

# Discussion of Hettig and Müller

## Fiscal policy coordination in currency unions at the effective lower bound

Jesper Lindé

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*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

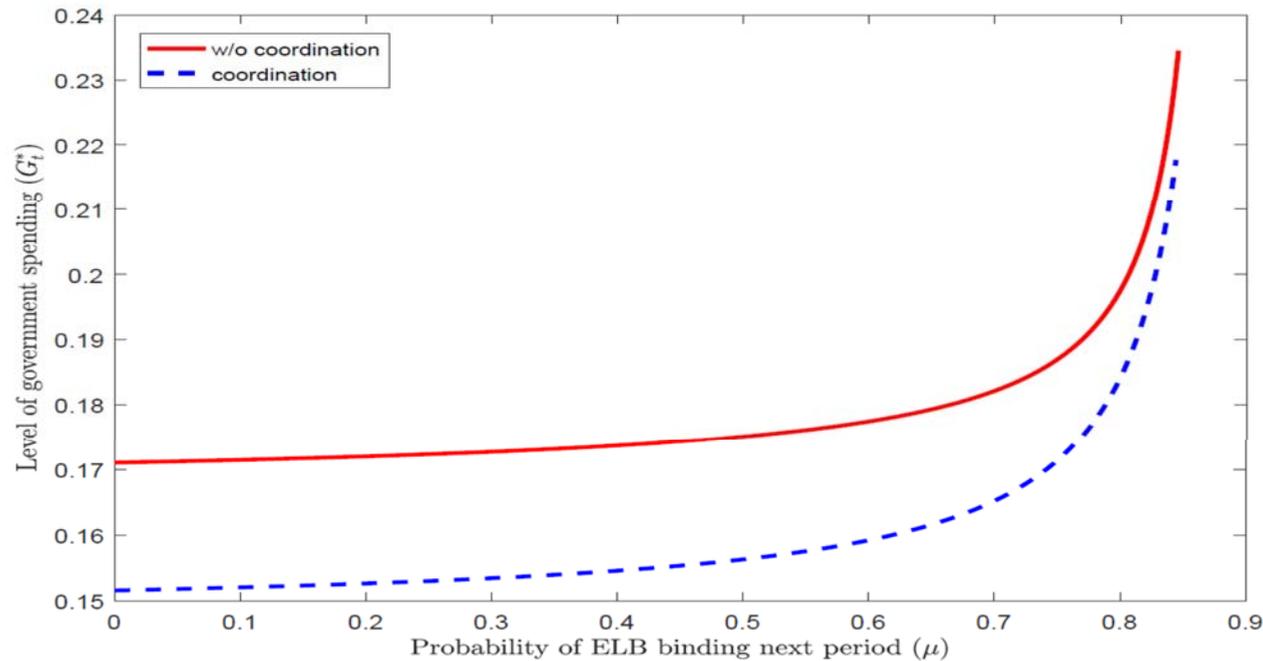
- **Set up GM (2005) model of CU consisting of infinite number of SOEs. Make the following two extensions:**
  - **Make CU CB s.t. an ELB (E-W Markov-switching framework). Complete stabilization when ELB does not bind.**
  - **Compute optimal FP when there is no coordination.**
- **Use model to characterize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



