

Discussion

‘Fiscal policy uncertainty and the business cycle: time series evidence from Italy’, *Alessio Anzuini, Luca Rossi and Pietro Tommasino*

Cláudia Braz

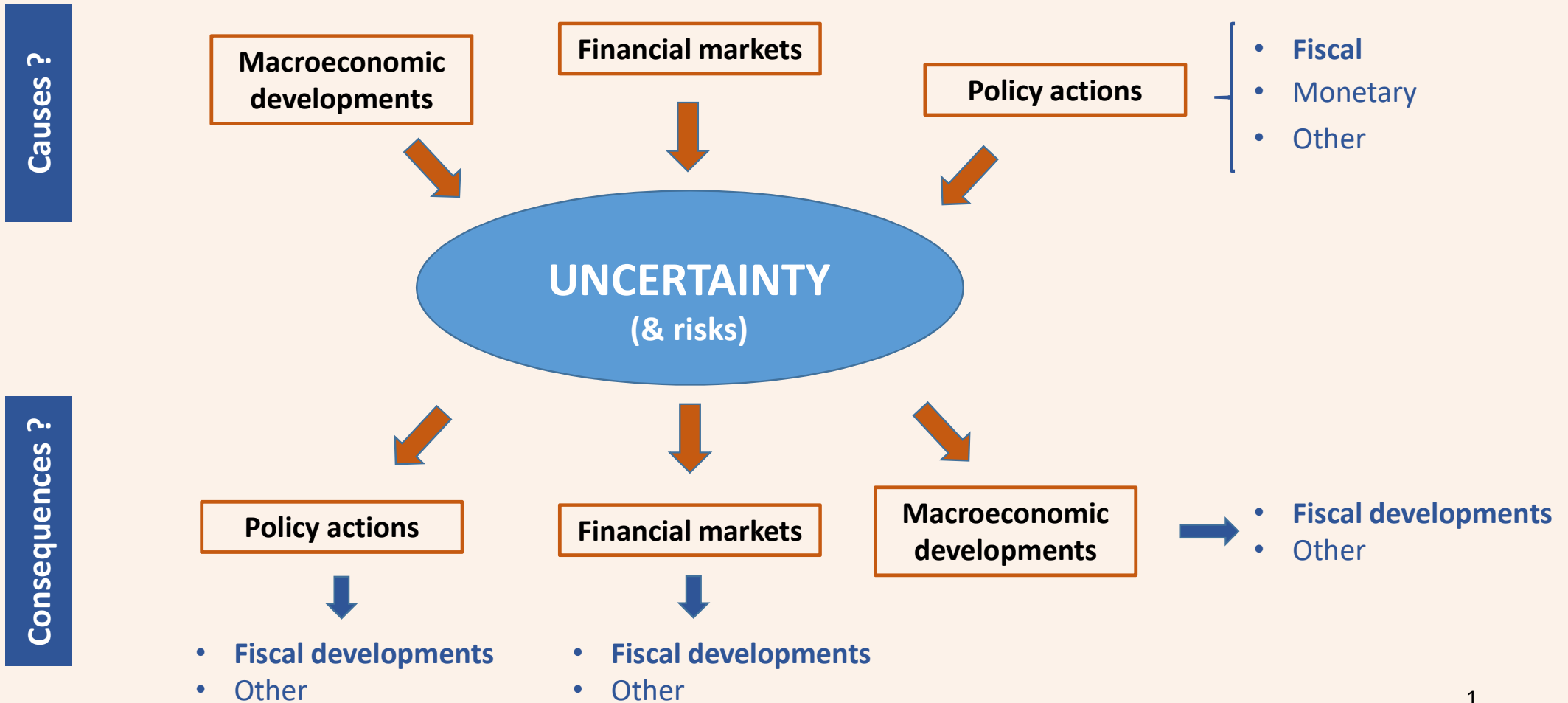
Banco de Portugal*

ECFIN Workshop ‘Fiscal policy in an uncertain environment’

Brussels, 29 January 2019

* The views expressed here are my own and do not necessarily represent those of Banco de Portugal.

