



# Debt Sustainability Analysis and the EU fiscal framework

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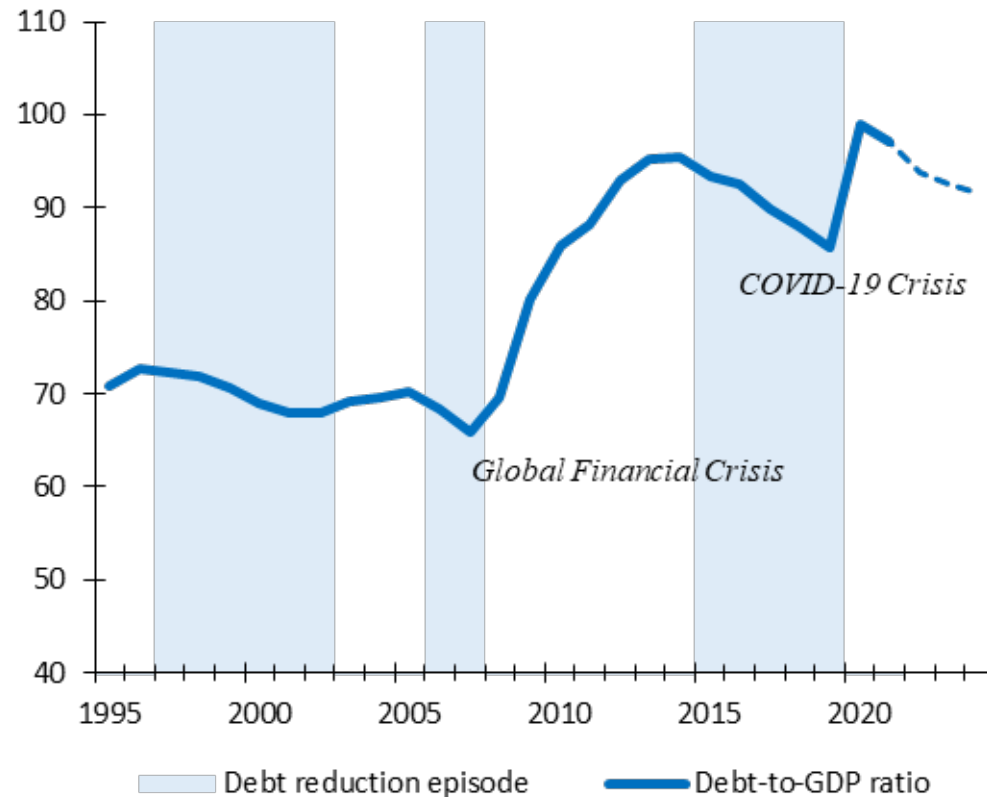
# Outline

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

# Context: current and future challenges

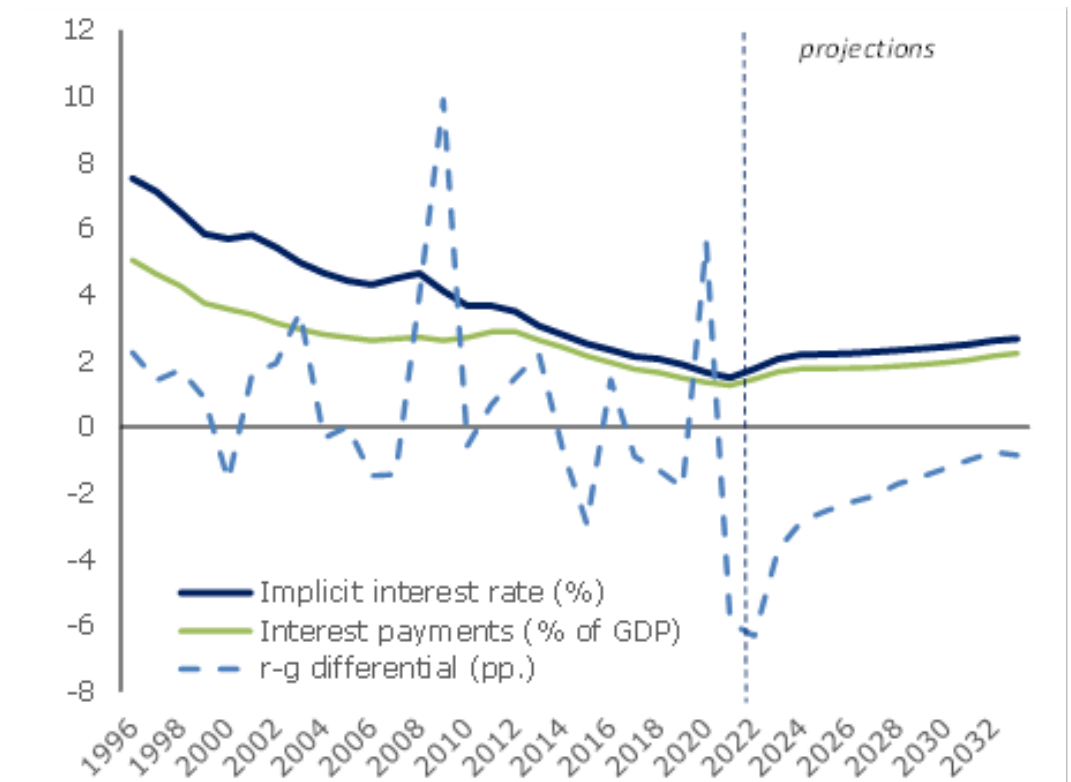
# High debt levels and tightening financing conditions

