The cycle and the fiscal rules

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Too Hot, Too Cold! The Irish Cycle

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Motivation

- **Fiscal framework has two main objectives:**
  1. Ensure public debt sustainability: discourage expenditure/deficit bias in good times

  2. Leave scope for fiscal stabilisation in bad times

- **Questions:**
  - The cycle: How reliable are output gap and structural budget balance estimates?

  - The fiscal rule: Does the EU fiscal framework effectively achieve the two main objectives? If not, how to change it?

The Cycle

Main roles of potential output estimates

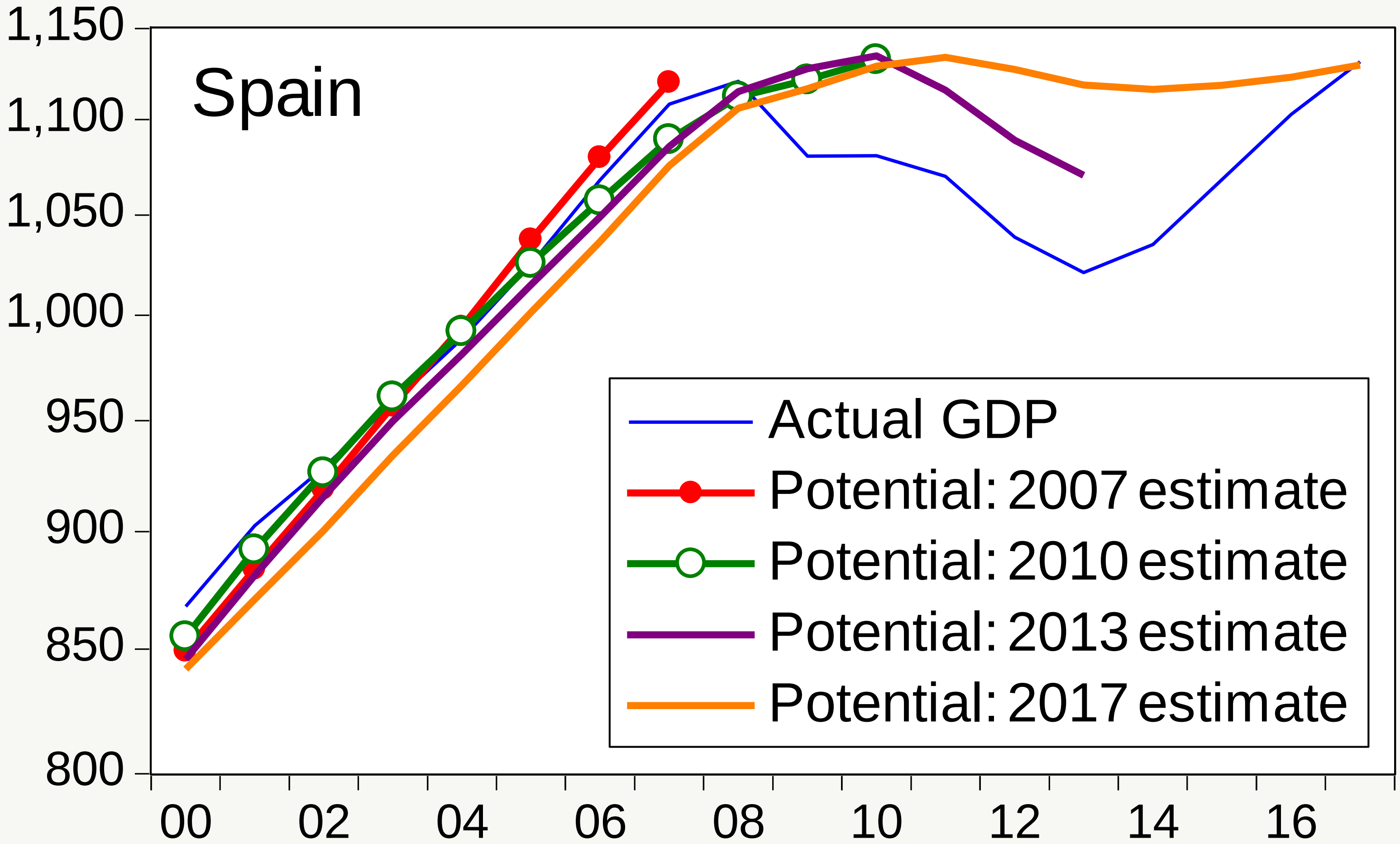
- **Potential output is an important unobserved variable**
  - Macro models
  - Monetary and fiscal policies
  - EU fiscal rules and sanctions depend on structural budget balance, hence on estimated potential output
- **Empirical methods**
  - Univariate methods, e.g. Hodrick-Prescott filter
  - Structural methods, e.g. Phillips curve and NAIRU/NAWRU (non-accelerating inflation/wage rate of unemployment)
  - Production-function

Main handicaps of potential output estimates

- **Key conceptual handicaps:**
  - Disregarding open economy considerations
  - Use of smoothing algorithms
  - Difficult to identify sustainable level of production function inputs

- **Empirical weaknesses:**
  - Sometimes implausible estimated potential output developments (e.g. next slide, inverted U-shape potential)
  - Large revisions

