

Comments on the new Danish macroeconomic model MAKRO

MMU

25 May 2018

Brita Bye

Overall

- Very ambitious project: To model the adjustments to *short* and *long* run in the *same* model
- Hybrid model: Combines DSGE (OLG/CGE ?) with SEM
- Model financial intermediation, nominal rigidities, heterogenous firms (monopolistic competition) and households (cohorts, Ricardian and other (hand to mouth))
- Expectations: Perfect, but also other
- Fiscal policy: detailed tax/transfers, government consumption and investments
- Calibration: four categories of model parameters, no steady state

Challenges/Questions

- The model is still in development:
 - Have you established a simple prototype (theory based OLG/CGE) that solves?
 - Follow a strategy of gradually incorporating new mechanisms/relaxing the theory based OLG/CGE ?
 - ♦ Easier to track the effects of different extensions and assumptions
 - Compared to partial modeling and SEM there is potential for unexpected interaction effects when put together in a simultaneous model. (Will the model solve properly?)
 - A detailed model structure combined with an ambitious empirical strategy (data fit, continuous updating of parameters etc) will be a challenge when interpreting model results (short & long run adjustments, fiscal policy shifts) compared to a more theory based model

3

Challenges/Questions

- The mix of theoretical modeling and data fit: How do you decide when theory should be the priority compared to data fit or vice versa?
- Modeling of Export:
 - Armington model has well known challenges: SOE large elasticities
 - Introduces a scale effect – why and how?
- Quality check of the model:
 - Ambitions for international publication?
 - Board: Strategy for quality check?

4

Organisation of the project

- Team: Leader (0,5) + 4 economists + 3 students
 - Sufficiency depends on skills
 - ♦ Experienced model builders?
 - ♦ Knowledge of Danish economy?
- Strategy
 - Start simple
 - Implement extensions gradually
 - What is the purpose of the extensions? (policy analysis, short & long run adjustments etc)
 - What are the effects of the extensions? (sensitivity analysis)
 - Document and present extensions and results (board, other)
 - Exit strategy: Who will be responsible after development period, what if it fails?
- The project: Fits with an «old dream» at SSB.....