*Euro area general government debt ratio (%)*



Source: Debt Sustainability Monitor 2022

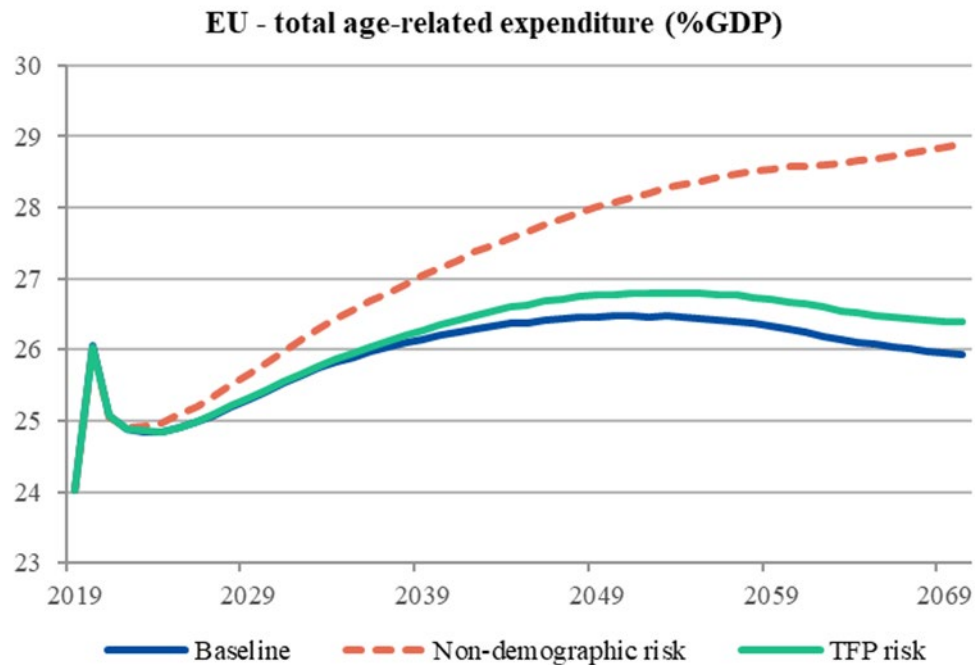
*Financing conditions in the EU*



Source: QREA 2022 / 4

# Population ageing and climate change

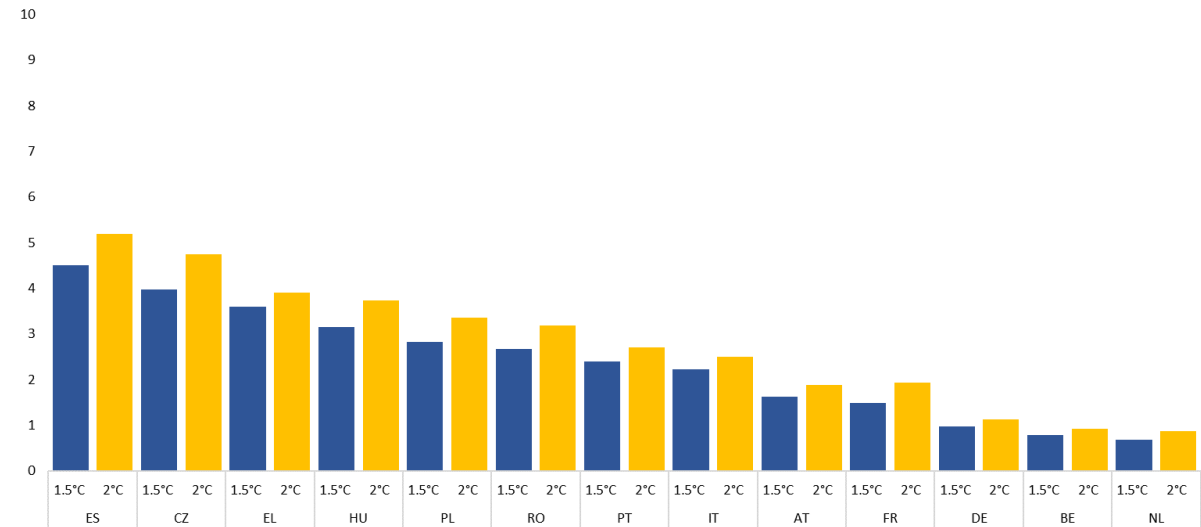
## Projected total (public) age-related spending



