The fiscal stance in the euro area: Methodological issues

Eloïse ORSEAU and Matteo SALTO
European Commission - DG ECFIN, Fiscal Policy and Surveillance

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• What do we talk about when we talk about the (aggregate) fiscal stance?

• Sustainability constraint and stabilisation objective:
  – Which prevails?
  – How to measure and assess needs

• Aggregation:
  – Bottom-up vs. top-down
  – The importance of composition
The aim of this paper (from the Commission's 2016 PFR) is to discuss methodological issues and propose possible solutions to the questions raised by this graph.

What fiscal stance for the euro area?

November 2016 Commission Communication
Institutional context: Two-Pack, European Fiscal Board

In the EP there was a discussion on "The euro area fiscal stance: definition, implementation and democratic legitimacy" in 2016
- Papers by F. Giavazzi, A. Bénassy-Quéré and the Kiel Institute

ECB Occasional Paper "Euro area fiscal stance" (K. Bankowski, M. Ferdinandusse), January 2017
Stabilisation and sustainability

• Two needs:
  – **Stabilisation** of the economy at close to potential *(objective)*
  – **Sustainability** of public finances *(budget constraint)*

• Which need should discretionary fiscal policy address as a priority?
  – Not an issue if both needs point in the same direction
  – **In case of conflict**, the choice depends on:
    • **Efficiency**: is fiscal impulse the best policy tool to address the respective needs?
    • **Extent of the needs**: how critical is each need?
    • **Cost-benefit analysis**: are the benefits from addressing one need larger than the cost of not addressing the other?
  – Ultimately this is a **political decision**
Normal times vs. crisis times

In normal times, stabilisation is entirely achievable through monetary policy (common shocks) and automatic fiscal stabilisers (country-specific shocks) → This is not about fiscal fine-tuning

Discretionary stabilisation is needed when these standard policy tools are not sufficient, in particular:

- if inflation has been very low (monetary policy constrained)
- in case of a long or severe economic crisis (automatic stabilisers not sufficiently large)

Moreover fiscal multipliers are expected to be larger in this case

Fiscal impulse vs. structural reforms

- Discretionary support to demand may be necessary when there is a risk of hysteresis affecting potential growth (persistent high long-term unemployment, persistent low investment)
- Although structural reforms may also be needed to enhance potential growth
Measuring stabilisation needs

Level and change of the output gap: not sufficiently telling

Same shape, different lengths and depths

Same length and depth, different shapes
Measuring stabilisation needs

- In the PFR, the methodology uses the output gap
- ...both backward-looking and forward-looking
- For the euro area as a whole:
  - Length: in 2016, 8 years of negative output gap (L1); 3 years since the trough (L2)
  - Depth: at the trough, -2.9% of potential GDP (D1)
  - Speed of closure: 20% in 2017 (C3) if neutral fiscal stance
Illustration: evolution of the OG and length

Output gap level in 2016-17 and length of the half-cycle

OG in 2017 (assuming no change in the SPB)

- Closing after several years of bad times
- Narrowing but still not closed after several years of bad times
- Still not closed after several years of bad times, and widening again
- OG improves
- OG deteriorates

Broadly unchanged or narrowing after few years of good times
A challenge: anticipating abrupt crises

The analysis based on real-time OG data for 2008-2009 would have led to recommending a neutral fiscal stance (ECB calculations)

This reflects a known inertia in economic forecasts

The methodology based on the OG is likely to be more relevant for less abrupt developments such as recoveries, to provide a quantified, consistent analysis of the recent half-cycle

When such crises hit, short-term indicators are more useful
**Going beyond the output gap**

- **OG: mechanical and uncertain**
  - Useful summary indicator but unobserved. Difficulty of disentangling cycle/trend
  - We don't know the future, regardless of the indicators considered

- **Other factors to consider for a richer assessment of the macroeconomic situation (non-exhaustive list)**
  - Inflation and monetary policy (below)
  - Hysteresis on the labour market (next slide) and in investment
Long-term unemployment (share of labour force), 2008-2015 (%)
When is fiscal consolidation needed?

