in the future, and overall provides for a better-looking inflation and output-gap forecasts. This would then be a case when a dramatic rise of an asset price and the related risk for a future bursting of a bubble has an impact on monetary policy. However, that impact is exclusively because the inflation and output-gap forecasts then look better, not because of the asset price being a target variable itself.

After this example of an asset-price impact on monetary policy, I would like to emphasize that this is by all means a rather unrealistic example. In most cases, the central bank will not have enough information so as to be able to confidently judge whether an asset-price increase is excessive and unsustainable relative to fundamentals, that is, whether it really is a bubble and will likely burst in the future, with likely negative consequences for future inflation and the output gap. In most cases, the central bank will not have enough information to identify a bubble and the consequences of its bursting, and in most cases it will therefore not be able to prematurely adjust policy in order to moderate an asset-price bubble and its consequences.

References

- [1] Bean, Charles (2003), "Asset Prices, Financial Imbalances and Monetary Policy: Are Inflation Targets Enough?" BIS Working Paper No. 140, www.bis.org.
- [2] Svensson, Lars E.O. (2003), "Monetary Policy and Learning," *Federal Reserve Bank of Atlanta Economic Review*, Third Quarter 2003, 11-16, www.frbatlanta.org.
- [3] Svensson, Lars E.O. (2004), "The Euro Appreciation and ECB Monetary Policy," briefing paper for the Committee on Economic and Monetary Affairs (ECON) of the European Parliament, www.princeton.edu/~svensson.