Conselho das Finanças Públicas

Fiscal Risks in Portugal: The approach of CFP

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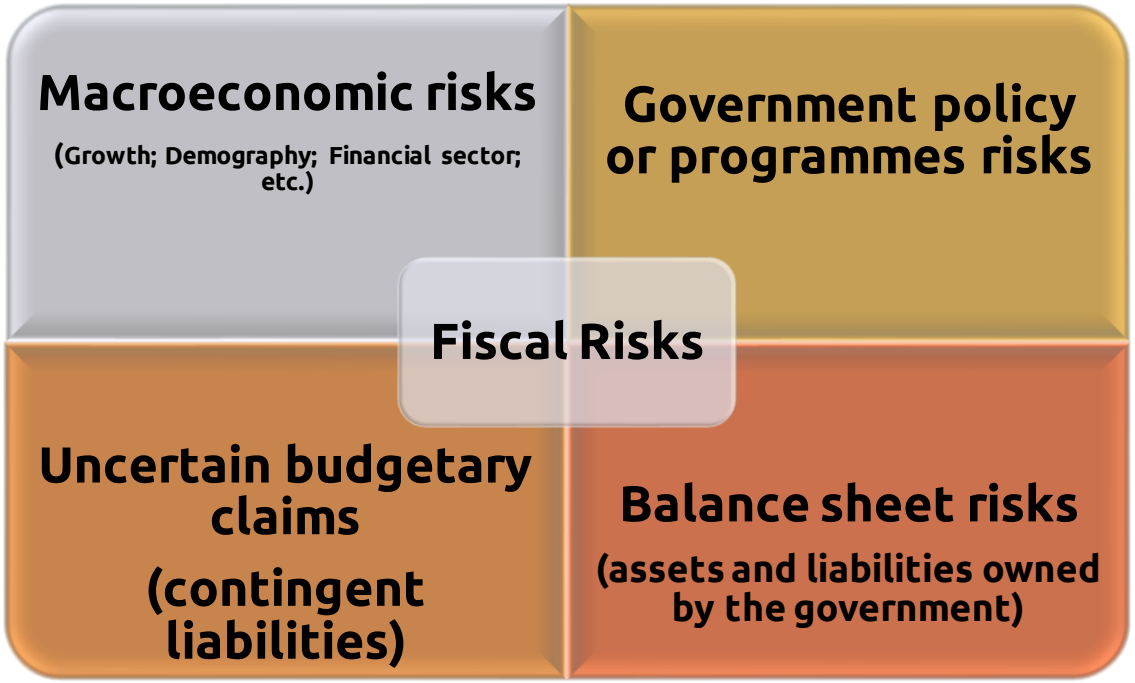
Definition and classification of fiscal risks

- Fiscal risks can be defined as “the probability of significant differences between actual and expected fiscal performance” (OCDE/Kopits, 2014) or “the possibility of deviations of fiscal outcomes from what was expected at the time of the Budget or other forecast” (IMF, 2008).
- Fiscal risks are not the same as fiscal pressures, which are phenomena generally integrated in forecasts (e.g. ageing). However, the distinction sometimes is not clearcut: it all depends on which assumptions and developments you include in your central projection and those you regard as potential (significant) deviations (OBR, 2017).



Source: OECD (2020), adapted

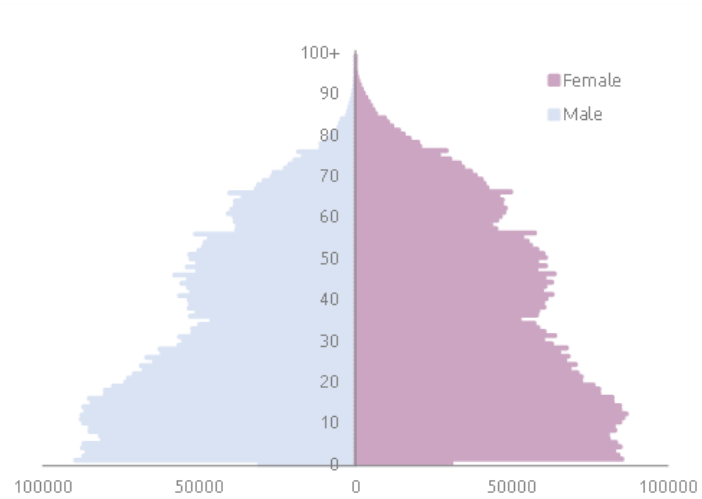
Macroeconomic Risks: (1) the impact of demographic changes

