EUROPEAN CENTRAL BANK

EUROSYSTEM

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Discussion of 'Overcoming Procyclicality in the EU Spending Rule' by E. Casey and S. Barnes

European Fiscal Board workshop

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The views expressed in this presentation are mine and do not necessarily reflect those of the ECB or the Eurosystem.

Main points of the paper

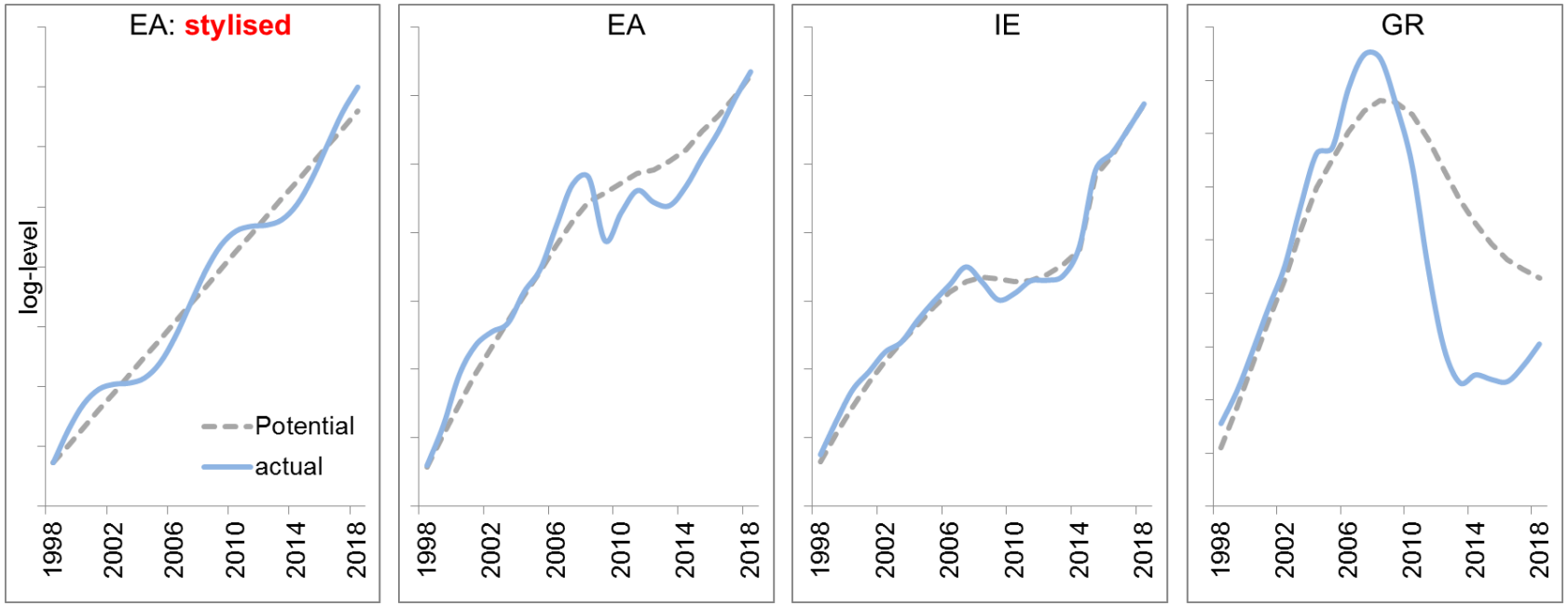
- Analytical question: do revisions to potential output growth rates positively respond to revisions in actual output growth rates in the EU?
- Analytical finding: potential output growth rates are revised by around 0.3 pp in response to real GDP growth rate forecast revisions of 1 pp → indication of pro-cyclicality
- Policy challenge: pro-cyclicality of potential output estimates raises serious questions about suitability of the Expenditure Benchmark to ensure effective economic stabilisation

Main focus of my discussion

- Is pro-cyclicality of potential output estimates a problem or actually desirable to some extent?
- Can the authors develop an optimality criterion helping to assess the level of pro-cyclicality beyond which it could be deemed excessive?