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

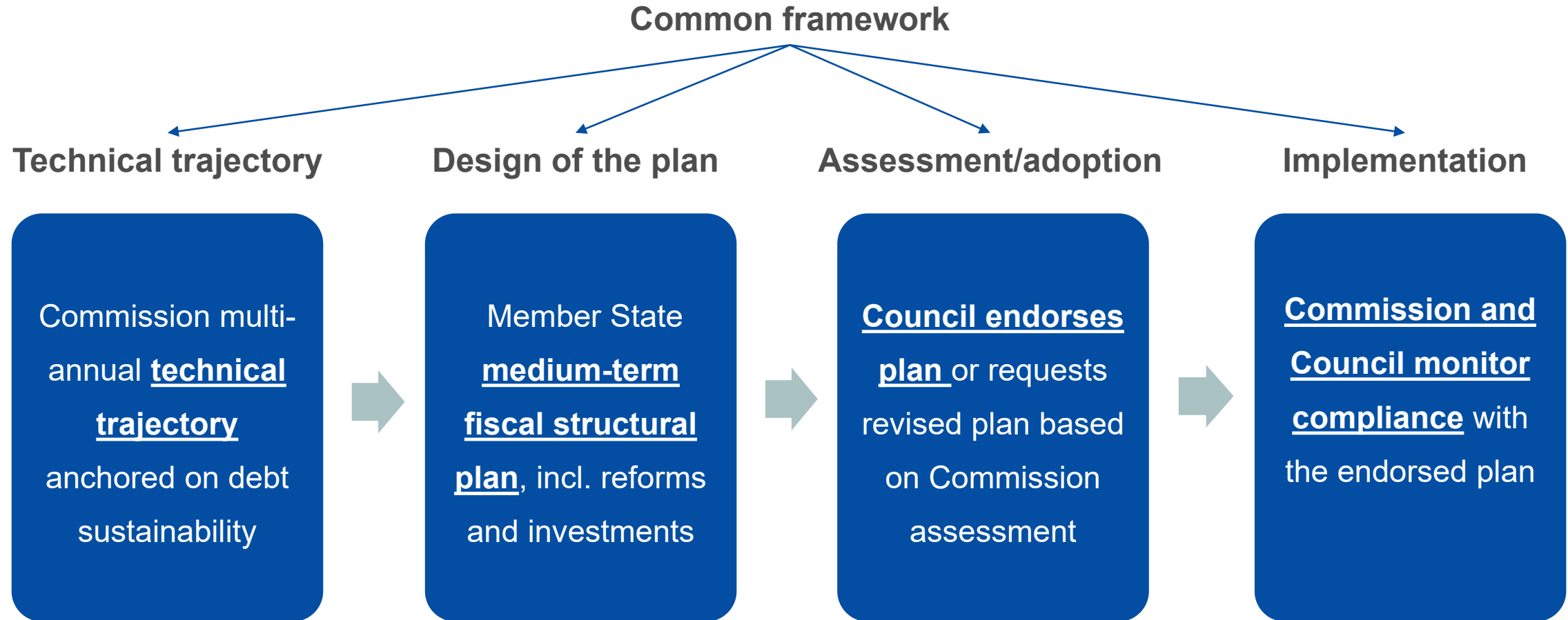
- *Key objectives and principles*
- *Focus on the technical trajectories / information and planned fiscal path*

# 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





# Technical trajectories or information, and planned fiscal path

- **Fiscal path**, over at least 4 years: put forward by the **Member States** in their plans, and to be endorsed by the **Council**. Should ensure that:
  - **Debt** is put on a downward path or stays at prudent levels, with sufficient certainty (“plausibly”)
  - **The deficit** is (brought and) maintained below 3% of GDP over the medium term
- 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 or deficit > 3% of GDP: **Technical trajectories** based on a common methodology i.e. the **Debt Sustainability Analysis (DSA)**
  - For others: **Technical information** related to the deficit criterion

