

The stabilising role of fiscal policy in EMU

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Questions addressed



- Role of fiscal policy as a shock absorber in EMU
- The past experience with fiscal policy stabilisation in EMU
- Improving the contribution of fiscal policy to stabilisation in EMU: the role of fiscal indicators and budgetary surveillance
- Improving the contribution of fiscal policy to stabilisation in EMU: the role of fiscal governance
- Fiscal stabilisation and coordination in EMU

Fiscal policy as a shock absorber in EMU



The EMU macroeconomic governance framework and fiscal stabilisation

- EMU not fully conforming to OCA criteria provides a potentially strong role for fiscal policy as a shock absorber
 - However:
 - In monetary unions, greater risk that fiscal activism turns into deficit bias
 - Fiscal stabilisation conducted in isolation neglects euro-area wide implications
- EMU rules-based framework for fiscal policy

Fiscal policy as a shock absorber in EMU



Fiscal stabilisation. What is needed?

- **Discretionary fiscal stabilisation**
 - Fiscal policy effective on output
 - Authorities have necessary information to implement appropriate policies (on size and type of shocks, on budgetary variables,...)
 - Authorities have actual control on budgetary aggregates (can calibrate fiscal impulse both in terms of size and time)
 - Authorities have appropriate incentives
- **Automatic stabilisers**
 - Stabilisers are sufficiently effective in smoothing shocks

Fiscal policy as a shock absorber in EMU



Effectiveness of discretionary fiscal policy

- **Main results from large-scale DSGE models suited for fiscal policy analysis (GFM, NAWM, QUESTIII, ...)**
 - Fiscal multipliers generally positive in the short-run, becoming negative in the long-run
 - Short-run fiscal multipliers often below one. Shock composition matters (e.g., government transfers vs. government spending)
- **VARs or SVARs with fiscal policy (Blanchard and Perotti, 2002, Galí, López-Salido and Vallés, 2003, Fatás and Mihov, 1999, Perotti, 2004, Mounford and Uhlig, 2004)**
 - Fiscal multipliers are generally positive but smaller than 1
 - Mild evidence that multipliers are falling over time

Fiscal policy as a shock absorber in EMU



Automatic stabilisers

■ Model-based evidence

- Automatic stabilizers reduce output volatility by between 25% (Van den Noord, 2000, INTERLINK model) and 10% (Barrell and Pina, 2000, NiGEM model)
- Automatic stabilizers dampen demand shocks, much less output shocks (e.g., Brunila, Buti and in't Veld, 2003, QUESTII model)

■ Econometric evidence

- Negative correlation between government size and output volatility (e.g., Galí, 1994, Fatás and Mihov, 2001,...).
- Possibly non-linear (Silgoner, Reitschuler and Crespo-Cuaresma, 2003). Possible explanation: supply-side effects of taxation (Buti et al., 2003)

Fiscal policy as a shock absorber in EMU



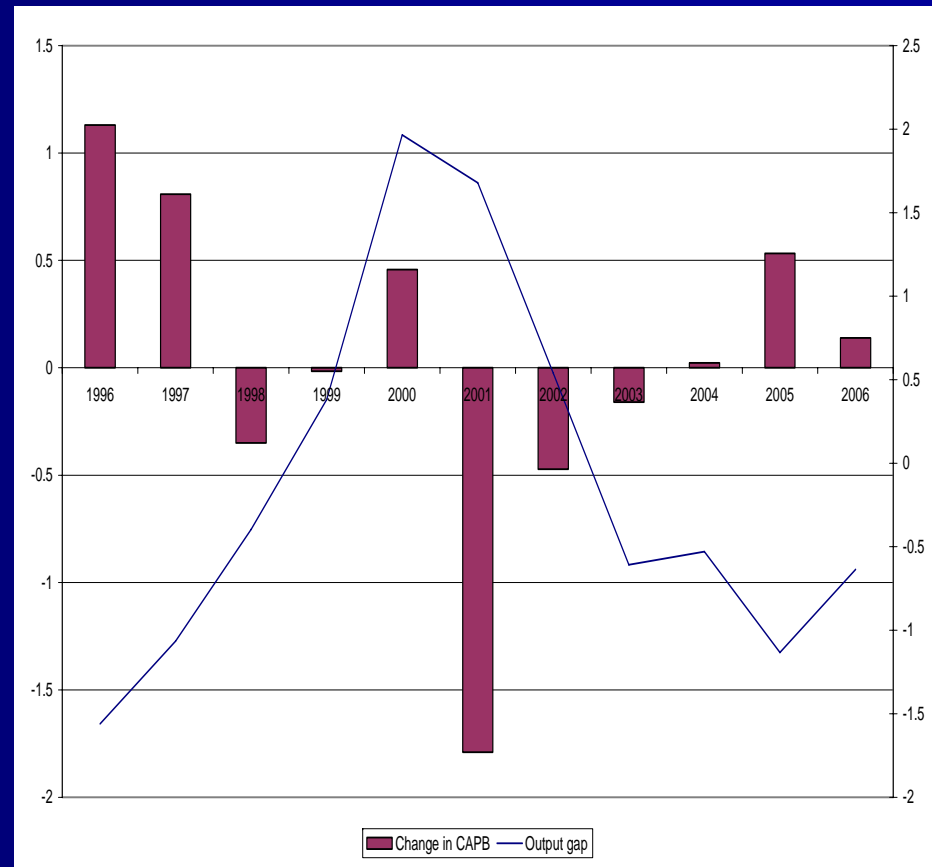
Fiscal policy effectiveness: summary

- Discretionary fiscal policy potentially effective, but substantial uncertainty on size of multipliers
- Automatic stabilisers may play a role, but most countries far from MTOs. Moreover, a number of factors play against their effectiveness in the perspective
 - Ageing and sustainability: high government deficits and debts reduce the room for fiscal manoeuvre. Automatic stabilisers may not play fully
 - Shrinking government size: reduced role for automatic stabilizers?
 - Reduced relevance of idiosyncratic policy-induced demand shocks: reduced role for automatic stabilizers?
 - Shocks do not come with a label

The past experience with fiscal policy stabilisation in EMU

Prima-facie evidence

Fiscal policy for the euro-area aggregate appears to have behaved rather pro than counter-cyclically in the past decade...



