"Fiscal Policy, Sovereign Risk, and Unemployment" by Bianchi, Ottonello and Presno

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[1] DISCLAIMER: The views expressed are solely the responsibility of the authors and should not be interpreted as reflecting the views of the Atlanta Federal Reserve Bank or of anyone else associated with the Federal Reserve System.

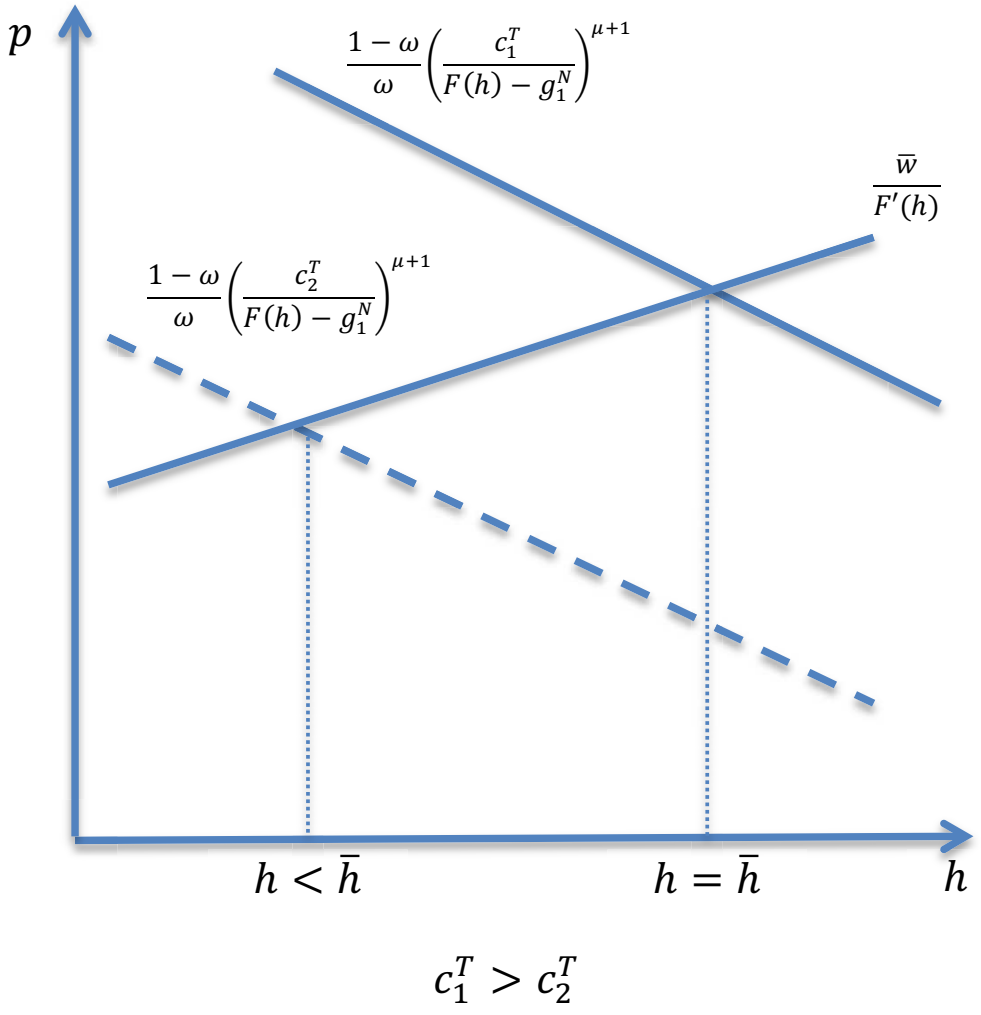
Motivation

- Austerity-versus-stimulus debate
  - Case for fiscal stimulus: expansionary government spending reduces unemployment.
  - Case for austerity: with high debt level, financing government spending increases borrowing cost due to higher default risk.
- Quantitatively study the fiscal trade-offs in choosing the optimal fiscal policy

