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Mikhail Chernov <m.b.chernov@gmail.com>
To: David Backus <dbackus@stern.nyu.edu>

Tue, Apr 9, 2013 at 7:55 PM

Just to follow up: Sims and Zha AER'07 worry about distinguishing changes in shocks and changes in the rule. This is where he explicitly talks about the rule. First two para of the intro:

It is widely thought that US monetary policy changed a great deal, and for the better, between the 1970's and the 1980's. Richard Clarida, Jordi Gali and Mark Gertler (2000) (CGG) and Thomas A. Lubik and Frank Schorfheide (2004) find that the policy rule appar-ently followed in the 70's was one that, when embedded in a stochastic general equilibrium models, would imply non-uniqueness of the equilibrium and hence wilnerability of the economy to "sunspot" fluctuations of arbitrarily large size. Their estimated policy rule for the later period, on the other hand, implied no such indeterminacy. These results apparently provide an explanation of the volatile and rising inflation of the 70's and of its subsequent decline.

There are other interpretations of the evidence, however. Giorgio Primiceri (2003) and Thomas J. Sargent, Noah Williams and Tao Zha (in press) estimate models that find only modest changes in policy in the past four decades. Ben Bernanke and Ilian Mihov (1998), Eric M. Leeper and Tao Zha (2003), and James H. Stock and Mark W. Watson (2003) perform several econometric tests and do not find strong evidence against stability of coefficients. An earlier version of this paper (entitled "Macroeconomic Switching") and subsequent studies (Fabio Canova and Luca Gambetti, 2004; Chang-Jin Kim and Charles R. Nelson, 2004; Timothy Cogley and Thomas J. Sargent, 2005; Giorgio Primiceri, 2005) show little evidence in favor of the view that the monetary policy rule has changed drastically.

Now in Section 2 he reviews the literature and item (iii) hits exactly what you were looking for, I think:

Identification in these models is fragile. This is particularly true for the forward- looking Taylor rule specification of CGG, for two reasons.

One is that estimating this single equation is based on claiming that a list of instrumental variables is available that can be used to control for the endogeneity of expected future inflation and and output. But these instruments are available only because of a claim that we know a priori that they do not enter directly into the reaction function — they can affect monetary policy only through their effects on expected future variables. We find it inherently implausible that, for example, the monetary authority reacts to an expected future 3 per cent inflation rate in exactly the same way, whether the recent past level of inflation has been 1.5 per cent or 6 per cent.

The other problem with this specification is that the Fisher relation is always lurking in the background. The Fisher relation connects current nominal rates to expected future inflation rates and to real interest rates, which are in turn plausibly determined by expected output growth rates. So one might easily find an equation that had the form of the forward-looking Taylor rule, satisfied the identifying restrictions, but was something other than a policy reaction function.

Multivariate models allow a check on the identifying assumptions via examina- tion of the impulse responses to monetary policy shocks. Single equation approaches obviously do not. It seems to us that empirical work that has been based on mul- tivariate models and has included checks for plausibility of responses to monetary policy shocks has tended to find less evidence of changing monetary policy.

On Tue, Apr 9, 2013 at 7:20 PM, Mikhail Chernov <m.b.chernov@gmail.com> wrote: from Sims, EER'04

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Economists have ... tried to dig deeper, trying to isolate periods when monetary policy variables moved for reasons that cannot be connected to any previous developments in the private sector. Friedman and Schwartz [1963] tried to do this in some passages, and more recently Romer and Romer [1989] have done the same thing more systematically. If we can examine the aftermath of such periods, it is thought, we will see the effects of policy unclouded by the effects of other disturbances that might also shift policy. Such studies are attempts to solve an identification problem informally, using the same intuition that leads to study of responses to reduced form innovations in multivariate models.

He clearly does not think of MP in terms of TR. he thinks of MP as a Fed Funds rate, and so isolating an MP shock is the identification in his view. This is basically a different (complimentary) question.

On Wed, Mar 27, 2013 at 6:22 PM, David Backus dbackus@stern.nyu.edu wrote:

One thing you might do over the next week or two: see if you can find nice sensible quotes about the logic for identification of mon pol in Sims, Bernanke, etc. I want to know what the thinking is, so that we can translate into our terms. Maybe it's a lost cause, but it would be nice if we found something.