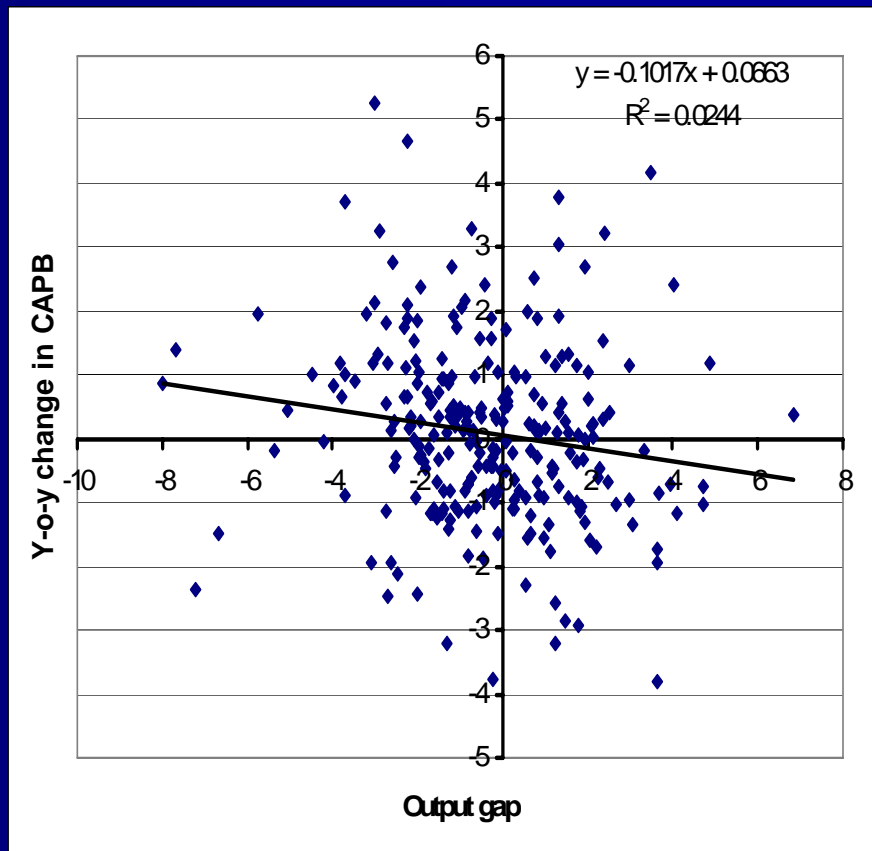
How do fiscal authorities behave in practice?

Prima-facie evidence

A counter-cyclical use of fiscal policy would imply a positive relation between the change in the CAPB and the output gap

However, in sufficiently large samples, the relation between change in CAPB and output gap is generally weak

EU11, 1980-2005



How do fiscal authorities behave in practice?



Estimation of fiscal reaction functions

- Common way to account for other determinants of fiscal stance: econometric estimate of a fiscal reaction function of the following type (e.g., Bohn, 1998, Galí and Perotti, 2003,...)

$$CAPB_{i,t} = \alpha + \beta_1 CAPB_{i,t-1} + \beta_2 d_{i,t-1} + \beta_3 \hat{y}_{i,t} + x'_{i,t} \beta + \eta_i + \varepsilon_{i,t}$$

- Main findings
 - Relation between CAPB and output gap is generally weak.
 - Pro-cyclicality is mainly related to the behaviour of government spending, especially government consumption and investment (e.g., Lane, 2003, Galí and Perotti, 2003, Turrini, 2004,...)
 - No evidence of increased pro-cyclicality in euro-area countries after introduction of EU fiscal framework (Galí and Perotti, 2003 but some evidence of pro-cyclical behaviour after SGP, IMF, 2004, EC, PFR, 2006)

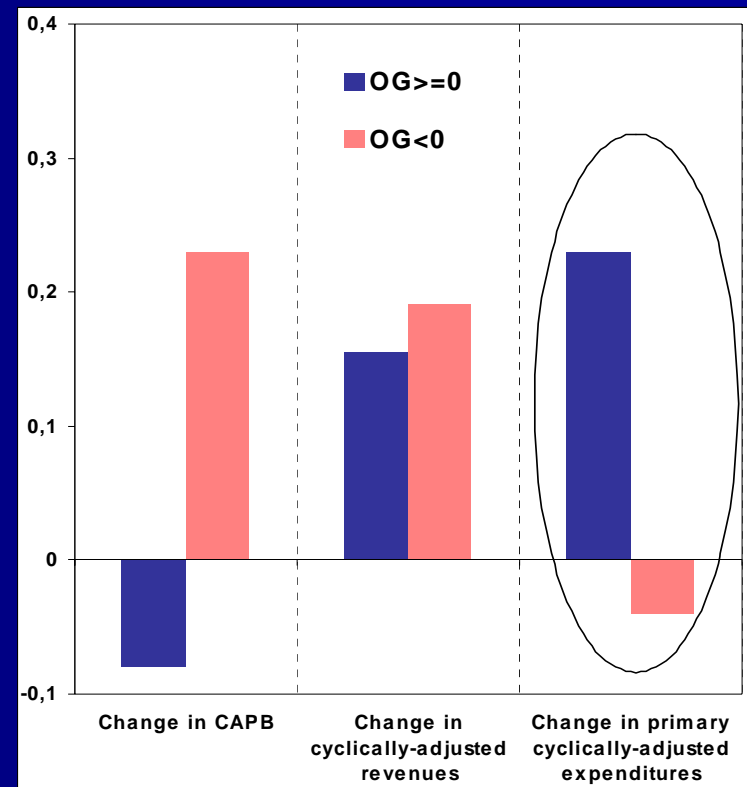
How do fiscal authorities behave in practice?

Good vs. bad times

On average since the 80s, the fiscal stance in the euro area appears more expansionary in periods of positive output gaps, the difference being explained by the behaviour of expenditure (EC, PFR - 2006)

Same result also after controlling for other variables that affect the fiscal stance via the estimation of fiscal reaction functions.

EU11, 1980-2005



How do fiscal authorities behave in practice?