This Paper's Contribution

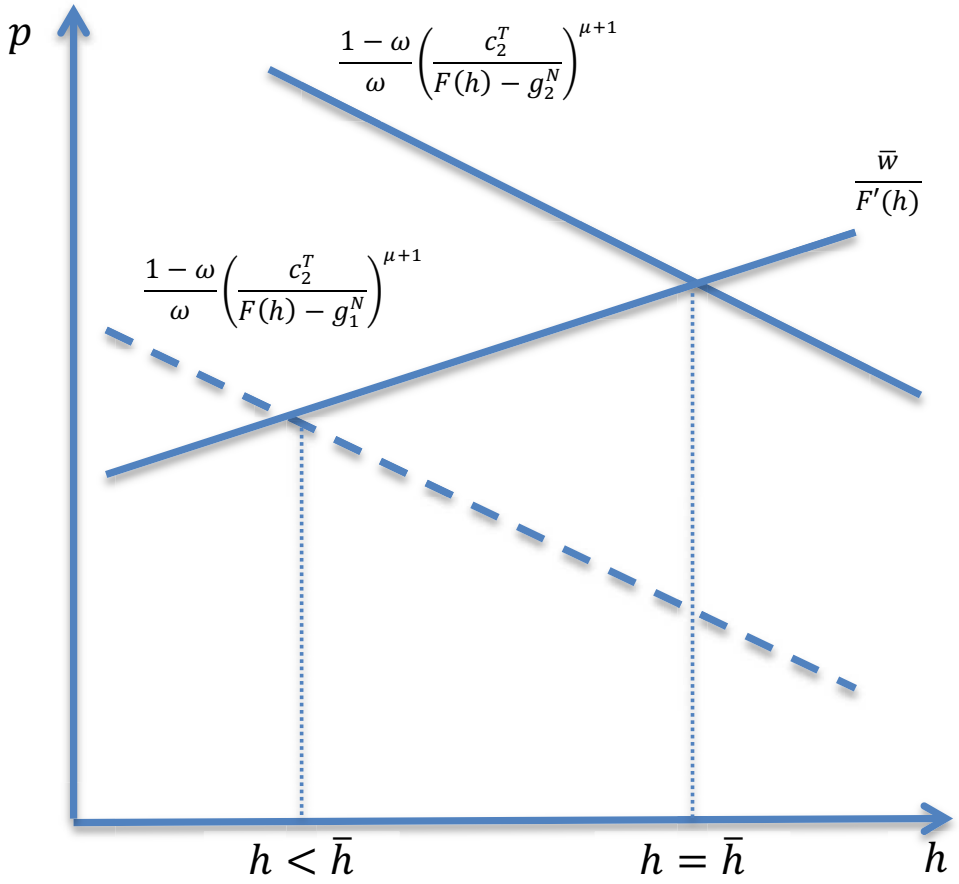
- Study the optimal fiscal policy in the presence of sovereign default risk and unemployment.
- Study both the positive and normative implications of fiscal policy in a model calibrated to the Euro area.
  - Fiscal multipliers are highly non-linear in the severity of the recession.
  - The optimal size of government purchases depends on the sovereign debt level.

Model Features



- Sticky wage that cannot go below $\bar{w}$
- Inelastic labor supply of $\bar{h}$
- Stochastic endowment in tradables
- Imperfect substitution between nontradables and tradables
- Government spending in nontradables.