Real-time potential output estimates for Spain by the European Commission

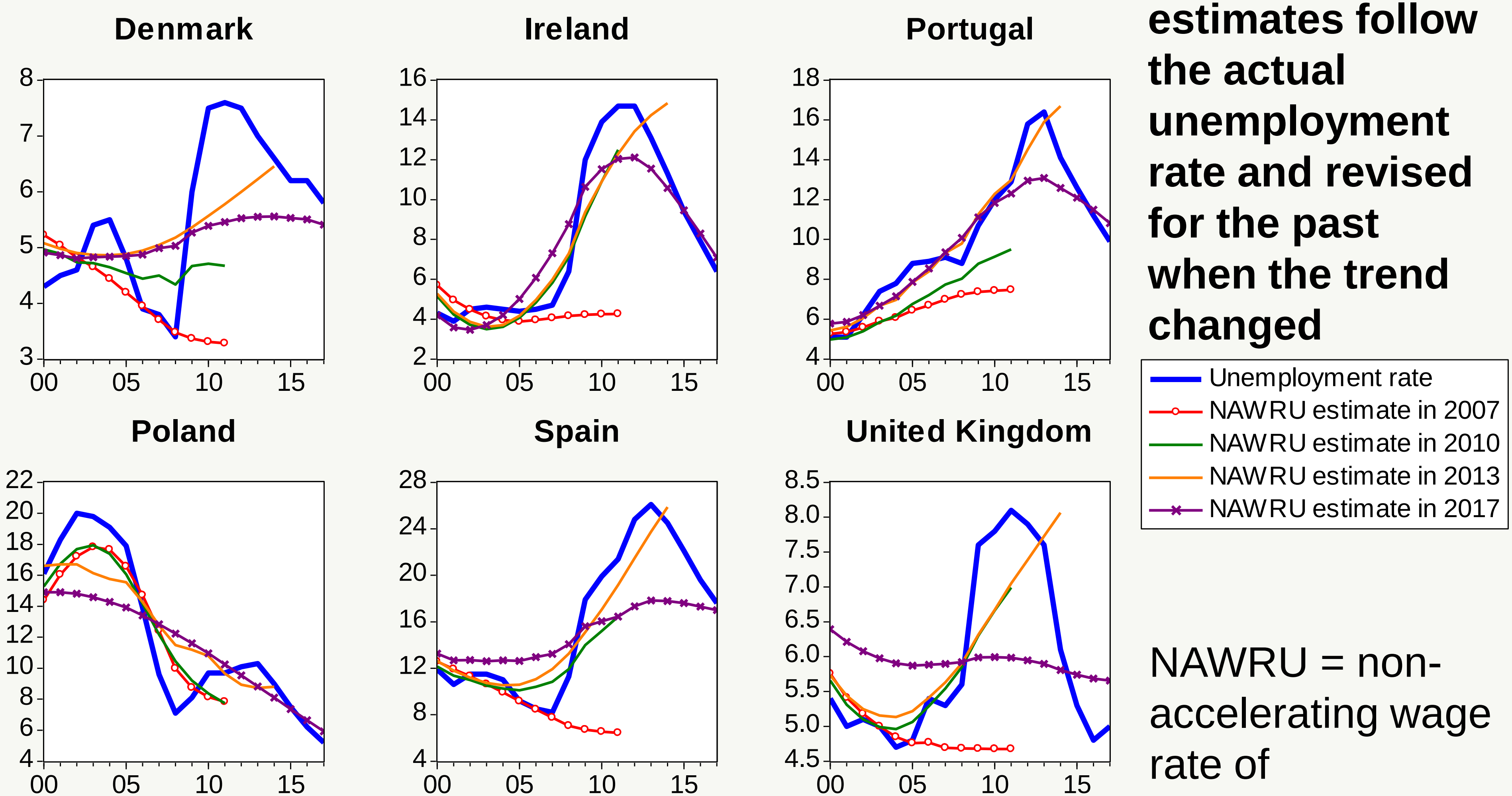


2013 estimate: potential output estimates follow an inverted U-shape, with potential output continuing to increase during crisis years, then gradually turning into a decline

Our alternative approach for potential output (Darvas and Simon 2015)

- Phillips-curve/NAIRU not sufficient: effect of excess demand is not symmetric across tradable and non-tradable sectors:
  - Non-tradeable sector: excess domestic demand creates excess employment and inflation via the Phillips-curve
  - Tradeable sector: much of the excess domestic demand absorbed by the trade balance, parallel to, or even without, the increase of inflation
  - Excess demand of the rest of the world has implications for domestic inflation and trade balance
- These effects are supported by several theories and models
- We offer a new concept: ”sustainable output” to incorporate these effects

NAWRU estimates and forecasts by the European Commission at different dates



NAWRU estimates follow the actual unemployment rate and revised for the past when the trend changed

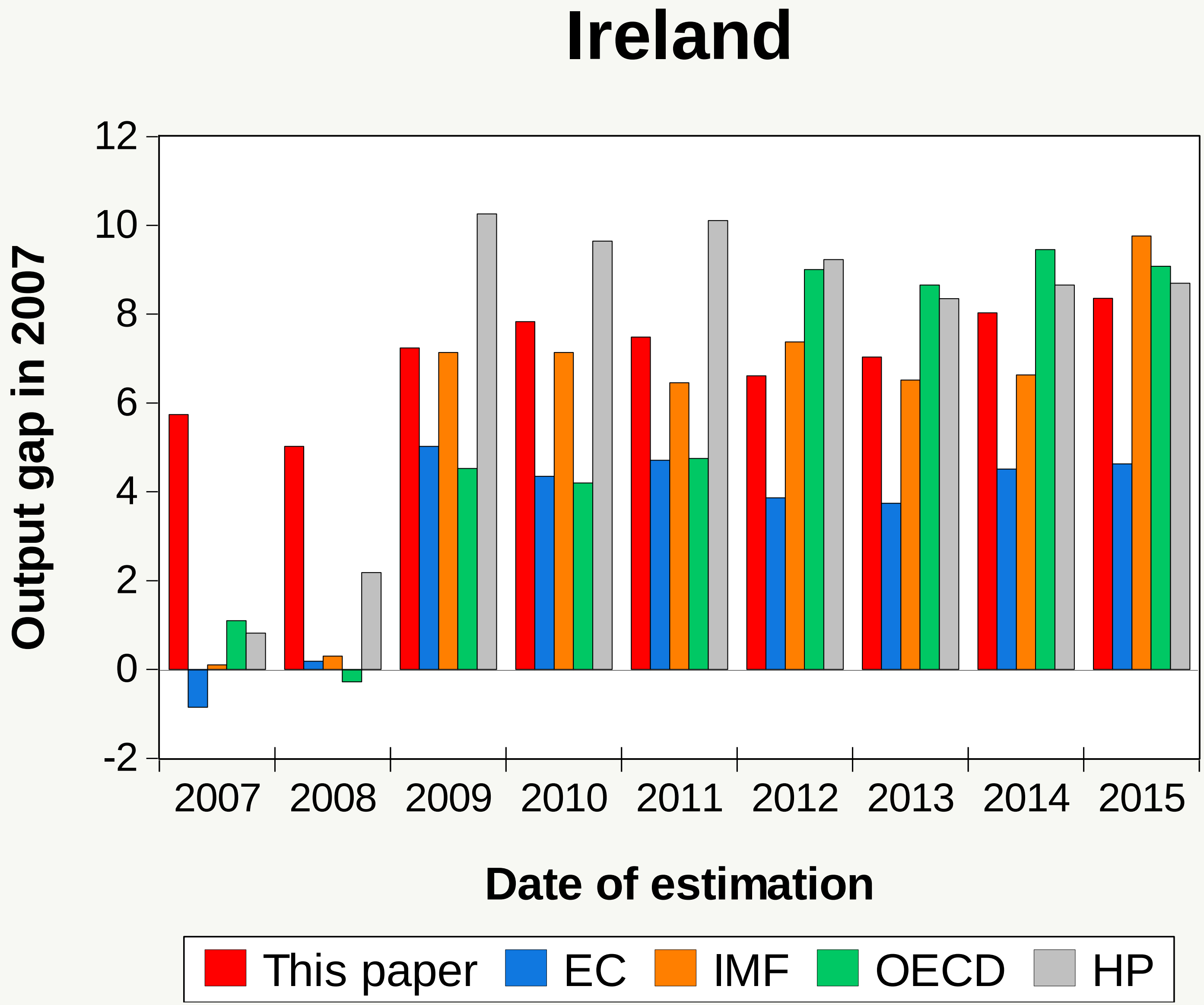
NAWRU = non-accelerating wage rate of unemployment