Good times vs. bad times

EU-11, 1980-2005 Dependent variable:	Δ primary CAB		Δ cyclically-adjusted primary expenditure	
	Output below potential (OG<0)	Output above potential (OG>=0)	Output below potential (OG<0)	Output above potential (OG>=0)
Explanatory variables				
Constant	-0.356	-2.869***	2.805**	6.517***
Lagged CAPB	-0.300***	-0.376***	-0.033	-0.128***
Lagged debt/GDP ratio	0.023**	0.037***	-0.019**	-0.016**
Output gap	0.115	0.241	0.136	0.197
Dummy 1992	-0.148	0.992**	0.135	-0.197
Dummy 1999	-0.698**	-0.454	0.267	0.116
N. obs.	149	102	149	102
R sq. within	0.24	0.21	0.12	0.27
R sq. between	0.48	0.01	0.009	0.04
R sq. overall	0.19	0.06	0.07	0.12

How do fiscal authorities behave in practice?



Pro-cyclicality: alternative explanations

- **Incorrect reading of cyclical conditions (identification of shocks)**
 - Real-time errors in computing output gaps

- **Imperfect control over budgetary aggregates**
 - Identification and implementation lags: fiscal impulse comes with a delay
 - Numerical fiscal rules constrain the operation of fiscal policy with stabilising purposes

- **Inconsistent incentives**
 - “Common pool” problem could get worse in good times: increased spending related with a “voracity effect” (Tornell and Lane, 1999)
 - Governments may pre-commit to re-distribute budgetary windfalls via tax cuts (Talvi and Vegh, 2005) or feel pressure by the electorate to do so (Alesina and Tabellini, 2005)

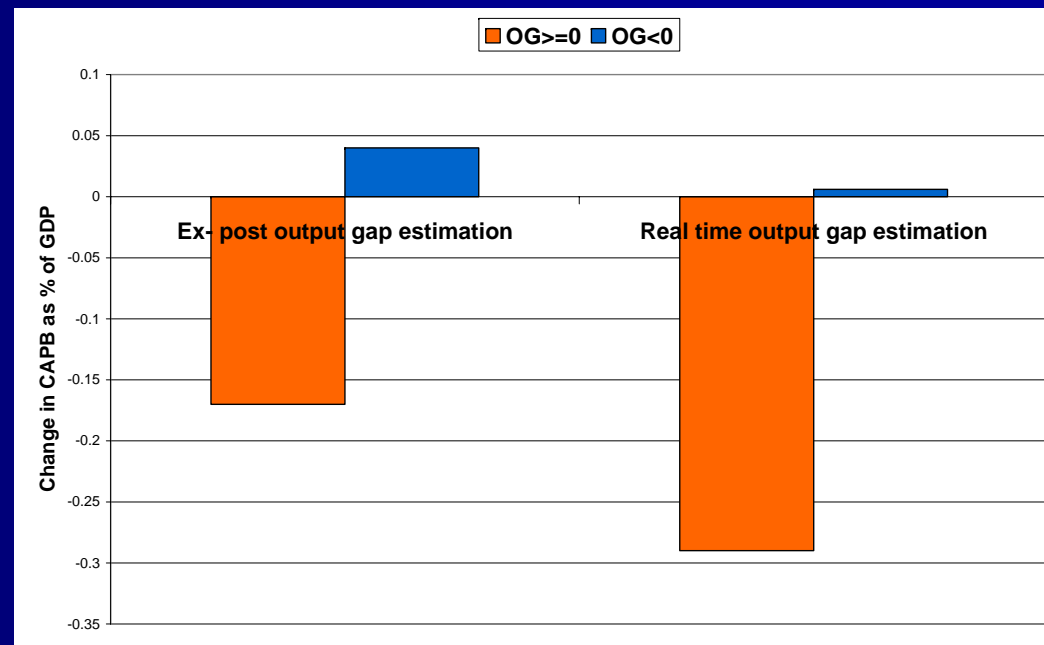
How do fiscal authorities behave in practice?

Real-time vs. ex-post output gaps

Prima-facie evidence shows that wrong assessment of good/bad times due to real-time errors may explain pro-cyclicality in bad times, not in good times (EC, PFR - 2006)

Consistent with fiscal reaction function estimations in Forni and Momigliano (2004).

EU11, 1995-2003

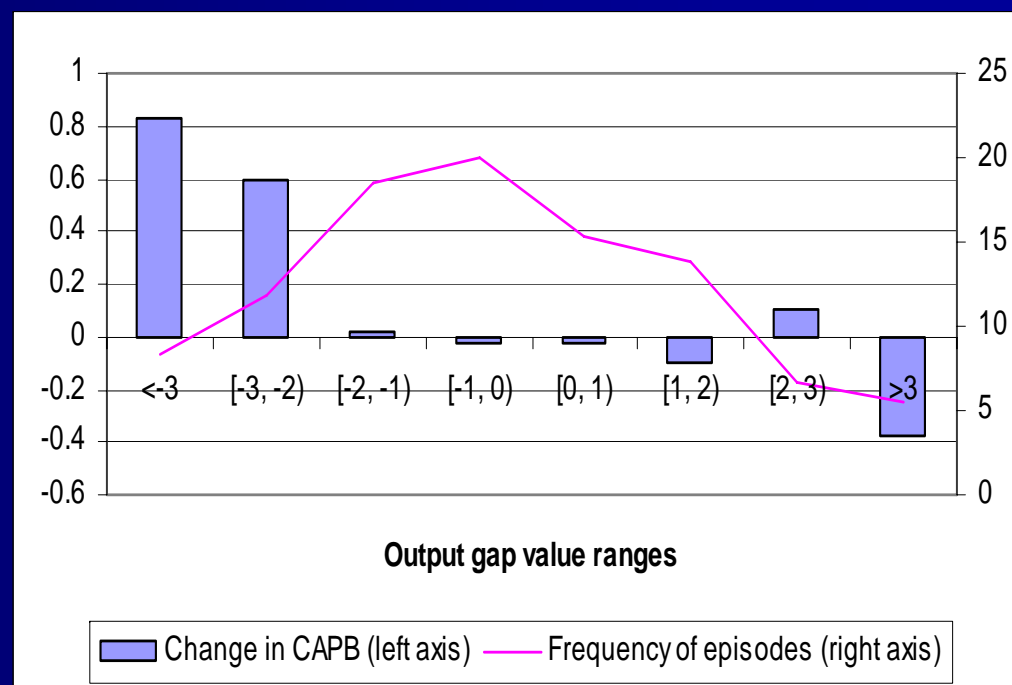


How do fiscal authorities behave in practice

Fiscal stance and output gap size

Further evidence against the view that pro-cyclicality mainly related with wrong assessment of good/bad times: fiscal policy more pro-cyclical when the output gap is large, i.e., when the occurrence of real-time errors less likely ((EC, PFR - 2006).