# The DSA as a budgetary planning tool

- *What DSA are we talking about?*
- *Advantages for fiscal surveillance*
- *De-mystifying the DSA (usual criticisms)*

# What DSA are we talking about?

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

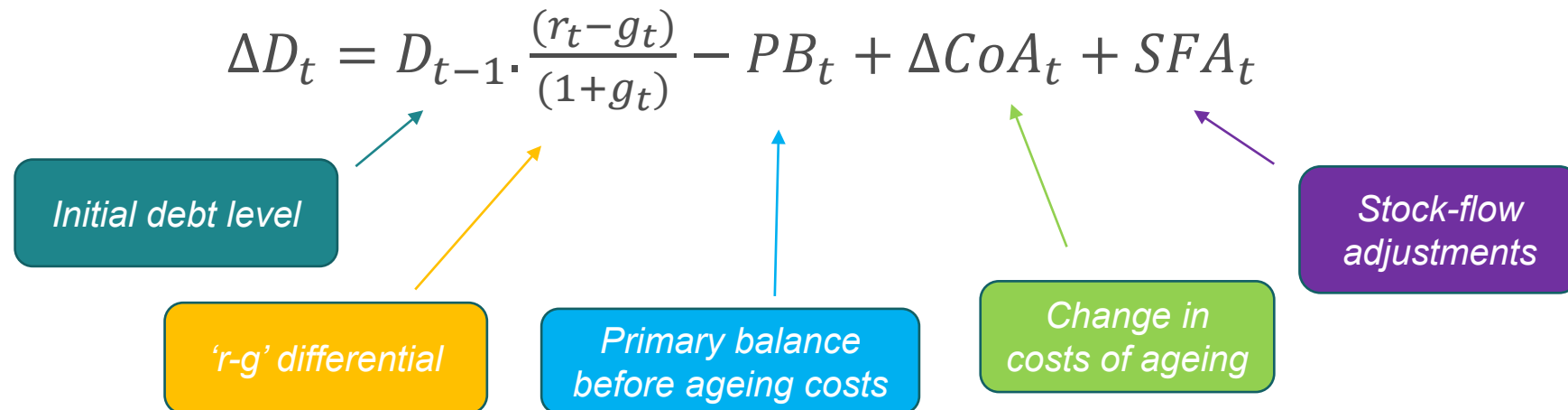
- Currently mainly used to **identify risks that debt will not stabilise in the future, based on current policies, and highlight the need for policy action**
- Risk assessment depends on the projected **debt level** and **trajectory**, the **room for corrective action** if needed (an indication of fiscal 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



- 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 Commission's DSA is a well-established framework

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

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

**Since 2010-11:** Introduction of a multidimensional 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** published every “non-FSR” year

[Fiscal sustainability: Council adopts conclusions - Consilium \(europa.eu\)](#)



# 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 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
<b>Stability and Growth Pact</b>		
<b>-Corrective arm</b>		
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.
<b>-Preventive arm</b>		
Assessment of Stability and Convergence 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

