Debt Sustainability Analysis and the EU fiscal framework

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Conference on Public debt dynamics: the search for optimal levels, Ministry of Finance Latvia, 07 September 2023

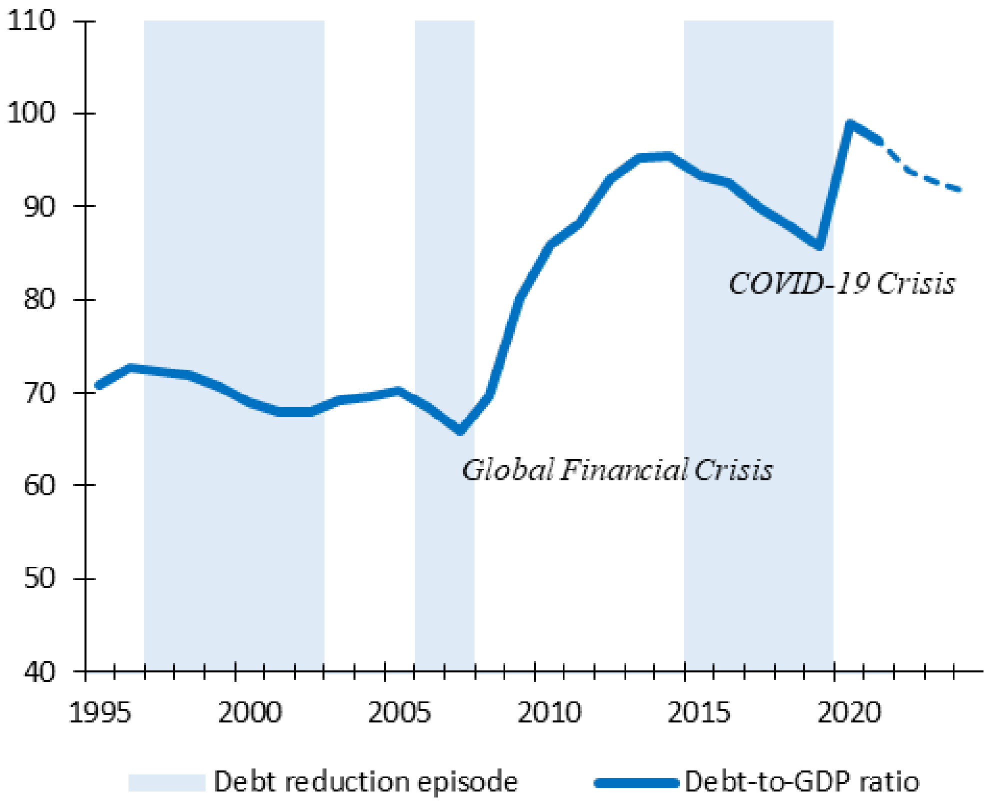
Outline

- Context: current and future challenges
- New fiscal rules fit for the future
- The DSA as a budgetary planning tool
- Some lessons from stylised simulations

Context: current and future challenges

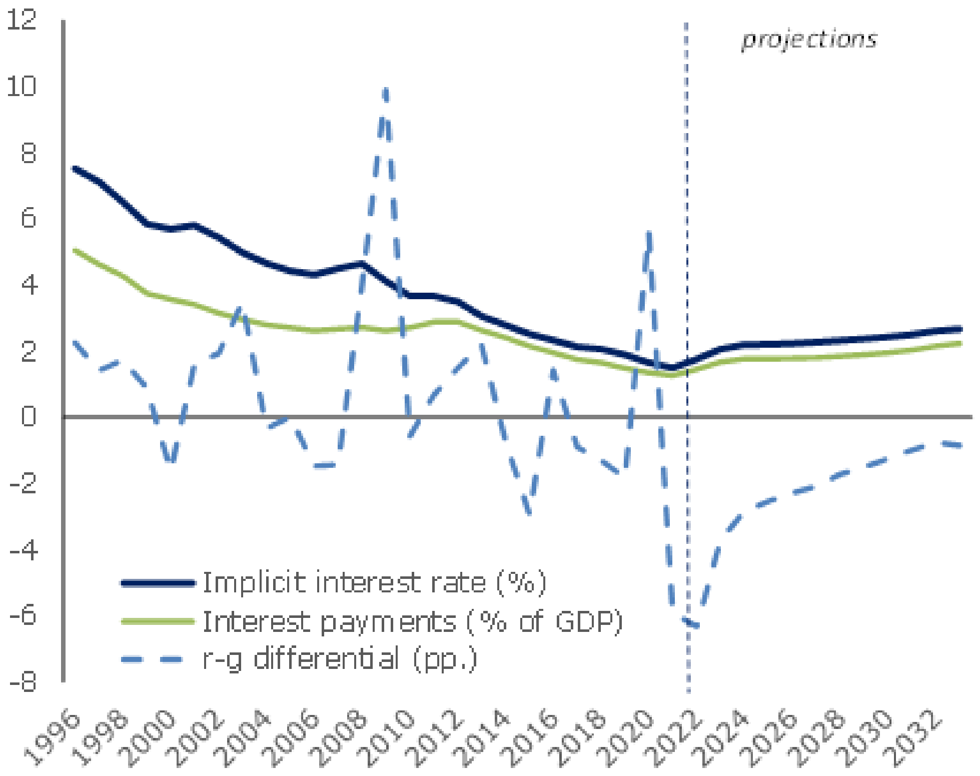
High debt levels and tightening financing conditions