Output decomposition: stylised concept vs. reality

- In a very stylised definition of an output gap the unobserved potential output is not influenced by the observed actual (**no pro-cyclicality**)
- In reality, moves in the observed actual output seem to affect the estimated potential (i.e. potential output estimates are **pro-cyclical**)



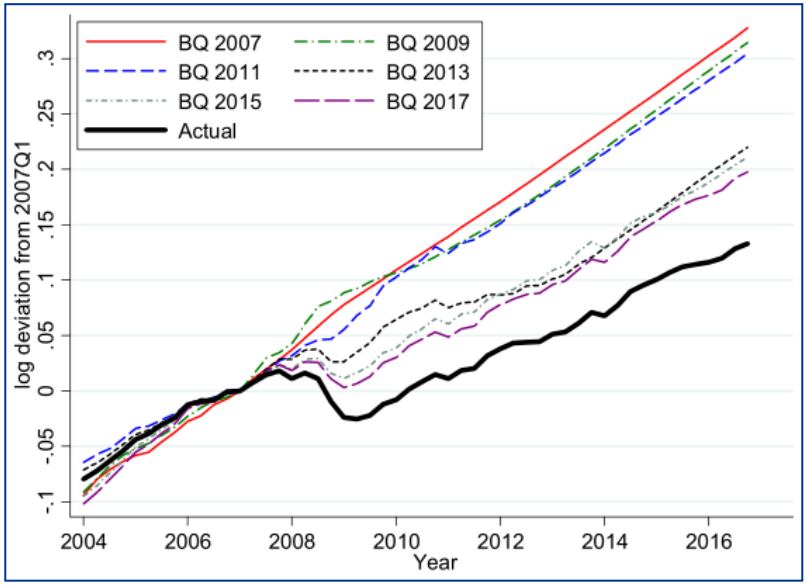
Sources: AMECO database, own calculations.

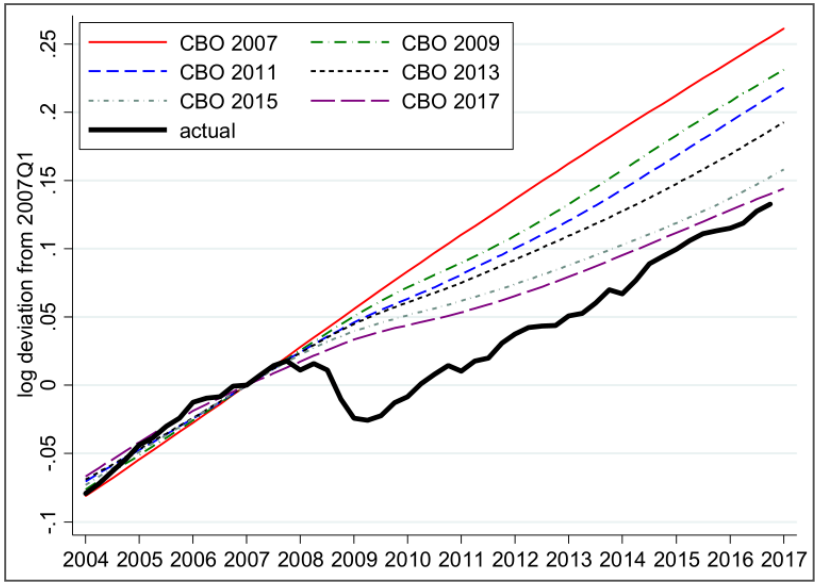
Output as combination of temporary and permanent shocks

- Output is driven by factors of both **permanent and temporary** nature. These may or may not affect potential output.
- Current methods do not distinguish between different types of shocks driving output fluctuations
- For **example**, HP filters adjust estimated potential output slowly to movements in actual output without distinguishing the source of fluctuations.
- The statistical approach will **insufficiently** reflect the permanent factors but **excessively** reflect the temporary ones in the estimation of potential GDP. Such estimates will be broadly fine only if these two biases offset each other in practice.