The uncertainty context... and the paper perspective



The modelling strategy and results: 1st step

1st step → Estimation of a fiscal reaction function to identify FPU (fiscal policy uncertainty)

$$def_t = \beta_1 debt_{t-1} + \beta_2 gap_{t-1} + \beta_3 def_{t-1} + e^{h_t} u_t \quad \text{where } u_t \sim N(0, 1) \quad (1)$$

$$h_t = \alpha_0 + \rho h_{t-1} + \gamma \varepsilon_t \quad \text{where } \varepsilon_t \sim N(0, 1) \quad (2)$$

- Two types of shocks: level shocks (u_t) and FPU shocks (ε_t)
- Estimated using a sophisticated econometric technique: particle-filter estimation
- Re-parametrization and choice of priors
- Monthly fiscal cash data, aggregated to quarterly (from January 1981 to March 2014, Bank of Italy)
- Potential GDP derived from HP filter ($\lambda=1600$)

The modelling strategy and results: 1st step

Some considerations (I):

- Use of (quarterly) cash data to measure the fiscal stance:
 - The choice of cash-based data for the fiscal flow variable is not obvious.

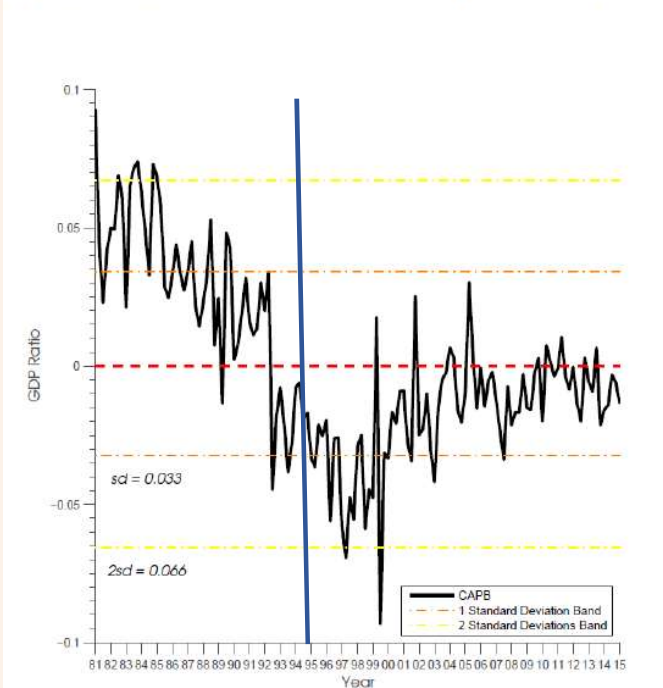
	Cash data	Accrual data
Advantages	Longer time series, available in a monthly frequency	In a quarterly frequency, volatile but following a seasonal pattern
	Allow deficit and debt to be built with the same methodology and criteria	Closer to policy decisions, reflecting the timing when obligations are created (includes arrears and trade credits and tax revenue due and likely to be collected)
	Not subject to ex-post revisions	Broader perimeter (including some SOE's) Follow international standards (audited) Ensures cross-country comparability (relevant for replication for other countries)
Disadvantages	Volatile (even transformed in a quarterly frequency) but not following a seasonal pattern	Shorter time series, particularly in a quarterly frequency
	Only considers actual receivements/payments	
	Narrow perimeter	
	Follow country standards Country-specific	

