

How Important is Money in the Conduct of Monetary Policy?

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1. Proposes a NK model suggesting that CBs need not attach any weight to Δm in setting policy.
 2. Argues the interpretation of the empirical evidence on the behavior of Δm and Δp , on which monetarist arguments are largely based, is debatable.
- No ... “compelling reason to assign a prominent role to monetary aggregates in the conduct of monetary policy.”

1. Is the model a useful starting point?

- Does the model provide a useful characterization of the world in which we live?
- Model lacks a realistic financial sector:
 - No informational asymmetries, credit constraints, need for financial institutions ...
 - Only non-inflationary money demand shocks.
 - AD depends solely on the expected future path of $r(t)$, which is set by the CB.

- Monetarists would claim:
 - Given $r(t)$, financial shocks, that impact on e.g. the availability and cost of credit, influence AD.
 - Supported by microeconomic studies of C and I.
 - Such shocks are likely to be reflected in the growth money and credit aggregates which therefore may convey information about AD.
- Model disregards mechanisms that many believe are essential for understanding the role of money.
 - Money creation by banking system.

2. Money growth and inflation.

- Monetarists emphasize:
 1. Strong, contemporaneous correlation between Δm and Δp (particularly in the “long run” or at “low frequencies”).”
 2. CI between Δm and Δp .
- This paper:
 - Views this correlation as solely reflecting non-inflationary money demand shocks.
 - Notes that CI is consistent with the NK model.
 - Argues CI does in any case not imply that Δm is useful for forecasting future Δp .

- Misses a key part of the empirical evidence.
- CI implies an ECM \rightarrow test hypothesis that Δm is uninformative about future Δp , given past Δp .
 - Assenmacher-Wesche and Gerlach (2006a) reject this hypothesis in euro area data.
 - AWG (2006a,b; 2007) reject it for low frequencies in euro area, Switzerland and Japan.
- Money is useful for forecasting future inflation (but the converse is not true).
- This finding seems incompatible with the recursive NK model of this paper.

3. Swiss evidence

- Money is important in SNB's policy framework:
 - *“The monetary aggregates ... play a primary role in the quantitative models used to forecast inflation over the next two to three years. For shorter-term inflation forecasts, other indicators – mainly relating to economic activity and exchange rates – are important.”* (From SNB's website.)
- Key, testable implication of the model is that “trend” Δm contains no information about future Δp .

<u>Δm^*</u>	<u>Δp^*</u>	<u>$y-y^*$</u>	<u>R-sq</u>
	-0.42 (0.10)	0.10 (0.06)	0.42
0.31 (0.06)	-0.21 (0.10)	0.10 (0.03)	0.72

- Regress change in annual inflation ($\Delta^4 p_t$) between t and t+8 on:
 - “trends” of Δp and $\Delta M3 - \Delta p^*$ and Δm^* .
 - output gap – $y-y^*$.
 - one-sided HP filter
 - 1987q1-2005q2; Newey-West errors
- The hypothesis is rejected.

4. Conclusion

- The financial sector is too stylized:
 - No endogenous money creation by banks and no money supply shocks.
 - May or may not justify a “two pillar approach.”
 - But does justify “monetary analysis.”
- Does not account for the fact that past money growth is informative about future inflation.
 - Money supply shocks appear important.

- Baltensperger, Jordan and Savioz (2001):
 - *“The claim made by proponents of inflation targeting that money is irrelevant to monetary policy ... stem basically from the over-simplified model underlying their analysis.”*
 - *“In ... this model, ... the money stock is a purely endogenous variable determined recursively ... by a simple money demand function. In such a model, money is irrelevant to monetary policy by design, so that the model is not very helpful for analyzing whether money is important or not.”*