• Sustainability is not an objective per se but an intertemporal budget constraint

• "Normal" times vs. "crisis" times
  – "Normal" times: compliance with the SGP should ensure sustainability. Member States need to consolidate if they are not at MTO or if debt is too high
  – "Crisis" times: imminent fiscal stress, as shown by the S0 indicator and spreads on government bonds, puts pressure for frontloaded fiscal retrenchment

• Fiscal consolidation vs. structural reforms
  – Unsustainable debt paths may reflect a need for structural reforms, especially of the pension and health care systems (see S2 indicator)
Sustainability: medium-term risk indicators (% of GDP)

Rank correlation
S1, distance to MTO 0.81
S1, primary gap 0.81
Distance to MTO, primary gap 0.81

Source: Commission services.
Note: The chart shows the euro area on the left, followed by Member States ranked by increasing level of S1. S1 is expressed in terms of structural primary balance, the distance to the MTO in terms of structural balance, and the primary gap in terms of primary balance. A negative distance to the MTO means that the Member State is above its MTO. For Slovenia, the graph shows the distance to the minimum benchmark.
Cost-benefit analysis: the snowball effect in the euro area

- Relatively low cost of delaying adjustment at the current juncture
- But conditional on the continuation of low interest expenditure
Ranges of fiscal targets

(Measured in terms of change in the structural primary balance)

- Fiscal stance consistent with an OG closure by 25%
- Additional target for stabilisation (neutral fiscal stance)
- Fiscal stance implied by 20% of S1
- Fiscal stance implied by 50% of S1
- Fiscal stance consistent with an OG closure by 50%
- Additional target for sustainability (not only derived from S1)
This is not a tool to compute a single optimal fiscal stance

It is meant to feed policymakers' analysis and raise questions:

- Do the ranges indicate high needs or not? How large is the uncertainty? Are there any tensions?
- Is the information based on the output gap consistent with other indicators?
- Should fiscal policy focus on stabilisation or sustainability, and why?

Necessarily involves arbitrary technical choices

- Unavoidable to define quantitative criteria
- But transparent, motivated by observation and economic theory, and cross-checked by robustness tests

Possibility of different economic views and political preferences

- We do not make these choices but force decision-makers to make them
Aggregation issues

1. **Why is aggregation relevant?**
   - Because of spillovers and contagion effects
   - **Stabilisation** becomes a common issue when monetary policy reaches its limits: euro area-wide shock
   - **Sustainability**: risks are neither isolated (despite being the responsibility of sovereign Member States) nor mutualised, but subject to contagion

2. **Technical but important issues**
   - Bottom-up or directly at the aggregate euro area level?
   - Aggregation first by country or by targets?
   - Aggregation of ranges or points?

3. **What weights?**
   - Standard practice: by the size of the economy (GDP) → euro area OG, S1
   - Alternatively: we propose solutions by using different weights
     - Weights reflecting risks
     - Weights reflecting spillover or contagion effects
   - Ideally: an economic model
A certain aggregate fiscal stance can reflect many different national fiscal stances = geographical composition

The outcome depends on several factors:

- Multipliers (budgetary composition + economic context, including national sustainability risks)
- Spillover effects (depend on structural factors)

The aggregation of national fiscal stances is more complex than a mechanical sum of balances

Analysis done in the Commission's QUEST model
Composition matters: an illustration in the QUEST model

Real GDP growth - euro area (%)

Government debt - EA (% of GDP)

- Scenario 1: consolidation in A
- Scenario 2: consolidation in A + stimulus in B, growth-friendly composition
- Scenario 3: consolidation in A + stimulus in B, alternative budgetary composition
Conclusion: main messages

• Aim:
  • The aim is not to come up with a number but meant as food for thought and as clarifying background analysis: raise issues
  • No intention to suggest permanent automatic fine-tuning

• Proposes transparent, consistent, quantified criteria which remain rough but are already an improvement
  o **Stabilisation needs:** Cyclical position subject to uncertainty → use all the information from the recent half-cycle, comparing the length, depth and pace of closure of the OG to standard values
  o **Sustainability needs:** Use medium-term sustainability risk indicators (S1 and debt sustainability analysis, distance to MTO, primary gap)
  o **No predefined weights for stabilisation and sustainability** but focus depending on the current conditions
  o **Spillover and contagion effects internalised** via alternative weightings and, whenever possible, model simulations

• Remains open for discussion
Part IV: The fiscal stance in the euro area: Methodological issues


https://ec.europa.eu/info/publications/2017-european-semester-communication-fiscal-stance_en
Thank you for your attention
Background slides
### Overview of the issues covered in this analysis

#### ECONOMIC STABILISATION

**What can make fiscal stimulus necessary**
- Long and severe **economic crisis**
- Persistent high **long-term unemployment**
- Very **low inflation**
- **Other tools not sufficient:** stabilisation not entirely achievable through **monetary policy** and **automatic fiscal stabilisers**
- Risk of persistent **low potential growth**