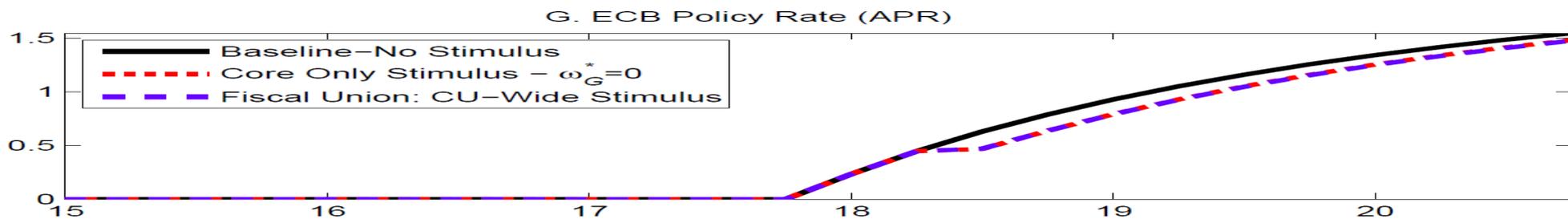
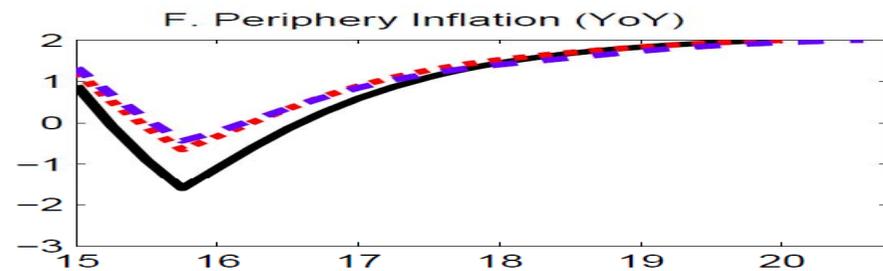
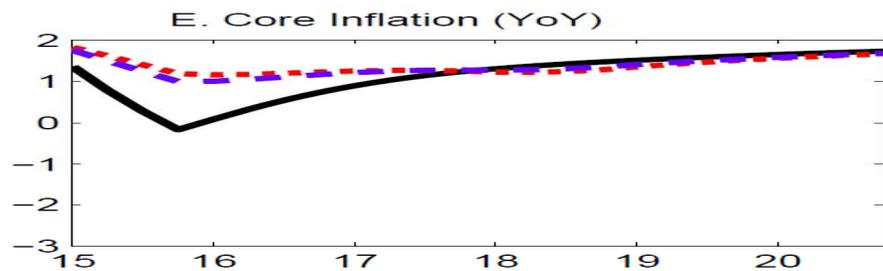
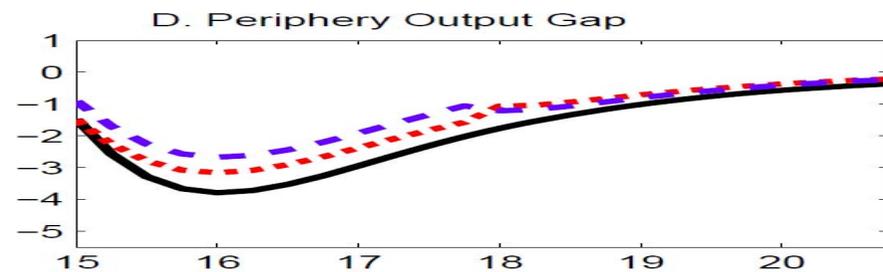
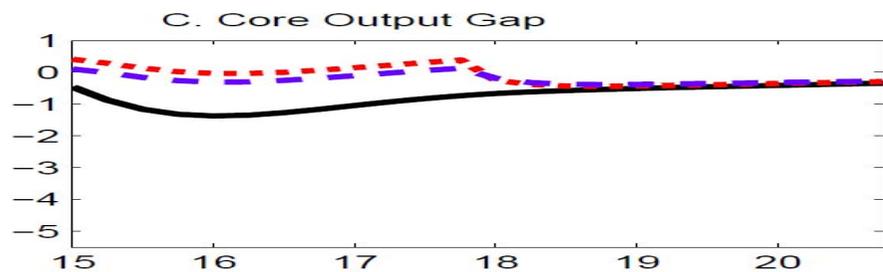
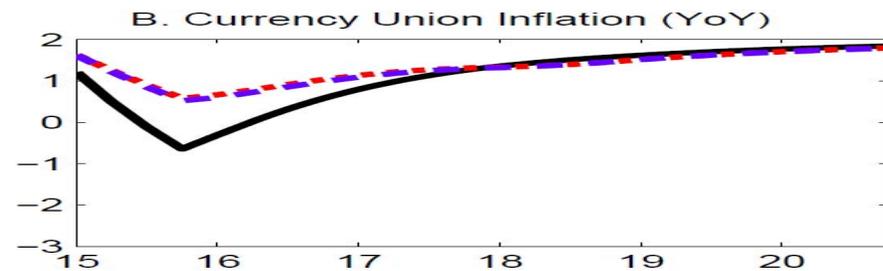
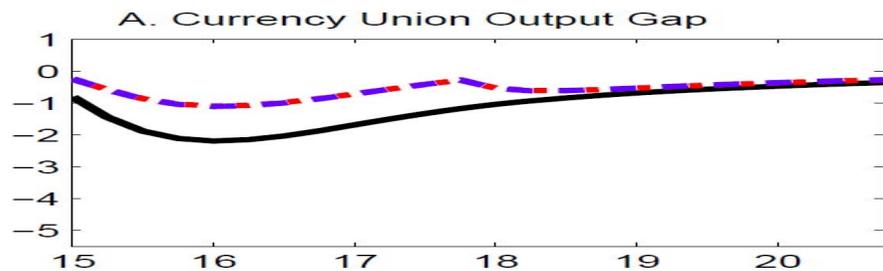
# Comments

