Discussion of Hettig and Müller

Fiscal policy coordination in currency unions at the effective lower bound

Jesper Lindé

European Central Bank conference Public debt, fiscal policy and EMU deepening

November 20, 2017

The views expressed are solely those of the authors and should not be interpreted as reflecting the views of Sveriges Riksbank.
Motivation of Paper

● Pre-crisis consensus: Monetary policy (MP) stabilizes CU-wide output gaps and inflation, fiscal policy (FP) tailored to meet country-specific conditions subject to solvency constraints.

  ○ No coordination between FP in different countries necessary.

● The division of labor between MP and FP was challenged by the emergence of the ELB on policy rates and associated persistent negative CU output gaps and below-target inflation rates. The authors ask:

  ○ How big are the gains of FP coordination at the ELB?

  ○ Can smaller stimulus in the EA relative to the US be explained by lack of coordination?
Approach in Paper

- Set up GM (2005) model of CU consisting of infinite number of SOEs. Make the following two extensions:
  - Make CU CB s.t. an ELB (E-W Markov-switching framework). Complete stabilization when ELB does not bind.
  - Compute optimal FP when there is no coordination.

- Use model to characterize differences between coordination/no-coordination.
  - In the steady state (size of government).
  - Effects of coordination on FP response (stimulus gap) when the ELB binds.
Key Findings

- **Steady state:** Lack of FP coordination implies a larger government sector (G/Y).
  - **Intuition:** Policymakers attempt to boost ToT and Y through purchases of domestic goods, but since everyone does this Y falls.

- **Dynamics:** Countries provide too little fiscal stimulus at the ELB in the absence of fiscal coordination. Intuition:
  - **Without coordination,** policymakers seek to avoid ToT appreciation which lowers the multiplier. Do not recognize high multiplier (max 1).
  - **Under coordination,** policymakers anticipate ToT remains unaffected and are hence willing to spend more. Recognize higher multiplier (>1).
  - **No clear cut however:** trade-off between potency of instrument and what others are doing.
Trade-off evident in Figure 4

- Spending is increased a lot in long-lived liquidity trap under Nash because outlook (not shown) is terrible and they do not internalize others will increase spending; under coordination hike smaller because multiplier higher and everyone is stimulating (positive spillovers).
Comments

- Role of baseline and automatic stabilizers.
  - Assumption of symmetric recession in the baseline scenario, fiscal space and automatic stabilizers (via transfers).

- Strategic interaction in CU.
  - Infinite many SOEs vs. a few dominant regions (countries).

- Some robustness checks.
  - Nonlinear vs. linearized approximation of model.
  - Financing G with distortionary taxes and consider real rigidities.
  - Allowing for real rigidities.

Role of Baseline & Automatic Stabilizers
• The authors assume a symmetric baseline in all SOE CU members.

• In reality, economic outcomes was sharply asymmetric in the euro area during the euro crisis.

• This fact, rather than lack of fiscal coordination, most likely accounts for the unwillingness of EA members with fiscal space to undertake any sizeable fiscal stimulus during the crisis.

• In BEL (2016), we studied welfare effects of fiscal union and core only spending hikes given outlook in 2015 (3-year liquidity trap).
  
  ▪ Fiscal union spending hike strongly beneficial for both Core (Germany-France) and Periphery (Italy-Spain). But clear that Core has less incentives to stimulate than Periphery w/o coord.

**BEL Baseline and Spending Hike**
Role of Baseline & Automatic Stabilizers Cont.
• Even so, the focus is not the lack of coordination during the EA crisis, but during the GFC in 2009. But during the GFC, Figure 1 demonstrates that government consumption was increased equally in the EA and the US during the GFC?

• Moreover, one can argue that less need of discretionary adjustment in Europe during recessions as more generous transfer system in place in the EA compared to the US.

  o So not entirely clear to me that less fiscal stimulus in EA compared to the US due to lack of coordination is factually correct (automatic stabilizers imply coord spending when CU-wide shocks hit).

  o Need to look at broader spending measures to assess fiscal stance.

  Strategic interaction in CU
• You assume a continuum of SOEs in your setup. This implies that no single economy internalizes CU effects of their actions.
  
  o They just have to think about the effects on their ToT.

• While this simplification gives you a lot of analytical tractability it is perhaps not the best way to think about fiscal policy in the EA, where a couple of dominant countries account for the lion share of the CU.

• Would therefore be useful to consider an extension to a two-region CU framework with endogeneous exit from the ELB. This, and declining marginal gains from stimulus as in Erceg and Lindé (2014) is probably a useful to understand how fiscal stimulus was sized in the EA.

Some Further Robustness Tests
• You follow previous literature by linearizing all model equations apart from the monetary policy rule.

• This is useful for analytical tractability and comparison to previous literature, but it implies strong nonlinearities in your Eggertsson-Woodford Markov-switching framework, although you impose a low slope of the NKPC. **CU multiplier under coordination:**

\[
\frac{1}{\gamma} \frac{\partial y_L^*}{\partial g_L^*} = \frac{(1 - \mu)(1 - \beta \mu) - (1 - \gamma)\mu \kappa \frac{\tilde{\sigma}}{\sigma + \varphi}}{(1 - \mu)(1 - \beta \mu) - (1 - \gamma)\mu \kappa} \geq 1
\]

  o Nice to see robustness when solving the model **nonlinearly.**

**Kinked fiscal stimulus schedules**
- Incredible that optimal spending (and multiplier) follows these curves

Some Further Robustness Tests Cont.
• Would the results be robust to finance G with **distortionary taxes** as opposed to lump-sum taxes? Both in SS and dynamically.

• Imposing some **real rigidities** (like habit persistence) might also give you some consumption “overhang” and less scope for fiscal stimulus.

• Going nonlinear and imposing distortionary taxation and real rigidities might lead to a spending schedule which is a more smooth function of the ELB duration.

  o Perhaps you could provide quantitative results with more empirically realistic model.

**Concluding remarks**
• This is a very **timely and nice paper** on an important topic.

• I think it would be extremely useful if the authors could examine the **robustness of the findings in a more empirically realistic framework**:
  
  o Reduce convexity in multiplier as function of expected liquidity trap duration.
  
  o Consider an environment with strategic interaction between large CU members.

• **Shameless promotion**: A useful model you can take essentially off the shelf to do this is the BEL (2016) model with habit formation.