EU11, 1980-2005



How do fiscal authorities behave in practice?

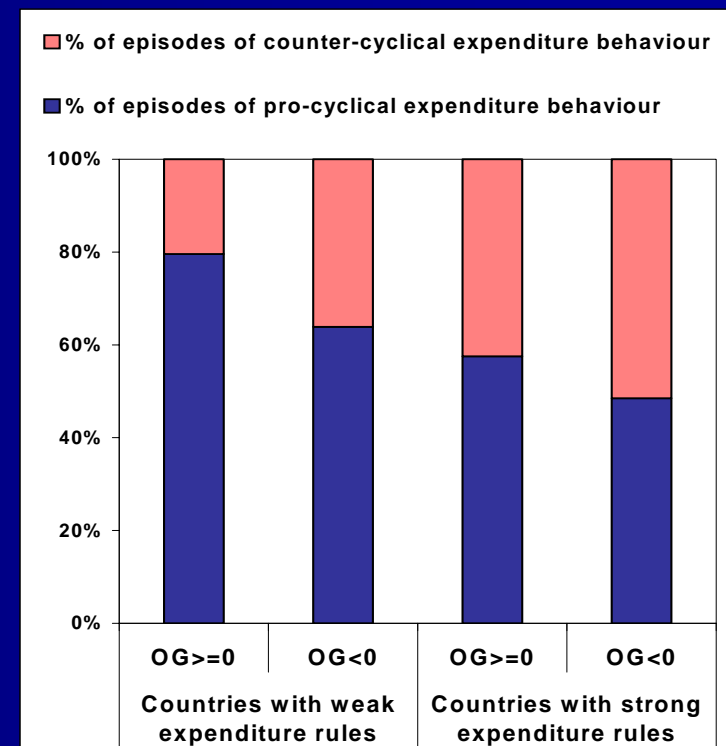


The role of national-level numerical fiscal rules

Evidence on the impact of national-level deficit rules on cyclical stance of fiscal policy is mixed (US states: Alesina and Bayoumi, 1996, Sorensen et al., 2001, Fatas and Mihov, 2004. EU: Gali and Perotti, 2003. Cross-country: Manasse, 2006)

EU countries with “stronger” expenditure rules run pro-cyclical expenditure policies less frequently over the past 15 years (EC, PFR - 2006)

22 EU countries, 1990-2005



How do fiscal authorities behave in practice?



A summary

- Was discretionary fiscal policy in the euro area used effectively to absorb shocks? Evidence is not supportive
- Puzzling: evidence of “pro-cyclical bias” in good times
- Incorrect reading of cyclical conditions
 - “Real-time errors” unlikely to be the major explanation for pro-cyclical behaviour
- Imperfect control of budgetary aggregates
 - The impact of numerical rules for fiscal policy is not clear cut: type of rule and design matter (e.g., Ayuso et al., 2006)
 - Identification and implementation lags
- Incentives

Fiscal policy and stabilisation in EMU: the role of fiscal indicators.



Gauging the medium-term orientation of fiscal policy

The measurement of the general government budget balance net of cyclical and other temporary factors is pivotal for fiscal policy analysis.

The current method used in EU budgetary surveillance framework of cyclical adjustment has proved its usefulness over the years. It is simple, transparent and can be consistently implemented across countries. The experience of recent years has highlighted two caveats:

- (i) the estimation of potential output in real time and
- (ii) the measurement of year-to-year changes in the tax elasticity with respect to GDP.

Fiscal policy and stabilisation in EMU: the role of fiscal indicators.



Uncertainty of real-time output gap estimates:

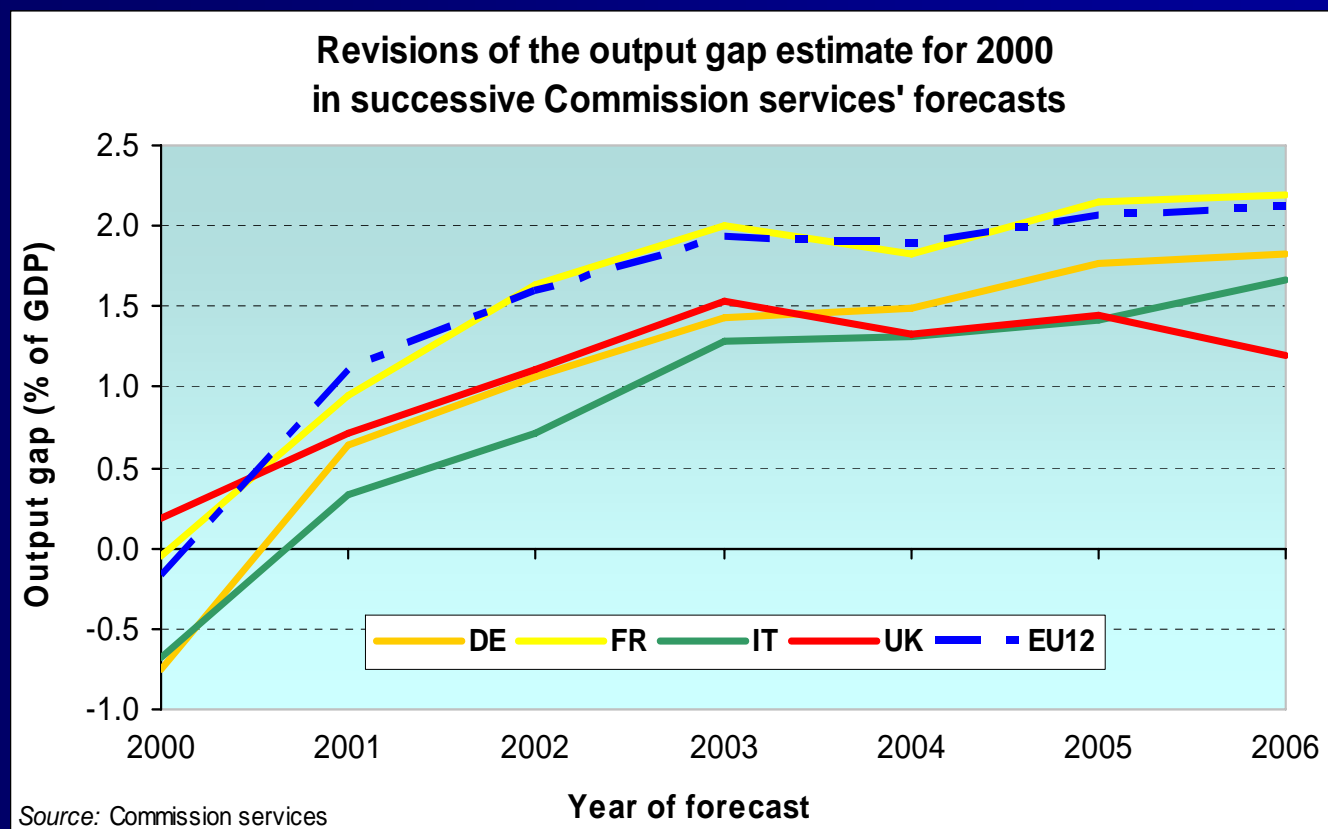
The perceived position in the cycle crucially depends on the prevailing outlook for medium-term growth which is subsequently revised as data for later years arrives.