Euro area general government debt ratio (%)



Source: Debt Sustainability Monitor 2022

Financing conditions in the EU



Source: QREA 2022 / 4

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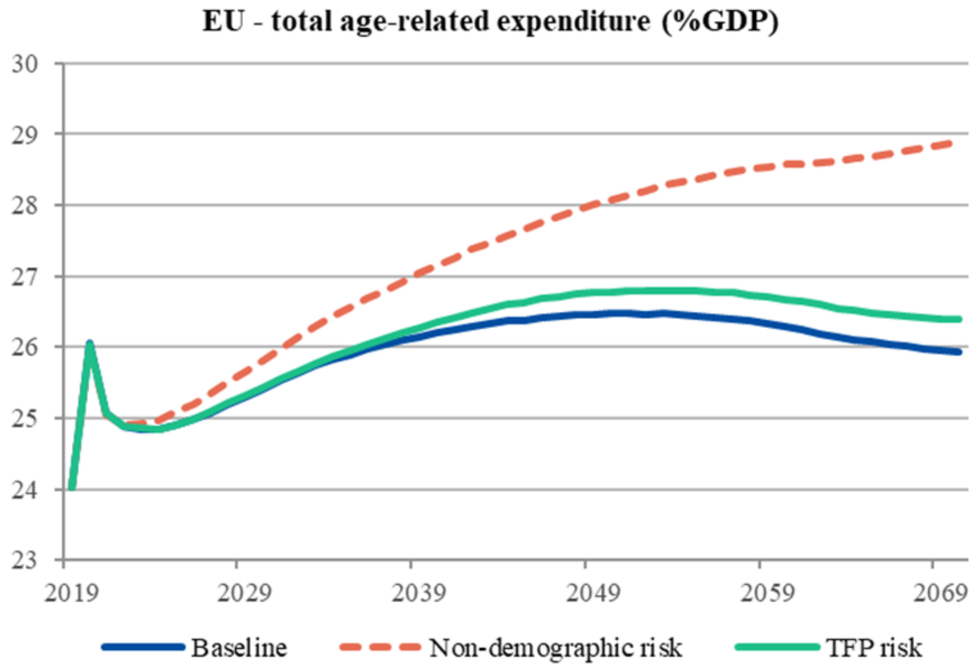
Population ageing and climate change

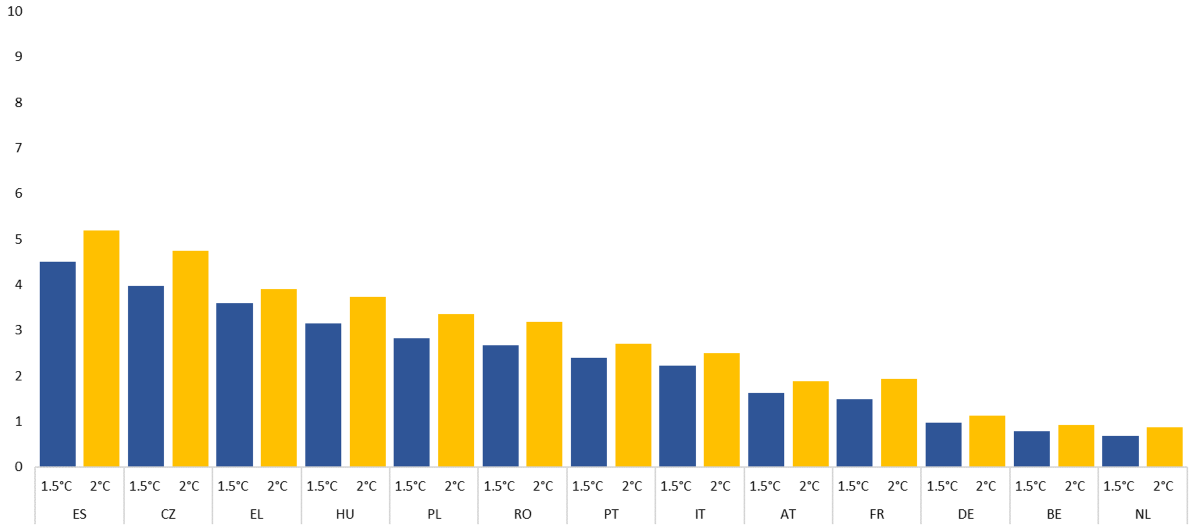
Projected total (public) age-related spending



Note: The aggregate includes pension, health care, long-term care and education spending

Source: Ageing Report 2021

***Fiscal impacts of acute physical risks in the EU, based on stylised scenarios** (estimated impact on public debt ratio, pps. of GDP)*



