"The Great Inflation and the Greenbook", Giacomo Carboni and Martin Ellison

Discussion by
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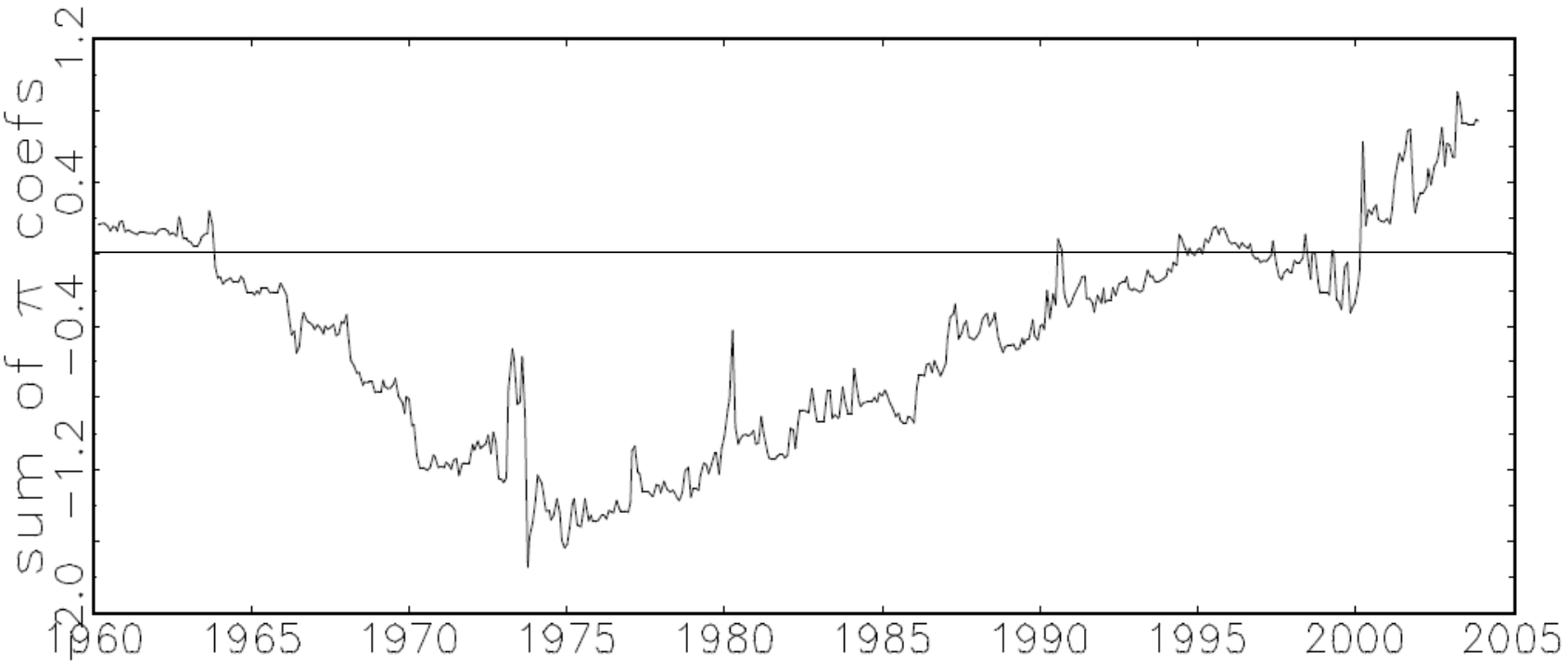
The SWZ story

- the Fed had an incorrectly specified model of the economy neglecting expectations
- a particular combination of shocks lead it to learn, then unlearn a long-run tradeoff