A conclusion

- **NARWU:** was not (and probably cannot be) estimated reliably real-time

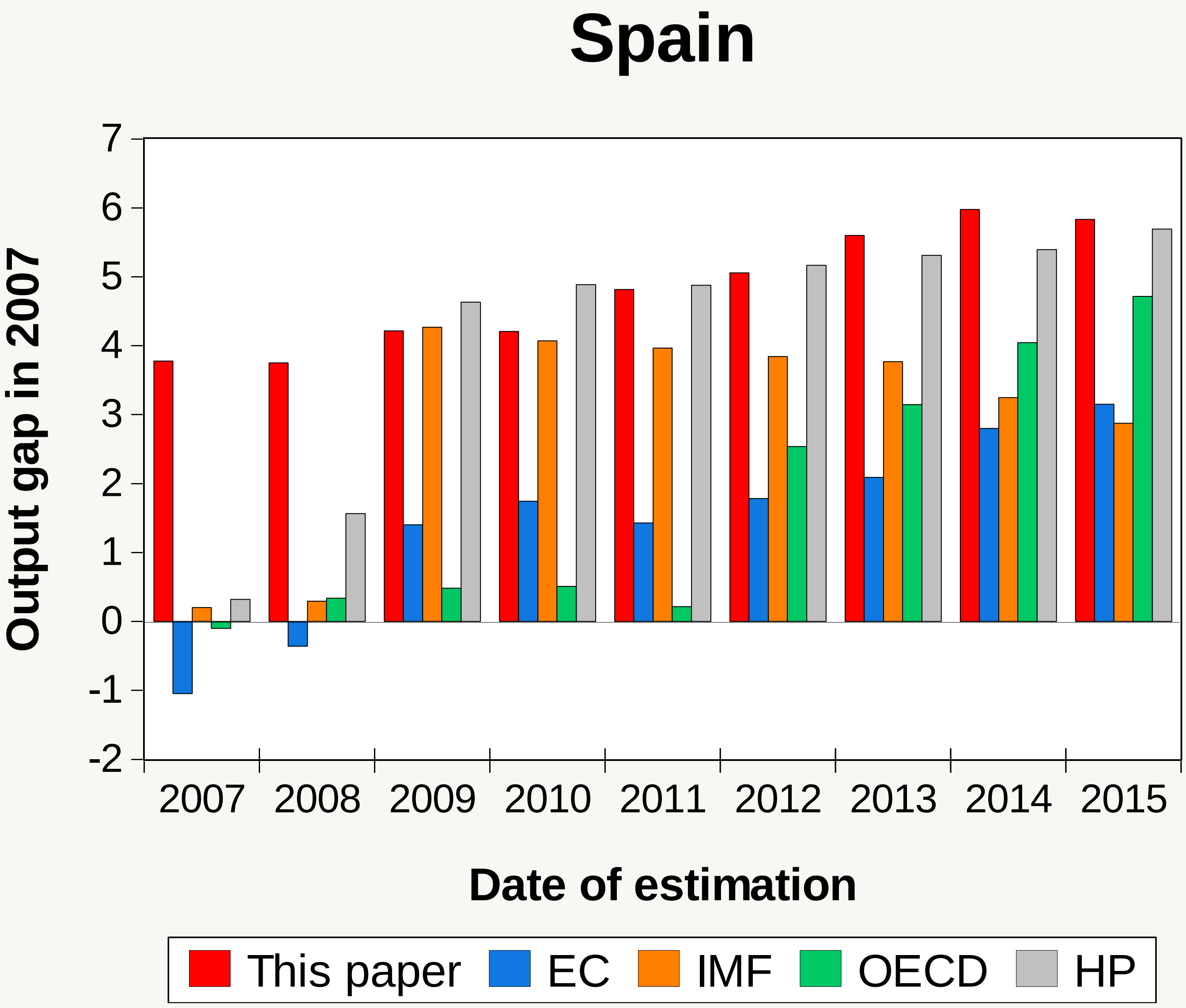
- **Current account gap** (needed for our open-economy model): can be estimated reliably real-time

Real-time estimates for the 2007 output gap



Based on April/May/June data of the year indicated on the horizontal axis

Real-time estimates for the 2007 output gap



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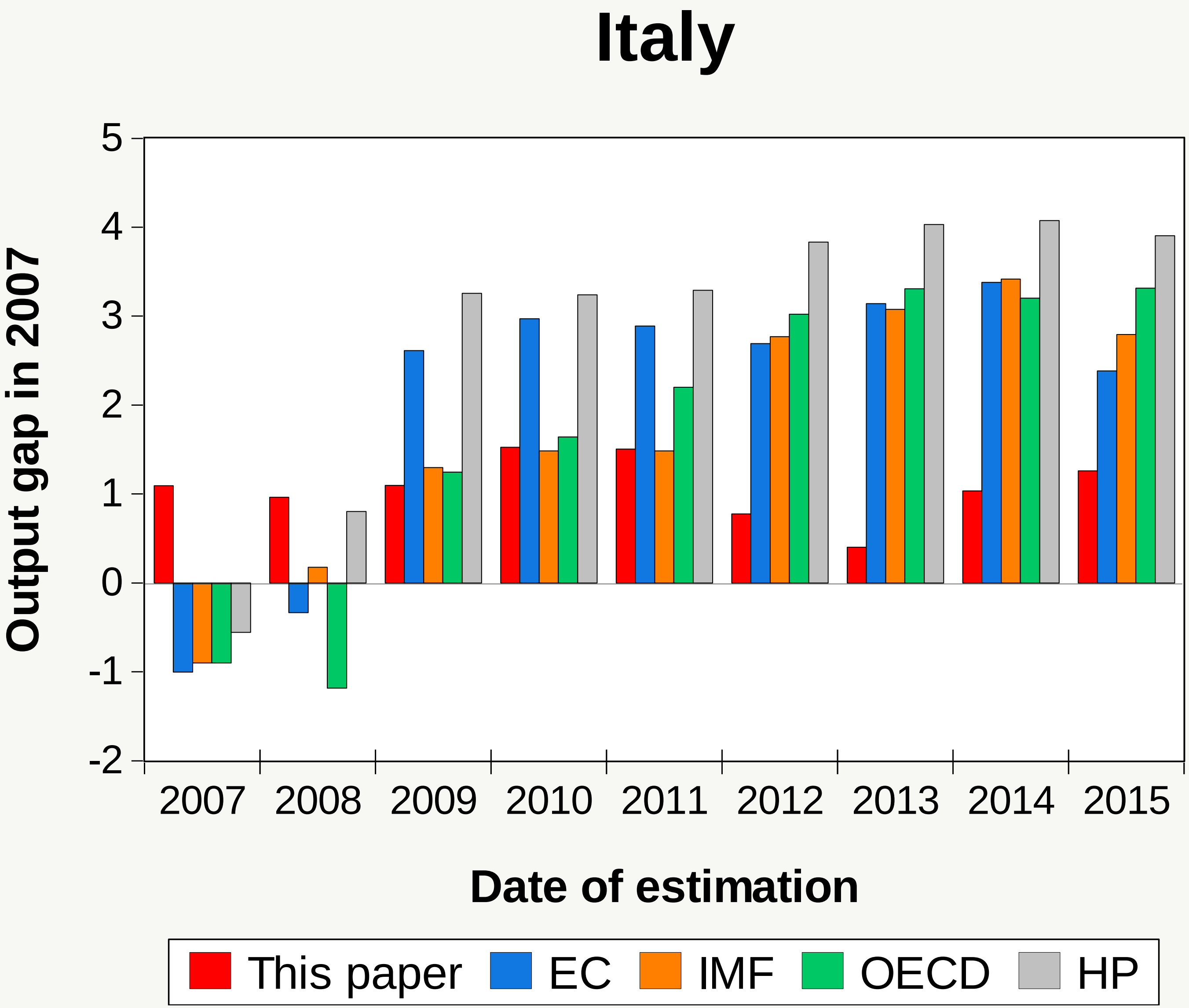