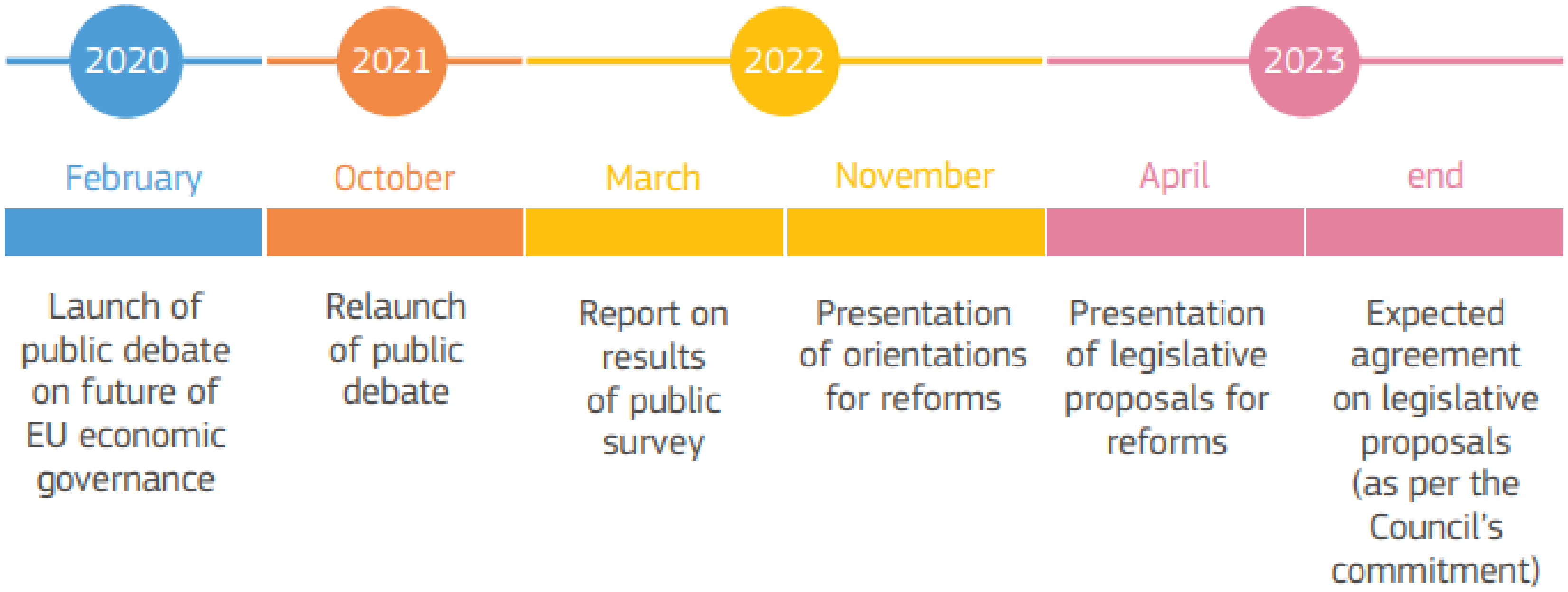
Source: Fiscal Sustainability Report 2021

New fiscal rules fit for the future

- *Key objectives and principles*
- *Focus on the technical trajectories / information and planned fiscal path*

Timeline of the Economic Governance Review

- Legislative proposals follow a long and intense period of consultations and discussions, which started before Covid and accelerated since October 2021.



Key objectives and principles of the reform

Key objective of the reform: strengthen **debt sustainability** and promote **sustainable and inclusive growth**

Key principles	How?
Medium-term approach	Medium-term fiscal-structural plans
Incentives for reforms and investments	Possibility of extending the adjustment period
Gradual and credible debt reduction	Differentiated fiscal path to reflect public debt challenges
National ownership	Member States to design their plans based on their economic priorities
Multilateral approach	Common framework from the design to the assessment / adoption and implementation of the plans
Simpler rules	Single operational indicator (net primary expenditure)
Better enforcement	Credible operationalisation of debt-based EDP

Revised process for coordination of economic and multilateral surveillance

Common framework

Technical trajectory / information

Commission multi-annual **technical trajectory** anchored on debt sustainability

Design of the plan

Member State **medium-term fiscal structural plan**, incl. reforms and investments

Assessment/adoption

Council endorses plan or requests revised plan based on Commission assessment

Implementation

Commission and Council monitor compliance with the endorsed plan

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Technical trajectories, or information, and planned fiscal path

- To guide the preparation of the plans, retain a multilateral approach and ensure equal treatment, the **Commission** provides:
  - For Member States with debt > 60% of GDP and/or deficit > 3% of GDP: **Technical trajectories** based on a common methodology i.e. the **Debt Sustainability Analysis (DSA)**
  - For Member States with debt < 60% of GDP and deficit < 3% of GDP: **Technical information** related to the deficit criterion

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The DSA as a budgetary planning tool

- *What DSA are we talking about?*
- *Advantages for fiscal surveillance*
- *Focus on low debt / deficit countries*

What DSA are we talking about?