The modelling strategy and results: 1st step

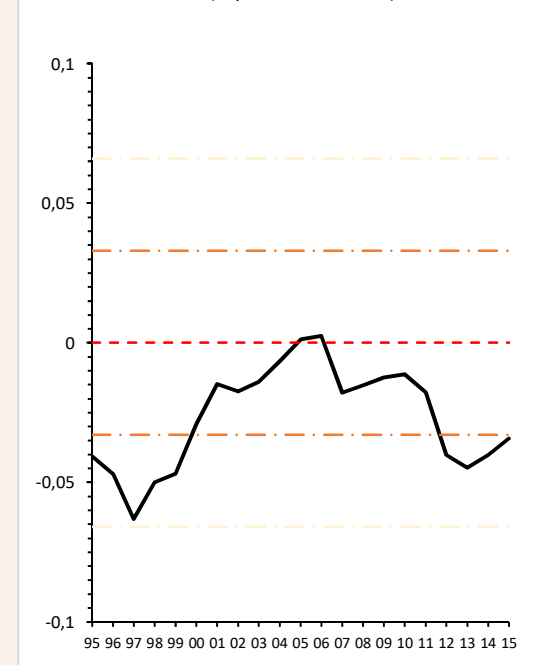
Some considerations (II):

- How to cyclically-adjust the cash data, particularly in a quarterly frequency?
 - ❖ Fiscal elasticities (e.g. OECD) computed on the basis of (less volatile) annual data
- Does the cash deficit convey the same stance as annual national accounts, relevant for decision makers?
 - ❖ The importance of one-offs
 - ❖ The role EU fiscal supervision

Figure 1: Cyclically adjusted primary balance



Cyclically adjusted primary deficit, Italy (% potential GDP, EC)

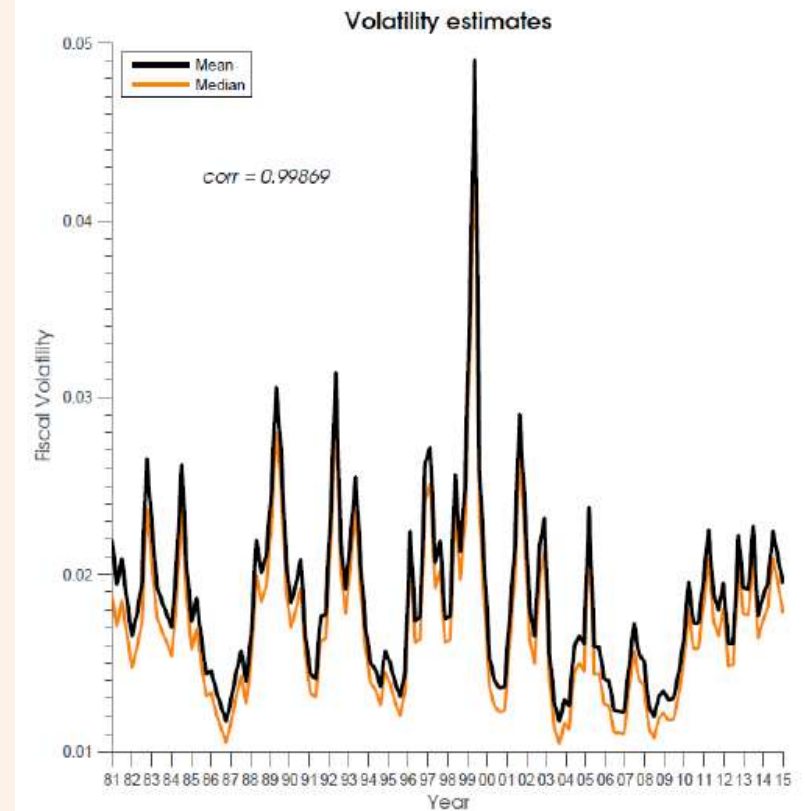


The modelling strategy and results: 1st step

Some considerations (III):

- The volatility item:
 - What is actually captured by the volatility item?
 - ❖ **Volatility \neq Uncertainty**
 - ✓ Perfectly foreseen volatility is not necessarily bad (e.g. temporary discretionary measures).
 - ✓ Fiscal policy volatility may reflect deliberate actions to stabilise the economy.
 - ✓ Some volatility may stem from the lack of smoothing of cash data and an improper cyclical adjustment.
 - ✓ The recent crisis years show a moderate increase (and resilient up to 2015) in uncertainty (when compared with past episodes).