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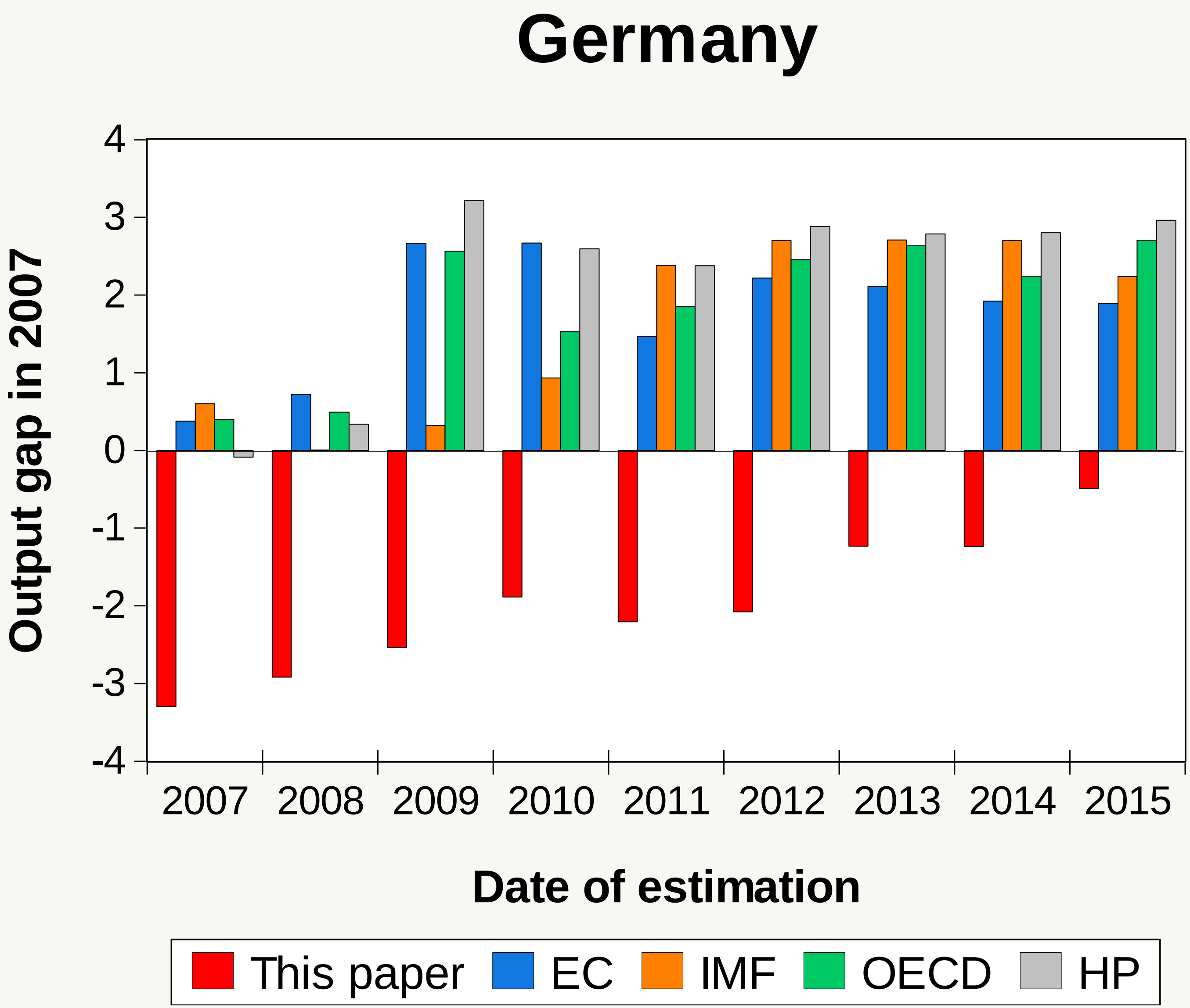

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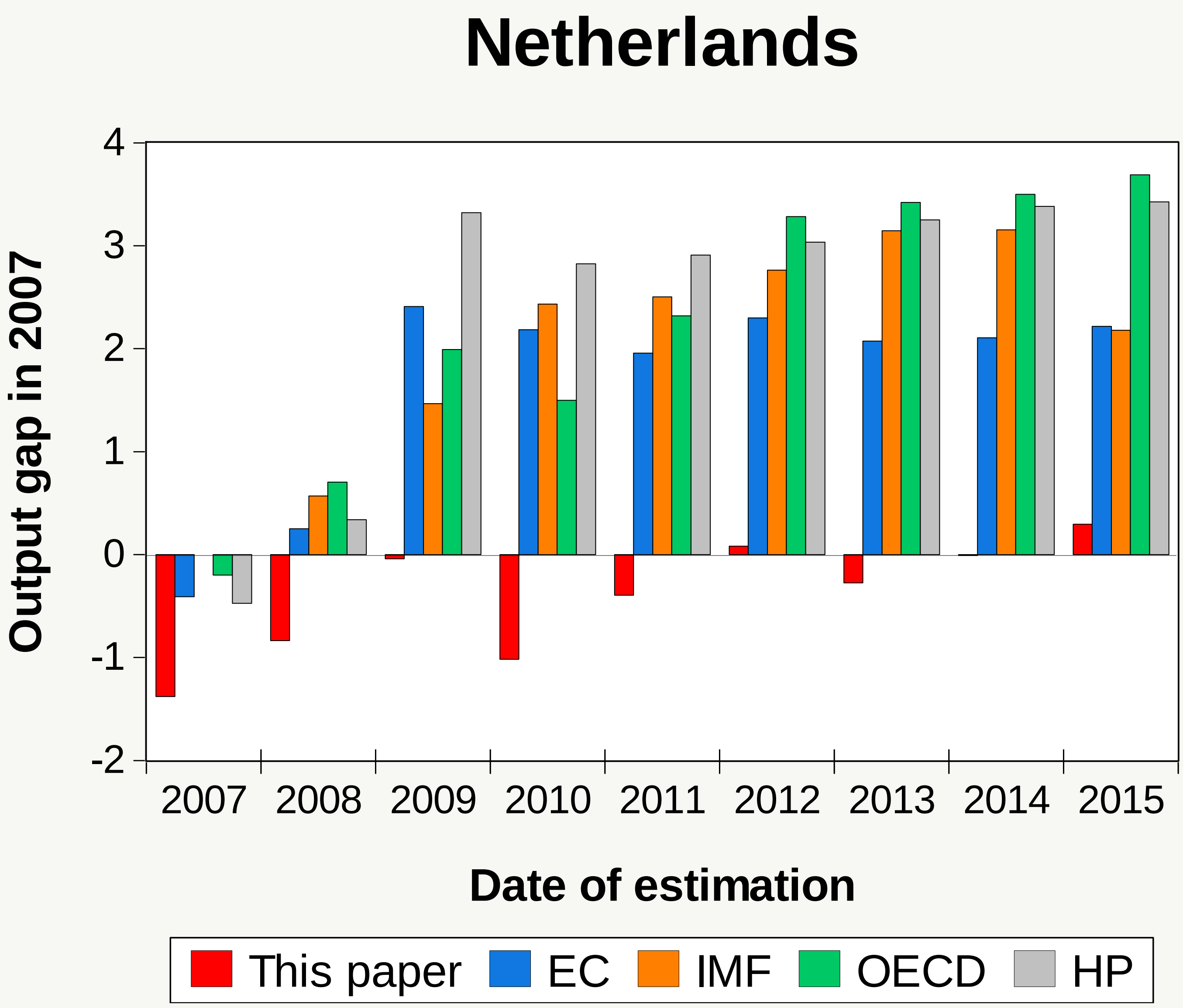