Key features of the Commission’s DSA **in the context of the EU fiscal framework**:

- Currently mainly used to **identify risks that debt will not stabilise in the future, based on current policies, and highlight the need for policy action**
- Risk assessment depends on the projected **debt level** and **trajectory,** the **room for corrective action** if needed (an indication of fiscal consolidation space), and **vulnerability to shocks**
- The Commission’s DSA provides a **medium-term multilateral public debt projection framework**, based on common assumptions and methodologies including a range of scenarios (a ‘no-fiscal-policy-change’ baseline and stress tests capturing ‘normal’ uncertainty)

Advantages of using the DSA toolkit for setting / assessing the plans

- Strengthening debt sustainability is the key objective of the fiscal rules
  ➔ the **DSA as the state-of-the-art tool** to contribute to this objective
  (e.g. Blanchard et al., 2021; IMF, 2022)

- Given current debt levels and future fiscal headwinds, need to **anchor fiscal policy in a credible medium-term perspective**: high debt will not be brought to 'safe levels' in one or two years, future fiscal pressures and uncertainty

- **The DSA, as a medium-term public debt projection framework, presents several advantages** for this purpose:

  - Fundamental / economic concept at its core

  - Commission's DSA is well-established, based on common assumptions and methodologies, and is already used in the EU fiscal framework

The DSA is based on a fundamental economic concept relevant for the fiscal rules: the debt dynamic and its drivers

Basic debt dynamic equation

$$\Delta D_t = D_{t-1} \cdot \frac{(r_t - g_t)}{(1+g_t)} - PB_t + \Delta CoA_t + SFA_t$$

Initial debt level

'r-g' differential

Primary balance before ageing costs

Change in costs of ageing

Stock-flow adjustments

- The debt dynamic is driven by a few key variables: the *initial debt level*, the current/projected *'r-g' differential*, the current/projected *primary balance* (including costs of ageing) and *stock-flow adjustments*

The DSA integrates available information, and relies on common assumptions and methodologies

- Commission short-term **forecast** (T+2)
- **Medium-term GDP growth projections**, based on the *EU commonly agreed methodology with the EPC Output Gap Working Group* (i.e. the standard 'T+10' projections)
- **Ageing costs** projections, based on the latest available Ageing Report (*jointly prepared with the EPC Ageing Working Group*)
- **Interest rates** and **inflation** reflect financial markets' expectations and agreed convergence values (e.g. ECB target)

❖ 'No-fiscal-policy-change' baseline and stress tests, including stochastic analysis

The Commission's DSA is a well-established framework

2000/01: Fiscal sustainability analysis introduced, focusing on long-term risks (ageing population / S1-S2 indicators)

2006: First Fiscal Sustainability Report (FSR) published (ECOFIN mandate ➔ EPC / AWG)

Since 2010-11**:** Introduction of a multi-dimensional approach, focusing on short- and medium-term fiscal sustainability risks (EA sovereign debt crisis)

- Early-warning indicator (S0 indicator)
- Debt Sustainability Analysis (DSA)
- First Debt Sustainability Monitor circulated to the EFC

Since 2016: FSR published every 3 years; Debt Sustainability Monitor (DSM) published in each "non-FSR" year

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The DSA already plays a role in the EU fiscal framework

Corrective arm SGP

- One of the relevant factors considered in the excessive deficit procedure
  (Art. 126(3) report)

Preventive arm SGP

- In principle, also informs the adjustment path towards the MTO

European Semester

- Also used in the context of the European Semester (Country Reports, PPS/ES, fiscal CSRs)

Table 1.1: Fiscal (debt) sustainability and Stability and Growth Pact: main legal provisions and content

EU surveillance process	Legal provisions	Details
Stability and Growth Pact		
-Corrective arm		
Assessment of debt developments following a breach of the debt criterion	Council regulation (EC) no. 1467/97	The Commission, when preparing a report under Article 126(3) of the TFEU, assesses the case for launching an EDP by taking into account all relevant factors, including the medium term economic and budgetary position of the Member State and ***the developments in the medium-term government debt position, its dynamics and sustainability.***
- Preventive arm		
Assessment of Stability and Covergence Programmes	Council Regulation (EC) No 1466/97 (Article 3)	Includes an assessment of ***debt sustainability*** implying a full-fledged DSA according to the methodology presented in the FSR / DSM.
Setting-up of the (minimum) MTOs	Council Regulation (EC) No 1466/97 (Article 2a)	The MTOs are set so as to ensure sustainability or rapid progress towards ***sustainability.*** To that purpose, the Commission estimates country-specific lower bounds of the MTOs, also based on the jointly prepared Commission / Council long-term budgetary projections.
Required fiscal adjustment to the MTO	Regulation (EC) no. 1466/97, and 2015 Council Commonly agreed position on flexibility within the SGP (no. 14345/15)	The 2015 Council Commonly agreed position on flexibility within the SGP includes a 'matrix' of requirements for adjustment towards the MTOs with a specific reference to risks to ***debt sustainability*** as a relevant criterion for differentiating fiscal requirement across countries. Moreover, the quantitative assessment of the long-term budgetary effects and the impact on the long-term sustainability of public finances is assessed by the Commission in case Member States apply for the "structural reform clause" or the "investment clause".
Degree of discretion	Article 6(3) and Article 10(3) of Regulation no. 1466/97	The analysis of ***sustainability*** challenges is used for the exercise of a degree of discretion when considering departures from the fiscal requirements to achieve a fiscal stance that contributes to both strengthening the ongoing recovery and ensuring the sustainability of Member State's public finance.
Assessment of Draft Budgetary Plans	Regulation (EU) No 473/2013 of the European Parliament and of the Council	Includes sensitivity analyses that provide an indication of the risks to ***public finance sustainability*** in the event of adverse economic, financial or budgetary developments.

Source: Commission services.