- **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.****
  - **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).**
  - **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.**
  - **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**

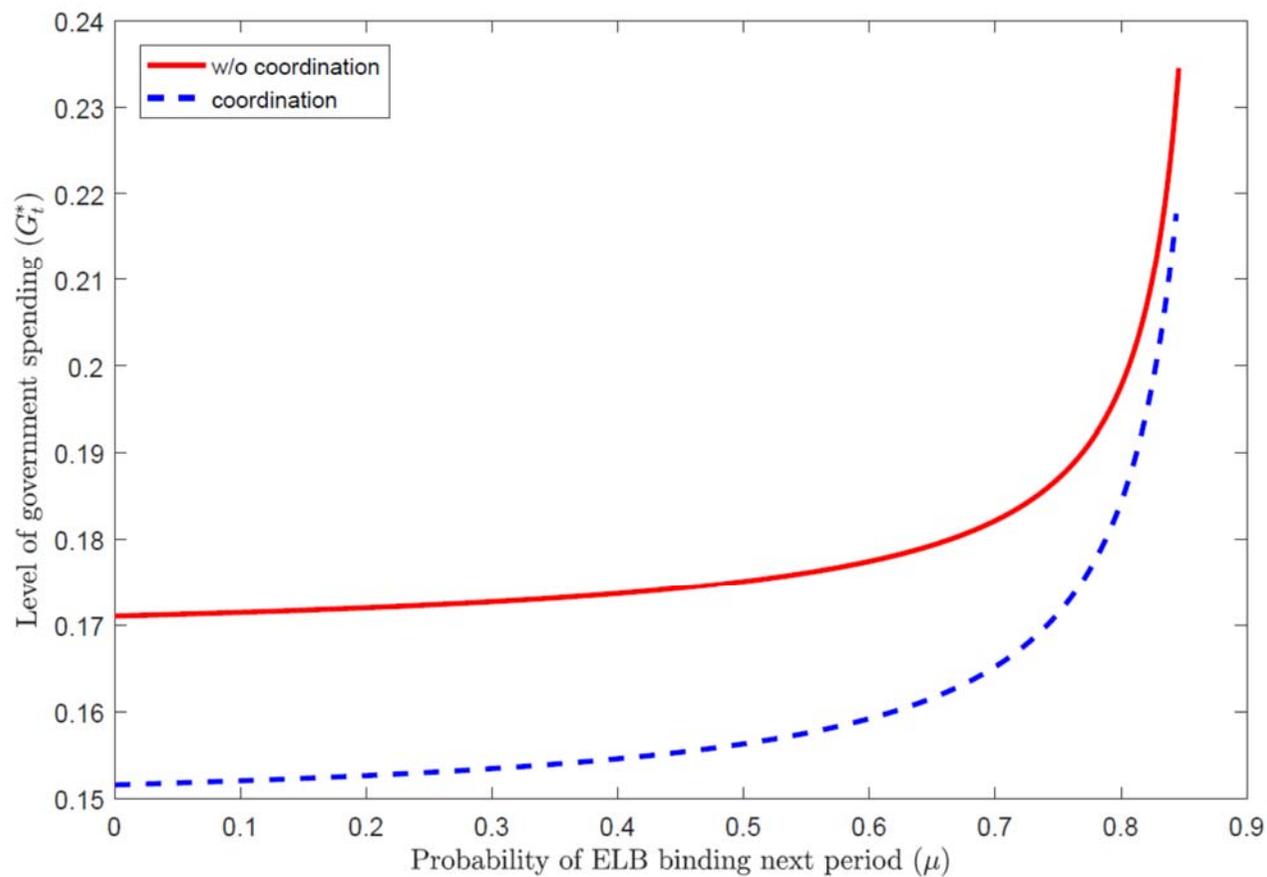
- You follow previous literature by linearizing all model equations apart from the monetary policy rule.
- This is useful for analytical tractability and comparison to previous literature, but it implies strong nonlinearities in your Eggertsson-Woodford Markov-switching framework, although you impose a low slope of the NKPC. **CU multiplier under coordination:**

$$\frac{1}{\gamma} \frac{\partial \hat{y}_L^*}{\partial \hat{g}_L^*} = \frac{(1 - \mu)(1 - \beta\mu) - (1 - \gamma)\mu\kappa \frac{\bar{\sigma}}{\bar{\sigma} + \varphi}}{(1 - \mu)(1 - \beta\mu) - (1 - \gamma)\mu\kappa} \geq 1$$

- 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.
  - 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**:
  - Reduce convexity in multiplier as function of expected liquidity trap duration.
  - 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.**