- The productivity (TFP) growth and demographic dynamics are the main risks to the growth of the Portuguese economy:
  - Economic growth in the long-run is projected to converge to 0.7%, and results from a contribution of 0.6 p.p. of the TFP (in line with the 2002-2019 average), of 0.4 p.p. of capital and -0.3 p.p. of labour.

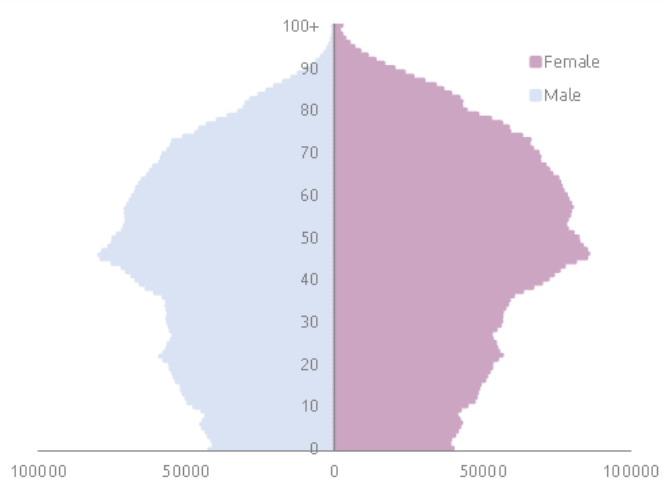
- The negative contribution of labour is explained by an expected downward trajectory of the working age population, in line with the EUROPOP 2023 projections.