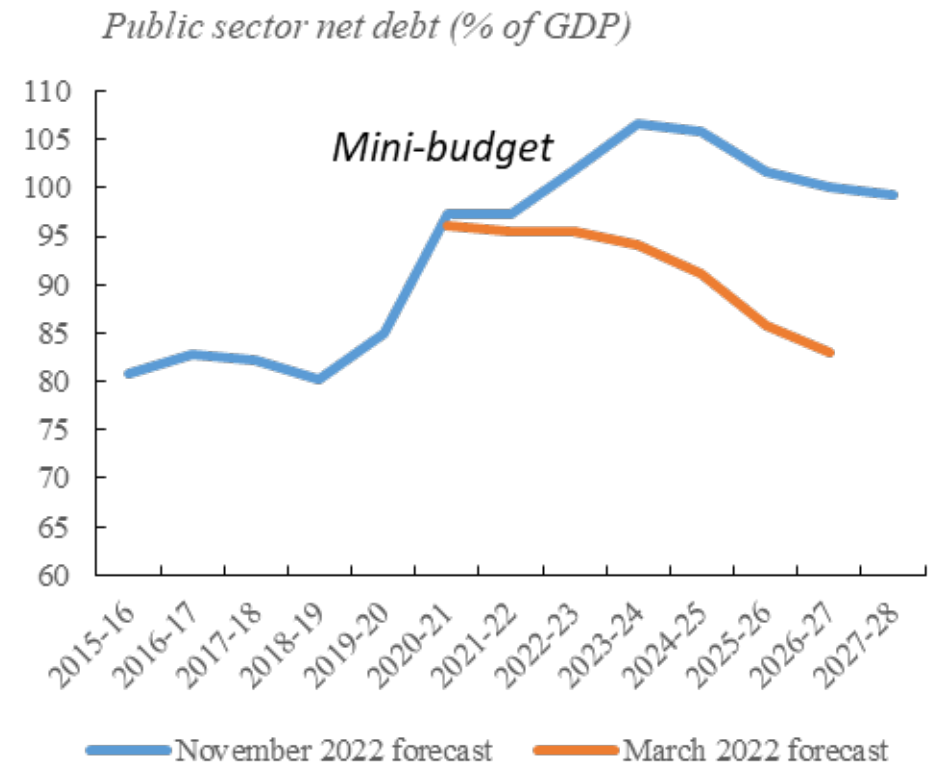


# De-mystifying the DSA:

## 1) Does it rely too much on the assumptions?

- The DSA reflects *fundamentals* including the current level of indebtedness, the capacity to repay debt (notably linked to economic growth), risk premium, contingent liabilities, and policy orientations
- Results can change depending on the (evolving) macro-financial environment and policy orientations
- Is that bad?

**Public debt projections in the UK: before and after the 'mini-budget' announcement**



Source: OBR (Economic and fiscal forecast, November 2022)

## 2) Is it too complex?

- A certain degree of complexity is needed to **rightly capture risks**: e.g. the snapshot level of debt alone is a poor predictor of debt sustainability risks (IMF, 2021; ECB, 2017)
- Yet, **high degree of transparency**:
  - Regular publications with extensive explanations on the assumptions and the methodologies

[Debt Sustainability Monitor 2022 \(europa.eu\)](#)

[Fiscal Sustainability Report 2021 \(europa.eu\)](#)

[The 2021 Ageing Report: Economic and Budgetary Projections for the EU Member States \(2019-2070\) \(europa.eu\)](#)

[...]

- Most of the analysis can be **replicated** in Excel spreadsheets

# Some lessons from illustrative 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

## Safeguards

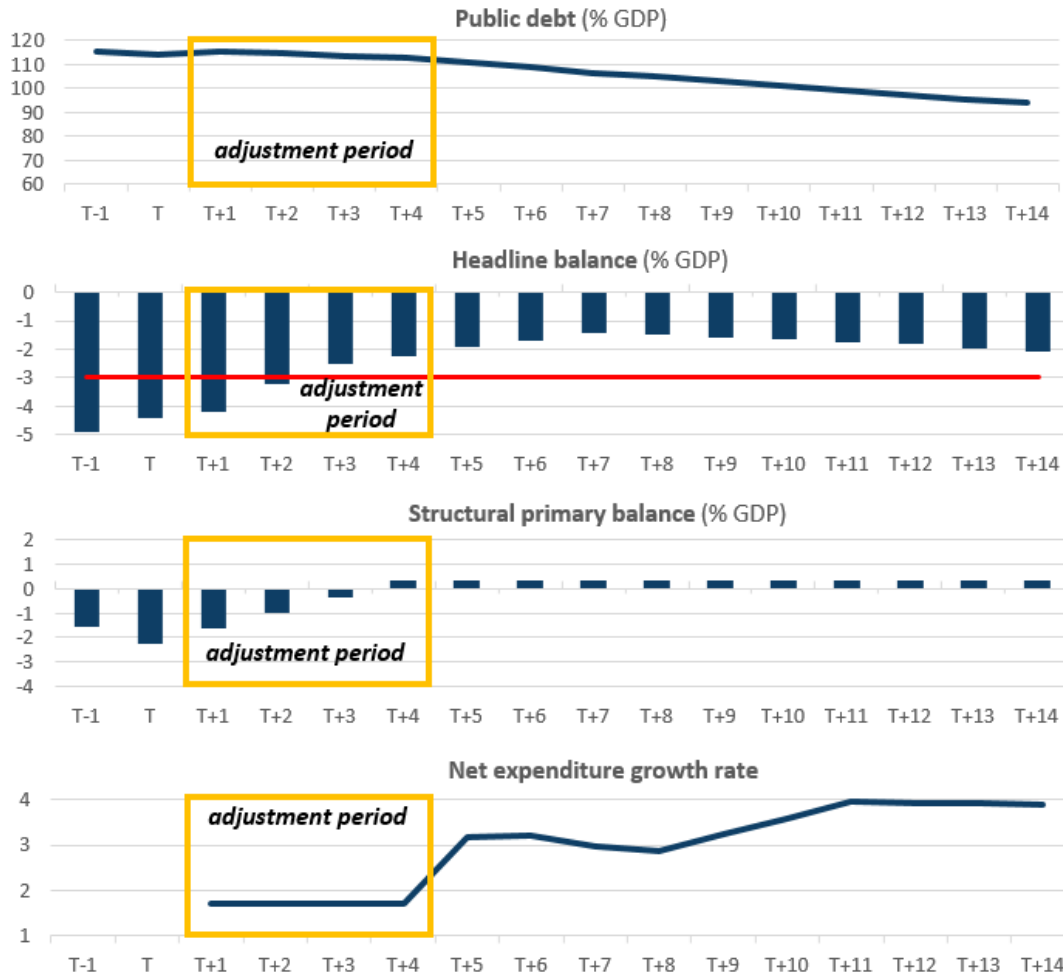
- 0.5% of GDP minimum adjustment for as long as the deficit is above 3% reference value
- Debt at the end of the planning horizon (4 years) lower than at the beginning
- No-backloading provision and no-expansion safeguard