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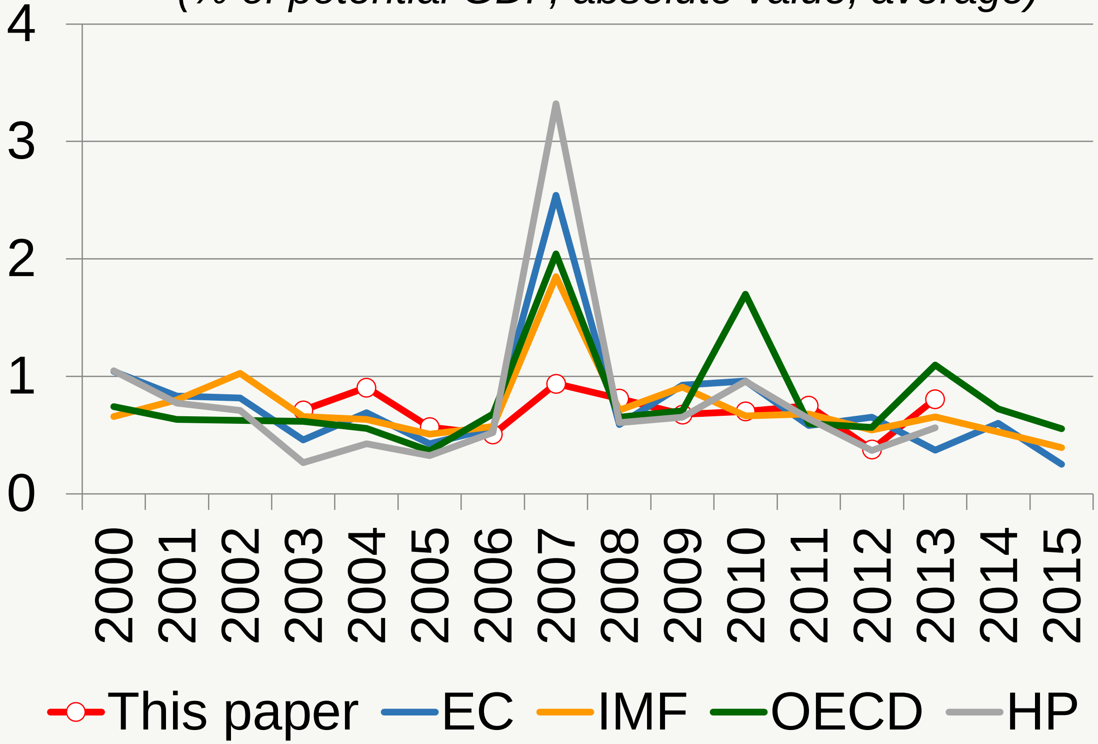
Big revision in output gap estimates

Revision of previous year output gap one year later, 12 EU countries

(% of potential GDP, absolute value, average)



E.g. the difference between the estimates made in spring 2017 and spring 2016 for 2015

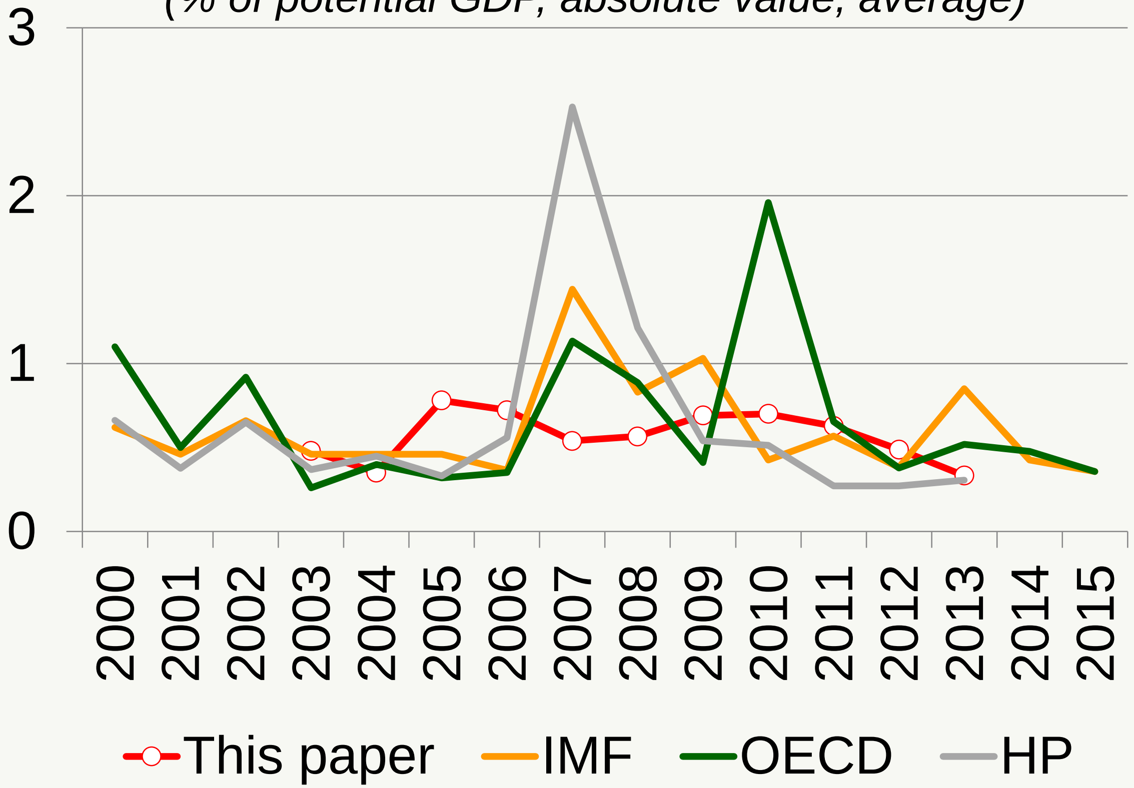
- **Revision a year later typically 0.5%-1.0% of GDP, which is ”big”**
- **Even larger revisions for 2007 (except our model)**

The 12 countries: Austria, Belgium, France, Finland, Germany, Ireland, Italy, Netherlands, Portugal, Spain, Sweden and the United Kingdom

Big revision in output gap estimates

Revision of previous year output gap one year later, 5 non-EU countries

(% of potential GDP, absolute value, average)



E.g. the difference between the estimates made in spring 2017 and spring 2016 for 2015

- **Same conclusion as for EU countries**

The 5 countries: Australia, Canada, Japan, New Zealand and the United States of America

Output gap revisions vs current account volatility

Correlation coefficient between output gap revisions and the variability of the current account balance (twelve older EU countries, 2004-13)

	Previous year output gap	Current year output gap
This paper	0.13	0.06
European Commission	0.59	0.74
IMF	0.69	0.70
OECD	0.54	0.84
HP (without forecasts)	0.57	0.71
HP (with forecasts)	0.50	0.72

- More volatile current account → larger revisions in EC/IMF/OECD/HP output gap estimates → info is missing from these estimates

The cycle – summary

- Existing methods (EC/IMF/OECD) have major conceptual weaknesses and subject to large revisions
- Our method: conceptual improvement; smaller revision in crisis years; similar revision in ”normal” years
- Revision is not a problem per se: it reflects our changing view of the world
- But an indicator subject to large revision is unsuitable for real-time policymaking

