Budgeting versus implementing fiscal policy in the EU

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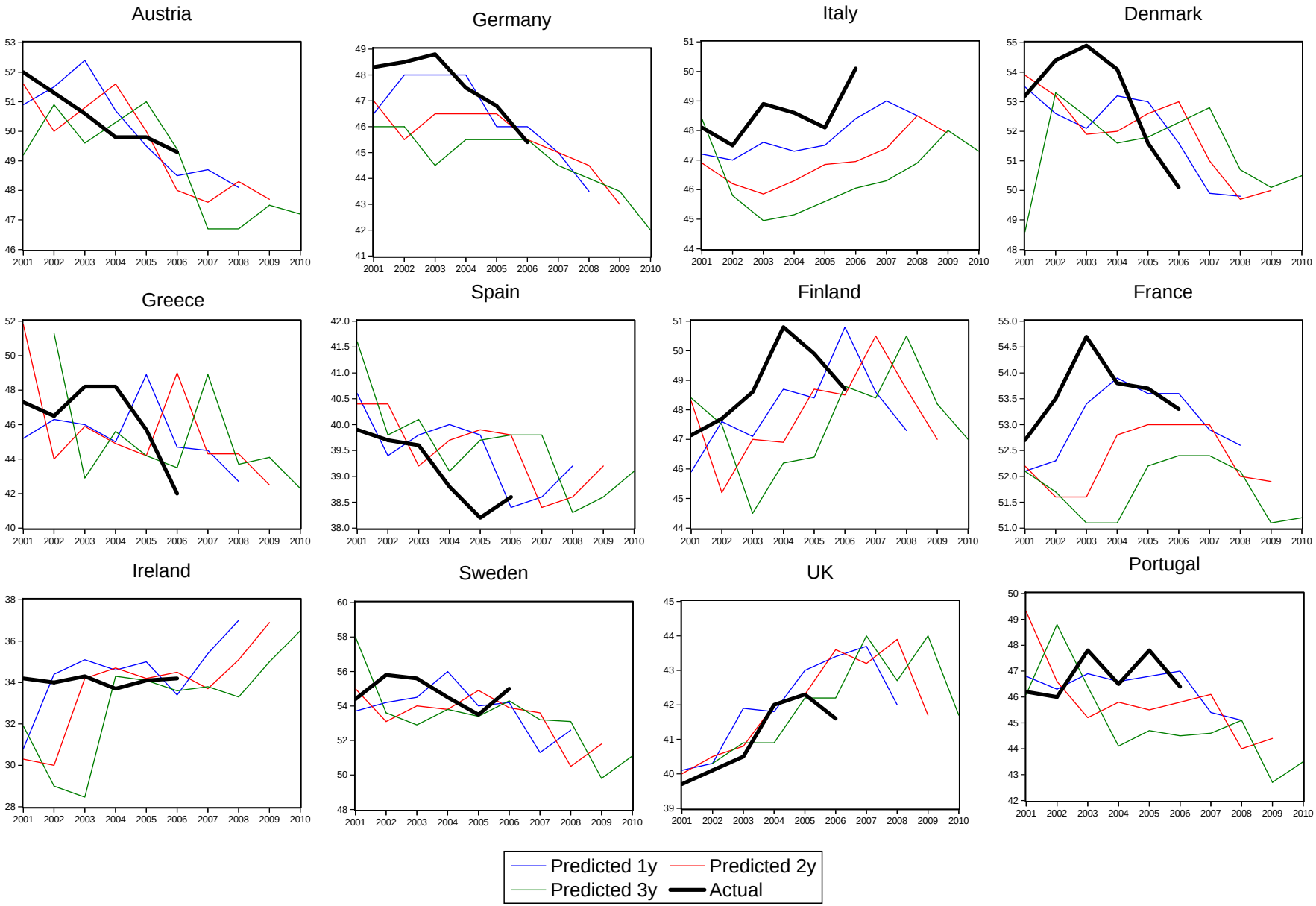
Summary

- The paper presents and organizes a wealth of interesting facts about budgeting in the EU
- Most interesting results (to me) concern the relation between planned and actual fiscal stance

Overview

- A further look in to the data
- Why is characterizing this relation very important (especially nowadays)

Planned v/s actual expenditure ratios



How informative are the policy signals?

$$g_{it} = \beta g_{it}^{p,t-i} + \delta_t d_t + \delta_i d_i + \varepsilon_{it}$$

	Expenditure	Revenues
i=1	0.34	0.43
	(0.13)	(0.14)
i=2	0.04	0.23
	(0.10)	(0.11)
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- Heterogeneity across country and across categories (Revenue more predictable, Italy less predictable)
- Budget laws are significant (although not perfect) predictors of future policies

An important policy question

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- Multiplier are often estimated using VAR or similar procedures (narrative approach)
- A recent memo from an important policy institution listed at least 20 different estimates over the last 5 years with a range of going from 0 to 2!
- The range is good for interesting debates (e.g. Perotti v/s Ramey, Boldrin v/s DeLong) but not for giving sound advice to policy makers!

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- Output today depends on signals that will only show up in observables tomorrow so that output today can only be represented using tomorrow's observables
- Inconsistent and fragile estimates of the multiplier

A simple example

$$
\begin{aligned}
s_t &= \rho_s s_{t-1} + \varepsilon_t && \text{Signal} \\
g_t &= \rho_g g_{t-1} + \underbrace{\delta s_{t-1}}_{\text{Foresight}} + \eta_t && \text{Fiscal policy} \\
y_t &= \rho_y y_{t-1} + \underbrace{\gamma}_{\text{Multiplier}} (\delta s_t + \eta_t) + v_t && \text{Output}
\end{aligned}
$$

- Reduced form but can be easily derived as the equilibrium outcome of a simple neo-classical model with elastic labor supply and standard utility (e.g. Ramey Shapiro).