Source: Fiscal Sustainability Report 2018

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Debt level and fiscal risks

- Debt vulnerabilities tend to increase as debt raises, though large investment needs, growth-friendly spending
- Difficult to determine an ‘optimal’ or limit debt level (country-specific / time-dependent)
- Debt dynamic is a key factor of fiscal risks; even low debt countries may face future headwinds and are subject to uncertainty

➢ EU proposed new framework provides guidance for low debt (and deficit) countries

Risk thresholds: estimations based on selected papers

Concept	Paper	Estimation method	Sample	Results
Growth related threshold (debt level beyond which growth is negatively impacted)	Chudik et al. (2017)	Dynamic heterogeneous panel data regression with cross-sectionally dependent errors	19 advanced economies	Weak support for 80% of GDP (no statistically significant threshold when using more advanced estimation techniques). More robust results in the case of countries with rising debt-to-GDP ratio.
Debt limit (debt level beyond which market access is lost)	Gosh et al. (2013)	Model interacting fiscal reaction function with market reaction function	Advanced economies	190% of GDP (on average). Above 90-100% of GDP, ‘fiscal fatigue’.
Prudent debt threshold (debt level ensuring that debt remains below a certain threshold with a high probability)	Fall and Fournier (2015)	Stochastic model with a fiscal reaction function	EA	For a debt threshold conventionnaly set at 65% of GDP (and probability to remain below it of 75%), prudent debt levels range from 35% in Greece and Ireland to around 50% in Austria.
Non-increasing debt cap (debt level ensuring that debt is not increasing with a high probability)	European Commission (2019)	Stochastic model	EA	80% of GDP (EA), with important country differences.
Debt distress threshold (debt level beyond which a risk of fiscal stress* is detected)	Berti et al. (2012), Pamies Sumner and Berti (2017)	Signalling approach	EU + 9 OECD countries	68% of GDP

Source: Pamies and Reut (2020)

Focus on low debt / deficit countries

- Based on the latest Commission's forecast, 9 Member States are expected to have a debt and deficit below 60/3% of GDP in 2024
- For this countries, the Commission will provide technical information:
  - The plans should ensure that the deficit remains below 3% of GDP, including in the absence of further budgetary measures over 10-years beyond the plan's horizon
  - In some cases, given headwinds related to population ageing and to 'r-g' differential developments, this entails consolidation needs
  - Moreover, for Member States with large implicit liabilities due to population ageing (over the longer-term) => fiscal path *and reforms* in the plan should contribute to address these issues

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Some lessons from stylised simulations

- *Approach used in practice*
- *Stylised illustrations and results*

Criteria to design the technical trajectories

Fiscal path (with respect to the ‘no-fiscal-policy-change’ baseline) ensuring:

Key criteria

- By the end of the adjustment period, at the latest, the 10-year **debt trajectory** in the absence of further budgetary measures is on a *plausibly* downward path, or stays at prudent levels
- The government **deficit** is brought and maintained below the 3% of GDP reference value in the absence of further budgetary measures over the same 10-year period

Benchmark/safeguards

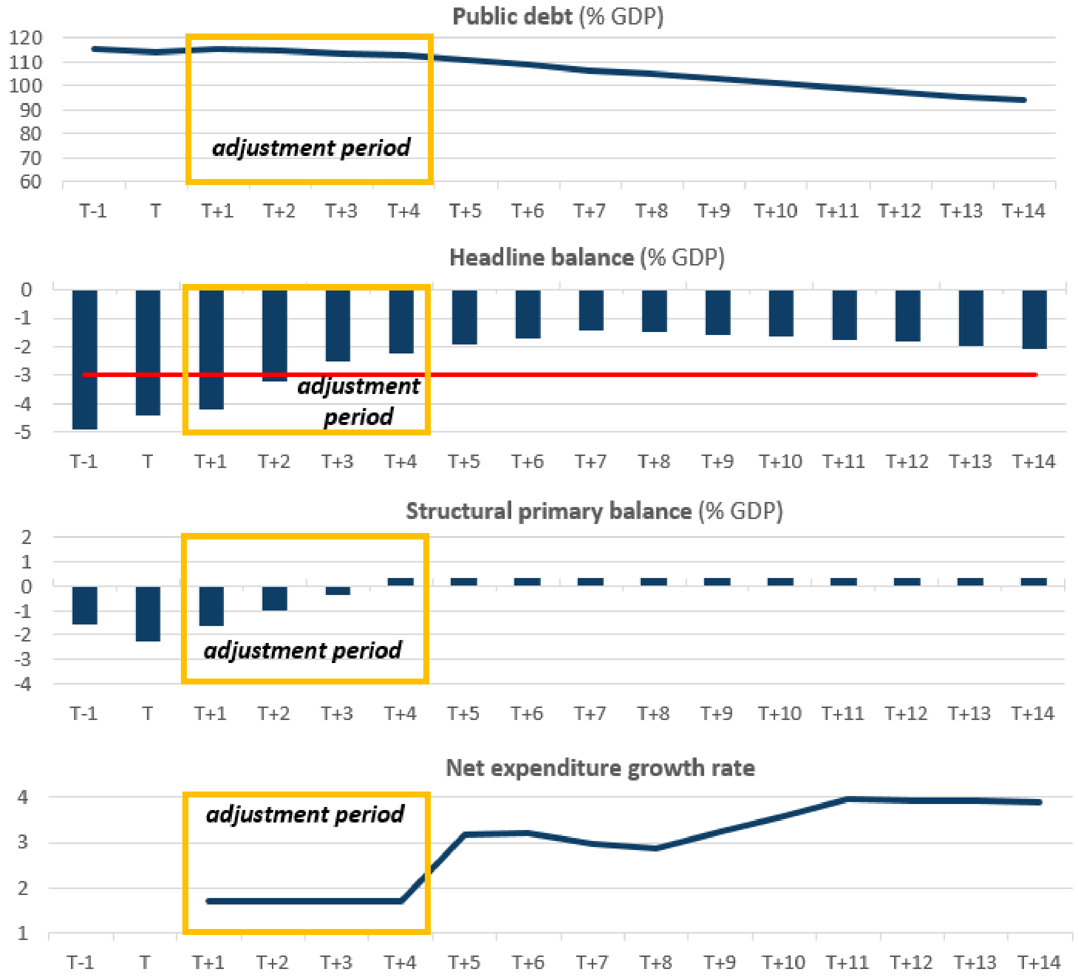
- 0.5% of GDP minimum adjustment for as long as the deficit is above 3% reference value (‘**benchmark**’)
- Debt at the end of the planning horizon (4 years) lower than at the beginning (‘**debt decline safeguard**’)
- ‘**No-backloading provision**’ and ‘**no-expansion safeguard**’

