

# Fiscal Delegation in a Monetary Union: Instrument Assignment and Stabilization Properties

Discussion by

Luisa Lambertini<sup>1</sup>

<sup>1</sup>EPFL

FISCAL SUSTAINABILITY, XXI CENTURY – Banco de España, June 8 2016

# Motivation

- Deficit limits in a monetary union (Stability and Growth Pact in the EMU)
- Large accumulation of public debt since the financial crisis
- Delegating some part of fiscal policy to an independent, debt-averse fiscal authority
- Very topical and interesting paper

# Outline of the discussion

- Model and results
- Discuss some modeling assumptions
- Controls and residuals
- Discuss the case where debt is residual
- Suggestions and conclusion

# The Model

Monetary union with output

$$x_{j,t} = \underline{x}_{j,t} + \nu(\pi_t - \pi_t^e - \tau_{j,t})$$

Government budget constraint

$$d_{j,t} = [R(d_{t-1}) + \chi(\pi_t^e - \pi_t)]d_{j,t-1} + p_{j,t}^g g_{j,t} - \tau_{j,t} - \kappa\pi_t$$

Welfare is approximated by the loss function

$$L_{S,j} = E_0^2 + \sum_t \beta_S^t \left[ \alpha_S \pi_t^2 + (x_{j,t} - \tilde{x}_{j,t})^2 + \alpha_{g,S} (g_{j,t} - \tilde{g}_{j,t})^2 \right]$$

Contagion – is it consistent with the empirical evidence? Your steady state is distorted – is your approximation consistent with this?

# Committed Social Planner

- Marginal cost of tax distortion is equal to the marginal benefit of public spending
- Marginal cost of inflation is equal to the average marginal benefit of public spending
- Zero steady-state debt and inflation proportional to output gap plus public spending

# Discretionary Policymaking

- Common central bank  $C$ : inflation averse  $\alpha_{\pi C} > \alpha_{\pi S}$  and chooses  $\pi$ ;
- Regional governments  $G_j$ : impatient  $\beta_G < \beta_S$  choose fiscal variables
- Federal government  $G$ : also impatient  $\beta_G < \beta_S$
- Fiscal authority  $F$ : debt-averse  $\alpha_{dF} > 0$  and  $\beta_G < \beta_F \leq \beta_S$

# Scenarios

- Large monetary union (MU)
- Single country (I)
- Federal government for a monetary union (G)
- Delegation to regional fiscal authorities ( $F_j$ )
- Delegation to a union-wide fiscal authority (F)

# Debt as a control

## *Standard* solution

- Central bank chooses inflation
- Substitute for debt using the budget constraint and find FOCs for taxes and debt.
- Government spending pinned down by the budget constraint



# Results

$$MU < I < F_j < F$$

- MU – deficit bias members do not internalize the effect of their own debt decision on the interest rate and the central bank's choice of inflation
- I – large government internalizes these effects
- G – large government but suboptimal government spending decisions
- $F_j$  – debt aversion and patience compensate
- F – takes externalities across regions and central bank into account

# Debt as a residual

- Governments choose  $\tau_j$  and  $g_j$ ; debt is then given by the budget constraint
- Fiscal delegation: governments choose  $g_j$ ; fiscal authority chooses  $\tau_j$
- Looks like Markov-perfect strategies (even if you do not say it)

# Results

$$MU < I < F_j < F$$

- Inflationary bias is stronger – C now takes into account the effect of debt on future variables and wants to reduce debt today
- Debt aversion is less effective in reducing debt and inflation
- Fiscal delegation still delivers welfare gains

# Summing up

- Interesting question and a rich setup
- Why not using the simplest NK model without capital?
- Robustness to your key assumptions
- Be very clear about strategies and solution method
- Transition from one regime to another
- Quantitative analysis is key – how much better is fiscal delegation?
- Are there circumstances – which? – where fiscal delegation is welfare-reducing?