"The cyclical sensitivity in estimates of potential output" by Coibion et al. (2018)

- Output decomposition into permanent (i.e. **supply shocks**) and temporary (i.e. **demand shocks**) factors following the methodology of Blanchard and Quah (1989)
- **Potential output**: a function of supply shocks only
- **Important lesson: some pro-cyclicality to be expected and desirable** as potential and actual output react in the same direction to permanent shocks

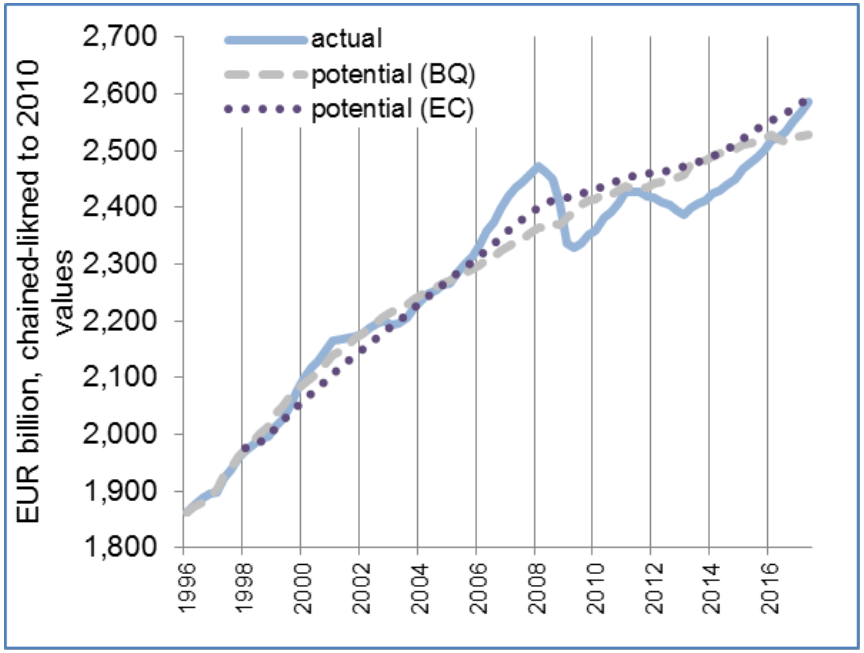


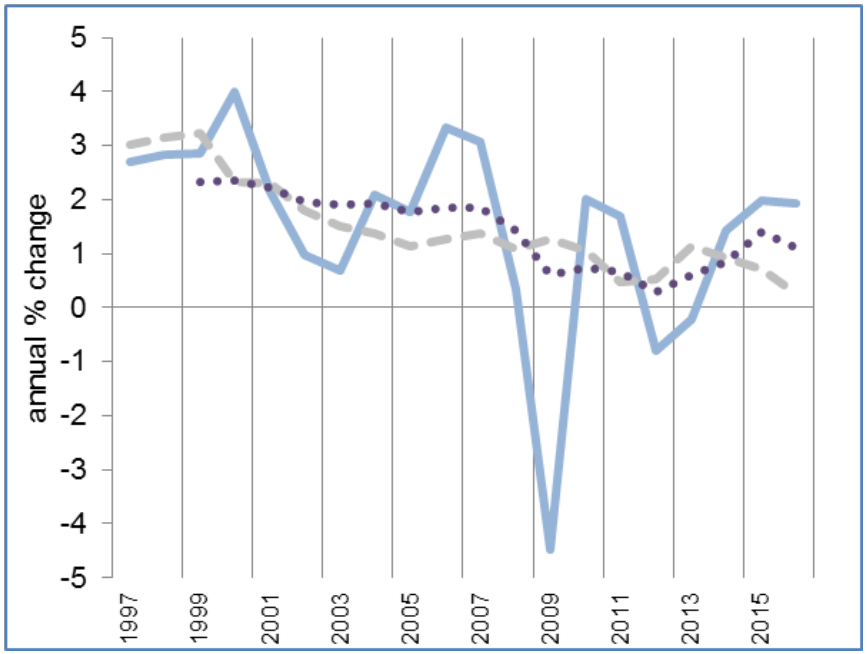


Source: Coibion et al. (2018).