Methodology to assess ‘plausibility’

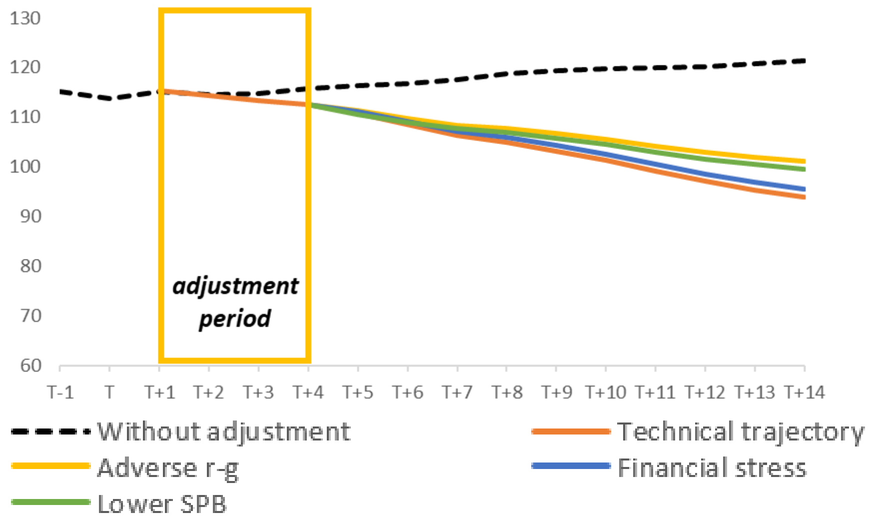
- “Public debt ratio should be declining, or stay at prudent levels, under the deterministic scenarios of the Commission’s medium-term public debt projection framework described in the Debt Sustainability Monitor 2022”:
    - The baseline and three stress tests (adverse ‘r-g’, financial stress, lower structural primary balance)
- “The risk of the public debt ratio not decreasing in the 5 years following the adjustment period of the national medium-term fiscal-structural plan is sufficiently low. The risk is assessed with the help of the Commission’s stochastic analysis”:
    - 2 000 shocks on interest rates, growth, primary balance and exchange rate
    - Based on country-specific historical data (variance-covariance matrix)
    - ‘Sufficiently low’ means a probability of debt decline of at least 70%, in line with the Commission’s DSA

Stylised results for a high-debt country, 4-year adjustment period (no extension)

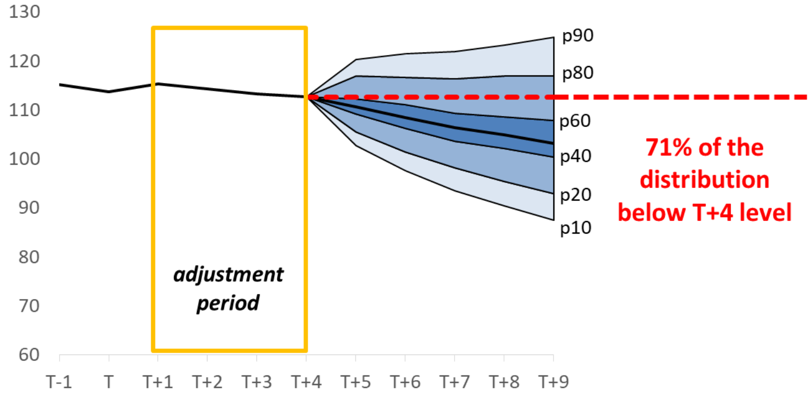
Under technical trajectory (0.65 pp of GDP per year)



Debt: technical trajectory and deterministic stress tests



Debt: stochastic projections around technical trajectory



Criteria to design the technical information

Structural primary balance (with respect to the ‘no-fiscal-policy-change’ baseline) ensuring:

Key criteria

- The government deficit is maintained below the 3% of GDP reference value in the absence of further budgetary measures over 10 years beyond the plan’s horizon

