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A Reform of the Eurosystem's Monetary-Policy Strategy Is Increasingly Urgent*

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Abstract

A reform of the Eurosystem's inferior monetary-policy strategy is increasingly urgent, as noted by a number of observers. For instance, a recent extensive CEPR report finds the that the prominent first pillar of the Eurosystem's strategy, the money-growth indicator, "looks increasingly ridiculous, giving perverse signals that the ECB probably ignores", and that it is "flawed beyond repair—both as a matter of theory and empirically." The Eurosystem's definition of price stability is ambiguous and asymmetric, and less effective as an anchor for inflation expectations than a point inflation target. The Eurosystem should simply adopt the superior monetary-policy strategy of flexible inflation targeting that Bank of England, the Reserve Bank of New Zealand and Sveriges Riksbank follow. That is, it should announce a symmetric inflation target, demolish the first pillar, use all relevant information (including any useful information in monetary aggregates) in the construction of published inflation and output-gap forecasts, set interest rates so these forecasts are consistent with the inflation target and modest output-gap variability, and motivate its interest decisions with reference to these forecasts.

A reform of the Eurosystem's monetary-policy strategy is increasingly urgent, as noted by many observers. The strategy has a "definition of price stability" and two "pillars". The first pillar is "a prominent role for money with a reference value for the growth of a monetary aggregate," more precisely, a money-growth indicator consisting of the difference between current M3 growth and a reference value. The second pillar is "a broadly based assessment of the outlook for future price developments," essentially an inflation forecast. The definition of price stability and, in particular, the first pillar are problematic.

As discussed in some detail in Svensson [16], the definition of price stability is problematic because it is ambiguous and asymmetric, and less effective as an anchor for inflation expectations.

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A symmetric explicit point inflation target, say 1.5%, 2% or 2.5%, would be better and provide a better anchor for inflation expectations. Having an explicit point target is more important than the precise level of the target, 1.5, 2 or 2.5%. As long as there is a clear point target to aim for, it is not important whether there is range or not. Unanticipated shocks will in any case make ex post inflation deviate from the target.

The Eurosystem has serious problems with its unfortunate choice of a two-pillar monetary-policy strategy, in particular the first pillar, which continues to be severely criticized by practically all external observers and commentators.[1] As has been said over and over again, the only sensible choice is a one-pillar strategy where all relevant information (including that in monetary and credit aggregates), is combined into constructing inflation and output-gap forecasts to guide monetary policy, precisely as the Bank of England, the Swedish Riksbank, the Swiss National Bank (since abandoning monetary targeting in December 1999, see [17]), and the Bank of Norway (a new explicit inflation targeter since March 2001, see [12]), among others, do.

The problems with the first pillar have recently been highlighted in an extensive report published by CEPR, Begg, Canova, De Grauwe, Fatás and Lane [2], where first pillar (referred to as the "poison pillar?") is said to be "flawed beyond repair—both as a matter of theory and empirically," and that it "should be dismantled." A summary of the report states that the first pillar "looks increasingly ridiculous, giving perverse signals that the ECB probably ignores."

The defence for the money-growth indicator (for instance, Issing, Gaspar, Angeloni and Tristani [10]) has mainly reported the well-known high long-run correlation between money growth and inflation in historical data. However, this correlation is often misunderstood. Since it is a correlation between two endogenous variables, it says nothing about the direction of causality between money growth and inflation. Money growth and inflation may both be caused by other variables. Indeed, the direction of causality is determined by the nature of the monetary policy pursued. For instance, under successful strict money-growth targeting, money-growth would be stable and in a sense exogenous to inflation. Then one can argue that endogenous inflation is caused by exogenous money growth. However, under successful strict inflation targeting, inflation would be stable and in a sense exogenous to money growth. Then one could argue that endogenous money growth is caused by exogenous inflation. Moreover, under successful exchange-rate targeting, the exchange rate would be stable, and endogenous domestic inflation (in a very open economy with a maximum degree of exchange-rate pass-through) would be determined by foreign inflation. The domestic interest rate would be equal to the foreign interest

[1] For recent examples, see Alesina, Alberto, Olivier Blanchard, , Jordi Galí, Francesco Giavazzo, and Harald Uhlig [1], Begg, Canova, De Grauwe, Fatás and Lane [2], Blinder, Goodhart, Hildebrand, Lipton, and Wyplosz [3], and Galí [8].

rate, and endogenous money growth would be determined by whatever money is demanded at the domestic interest rate, output and price level. Thus, under a fixed exchange rate, both money growth and inflation are in a sense caused by other variables, although they may remain highly correlated in the long run.