# Methodology to assess ‘plausibility’

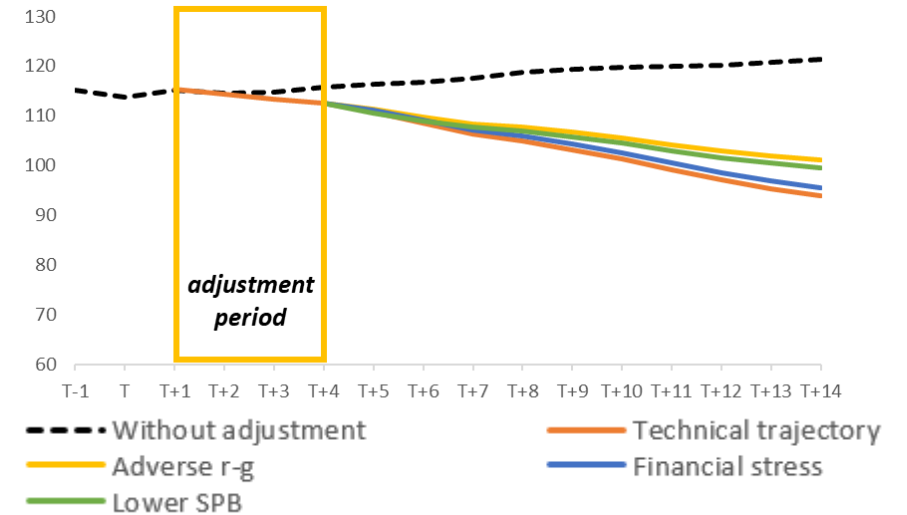
- “Public debt ratio should be declining, or stay at prudent levels, under the deterministic scenarios of the Commission’s medium-term public debt projection framework described in the Debt Sustainability Monitor 2022”:
  - The baseline and three stress tests (adverse ‘r-g’, financial stress, lower structural 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)

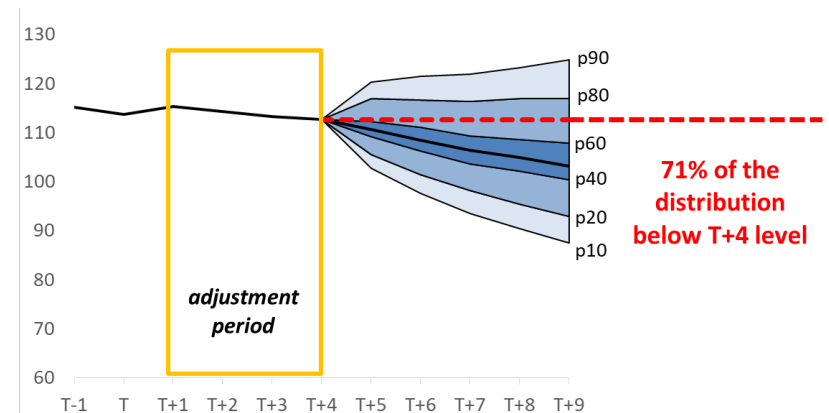
Under technical trajectory (0.65 pp of GDP per year)