Figure 7: Fiscal Policy Uncertainty index



The modelling strategy and results: 2nd step

2nd step

→ Estimation of the macroeconomic impact through a VARX model

$$Y_t = \delta_0 + \delta_1 t + \delta_2 t^2 + A(L)Y_{t-1} + b(L)\chi_t + c(L)\mu_t + v_t \quad (3)$$

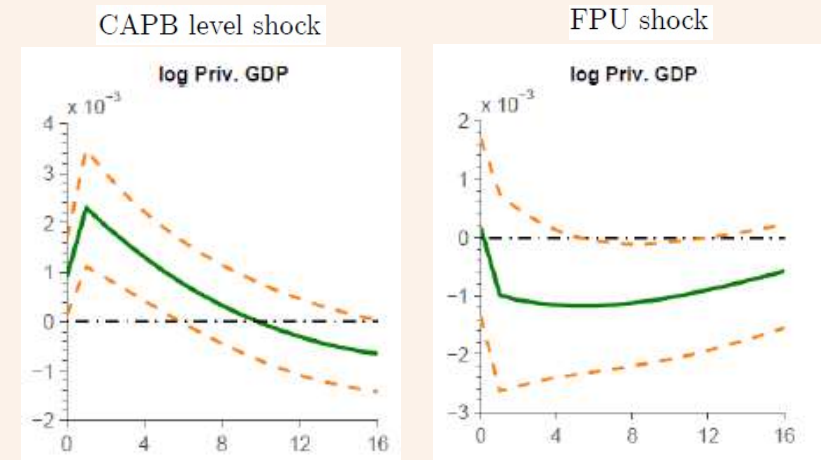
- Estimated using Bayesian techniques
- Choice of priors
- The estimated model is fed with shocks of the two types (fiscal-level:1SD and FPU:2SD)
- Numerous robustness checks are performed

The modelling strategy and results: 2nd step

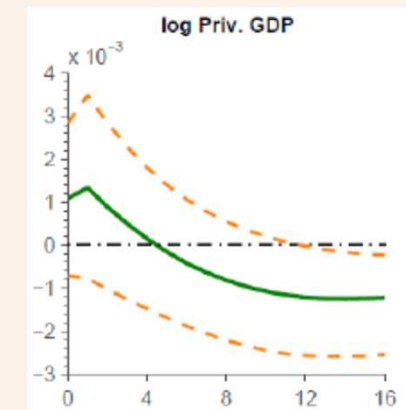
Some considerations (I):

- The results have the expected sign:
 - GDP increases after a level shock (fiscal expansion) and decreases after a volatility shock (FPU increases)... but there is no information about the channels by which FPU has effects.
- The paper provides a contribution to the fiscal multipliers literature (particularly on disentangling the fiscal shock origin). However, the comparison with other estimates of the macro impact of fiscal policies is difficult:
 - Given the shock calibration (particularly the FPU shock) and the absence of composition of fiscal policies effects.

Impulse response functions



joint shocks to CAPB and FPU



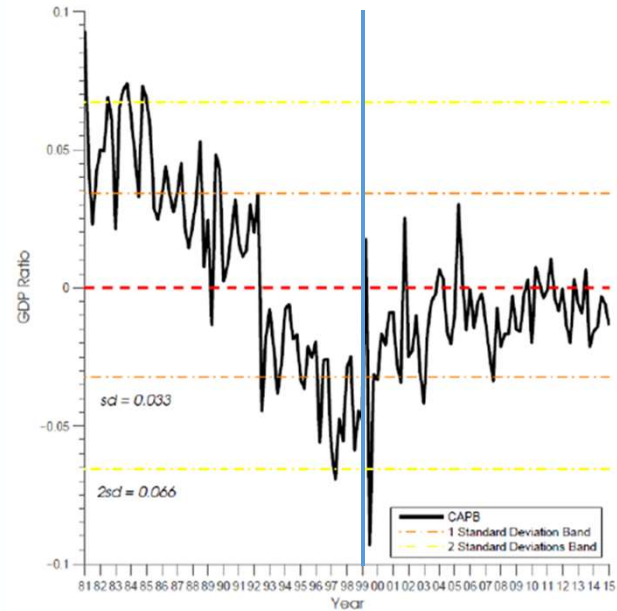
The modelling strategy and results: 2nd step