Potential output estimates for the euro area

- Blanchard and Quah decomposition of output seems to interpret the growth deceleration in the euro area as being to a large degree permanent

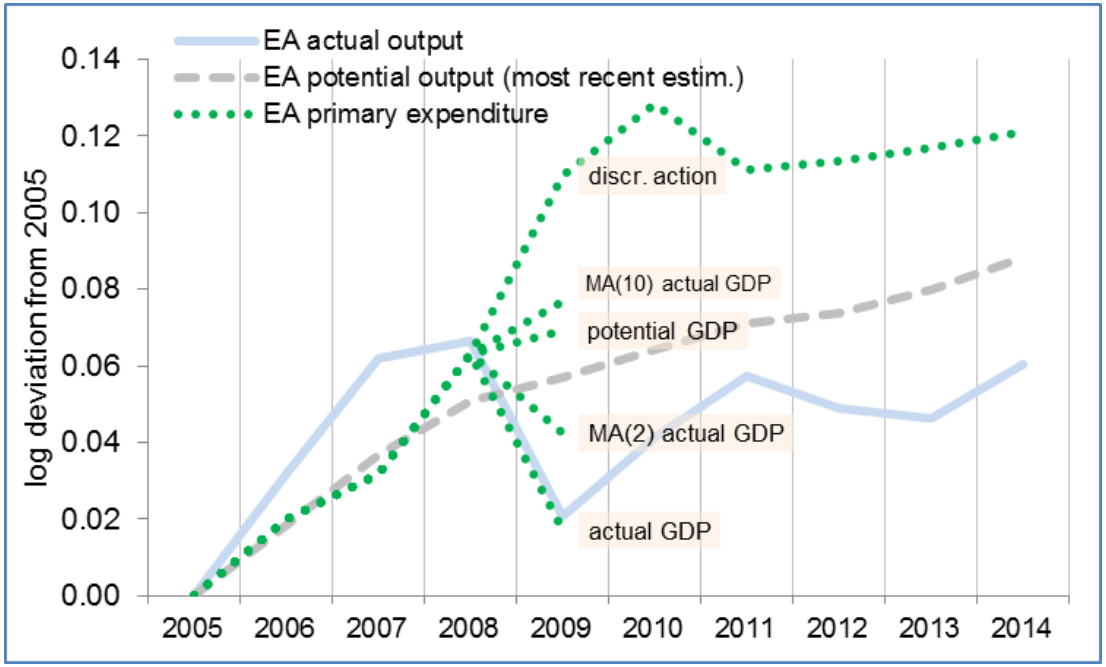




Sources: AMECO database and Third ECB Annual Research Conference (the discussion of Coibion et al. (2018) by Michele Lenza).

How fiscal policy should react to big output changes without knowledge about the shock type?