Interpretation

- For some Member States, some fiscal consolidation will be necessary to ensure that the deficit criterion is met
- For other Member States, technical information will show the ‘limit’ beyond which they should not deconsolidate their fiscal positions

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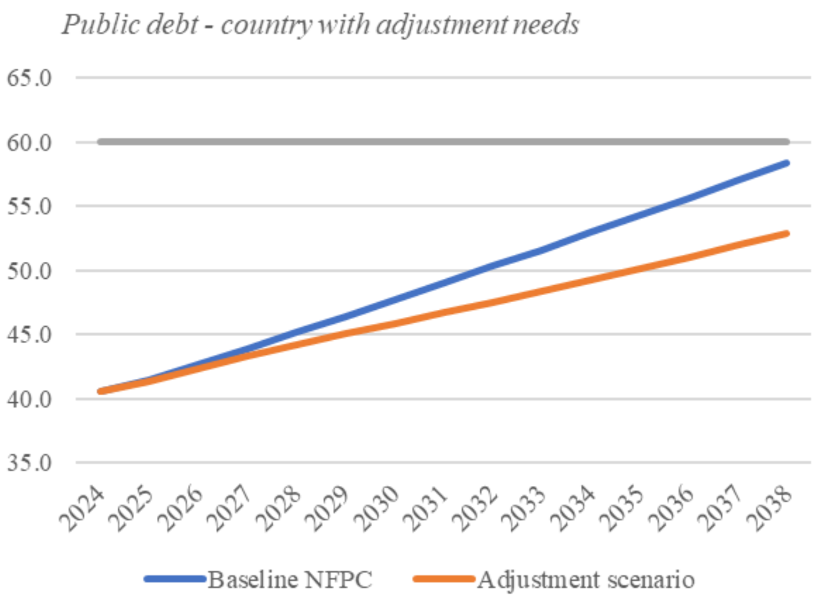
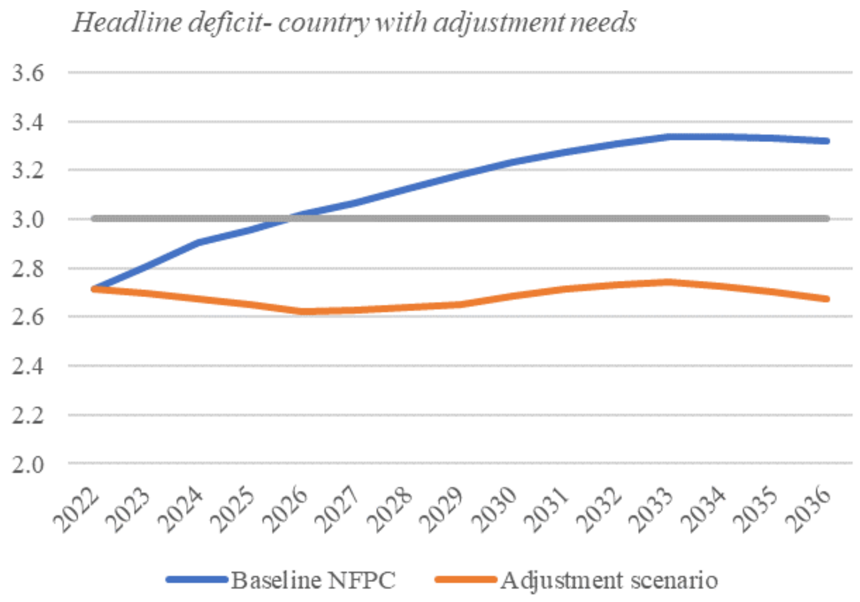
Stylised results for a low debt / deficit country but with risks to breach the 3% of GDP deficit reference value (under NFPC)