The European Fiscal Rules

Current European fiscal rules

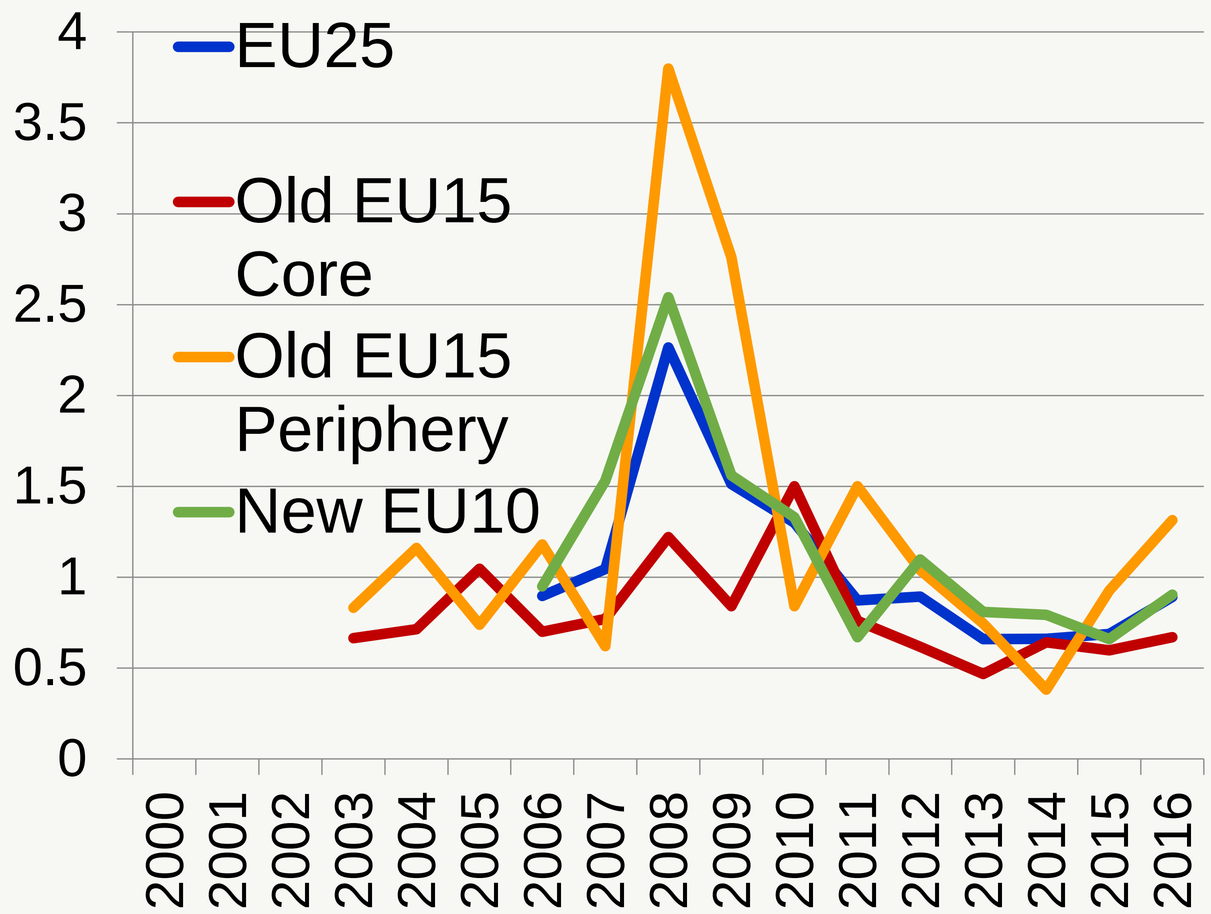
- **Basic numerical rules are simple:**
  1. 3% of GDP deficit
  2. 60% of GDP debt
     - ➢ if larger, decline by 1/20th of gap every year
  3. The structural budget balance must be higher than the country-specific medium-term objective (MTO)
     - ➢ if smaller, increase by 0.5 percent of GDP per year as a baseline
  4. Expenditure benchmark: A measure of government expenditures cannot grow faster than the 10-year average rate of potential economic growth if the country's structural balance is at its MTO or higher
     - ➢ if not yet at MTO, lower expenditure growth

Assessment of EU fiscal rules: in theory

- **Long-term sustainability of public debt:**
  - With MTO of -1.0% and 3% nominal growth AND no shocks → debt converges to 34% of GDP
  - With shocks and exemptions → debt higher

- **Counter-cyclical stabilisation:**
  - Cyclically-adjusted targets sensible in theory
  - For reasonably deep recessions: MTO combined with 3% deficit rule allow automatic stabilizers to operate
  - For deeper recessions: Use of excessive deficit procedure in first year, exemptions, deadline extensions, etc.

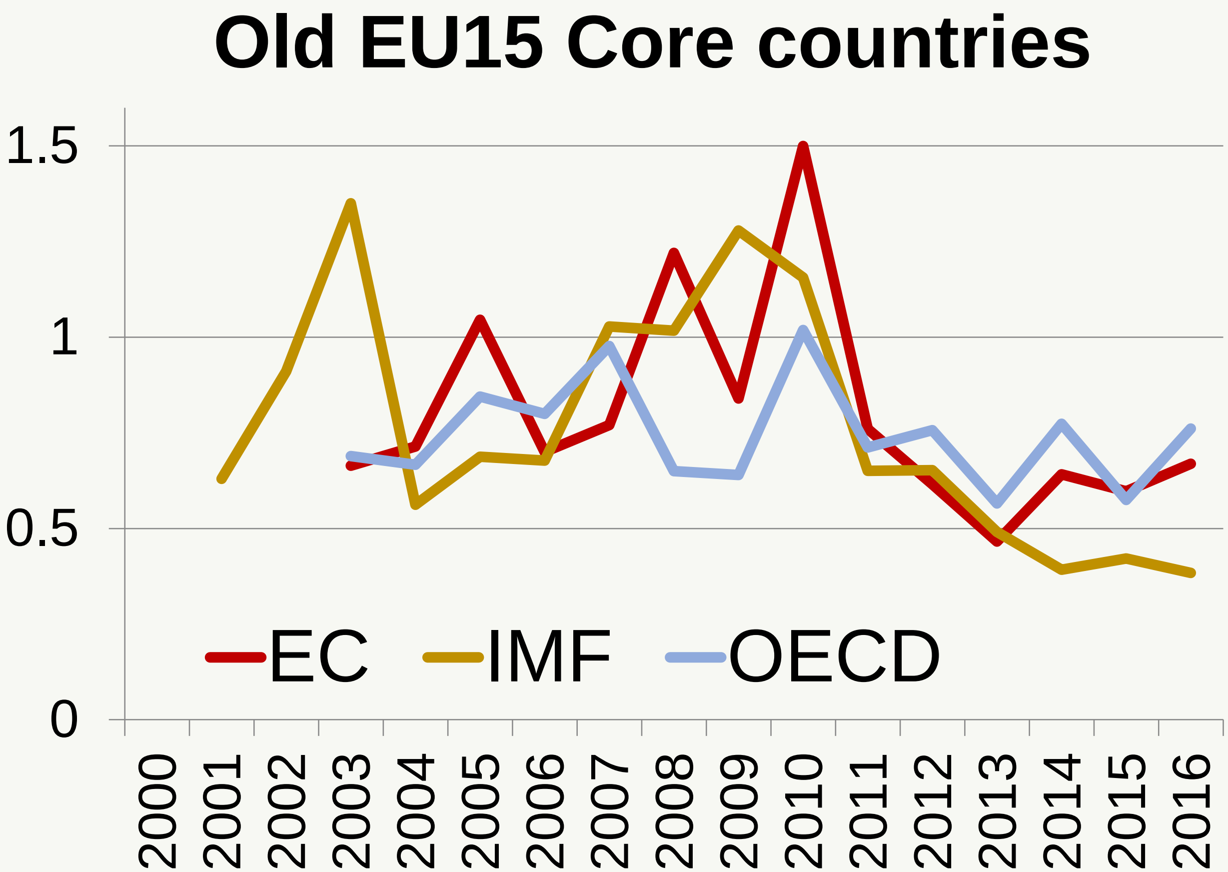
Annual revision of current year EC structural balance estimates (%GDP)