Debt: technical trajectory and deterministic stress tests

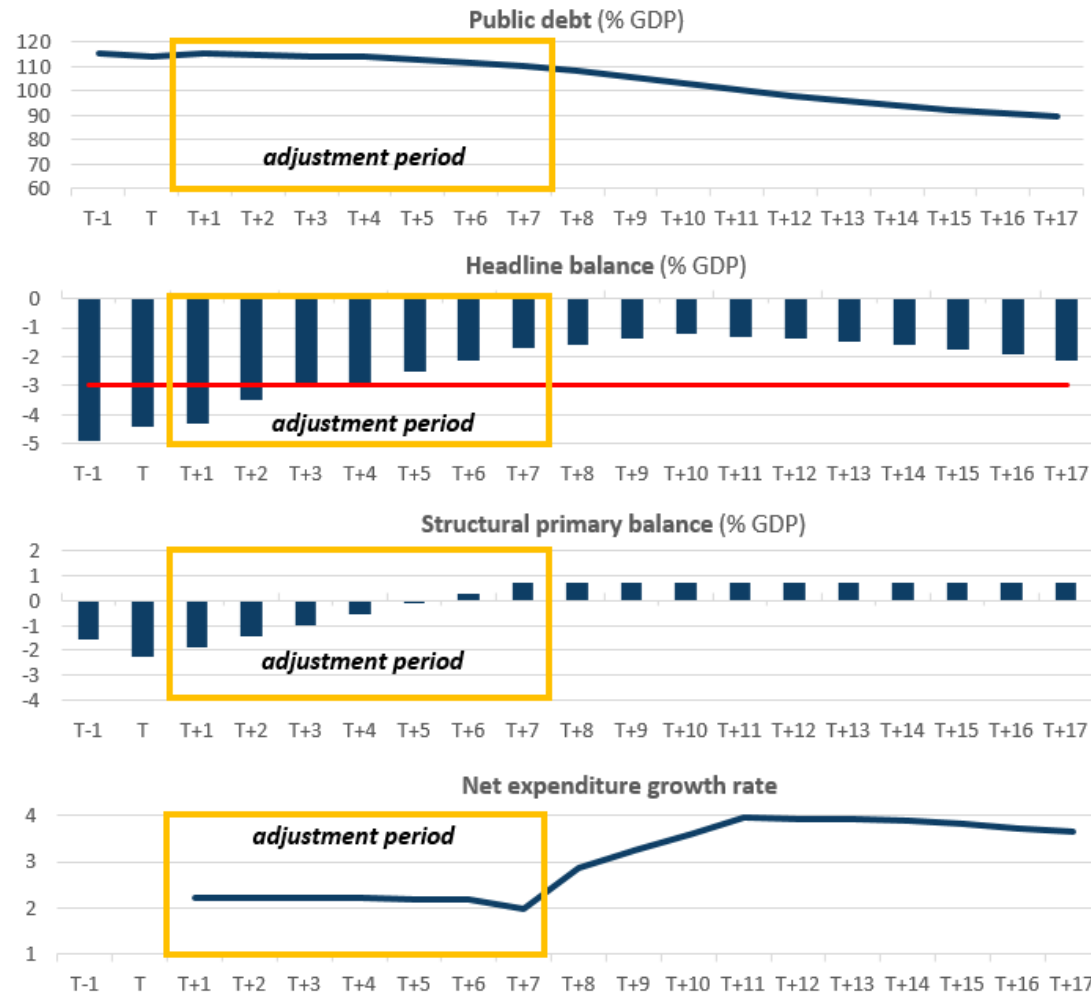


Debt: stochastic projections around technical trajectory

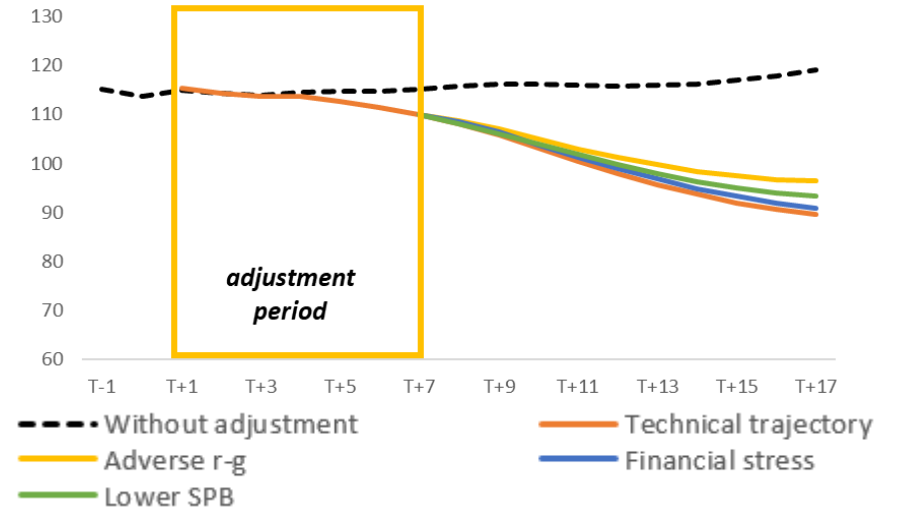


# Stylised results for a high-debt country, 7-year adjustment period (extension)

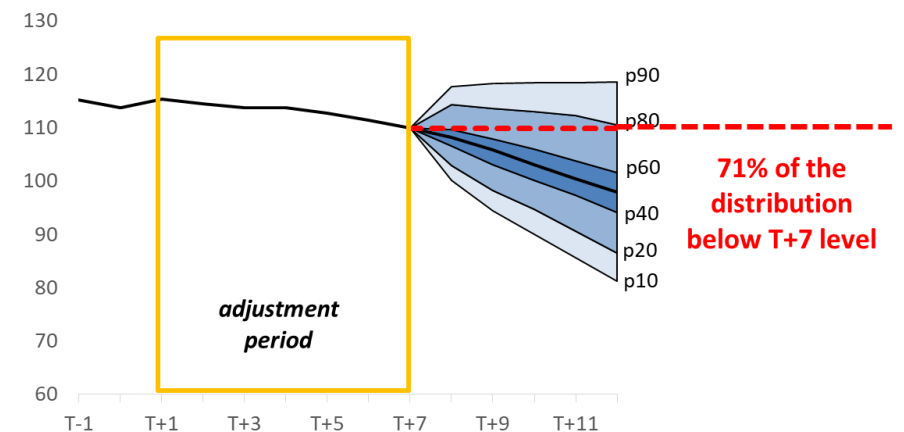