The issue was first highlighted and empirically explored in connection with US monetary policy making (Orphanides and Van Norden, 2002 and Orphanides, 2003).

It became increasingly important for fiscal policy making in EMU in the context of the rule based-system provisions of SGP, especially with the 2005 reform of the SGP.

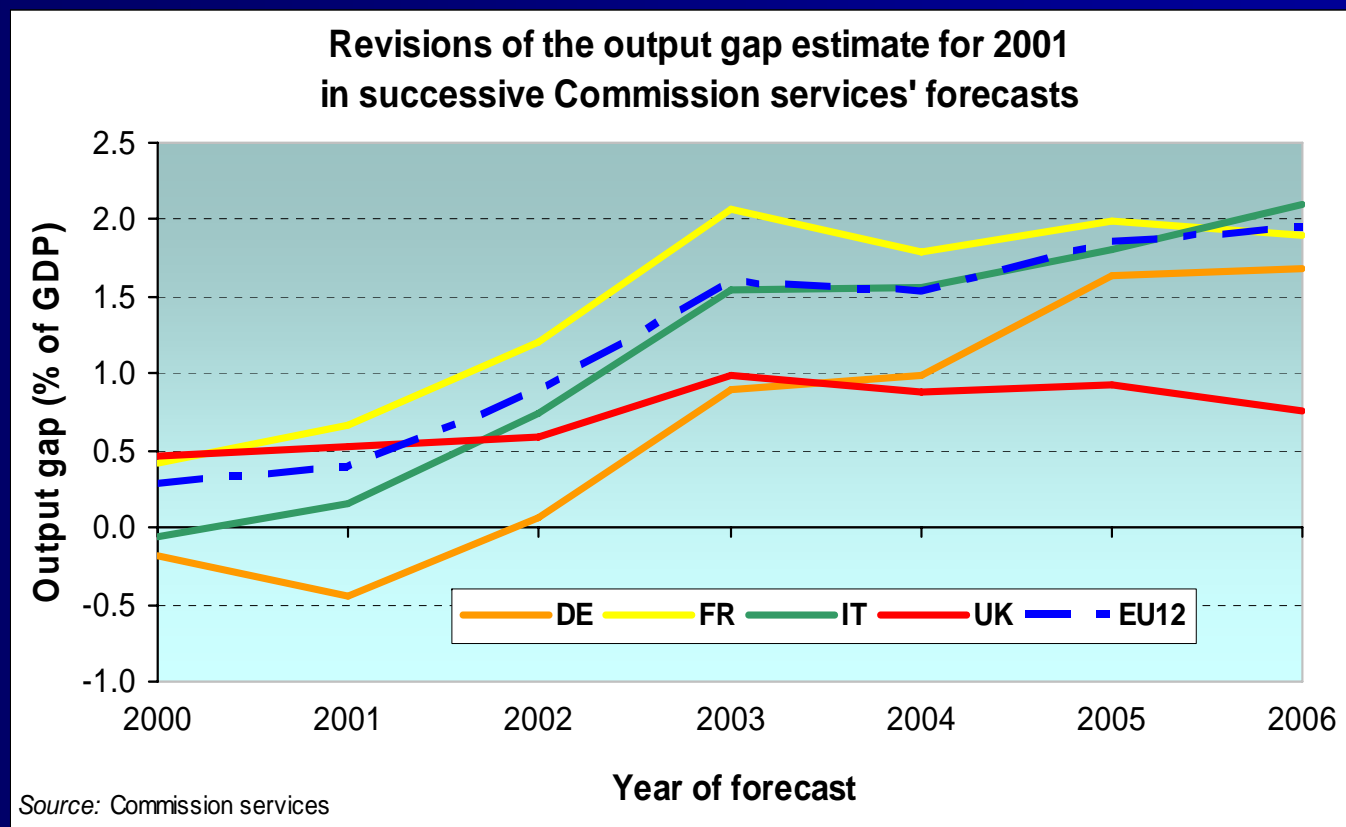
Fiscal policy and stabilisation in EMU: the role of fiscal indicators

Uncertainty of real-time output gap estimates



Fiscal policy and stabilisation in EMU: the role of fiscal indicators.

Uncertainty of real-time output gap estimates



Fiscal policy and stabilisation in EMU: the role of fiscal indicators.



Short-term fluctuations in tax elasticities

Tax elasticities used to gauge the cyclical component of the budget balance are taken to be constant over time.