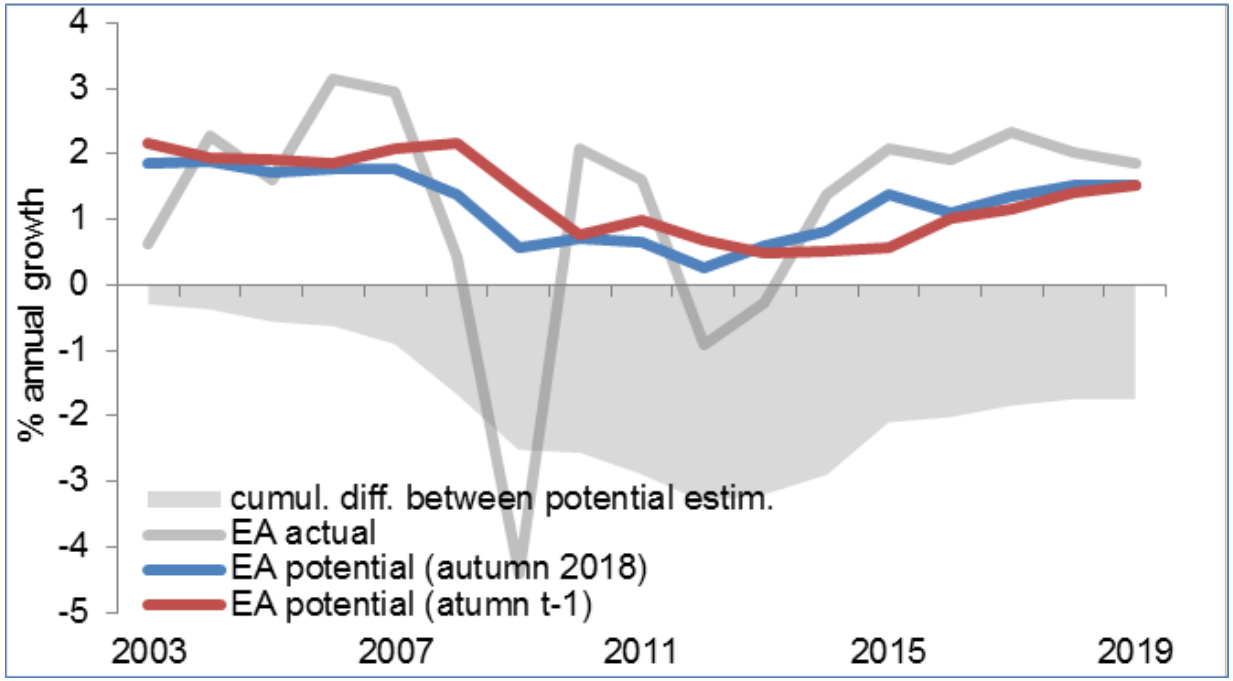
- options: (1) follow GDP (budget balance rule), (2) follow smoothed GDP, (3) follow potential, (4) undertake a discretionary action
- The estimated potential output is probably our best guess on the role of persistent vs. transitory shocks in practice



Sources: AMECO database, own calculations.

Can fiscal policy be solely based on potential growth?

- Historically, revisions have been mostly downward (i.e. over-estimation of potential growth in real time)
- This would call for a safety margin (e.g. authors' rainy-day fund idea or a projection safety margin, as applied in NL in the past)



Sources: AMECO database vintages, own calculations.

Does the SGP's expenditure benchmark create a ratchet effect?

- The EB is not linked to a certain size of government but to the achievement of the MTO under the PA (or the required adjustment)
- The convergence margin is a function of the adjustment requirement under the PA and lagged (net) primary expenditure:

$$EB_t = RR_t - C_t \quad RR = 3.0$$
$$C_t = \frac{adj_t}{pe\_net_{t-1}} \quad MTO = -0.5$$

- If a country is at the MTO the convergence margin is zero, implying that (net) primary spending in line with the (medium-term) reference rate will ensure PA compliance.
- A shock to (net) primary spending (and a deviation from the MTO) will trigger a temporary increase in the convergence margin (reflecting the adjustment speed back to the MTO) → scenario 2
- Unlike the debt rule the PA does not have a "memory", i.e. temporarily higher (structural) deficits will imply a drift in the debt ratio.

baseline

% of GDP	t-1	t	t+1	t+2	t+3
pe_net	40.0	40.0	40.0	40.0	40.0
pe_net (growth rate)		3.0	3.0	3.0	3.0
stb	-0.5	-0.5	-0.5	-0.5	-0.5
adj		0.0	0.0	0.0	0.0
C (growth rate)		0.0	0.0	0.0	0.0

scenario : 2pp spending shock in t

% of GDP	t-1	t	t+1	t+2	t+3
pe_net	40.0	40.8	40.3	40.0	40.0
pe_net (growth rate)		5.0	1.8	2.3	3.0
stb	-0.5	-1.3	-0.8	-0.5	-0.5
adj		0.0	0.5	0.3	0.0
C (growth rate)		0.0	1.2	0.7	0.0