✓ In this case, need to *increase* the SPB by the end of the planning horizon

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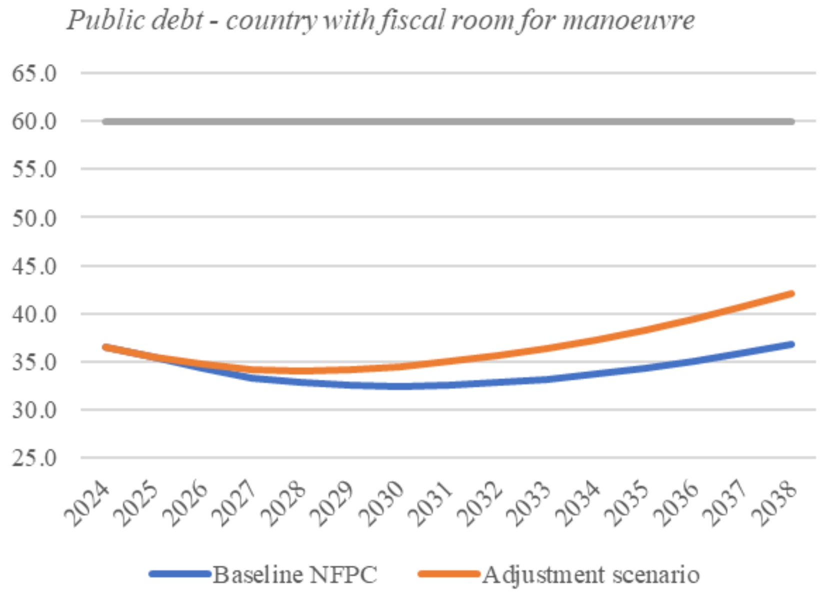
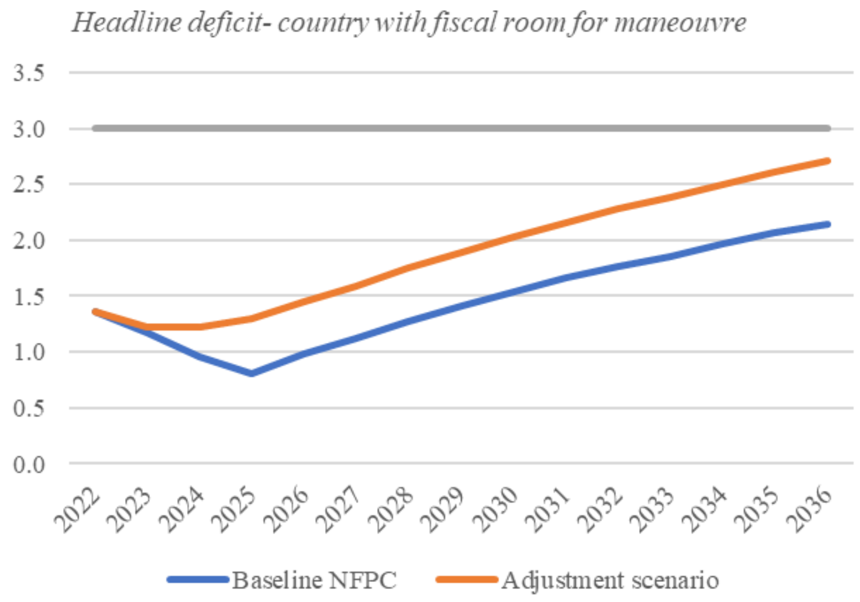
Stylised results for a low debt / deficit country with fiscal room for manoeuvre



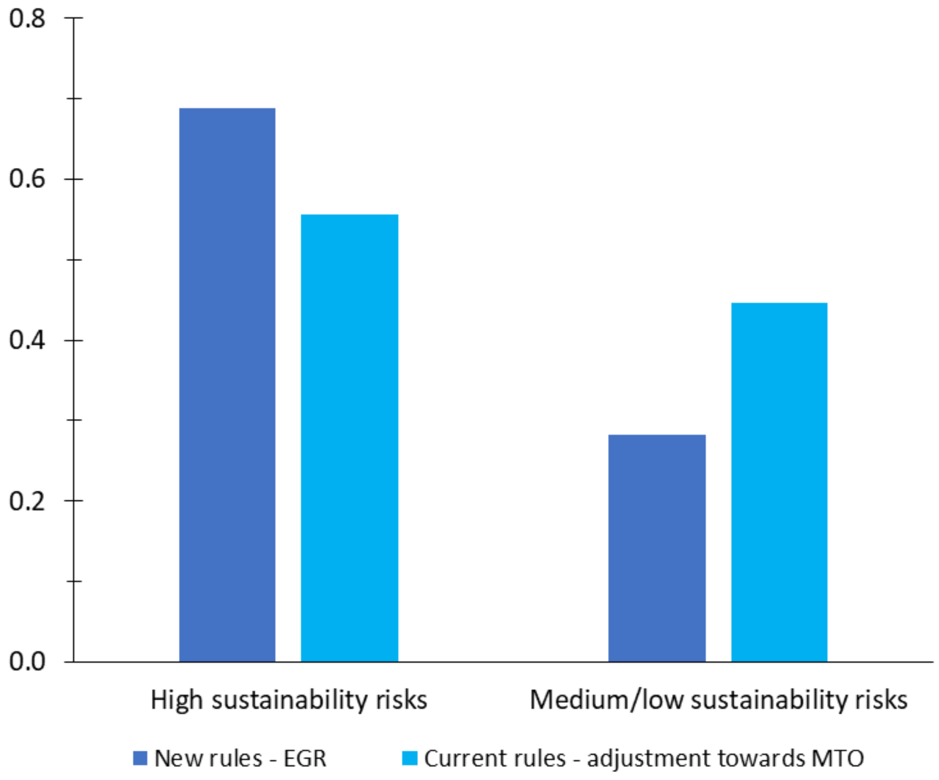


✓ In this case, need to *ensure that* the SPB doesn't *decrease* below a certain lower bound level by the end of the planning horizon

EGR adjustment requirements on average similar to current fiscal rules, but better differentiated by sustainability risks

Fiscal adjustment requirements

(average across Commission DSA risk category)



Source: Commission services based on COM AF 2022

Lessons learnt from illustrative simulations

- Requirements better differentiated, reflecting country-specific fundamentals
- Still ambitious fiscal adjustment for Member States with larger public debt challenges, reflecting:
  - Current (negative) fiscal position
  - Structural trends: population ageing, increasing interest rate (adjusted for growth)
  - Vulnerability to shocks (need for fiscal buffers)
- Allowing putting debt on a decisive downward path
- Incentives for investments and reforms through more gradual adjustment in case of extension to 7 years
- Framework also provides guidance for low debt challenges countries

Thank you

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