Fiscal Stimulus in the Model



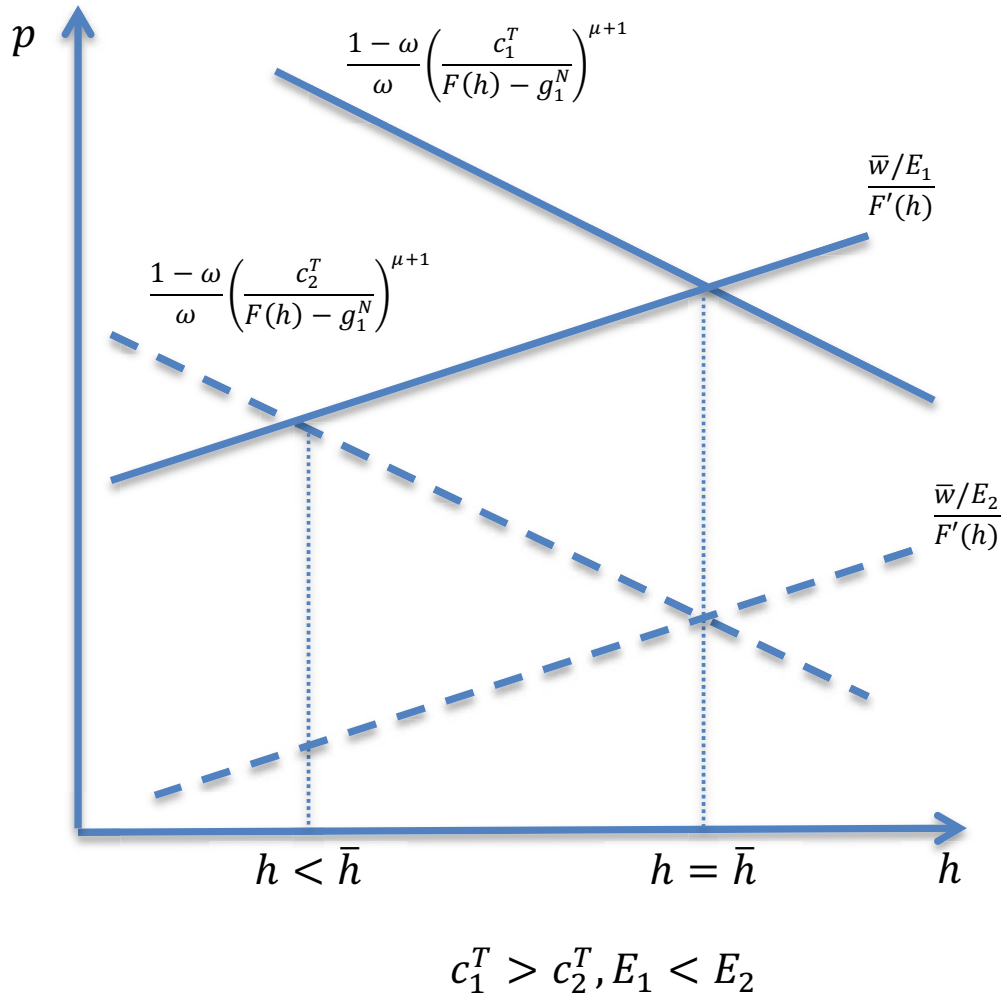
$c_1^T > c_2^T, g_1^N < g_2^N$

- Increase government spending in nontradables.
- Demand of nontradable increases.
- Price of nontradable increases.
- Demand for labor increases at the given wage.
- Unemployment decreases.