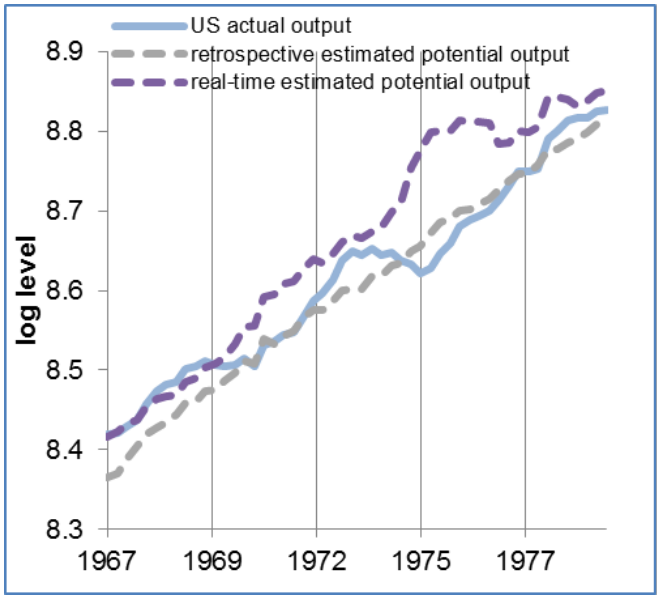
BACKGROUND

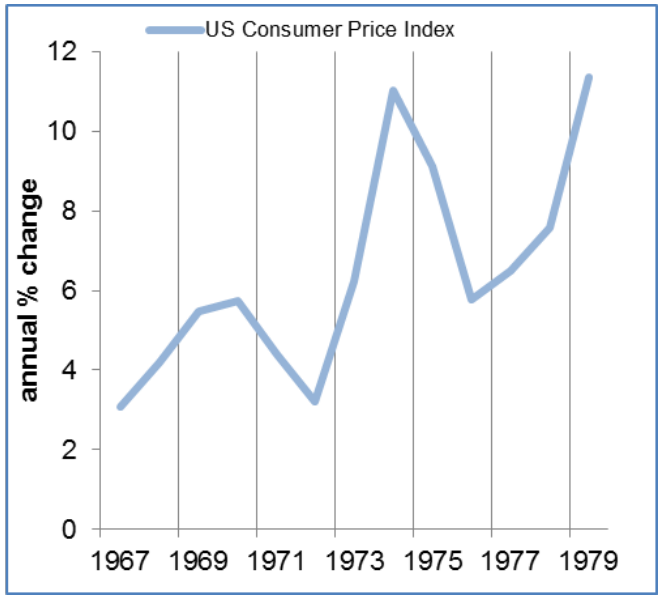
In the ideal world fiscal policy would recognise the type a shock and act accordingly

- Permanent vs. temporary shocks: Dynamic Macroeconomic Theory by T. Sargent (1987)
  - Spending capacity of the government is based on permanent (not current) tax base
  - With exogenous primary spending tax rates respond to permanent changes
  - Governments should borrow rather than adjust taxes if shocks are transitory
- Demand vs. supply shocks: Commentary by O. Blanchard (2000)
  - Fiscal policy (here in the form of automatic stabilisers) stabilises output both with respect to demand and supply shocks
  - However, in the presence of supply shocks output should move and fiscal policy would prevent it, which is undesirable
  - In the case of demand shocks, the stabilisation of output by fiscal policy is desirable

Can inappropriate reaction of policy makers lead to a major policy mistake?