**What can make fiscal stimulus possible and effective**
- Available **fiscal space** in some countries
- High fiscal **multipliers**
- Large **spillovers** across Member States
- Focus on investment and **growth-enhancing** measures
- **No risk of overheating** in the Member States where stimulus is implemented

#### SUSTAINABILITY OF PUBLIC FINANCES

**What can make fiscal consolidation necessary**
- Compliance with **fiscal rules**
- High **debt** ratios
- High **risks to fiscal sustainability**
- Risk of governments losing **access to financial markets**
- Risk of **contagion** across Member States

**What can make fiscal consolidation more effective**
- Accompanying **structural reforms**
- Focus on **growth-friendly** consolidation
## Fiscal multipliers
### QUEST, temporary shocks (one-year fiscal stimulus)

<table>
<thead>
<tr>
<th>Category</th>
<th>Low share of constrained households (30%)</th>
<th>High share of constrained households (60%)</th>
<th>High share of constrained households and zero lower bound</th>
</tr>
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<tbody>
<tr>
<td>Government investment</td>
<td>0.9</td>
<td>0.9</td>
<td>1.1</td>
</tr>
<tr>
<td>Government purchases</td>
<td>0.8</td>
<td>0.8</td>
<td>1.0</td>
</tr>
<tr>
<td>General transfers</td>
<td>0.2</td>
<td>0.4</td>
<td>0.5</td>
</tr>
<tr>
<td>Transfers targetted to credit-constrained households</td>
<td>-</td>
<td>0.7</td>
<td>0.9</td>
</tr>
<tr>
<td>Transfers targetted to liquidity-constrained households</td>
<td>0.7</td>
<td>0.7</td>
<td>0.9</td>
</tr>
<tr>
<td>Labour tax</td>
<td>0.2</td>
<td>0.4</td>
<td>0.6</td>
</tr>
<tr>
<td>Consumption tax</td>
<td>0.4</td>
<td>0.5</td>
<td>0.7</td>
</tr>
<tr>
<td>Property tax</td>
<td>0.0</td>
<td>0.1</td>
<td>0.2</td>
</tr>
<tr>
<td>Corporate income tax</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
</tbody>
</table>

Source: Commission services.
Note: The table shows the first-year impact on EU GDP (as percentage difference from the baseline) for a temporary one-year fiscal stimulus of 1%
Aggregating country-specific information

### Stabilisation

- **Risk-related:** length of cycle
- **Spillover-related:** GDP x intra-EA trade

<table>
<thead>
<tr>
<th></th>
<th>Share in euro area GDP (2016)</th>
<th>Share of imports from the EU in total imports</th>
<th>Share in GDP x trade</th>
<th>Difference with/without trade</th>
</tr>
</thead>
<tbody>
<tr>
<td>BE</td>
<td>3.9%</td>
<td>63.6%</td>
<td>3.9%</td>
<td>0.0%</td>
</tr>
<tr>
<td>DE</td>
<td>29.2%</td>
<td>65.6%</td>
<td>30.1%</td>
<td>0.9%</td>
</tr>
<tr>
<td>EE</td>
<td>0.2%</td>
<td>81.8%</td>
<td>0.3%</td>
<td>0.1%</td>
</tr>
<tr>
<td>IE</td>
<td>2.6%</td>
<td>65.2%</td>
<td>2.6%</td>
<td>0.0%</td>
</tr>
<tr>
<td>EL</td>
<td>1.6%</td>
<td>49.3%</td>
<td>1.3%</td>
<td>-0.4%</td>
</tr>
<tr>
<td>ES</td>
<td>10.5%</td>
<td>60.0%</td>
<td>9.8%</td>
<td>-0.7%</td>
</tr>
<tr>
<td>FR</td>
<td>20.7%</td>
<td>68.2%</td>
<td>22.3%</td>
<td>1.6%</td>
</tr>
<tr>
<td>IT</td>
<td>15.4%</td>
<td>57.9%</td>
<td>14.1%</td>
<td>-1.3%</td>
</tr>
<tr>
<td>CY</td>
<td>0.2%</td>
<td>73.0%</td>
<td>0.2%</td>
<td>0.0%</td>
</tr>
<tr>
<td>LV</td>
<td>0.2%</td>
<td>79.8%</td>
<td>0.3%</td>
<td>0.1%</td>
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<tr>
<td>LT</td>
<td>0.4%</td>
<td>67.8%</td>
<td>0.4%</td>
<td>0.0%</td>
</tr>
<tr>
<td>LU</td>
<td>0.5%</td>
<td>74.5%</td>
<td>0.6%</td>
<td>0.1%</td>
</tr>
<tr>
<td>MT</td>
<td>0.1%</td>
<td>64.4%</td>
<td>0.1%</td>
<td>0.0%</td>
</tr>
<tr>
<td>NL</td>
<td>6.5%</td>
<td>45.1%</td>
<td>4.6%</td>
<td>-1.9%</td>
</tr>
<tr>
<td>AT</td>
<td>3.3%</td>
<td>76.7%</td>
<td>3.9%</td>
<td>0.7%</td>
</tr>
<tr>
<td>PT</td>
<td>1.7%</td>
<td>75.4%</td>
<td>2.0%</td>
<td>0.3%</td>
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<td>SI</td>
<td>0.4%</td>
<td>69.4%</td>
<td>0.4%</td>
<td>0.0%</td>
</tr>
<tr>
<td>SK</td>
<td>0.8%</td>
<td>77.8%</td>
<td>0.9%</td>
<td>0.2%</td>
</tr>
<tr>
<td>FI</td>
<td>1.9%</td>
<td>71.8%</td>
<td>2.2%</td>
<td>0.3%</td>
</tr>
</tbody>
</table>