Coefficient drift

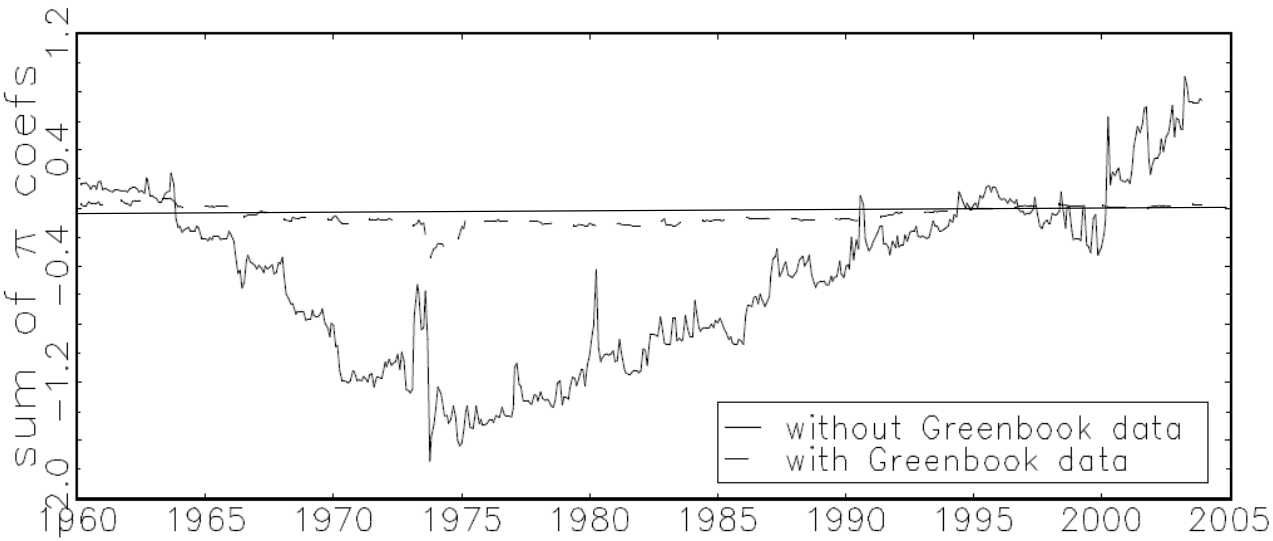
- a key part of the story is that the Fed allows for the possibility that the structure of the economy is changing

$$\begin{aligned} u_t &= \alpha_t' \Phi_t + \sigma_w w_t \\ \alpha_t &= \alpha_{t-1} + \Lambda_t \quad \Lambda \tilde{} N(0, V) \end{aligned}$$

- the estimated V turns out to be large - the Fed shows "openness to recent data"
- is this reasonable?
  - SWZ assert it is by appealing to recent work on model uncertainty and their interpretation of the historical record

The Carboni and Ellison approach

- the SWZ model implies forecasts that are much more volatile than those in the Greenbook data
- so restrict the model (effectively the coefficients of V) by requiring that forecasts produced by the model should fit the forecasts in the Greenbook



