Discussion of "Employment and Output Dynamics in a Model with Social Interactions in Labor Supply," by Baskaya and Kilinc.

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Motivation

- Standard RBC model have hard time matching joint dynamics of labor market variables (N,w,Y,Y/N) over the BC (King and Rebelo (1999)).

  (1) Y and N much more volatile compared to w.

  Even with macro NS elasticity wrt w around 4 ($>>$ micro estimates), s-RBC cannot deliver observed volatilities.

  (2) Corr (N,Y/N) is near zero.

Main Objective of BK

- Quantitative argument: Adding social interactions in NS to standard RBC improves model's fit along (1) and (2) without playing with elasticity of NS wrt w.

  Social interactions in NS=Individual disutility from a given amount of work is decreasing in average labor supplied.

Main Mechanism at Work

- S-RBC except for agent's period utility function:

$$U(C_t, N_t) = log(C_t) + \frac{\theta}{1-\eta}(1 - N_t + b\mu_{N_t} N_t)^{1-\eta}.$$

Main Mechanism at Work

- Intuition behind the amplification:

$$\underbrace{A \uparrow\Rightarrow w \uparrow\Rightarrow ns \uparrow\Rightarrow NS}_{s-RBC} \uparrow\Rightarrow ns \uparrow\Rightarrow NS \uparrow\Rightarrow ...$$

- So, N,Y response to A is amplified.

Quantitative analysis

- Data and calibration a la King and Rebelo (1999).

- Results (only A shock, under b=0.65):

  Std deviat Y: Data:1.81 s-RBC:1.39 RBC-si:1.58

  Std deviat N: Data:1.79 s-RBC:0.68 RBC-si:0.96

  Std deviat w: Data:0.68 s-RBC:0.75 RBC-si:0.68

  Corr(N,Y/N): Data:-0.14 s-RBC:0.89 RBC-si:0.83

  Improvement over RBC? Moderate in case of (1), almost none in case of (2).

Quantitative analysis

- Results (both A and G shock, under b=0.65):

  Std deviat Y: Data:1.81 s-RBC:1.28 RBC-si:1.45

  Std deviat N: Data:1.79 s-RBC:0.75 RBC-si:1.04

  Std deviat w: Data:0.68 s-RBC:0.86 RBC-si:0.83

  Corr(N,Y/N): Data:-0.14 s-RBC:0.26 RBC-si:0.18

  Improvement? Moderate in case of (1), almost none in case of (2).

Issues:

- In the data (King and Rebelo (1999)):

  Volatility of employment is high (extensive margin).

  Volatility of hours per worker is very low (intensive margin).

  $\Rightarrow$Volatility of totals hours is due to volatility of employment.

  This paper is about the intensive margin whereas the action seems to be in the extensive margin.

  Kim and Chang (2006,2007) recently showed the success of modeling the extensive margin in solving (1) and (2).

- The paper does not solve micro vs macro elasticity prob-

lem because macro and micro elasticities are identical in the model.

Elasticity of NS wrt w in RBC-si=4.74

Elasticity of NS wrt w in s-RBC=4

Micro estimates of elasticity of NS$<$1.

Suggestions

- Maybe break volatility of N in the data into two components:

  one due to volatility of employment and one due to the volatility of hours per worker,

  show that s-RBC is not good enough to match the latter, and show your mechanism matches.