- Missing pro-cyclicality of potential output estimates (i.e. assuming zero coefficient instead of a positive one) can be detrimental
- In the 1970s central banks heavily relied on output gap measures
- Many argue that over-estimation of potential in real time translated into excessively loose monetary policy followed by the Great Inflation

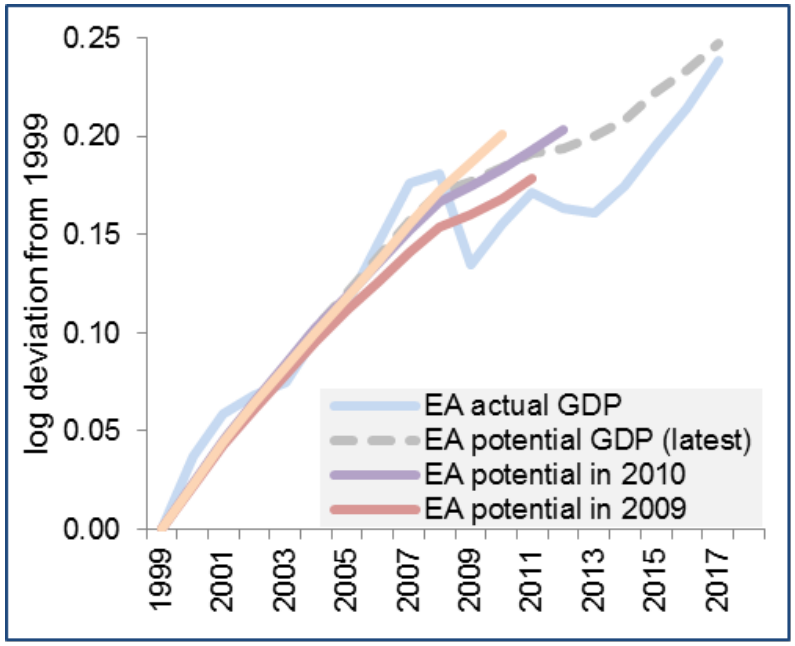


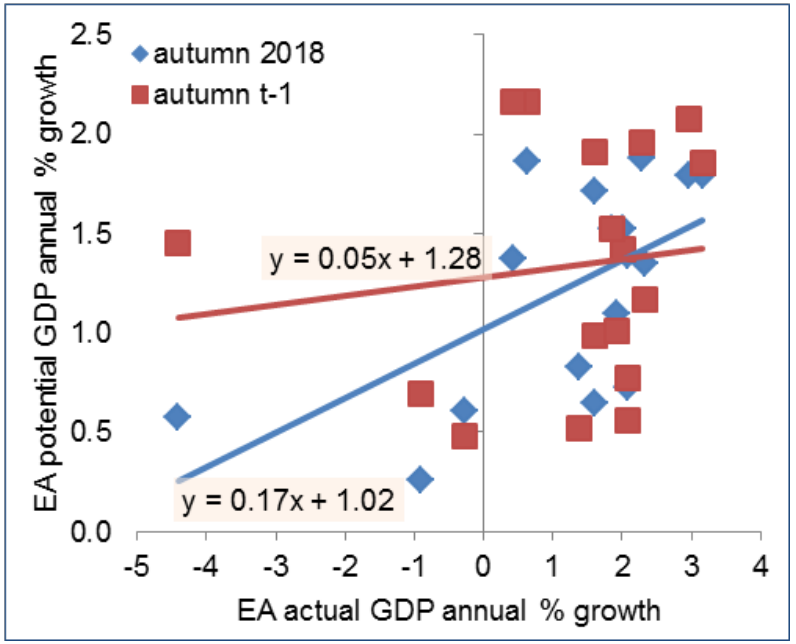


Sources: Haver and ECB MoBu of May 2010 (Article: The “Great Inflation” lessons for monetary policy).

Can fiscal policy be solely based on potential growth?