Cost of Fiscal Stimulus and Fiscal Policy Trade-offs

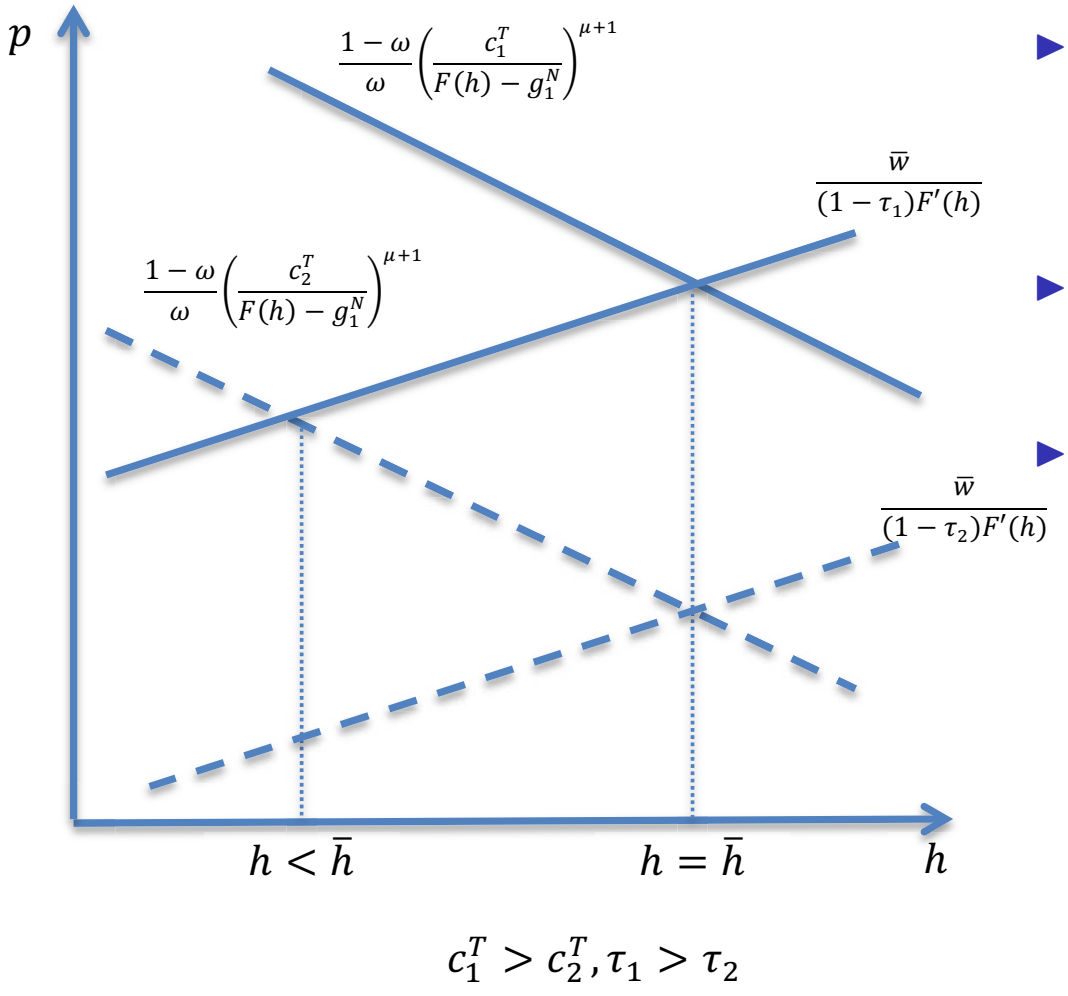
- Increasing government spending reduces unemployment.
- The government faces tradeoff in choosing government spending.
- Fiscal stimulus is costly.
  - Government finances spending using taxes and debt.
  - Increasing tax leads to direct welfare loss.
  - Increasing borrowing increases default risk.
  - Default leads to direct welfare loss.

Comment: Monetary/Exchange Rate Policy



- Nominal depreciation.
- Undo the nominal rigidity.
- Real wage decreases.
- Demand for labor increases.
- Na, Schmitt-Grohe, Uribe and Yue (2014)

Comment: Fiscal Devaluaion



$c_1^T > c_2^T, \tau_1 > \tau_2$

- Fiscal devaluation through cutting value added tax or payroll tax.
- Schmitt-Grohe and Uribe (2012)
- Farhi, Gopinath and Itskhoki (2013)