- **Huge revisions in European Commission estimates**
- **No recent improvements**

E.g. the last observation: the difference between the May 2017 and the May 2016 estimates for the 2016 structural balance (absolute value, group average)

Annual revision of current year structural balance estimates (%GDP)



- **IMF and OECD revisions are similarly large**

E.g. the last observation: the difference between the May 2017 and the May 2016 estimates for the 2016 structural balance (absolute value, group average)

Assessment of EU fiscal rules: in practice

- **Fiscal stance in the EU:**
  - Pre-2008: did not constrain booming countries
  - Counter-cyclical in 2009, partly due to Commission recommendation
  - Mostly pro-cyclical after 2009
- **Fiscal framework might not be only culprit, but contributed to misguided recommendations:**
  - No repeated stimulus possible if recession lasts several years
  - Incorrect forecasts by Commission
  - Use of structural balance harmful in practice because estimates badly measured in real time:
    - Typical one-year revision larger than required policy action (0.5% GDP)
    - During crisis measurement problem worsens
    - During booms: current structural balance rule would not have constrained Spain in 2001-07 because of real-time measurement error

How to change the EU fiscal framework?

- **1st best:**
  - Complete overhaul of the framework to have:
    a) credible no-bail-out policy
    b) large degree of fiscal independence of member states
    c) European cyclical stabilisation mechanism
    ↑ unrealistic today, not developed in this presentation

- **2nd best:**
  - Revise Stability and Growth Pack (SGP) and the Fiscal Compact for a better fiscal rule and surveillance ← scope of this presentation

Our proposal: a better expenditure rule

- **Revise SGP and Fiscal Compact:**
  - Drop 3% deficit & structural deficit as operational targets
  - Scrap flexibility options → accountable institution need to exercise discretion
  - A better expenditure rule with debt feedback mechanism (and drop 1/20th debt reduction rule)

- **Our proposal for expenditure rule:**

Growth rate of nominal expenditures excluding interest, labour market expenditures; plus smoothing public investment	**<**	**Medium-term potential real GDP growth + inflation target (2% in euro area) – 0.02 x (debt/GDP ratio – 60)**

Differences with current expenditure rule

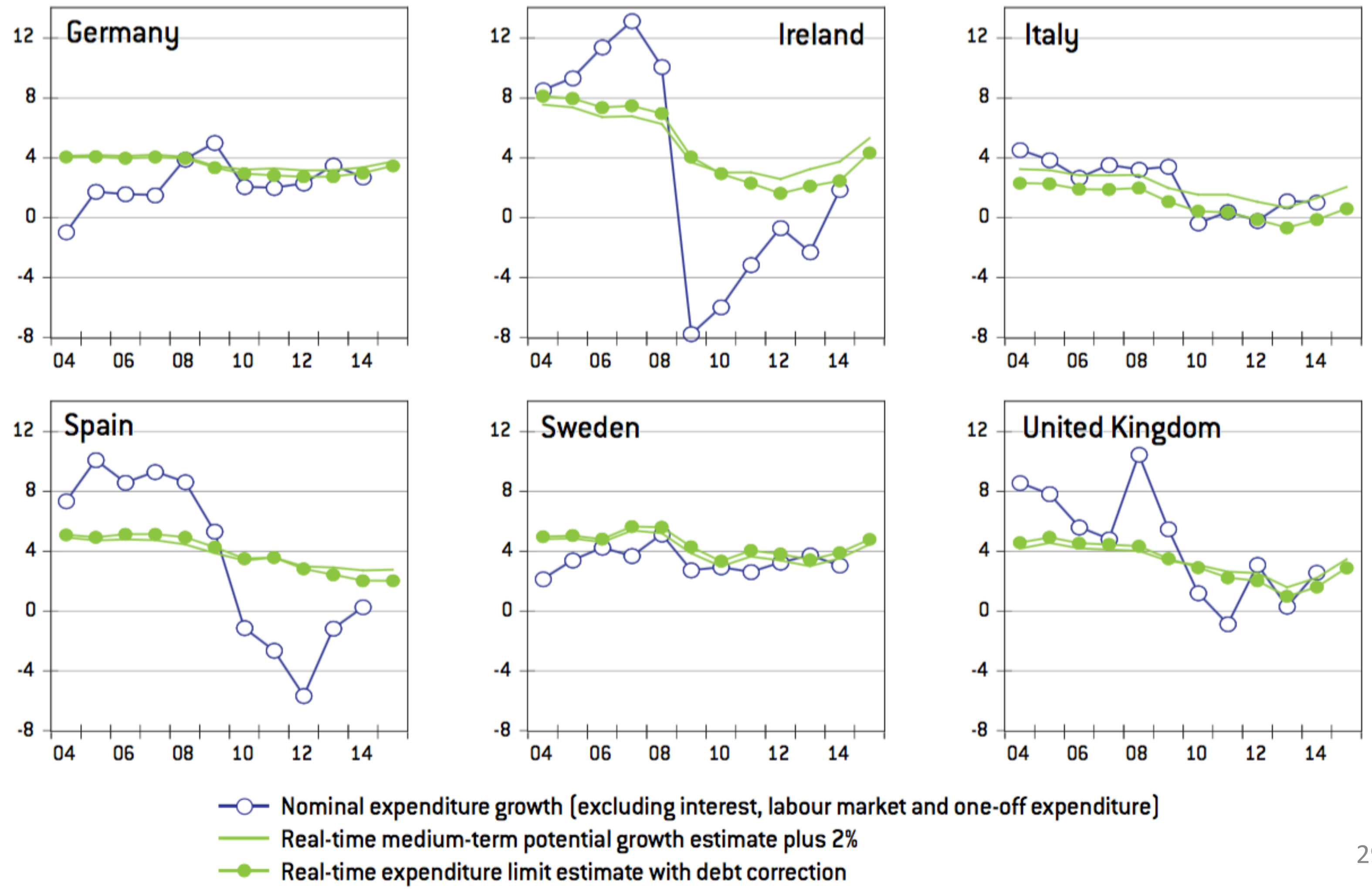
	Current rule	Our proposed rule
Expenditure aggregate	Real, inflated by GDP deflator forecast	Nominal
Items excluded from the expenditure aggregate	Interest, non-discretionary changes in unemployment benefit, one-offs, EU-funded programmes	Interest, all unemployment benefit expenditure, one-offs
Treatment of public capital expenditure	Four-year average	As in corporate accounting; separate current and investment budgets
Expenditure growth benchmark	Real medium-term potential GDP growth	Real medium-term potential GDP growth + 2% inflation target
Revenue correction	Yes	Yes
Debt correction	Indirectly through MTO	Yes
Expenditure-overrun correction	No	Yes