Population Pyramids for Portugal

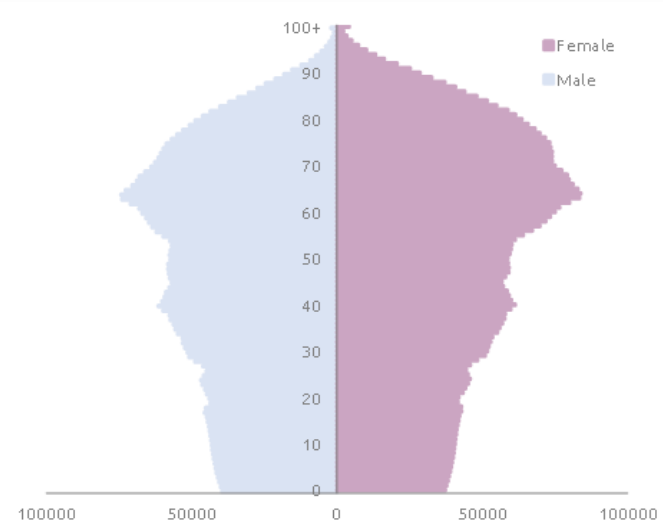
1977



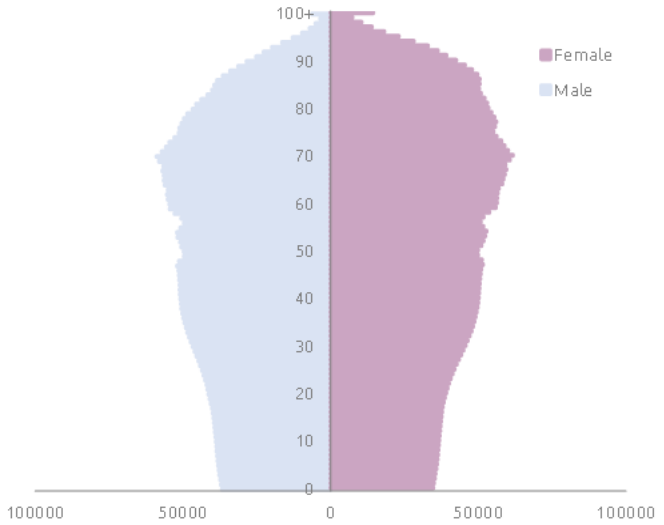
2022



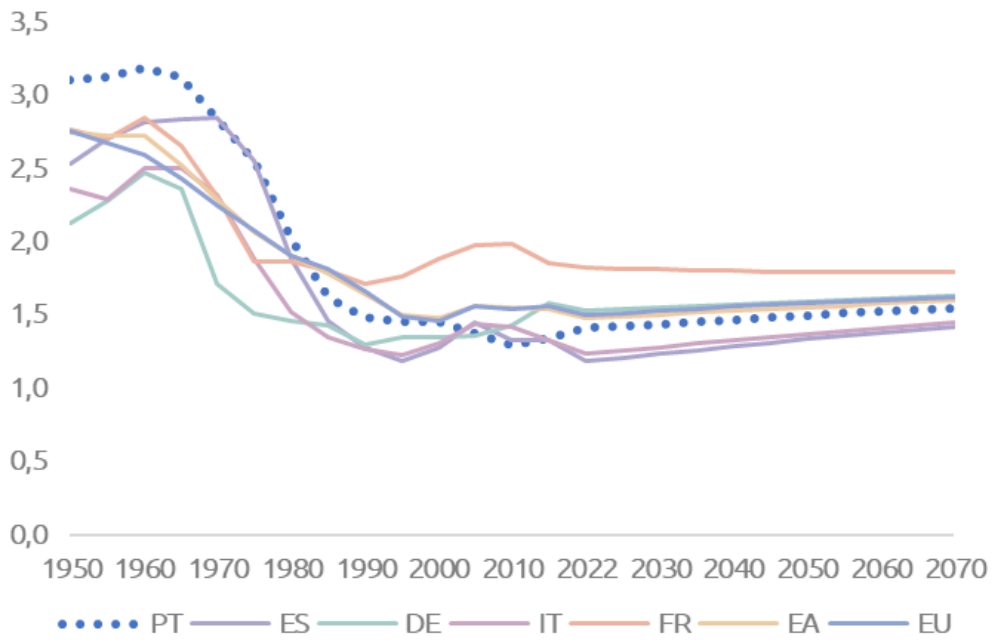
2040



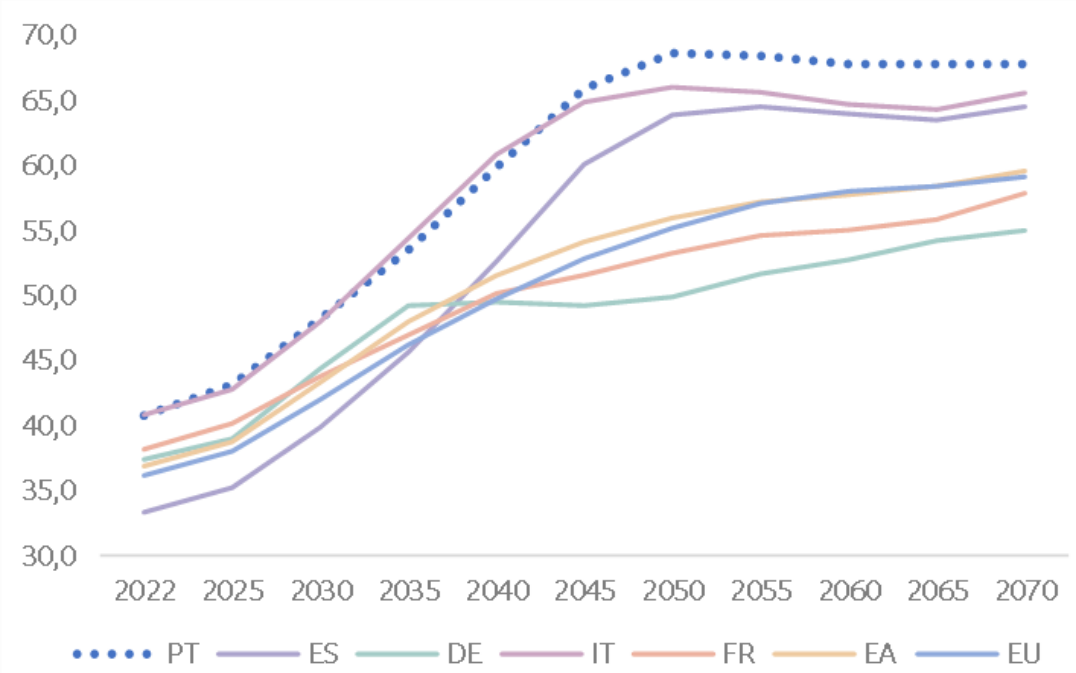
2070



Fertility rate (%)



Old-age dependency ratio [65+/20-64] (%)



Impacts

Impact on economic growth:

Population aging affects economic growth, **directly** through the impact on **employment** resulting from the expected decrease in the active population and through changes in **savings** and **investment** patterns, with an impact on consumption decisions and capital stock.

Impact on public finances:

The decrease in the population of working age, could, on the one hand, affect the collection of tax and contributory revenues, and, on the other hand, place **upward pressure** on the public expenditure, e.g. **health care and pension expenditure**.

(!) Remark: the importance of reforms in these two sectors (Health Care and Pension Systems), combined with budgetary and public financial management reforms (improving efficiency and the quality of public expenditure) – increasing fiscal space.

Macroeconomic Risks: (2) Climate change

- There are also other risks that may affect economic growth in the medium and long-run, namely:
  - Climate change risks: the economic costs of not achieving the Paris Agreement goal constitute a serious threat for the sustainability of public finances.

Assessment index on the physical risks of climate change (2023)