Actually, the high long-run correlation between money growth and inflation is largely irrelevant to the practical conduct of monetary policy. The reason is that what matters for practical monetary policy is the correlation for shorter horizons of around 1–3 years, the horizons relevant for practical monetary policy. A number of papers have forcefully demonstrated that the correlation between money growth and inflation at shorter horizons is much smaller. One way to understand this is to realize that nominal money growth is equal to real money growth plus inflation. If real money growth is quite stable, nominal money growth and inflation become highly correlated. However, in the short run real money growth is quite variable, causing a relatively low short-run correlation between money growth and inflation.

Nevertheless, a high long-run correlation between money growth and inflation reminds us, that high long-run inflation can only occur if the central bank somehow tolerates high long-run money growth, and that if the central bank makes sure that long-run money growth is modest, *average* long-run inflation will also be modest. However, this would not prevent considerable *variability* of inflation around the average long-run level. Indeed, Rudebusch and Svensson [13] demonstrate that money-growth targeting that stabilizes money growth in the United States would be a very bad policy, since it would cause very high variability of both inflation and the output gap, compared to that under flexible inflation targeting (although *average* long-run inflation would be at the same low level as under inflation targeting).

Interestingly, Begg, Canova, De Grauwe, Fatás and Lane [2], citing work of De Grauwe and Grimaldi [4] and De Grauwe and Polan [5], now question the high long-run correlation of money growth and inflation. Indeed, for countries with inflation below 5%, average money growth and average inflation during 1970–1999 are largely uncorrelated across countries. Put differently, differences between these countries in money growth over these 30 years do not explain differences in inflation over the same 30 years. Intuitively, in comparison with high money growth and high inflation, the effects of other shocks and disturbances would be relatively small, giving a high correlation. However, with low money growth and inflation, the relative magnitude of other shocks and disturbances is relatively large, bringing a low correlation between money growth and inflation also in the long run.

To this should be added previous results that money growth is a poor predictor of future inflation at horizons of interest to monetary policy, as demonstrated by, for instance, Estrella

and Mishkin [6] and Stock and Watson [14]. Current inflation and the output gap are much better predictors.

Furthermore, regarding monetary aggregates, Gerlach and Svensson [9] have recently shown for euro-area data that, if one wants to use a monetary aggregate to predict future inflation, one should use the *real* money *gap*, rather than the *nominal* money-*growth* indicator. The real money gap is the difference between the current real money stock (the nominal money stock deflated by the consumer price index) and the corresponding real money stock that would result in a hypothetical long-run equilibrium (when output equals potential output and velocity equals its long-run level). It can be seen as a precise measure of the loose idea of "monetary overhang." (It is equal to the price gap between the current price level and the long-run equilibrium price level in so-called P^* models.)

The real money gap helps to predict future inflation for euro-area data. In a preliminary version of [9], the real money gap seemed to be an even better predictor than the output gap. However, in a new version of [9], with improved empirical methods (thanks to suggestions of a referee) and a longer sample, the real money gap does not perform better than the output gap, and the best result arises if the both the output gap and the real money gap are used as predictors.

The real money gap is distinct from the Eurosystem's nominal money-growth indicator. Indeed, the money-growth indicator is equal to the *change* in the real money gap *less* the difference between inflation and the implicit inflation target (the inflation rate, currently 1.5%, used in constructing the Eurosystem's reference value). Thus, in its insistence to raise a monetary indicator to prominence, the Eurosystem was unfortunate in picking the wrong monetary indicator.[2]

Fortunately for euro-area monetary policy, the Eurosystem seems to ignore the money-growth indicator in its interest-rate decisions. As discussed in Begg, Canova, De Grauwe, Fatás and Lane [2], the correlation between the money-growth indicator and interest-rate decisions is not only zero but of the wrong sign. That is, when money growth increases, on average the Eurosystem lowers the interest rate. Ignoring the money-growth indicator is clearly better than obeying it. Even better would be for the Eurosystem to be up-front about the irrelevance of the money-growth indicator, and avoid the confusion and nontransparency inherent in maintaining its prominence. The many qualified ECB staff members now employed in detailed work on analyzing, revising and providing excuses for the first pillar could certainly be more productively employed in working on things that matter and are useful for monetary policy, like making

[2] Nelson [11] finds that real money growth affects output for U.S. and U.K. data. Favara and Giordani [7] find that the real money stock affects both output and inflation for U.S. data. Thus, *real* monetary aggregates, rather than nominal, may help to predict future inflation and output.

inflation and output-gap forecasts.

As stated many times by a number of observers: The Eurosystem should simply adopt the superior monetary-policy strategy of flexible inflation targeting that Bank of England, the Reserve Bank of New Zealand, and Sveriges Riksbank follow. That is, it should announce a symmetric inflation target, demolish the first pillar, use all relevant information (including any useful information in monetary and credit aggregates) in the construction of published inflation and output-gap forecasts, set interest rates so these forecast are consistent with the inflation target and modest output-gap variability, and motivate its interest decisions with reference to these forecasts.

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