

Referee report on "Monetary Policy and Swedish Unemployment Fluctuations" by A. Alexius and B. Holmlund

This paper presents a structural VAR model estimation for Sweden, and the main conclusions are that monetary shocks account for 1/3 of unemployment fluctuations, and that the effects are very persistent (about 30% of the effect remains after 10 years). The paper is well-written and also includes an interesting account of unemployment and macroeconomic policies in Sweden.

I have, however, severe reservations about the empirical analysis in the paper.

(i) The authors state on page 11 that a measure of monetary policy is "self-evident". In my opinion, it is anything but self-evident. The sample essentially includes three monetary regimes: (a) fixed exchange rate with regulated capital markets, (b) fixed exchange rate with liberalized capital markets and (c) a floating exchange rate (and liberalized capital markets). The contrast between these in terms of monetary policy implications are strong (e.g. in regime b no independent monetary policy, in regime c an independent monetary policy). Hence, it is not at all trivial to assess the effects of monetary policy across regimes where both the instruments and the transmission mechanisms are different. Moreover, the persistence found in the data may reflect persistent effects of changes in regimes rather than specific policy changes (within a given regime).

(ii) As a measure of monetary policy is used a monetary condition index (MCI) based on the real interest rate and the real exchange rate. This is problematic since this index is not closely related to policy instruments but includes endogenous variables (inflation, terms of trade etc). It is therefore not straightforward to interpret this index in terms of monetary policy. Moreover, the endogenous part (inflation and terms of trade) is known to display substantial persistence, and hence persistence is built into the MCI metric used to assess the persistence of monetary policy changes. I find this very problematic with respect to whether it is legitimate to interpret the findings of the empirical analysis in terms of effects of monetary policy and persistence in response to monetary policy changes. (iii) The MCI is estimated ("time-varying weighting parameters using a seven-year window and then smoothed"), but none of this is reported, making it impossible to evaluate the properties of the MCI index.

(iv) Related to the remarks above on the endogeneity of the MCI. Fiscal policy also affects the conditioning variables (inflation, terms of trade), and hence there is an issue as to whether the effects attributed to monetary policy may arise via fiscal policy.

Some minor comments:

- In line with the tradition in the literature, monetary policy is interpreted as innovations to the MCI; that is, a monetary policy surprise unrelated to any conditioning variables. This is a very specific type of policy, and the paper ought to point this out.
- It is unclear how the structural balance (measure used for fiscal policy) is constructed.
- The paper refers e.g. in the opening paragraph to well-established findings without giving references.