Differences with the structural balance rule

	Structural balance rule	**Our proposed rule**
Operational target	Structural balance (<u>not</u> under government control)	Adjusted nominal expenditure (under government control)
Role of forecasts	GDP and inflation forecasts matter a lot	Forecasts do not matter much
Estimation error	Large (output gap in a given year, elasticity of budget balance to output gap)	Small (multi-year average of potential growth)
Quantification of one-offs	Yes	Yes
Counter-cyclicality	Good in theory, bad in practice	Good in theory, good prospect for practice
Debt sustainability	Good in theory, dubious in practice	Good in theory, good prospect for practice

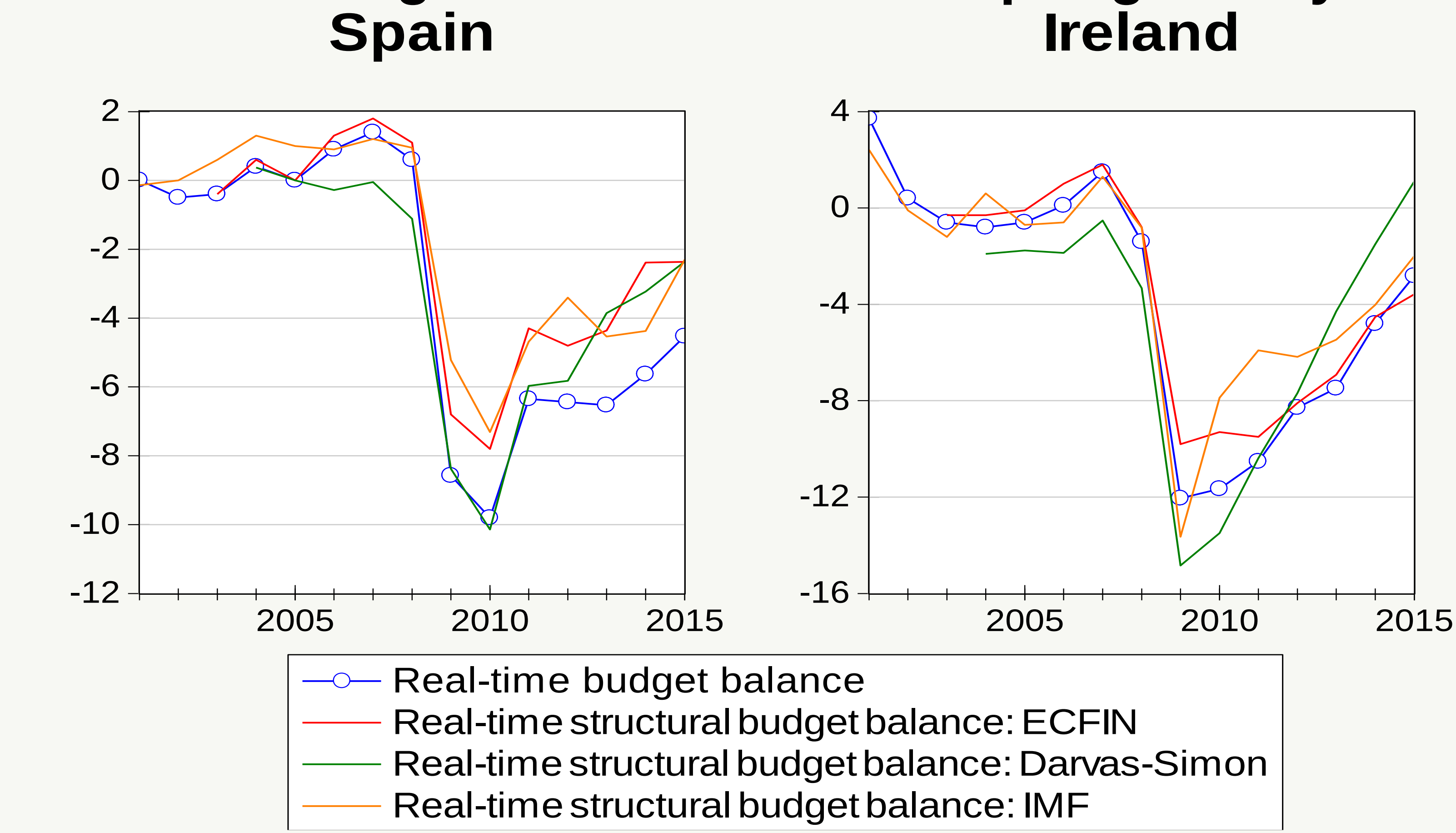
Our proposed rule would have disciplined Ireland and Spain pre-crisis

Figure 4: Actual expenditure growth and real-time expenditure limit estimate based on our proposed rule, selected countries



Current structural balance rules would have NOT disciplined Ireland and Spain pre-crisis

Real-time estimates of the actual budget balance and structural budget balance made in spring each year



For each year, the real-time estimate for the given year made in the spring of that year is indicated. Eg for 2010, the spring 2010 estimate for 2010 is included, for 2011 the spring 2011 estimate for 2011 is included, etc.

Advantages of our proposal

- **Design:**
  - Simple; transparent; easy to implement; easy to monitor; less prone to measurement errors; easy to explain

- **Conducive of stabilisation (both in good and bad times):**
  - Through expenditures: via inflation target & exclusion of U benefits
  - Through revenues: automatic stabilizers allowed to work fully
  - Help ECB to fulfil mandate and reach inflation target

- **Conducive of debt sustainability:**
  - Debt correction
  - Elimination of pro-cyclical bias in expenditures in good times
  - Limit hysteresis effects in bad times

Surveillance

- **National level: national fiscal councils**
  - Monitor implementation of the rule
  - Validate potential growth estimates used in the rule

- **European level: establish a European Fiscal Council**
  - ECB-style governance: executive board + chairs of national councils
  - Proper mandate (sustainability + stabilization = counter-cyclicality), proper appointment procedure, proper accountability to EP
  - Oversee system, exercise necessary discretion

- **Eliminate financial sanctions:**
  - Sanctions not credible today
  - Negative political consequences if applied
  - Countries will not observe rules because of sanctions, but because agree that rule represents the best guidance for fiscal policies

EU fiscal rules – summary

- Good in theory, bad in practice
- Plus opaque web of flexibility options; lack credibility; subject to continuous disputes
- Structural balance estimates are extremely unreliably, including in ”normal times”
- Our proposal:
  - scrap current rules and sanctions
  - introduce an appropriate expenditure rule with primarily national surveillance
  - Establish an ECB-style European Fiscal Council to oversee system

Thank you for your attention!

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Annex 1: Current European fiscal framework

- **The framework is lost in flexibility and discretion:**
  - Unusual or unexpected adverse economic event
  - Severe economic downturn in the member state
  - Severe economic downturn for the euro area or the Union as a whole
  - Pension reforms
  - Implemented or planned structural reforms
  - Contribution to EU-funded investments
  - “Relevant factors”
  - Deviation from 3% deficit rule is small and temporary
  - Deviation from the 1/20th debt when the country is assessed to do enough fiscal consolidation
- **Opaque web of flexibility options leads to disputes**

Annex 2: Current European fiscal framework

- **Non-numerical requirements:**
  - Requirements for multi-annual budgeting
  - High-quality forecasting
  - Independent audit
  - Independent assessment of meeting fiscal rules (fiscal council)
  - Stability (euro are members) or a Convergence (non-euro area members) Programme in April
  - Draft Budget Plan (euro are members) in October
- **All these requirements are useful**