- Policy set in real time but unobservable potential is not reliably estimated in real time and suffers from major revisions
- Potential growth ex-post is more pro-cyclical than the one estimated in real time

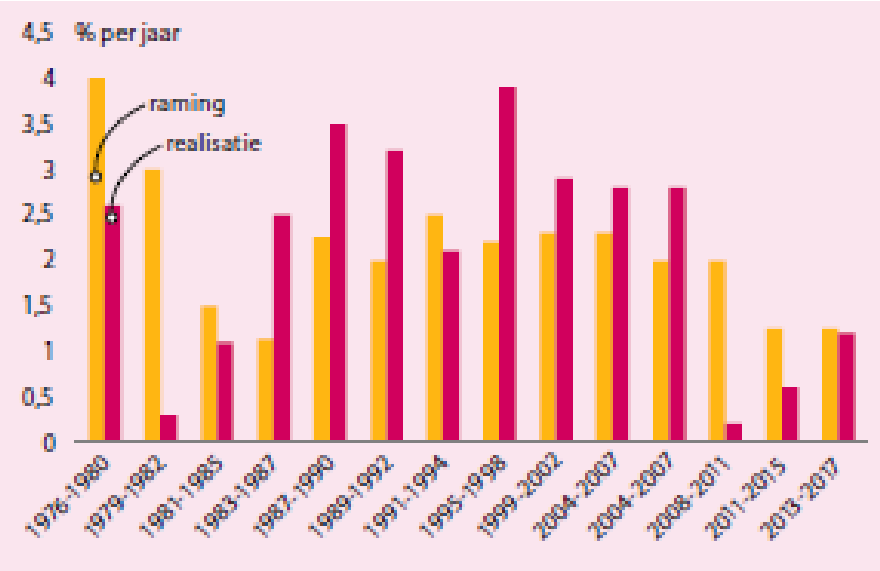


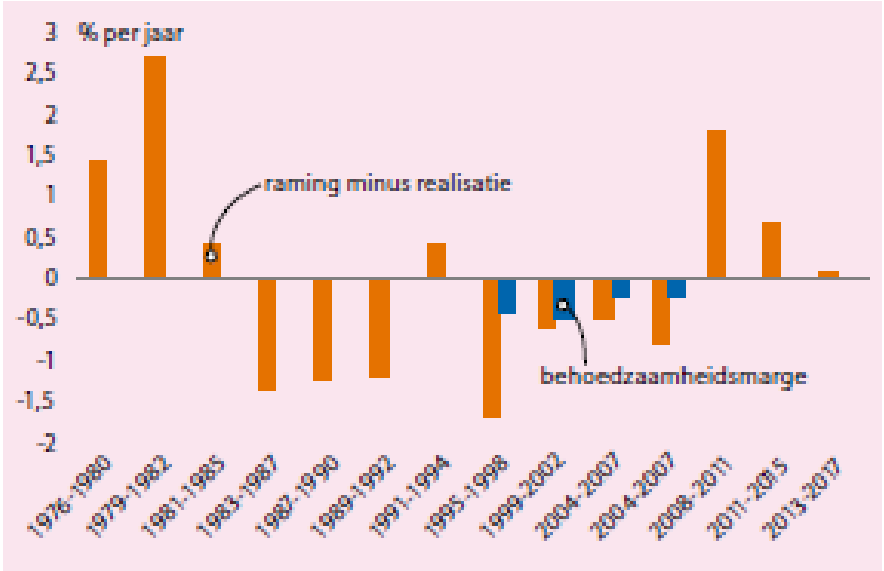


Sources: AMECO database vintages, own calculations.

CPB medium-term budgetary projections underlying Dutch coalition agreements

- Safety margin applied to medium-term GDP projections by CPB underlying coalition agreements from mid-1990s until financial crisis
- Combined with rules on use of windfalls
- Annual safety margin: 0.4% for 1995-98; 0.5% for 1999-2002; 0.25% for 2004-07





Source: W.Suyker, CPB Policy Brief 2016/02. Left chart: real GDP growth projection (yellow) and realisation (red); right chart: projection - /- realisation (orange) and safety margin (blue). GDP projection until 1991-94 excluding fiscal plans; afterwards including fiscal plans.