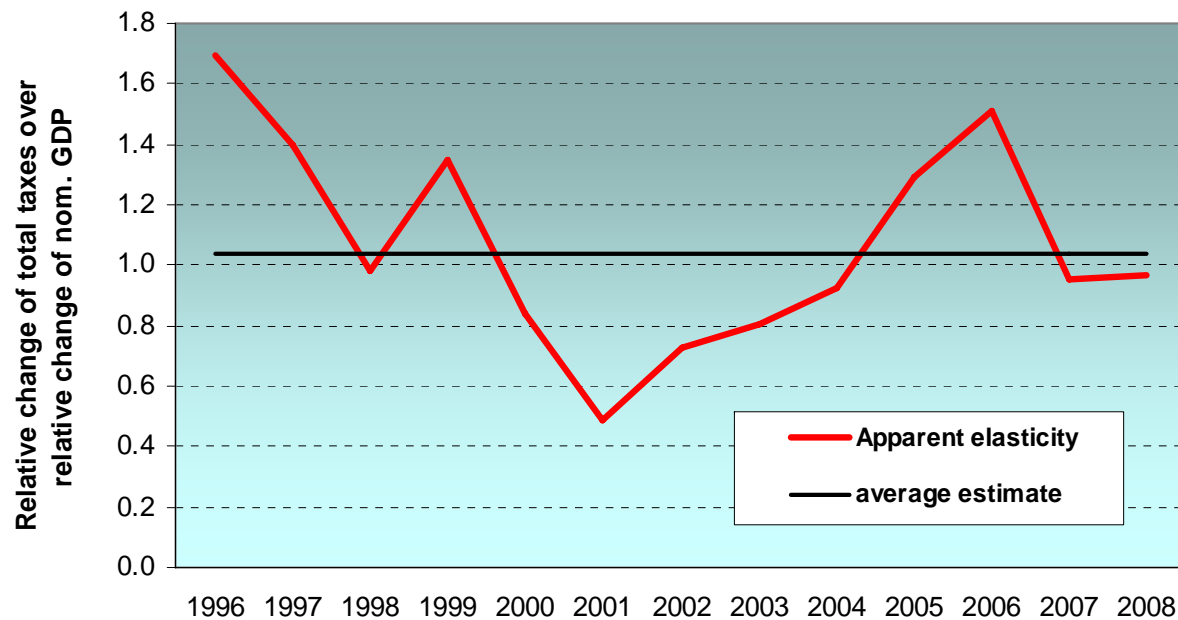
Year-to-year fluctuations, which in some cases and years can be relatively big, are not captured.

In practice, this approach can have unwelcome implications for fiscal policy analysis: on the basis of average elasticities, temporary increases in tax revenues may be assessed to be structural

Fiscal policy and stabilisation in EMU: the role of fiscal indicators

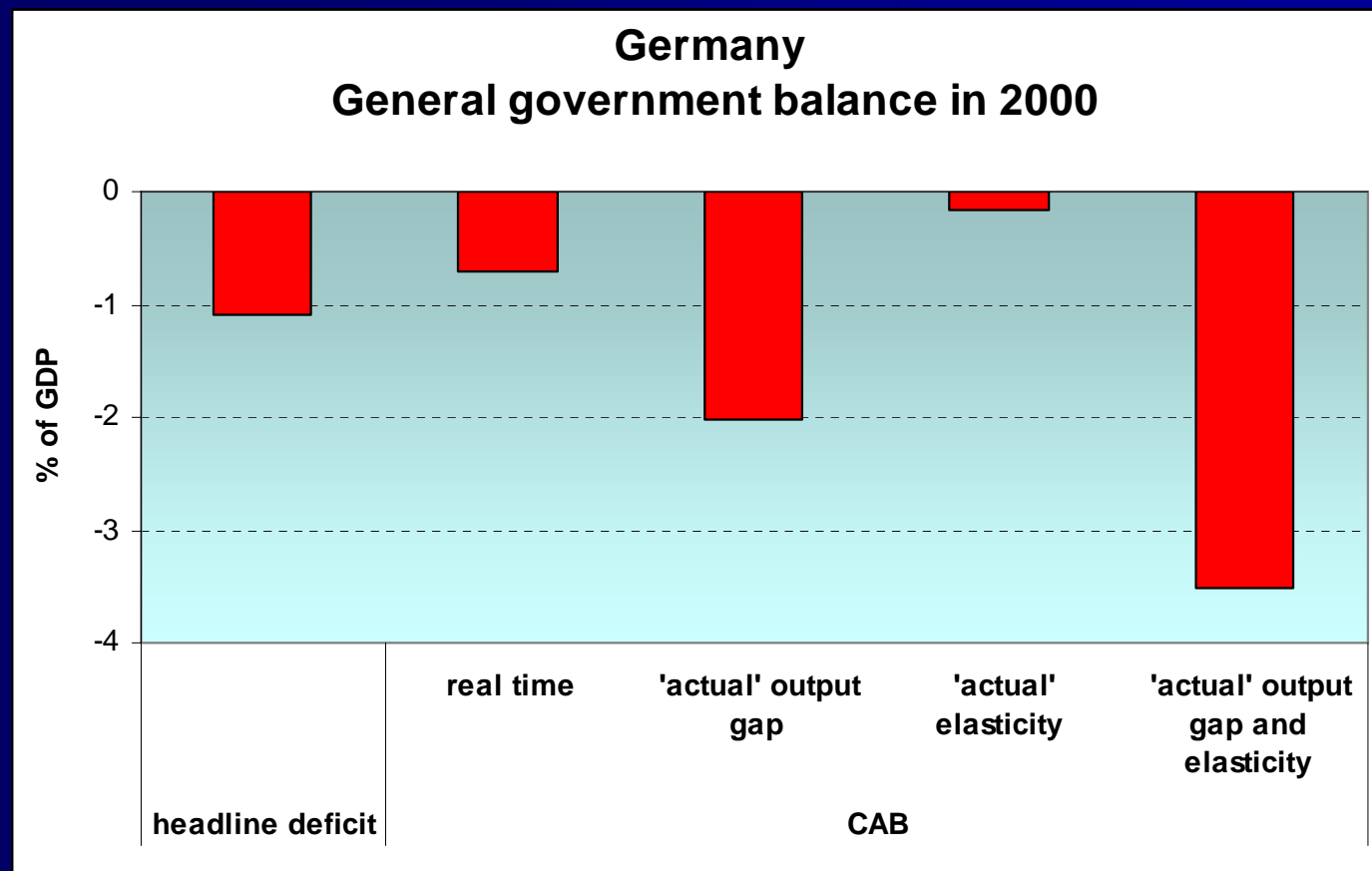
Short-term fluctuations in tax elasticities