### Sustainability

- **Risk-related:** debt ratio, share in euro area debt
- **Contagion-related:**
  - **Most favourable scenario ("early EMU"):** interest rates aligned on least risky \( S1 = 0.5 \)
  - **Least favourable (sovereign debt crisis):** full weight on the Member States with the highest spreads vis-à-vis Germany

<table>
<thead>
<tr>
<th>Country</th>
<th>Debt-to-GDP ratio</th>
<th>Share of debt in total euro area level</th>
<th>Government bond yield spreads against Germany</th>
<th>Focus on highest spreads</th>
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<tr>
<td>BE</td>
<td>106</td>
<td>4.5%</td>
<td>0.4</td>
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<tr>
<td>DE</td>
<td>69</td>
<td>21.7%</td>
<td>-</td>
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<tr>
<td>EE</td>
<td>10</td>
<td>0.0%</td>
<td>n.a.</td>
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<td>IE</td>
<td>89</td>
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<td>0.7</td>
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<td>183</td>
<td>3.2%</td>
<td>8.6</td>
<td>5.0</td>
</tr>
<tr>
<td>ES</td>
<td>100</td>
<td>11.4%</td>
<td>1.4</td>
<td>0.5</td>
</tr>
<tr>
<td>FR</td>
<td>97</td>
<td>21.9%</td>
<td>0.4</td>
<td></td>
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<td>IT</td>
<td>133</td>
<td>22.4%</td>
<td>1.3</td>
<td>0.5</td>
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<td>CY</td>
<td>109</td>
<td>0.2%</td>
<td>3.8</td>
<td>1.0</td>
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<td>40</td>
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<td>23</td>
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<td>MT</td>
<td>61</td>
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<td>0.9</td>
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<td>NL</td>
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<td>85</td>
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<tr>
<td>FI</td>
<td>65</td>
<td>1.4%</td>
<td>0.3</td>
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## A heat map of stabilisation needs

<table>
<thead>
<tr>
<th>LENGTH (IN 2016)</th>
<th>DEPTH</th>
<th>PACE OF CLOSURE</th>
<th>CONCLUSION</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>L1</td>
<td>L2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Number of consecutive years with same sign</td>
<td>Number of years since latest peak/trough*</td>
<td>Level at latest peak/trough*</td>
</tr>
<tr>
<td></td>
<td>Standard</td>
<td>SUR</td>
<td>Standard</td>
</tr>
<tr>
<td>EA-19</td>
<td>8</td>
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<td>3</td>
</tr>
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<td>NL</td>
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<td>2</td>
<td></td>
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<tr>
<td>MT</td>
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<td>4</td>
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</tr>
<tr>
<td>LV</td>
<td>4</td>
<td>4</td>
<td>1</td>
</tr>
</tbody>
</table>

**Notes:**
- **Positive output gap:** Broadly closed
- **Negative output gap:** Low
- **Length (in 2016):**
  - L1: Number of consecutive years with same sign
  - L2: Number of years since latest peak/trough*
- **Depth:**
  - D1: Level at latest peak/trough*
  - D2: Level in 2016
- **Pace of closure:**
  - C1: Annual percentage of closure between latest peak/trough and 2016*
  - C2: Percentage of closure 2015-2016
- **Intensity of needs:**
  - high
  - medium
  - low
What if the needs of the euro area conflict with those of individual countries?

- Case of conflicts between the national need for stabilisation and need at the euro area level

What if the needs of the euro area conflict with those of individual countries?