Some considerations (II):

- The comparison with studies with alternative modelling strategies is also not straightforward.
- Going a step further in policy recommendations:
 - Did fiscal rules make a difference in past FPU in Italy?
 - Which fiscal rules would be conducive to reducing FPU, in the view of the authors?

Additional slides

Figure 1: Cyclically adjusted primary balance



General government primary deficit, Italy
Quarterly national accounts, % of GDP

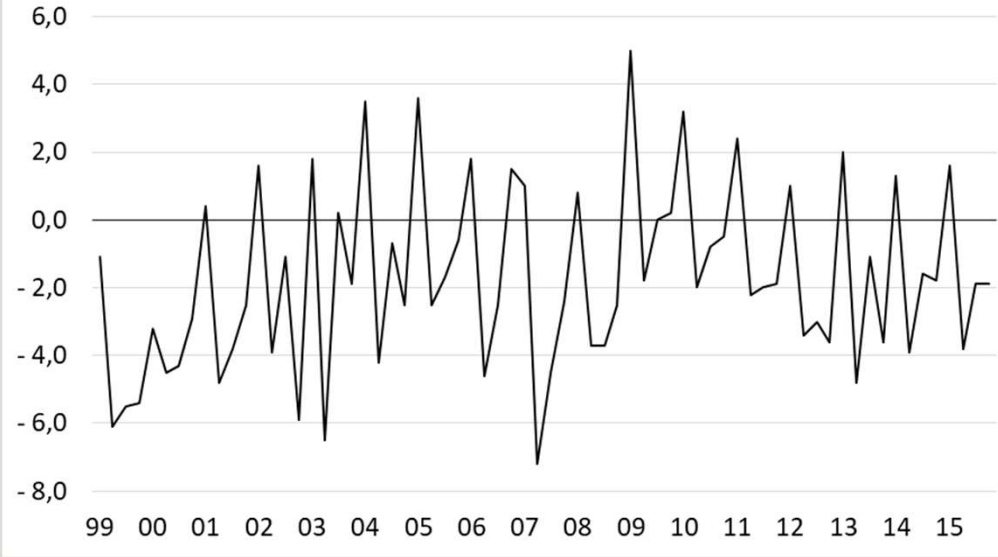
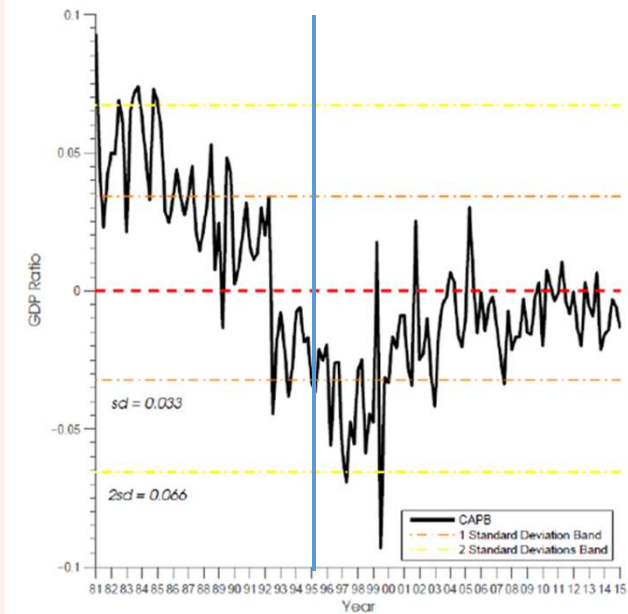


Figure 1: Cyclically adjusted primary balance



General government primary deficit, Italy
Annual national accounts, % of GDP