Euro-area tax elasticity with respect to GDP

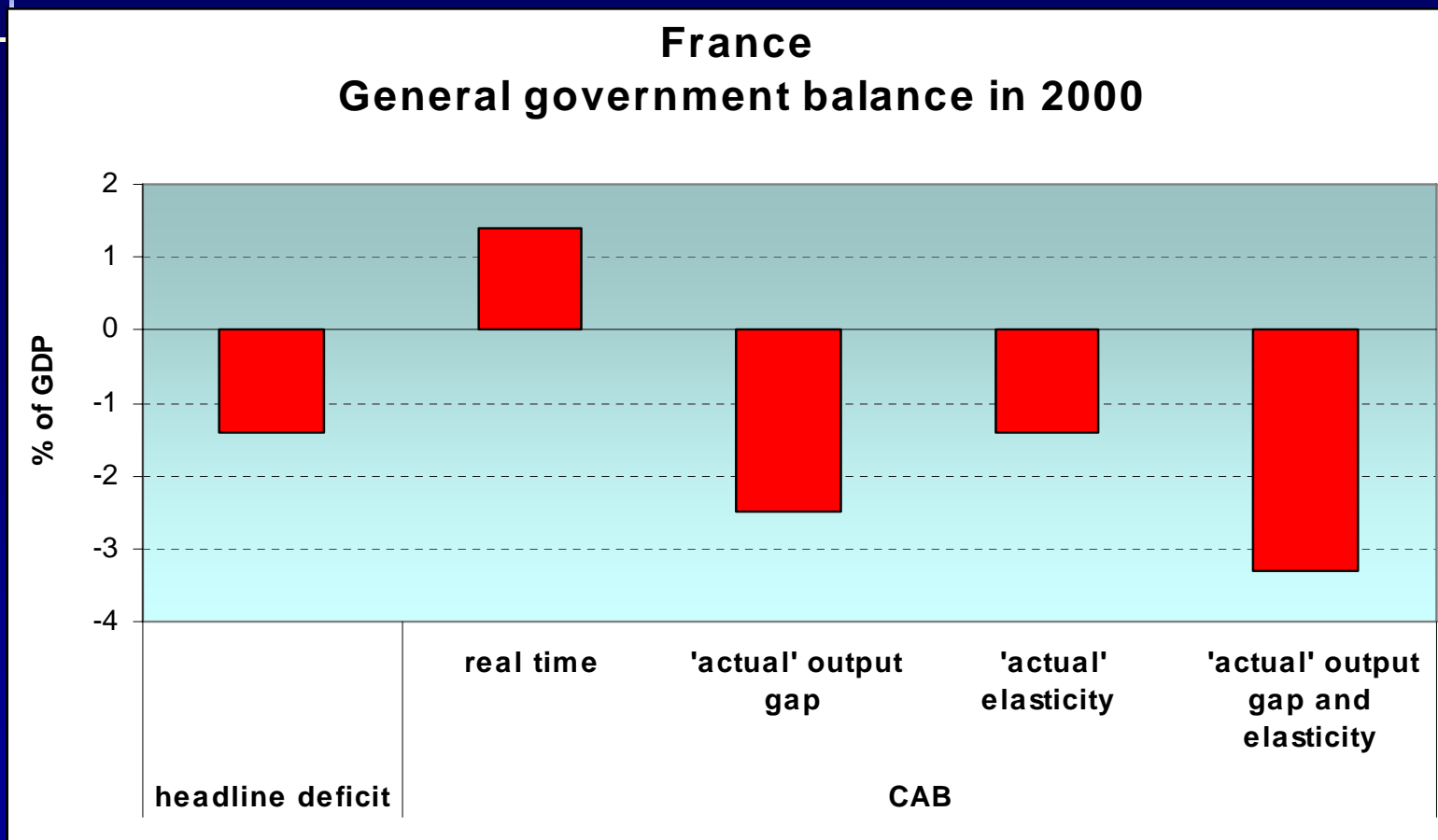


Source: Commission services

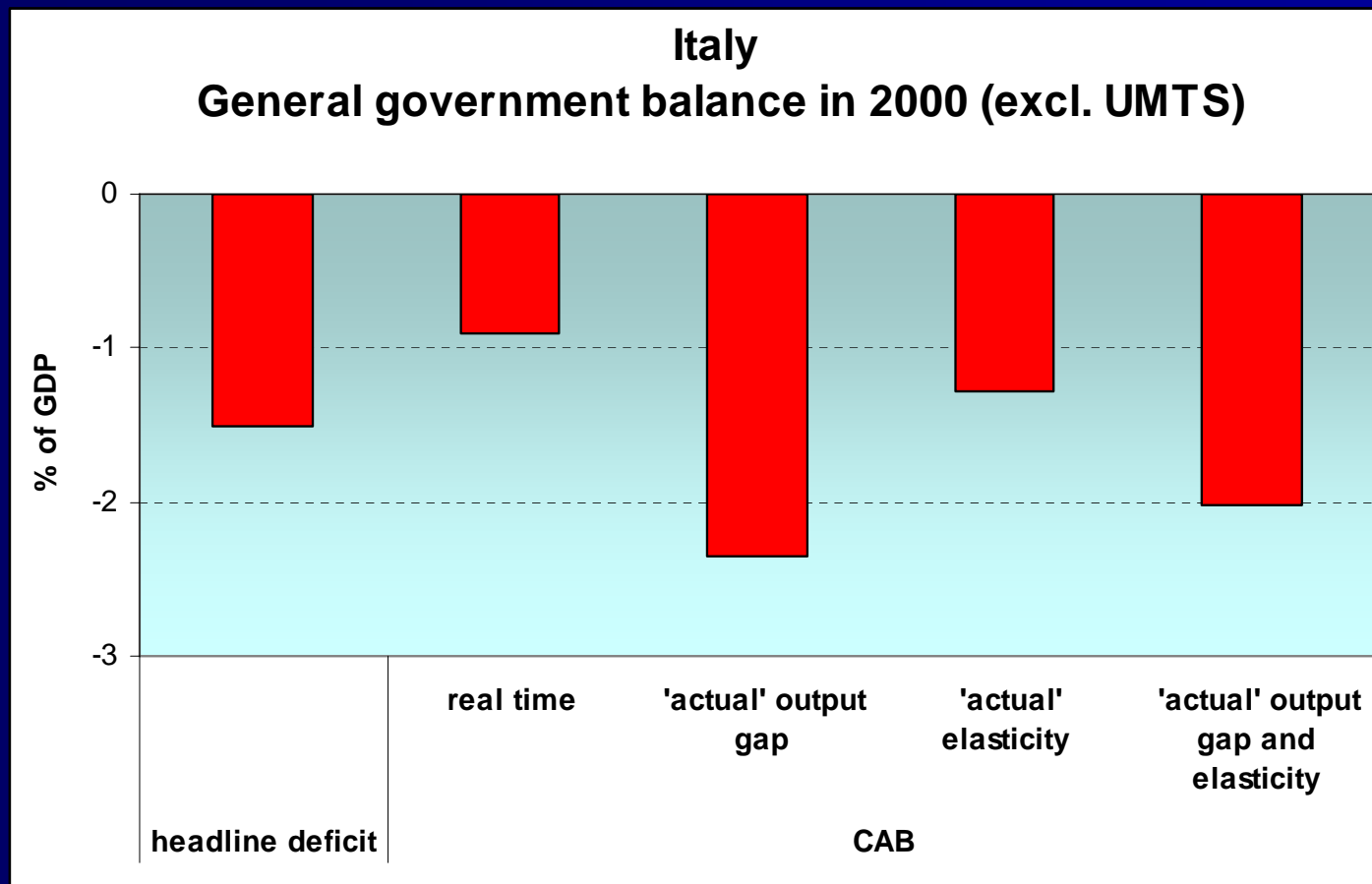
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Fiscal policy and stabilisation in EMU: the role of fiscal indicators.