Under technical trajectory (0.4 pp of GDP per year)



Debt: technical trajectory and deterministic stress tests

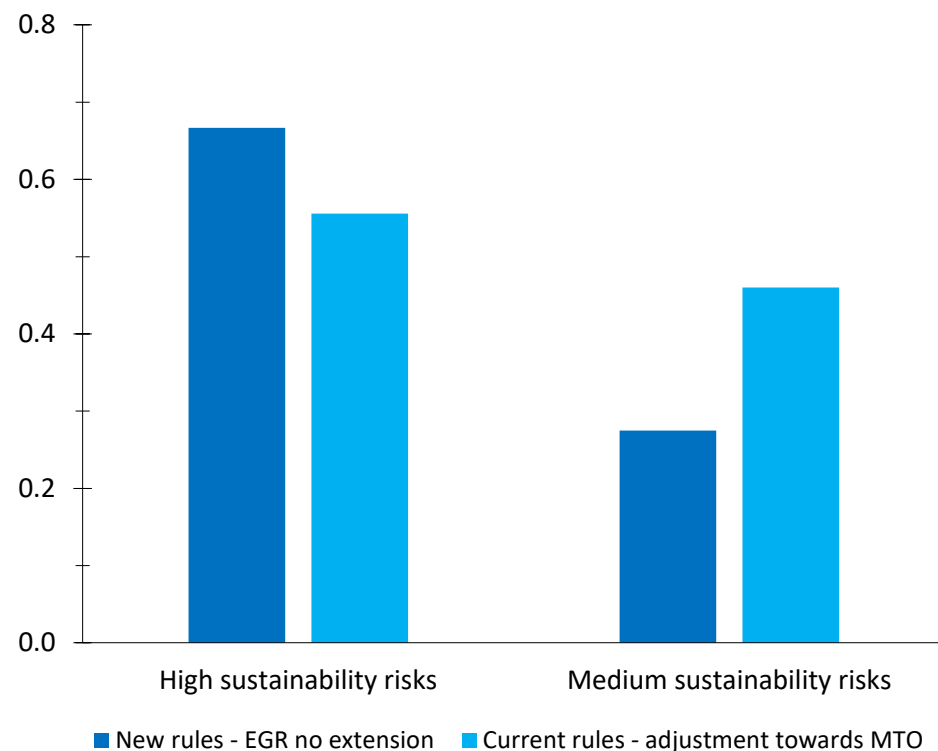


Debt: stochastic projections around technical trajectory



# 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

# Thank you



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