

Comments on "Long-term dimension to fiscal uncertainty" - Jim Ebdon, Office for Budget Responsibility

> Stéphanie Pamies European Commission ECFIN.C2 – Sustainability of public finances

Fiscal policy in an uncertain environment Brussels, 29 January 2019

Contents

- Background considerations on uncertainties in long-term fiscal projections
- The OBR approach
- The COM approach: similarities and differences



1. Background

Background

- Growing recognition of large uncertainties surrounding medium-/long-term projections e.g.
 - Balassone et al. (2008), Crafts and Mills (2017)
 - IMF contributions on analysing and managing fiscal risks (2016) and review of DSA framework for market-access economies (on-going)
- Increases in government debt often driven by 'unexpected' & large shocks <u>\$</u>
- Revision of long-term projections when change in underlying assumptions can be large



Increases in government debt often driven by 'unexpected' & large shocks



Sources: Bova and others (2016) and staff estimates.

Source: COM FSR 2018



1. The OBR approach

Key features and strengths (cont'.)

- Few national institutions perform long-term analysis and even less so risk analysis (IMF, 2016)
- OBR approach goes beyond standard stress test analysis by:
 - Identifying a *large* set of risks *most relevant* for the UK (e.g. macroeconomic, financial, policy-related)
 - Associated range of probability of realization (based on judgement / experience)
 - *Broad* measured fiscal impacts: over medium-/long-term, and for flow and stock variables



Key features and strengths

- **Transparent framework** in terms of inputs, analysis, results and limitations
- Large variety of *individual* risks considered, with some feedback effects taken into account
- Specific to some items (expenditure / receipts, specific balance sheet risks)
- A combined fiscal stress test (based on BoE stress test)
- Main metric to assess results: public sector net debt



Main results

- OBR: matrix with 5 ranges of probability (very low/low/medium/high/very high) and 3 ranges of impact (low/medium/high)
- Medium-term:
 - Shocks with a high impact have a (very) low probability (except. 'typical recession')
 - Shocks with a (very) high probability have a low impact
- Long-term:
 - Over 60% of shocks with medium / high impact and medium to very high probability



1. The COM approach: similarities and differences

OBR: FSR, FRR

COM: FSR / DSM, AR





Confronted to similar challenges

Changes in public pension expenditure as a share of GDP in the 2001, 2009, 2012 and 2015 vintages, EU



Overall classification of main assumptions by comparing budgetary projection exercises

| | Ageing report |
|---------------------------|---------------|---------------|---------------|---------------|---------------|
| | 2001* | 2006** | 2009*** | 2012*** | 2015 |
| Demographic assumptions | | | | | |
| Labour force assumptions | | | | | |
| Macroeconomic assumptions | | | | | |

Source: Commission Discussion Paper on pensions (2016)

UK



Source: OBR FRR 2017 (ONS)



Some similarities with the OBR approach

- Distinction between medium-/long-term risks, entailing different indicators and risk scenarios considered
 - Some differences in terms of time-span
- For the long-term: also strong focus on ageingrelated costs and non-demographic drivers of health-care spending
- Similar attention to **downside risks** in both cases



Some differences

- Horizontal approach, less tailored-made stress tests and less granular projections
- Some differences in the interpretation of the nofiscal policy change assumption
- Use of stochastic projections
- Overall risk assessment provided by timedimension
- Increasing use of additional indicators to debt in the medium-term such as GFN (important in case of liquidity tensions)



Different ways to capture uncertainties in COM framework

- Medium- and long-term assessment is based on a large set of tools, indicators and scenarios
- Extensive sensitivity analysis (S1 and S2 indicators, debt projections)
- Stochastic projections used to inform the risk classification <u>S</u>
- Additional tools to capture tail events and broad government liabilities (based on Eurostat reporting, Symbol)



Extensive sensitivity analysis

Projected change in cost of ageing, baseline and risk scenarios, 2016-2070, FSR 2018



Source: COM FSR 2018, Ageing Report 2018

Health-care expenditure, % of GDP, EU, AR 2018





Comparing different risk scenarios

General government debt (% of GDP), COM DSM 2017



Public sector net debt (% of GDP), OBR FRR 2017



Source: OBR FRR 2017



Source: COM DSM 2017



COM: main results for the UK

- No short-term risk
- High-risk in the medium (10-15 years) and long-term
- Some qualifying aggravating / mitigating factors

| 1. Risk classification summary table | | | | | | | | | | | | | | |
|--------------------------------------|------|------|-----------------|---------------------------------------|----------|-------------------|---------------------|-------------------------|-----------------------------|------------------------|------|----------|----------|------|
| | | | | | | | | | | | | | | |
| 01 | Ľ | | ¹ S1 | Debt sustainability analysis (detail) | | | | | | | | ÷. | | • |
| term | term | term | | | Baseline | Historical SPB | Lower GDP growth | Higher interest rate | Negative shock on SPB | Stochastic projections | DSA | I I | S2 | term |
| | Π. | | | Risk category | MEDIUM | HIGH | MEDIUM | MEDIUM | MEDIUM | LOW | | i. | | |
| | ц. | | | Debt level (2029) | 73.9 | 96.9 | 78.3 | 77.6 | 76.5 | | | i. | | |
| LOW | ЦU | HIGH | MEDIUM | Debt peak year | 2018 | 2029 | 2018 | 2018 | 2018 | | HIGH | 1 | MEDIUM | HIGH |
| (S0 = 0.4) | 1.1 | | (S1 = 1.3) | Percentile rank | 36.0% | 75.0% | | | | | | Υ. | (S2 = 3) | |
| | 114 | | | Probability debt higher | | | | | | 17.0% | | 5 | | |
| | | | | Dif. between percentiles | | | | | | 19.3 | | | | |
| | 11 | | | (| | | | | | | | . | | |

Source: COM FSR 2018



Open issues and questions

- What about short-term risks?
 - Near-term fiscal risks expressed as a concern of UK government

• Deterministic projections:

- How to best choose and calibrate risk scenarios?
- How to best 'estimate' their probabilities?

• Use of stochastic projections:

- Useful metrics: probability of debt not to stabilise / to cross a certain risk threshold
- Remaining questions: best calibration of shocks, scope of variables considered (typically not SFA)
- Importance of tail events
- How to best communicate about the results?
 - Trade-off between complexity and clarity of results



Thank you for your attention