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Fiscal policy and stabilisation in EMU: the role of fiscal indicators.



Room for improving existing instruments

- **Assessment of the cycle**

- (i) Accuracy of macro economic projections (Bias?, Cyclical patterns?)
- (ii) Complement real-time output gap estimates with additional information available in real time; consider rate of nominal GDP growth

- **Assessment of tax revenues**

- (i) Disaggregated approach (ECB)
- (ii) Model tax revenues to capture effect of composition effects

Fiscal policy and stabilisation in EMU: the role of fiscal governance



Improving fiscal governance in EMU

Responding to the shortcomings experienced prior to the 2005 reform of the SGP, the revised Pact highlights the need to avoid pro-cyclical fiscal policy.

Two pronged-approach:

- (i) **EU rules:** achieve more symmetrical approach of fiscal policy over the cycle.
- (ii) **National fiscal governance:** domestic fiscal rules and institutions to complement the EU framework.

Fiscal policy and stabilisation in EMU: the role of fiscal governance



EU rules

Key concepts are expressed in structural terms:

- Medium-term budgetary objective (MTO)
- Adjustment towards MTO to be modulated in function of cycle

Benchmark for annual adjustment:

- 0.5% of GDP on average
- more in good times (can be less in bad times)

Adjustment path for EDP countries takes into account cyclical conditions and country-specific shocks

Fiscal policy and stabilisation in EMU: the role of fiscal governance



National fiscal governance

New SGP does not directly deal with national rules and institutions. However:

- March 2005 ECOFIN report on SGP reform: emphasis on the complementary role of national rules and institutions
- January 2006 ECOFIN invited EPC and Commission to carry out analysis
- October 2006 ECOFIN invited Member States to provide information in SCPs, and Commission to take this information into account in assessing SCPs

Fiscal policy and stabilisation in EMU: the role of fiscal governance



National fiscal governance

Rules

- Expenditure rules: may help to curb pro-cyclical expenditure fiscal policy in good times
- Revenue rules: ex-ante rules for the allocation of 'windfalls', 'cagnottes', 'tesoretti',...
- Deficit and debt rules: design matters

Institutions

Radical" proposals: delegation of stabilisation objectives to independent fiscal authorities (e.g. Wyplosz, 2005)

"Pragmatic" approach: independent agencies carrying out forecasts (Jonung and Larch, 2006), estimating budgetary impact of policy measures, monitoring the respect of national fiscal rules, issuing public recommendations (e.g. PFR - 2006).

Fiscal policy and stabilisation in EMU: coordination



Fiscal policy spillovers in EMU

- Expansionary fiscal policy in a given country leads to higher real interest rates in the area as a whole.
- Main channels, expected impact :
 - Trade (external demand, RER) (+)
 - Common interest rate policy (-)
 - Common exchange rate (-)
- Coordination among fiscal authorities may help to better calibrate fiscal policy response against shocks

Fiscal policy and stabilisation in EMU: coordination



Implementation issues

- Theory provides an ambiguous answer on the benefits of “ex-post” cooperation among fiscal authorities (e.g., Beetsma et al., 2001, Uhlig, 2003,...)
- On top of fragile results in theory, there are serious implementation issues with coordinating fiscal stabilisation policies “ex-post”
 - spillovers: small size, uncertain sign (in’t Veld, 2004, Gros and Hobza, 2005, Benassy-Quere and Cimadomo, 2006, Weyerstrass et al., 2006,...)
 - free-riding: how to enforce commitments?
 - time-consistency: can agreed fiscal plans survive internal approval?
 - imperfect information: can a correct common reading of economic conditions be reached in real time? (size, type, and source of shocks). Quality of fiscal indicators?
 - implementation lags: even more relevant in a multilateral context?

Fiscal policy and stabilisation in EMU: coordination



Coordination in the euro area

- Feasible alternative to “ex-post” coordination
 - coordination via agreed “ex ante” principles and guidelines (Treaty, SGP, BEPGs)
 - regular dialogue (Eurogroup, ECOFIN)

- Benefits
 - avoid “gross mistakes”
 - enhance quantity and quality of information used in policy making
 - help to tie hands against domestic pressures in good times

- Recent developments in budgetary surveillance
 - SCP assessment: Increased focus on cyclical stance of fiscal policy
 - strengthened role of Medium Term Budgetary Review

Concluding remarks



- **Stabilisation via discretionary fiscal policy**
 - could the control on budgetary variables be strengthened? Could incentives be improved?
 - Room for improving fiscal indicators (e.g., cyclical adjustment)
 - More on role of fiscal governance on fiscal stabilisation

- **Stabilisation via automatic stabilisers**
 - Pre-requisite: MTOs are reached
 - How to ensure successful (=long-lasting) consolidations?
 - Doomed to become less effective?
 - More on government size and stabilisation

- **Spillovers, coordination**
 - Spillovers: small size, uncertain sign. Coordination involves serious implementation issues. Yet, possible benefits from common ex-ante principles and regular dialogue
 - Room for improving existing framework?