Estimating the multiplier

- Suppose $\delta = 0$ (No foresight):

$$y_t = \rho_y y_{t-1} + \gamma g_t - \gamma \rho_g g_{t-1} + v_t$$

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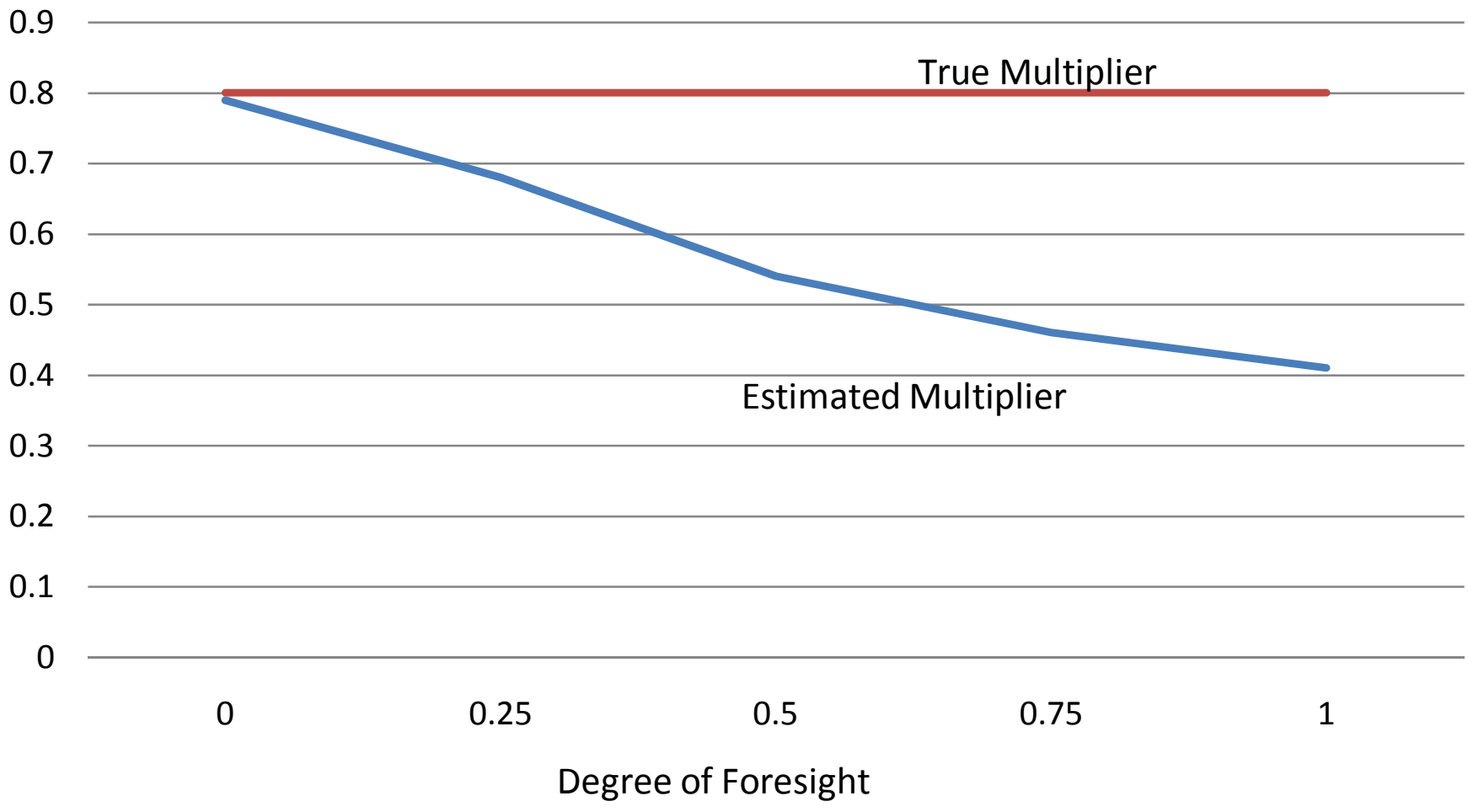
  error correlated with regressors, VAR estimates of γ are biased
- Basic intuition: when a signal arrives, econometrician sees output change but does not observe signal, so does not attribute the movement to the fiscal shock

Multipliers estimates and fiscal foresight



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- Instrumental variables (Blanchard & Perotti): indirect and not always work
- Using directly observed signals (i.e. planned expenditures): it is the ideal instrument for the problem. If signals are part of the observables the fiscal foresight problem disappears and VAR yields unbiased estimates of the multiplier

$$y_t = \rho_y y_{t-1} + \gamma g_t - \gamma \rho_g g_{t-1} + \gamma \delta s_t - \gamma \delta s_{t-1} + \underbrace{v_t}_{\text{Error}}$$

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- This paper shows that it is possible to estimate fiscal policy signals and also measure how informative they are
- This discussion suggests that estimates of this signals are very important to better understand the effects of fiscal policy
- Next: longer sample so that data on planned fiscal stance can be used, together with structural models, to make further quantitative progress on this key policy issue!