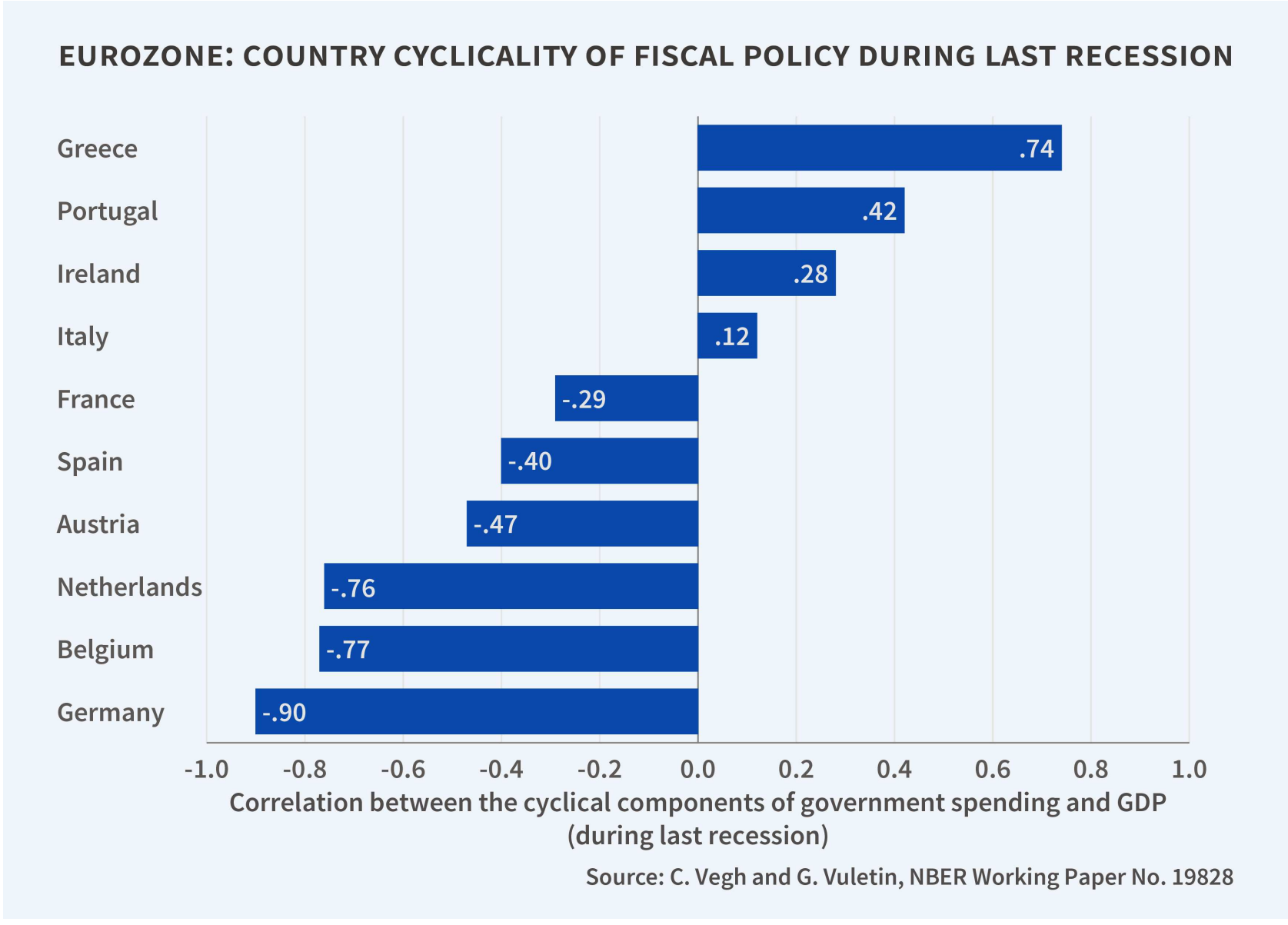
Comment: Cost of Default and Tax Distortion

- Fiscal policy trade-offs assess the cost of tax distortion and default which are modeled as direct utility loss
- Important for the quantitative analysis to
  - Directly study the tax distortion
  - Use output loss due to default
- Calibration issues
  - The utility loss parameters are set to roughly match the mean and volatility of the bond spreads.
  - The tax distortion parameter is set to roughly get to the volatility of government spending relative to taxes.
  - Currently unable to match the tax volatility relative to GDP and mean taxes/GDP in the data.
  - Relative welfare loss due to default and tax distortion is important for the quantitative result.

Comment: Model Implication vs Data

- Model predicts procyclical fiscal policy.
- Government spending and output are negatively correlated for 1998-2011 for the Euro area.
- Procyclical fiscal policy for emerging economies. The average correlation for industrial countries is -0.23, compared to 0.21 for developing countries. (Reinhart, Kaminsky, and Vegh 2004)
- Dynamics of government spending, taxes, and debt.

Comment: Model Implication vs Data



Comments

- Downward wage rigidity is modeled as a constant wage floor.
- Tax is paid in tradables. When paying tax in home currency, fiscal stimulus is less costly.
- When introducing financial friction, the total output of tradable and nontradables is assumed as collaterals.
- When only tradables are the collaterals, fiscal stimulus cannot relax the borrowing constraint.

Conclusion

- Important topic
- Great idea
- Looking forward to the finished product