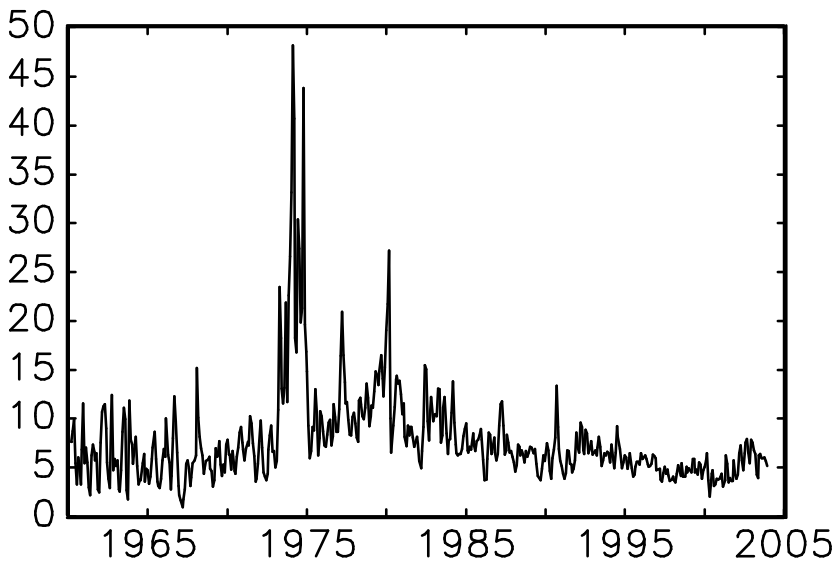
Assessment

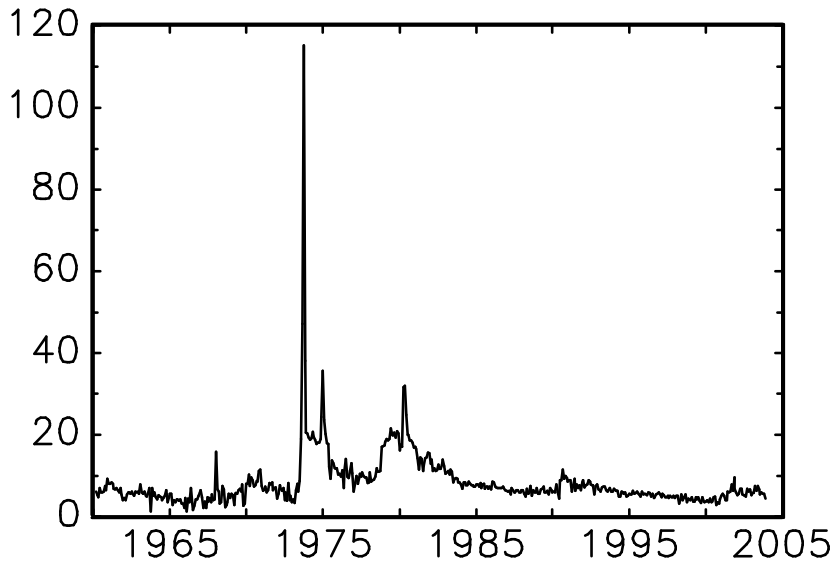
- a very neat paper
- simple idea, elegantly executed, with big implications...
- ... and also two useful robustness checks
- AND it's clear and readable

How does inflation fits so well?

The Fed's choice of inflation depends on

- the long-run tradeoff
- the perceived costs of disinflating





Two possible weaknesses in the "Greenbook" story

- the Greenbook model suggests the Fed knows the natural rate very well
  - element of V corresponding to the natural rate is 26 without Greenbook, 0.63 with
- what weight is put on the Greenbook forecasts by the open-market committee?

The structural model

- a Lucas supply curve

$$u_t - u^{**} = \theta_0 \left(\pi_t - E_{t-1}\pi_t\right) + \tau_1 \left(u_{t-1} - u^{**}\right) + \sigma_1 w_{1t}$$

- which when estimated in both SWZ and Carboni and Ellison is very close to

$$u_t - u^{**} = 0.99 \left(u_{t-1} - u^{**}\right) + \sigma_1 w_{1t}$$

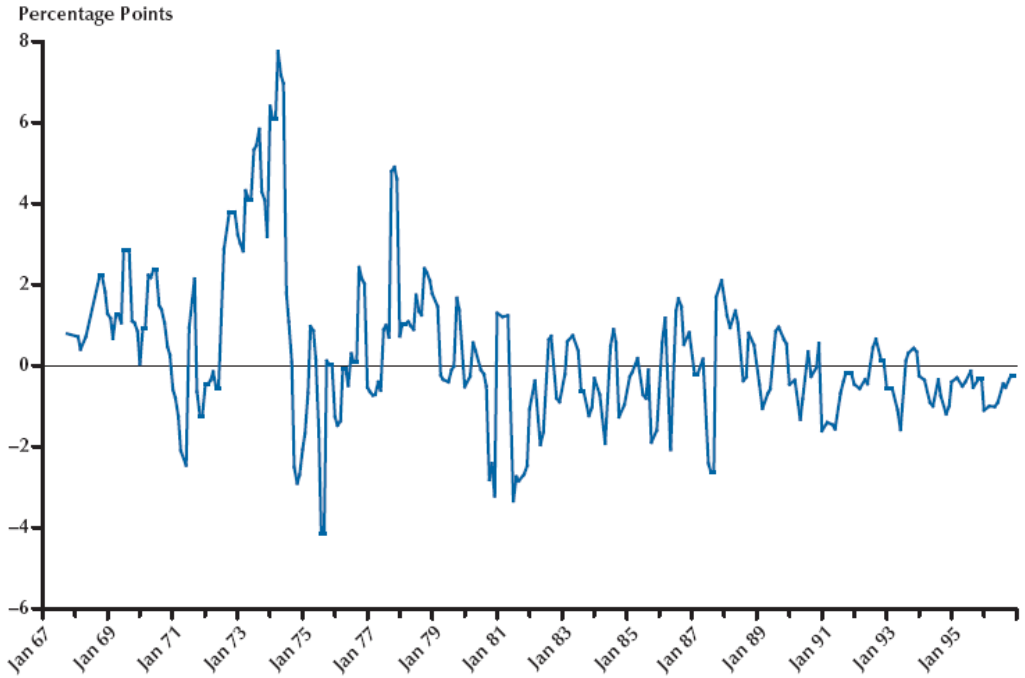
- so unemployment is very close to being independent of monetary policy...

Did the Fed believe it could control inflation?

- in the model, the Fed chooses inflation up to a control error

$$\pi_t = x_{t-1} + \sigma_2 w_{2t}$$

- SWZ $\sigma_2 \approx 0.1\%$, Carboni and Ellison $\sigma_2 \approx 0.5\%$
- actual forecast error



- were policymakers learning that inflation was a monetary phenomenon?