Drought risk

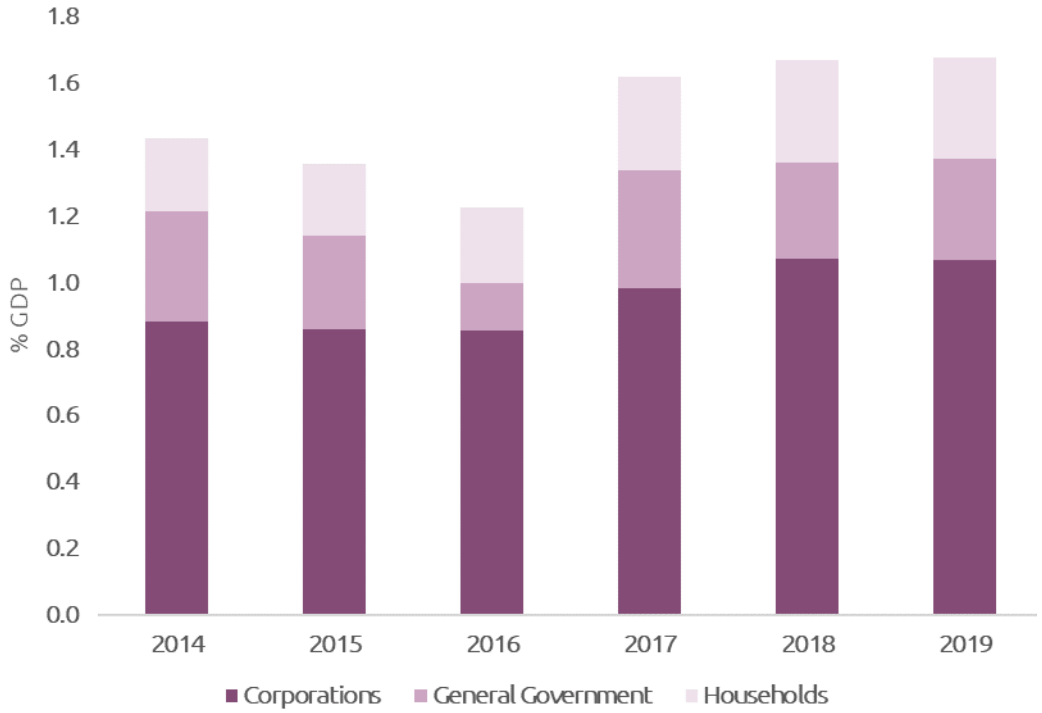
Coastal flood risk

Source: European Commission, INFORM Risk Index 2024. The INFORM project is a collaboration between the Inter-Agency Standing Committee Reference Group on Risk, Early Warning and Preparedness and the European Commission. The European Commission Joint Research Centre is the scientific leader of the INFORM project.

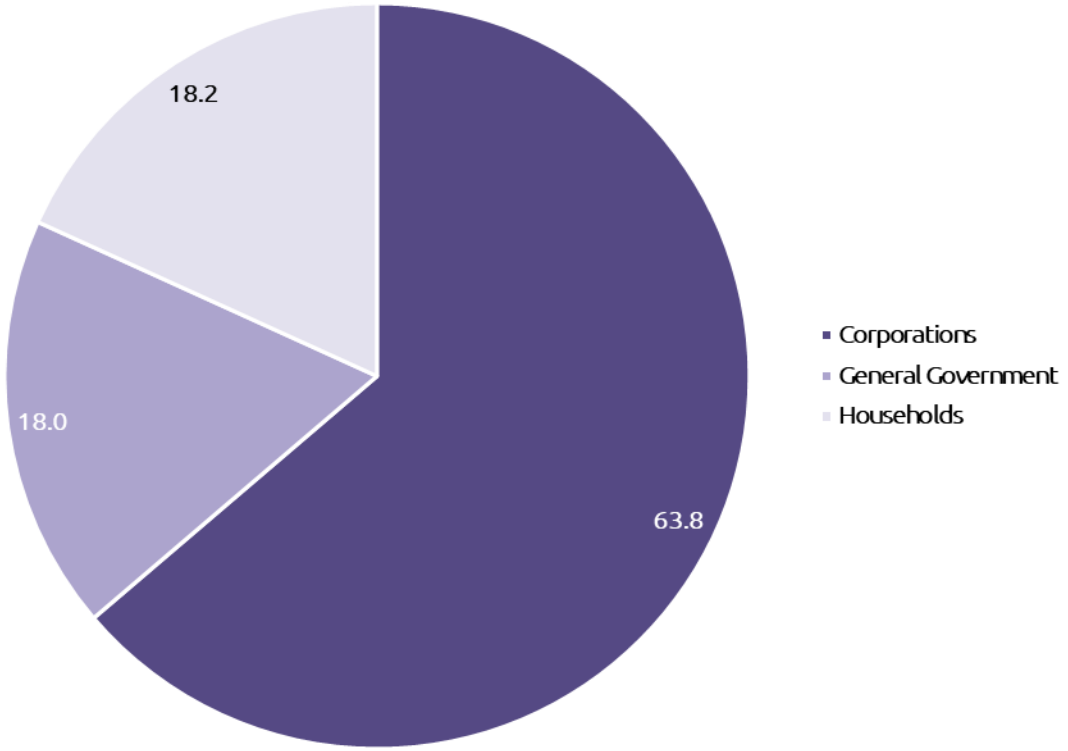
Impact on public finances

National expenditure on environmental protection in Portugal

Evolution by institutional sector (% GDP)

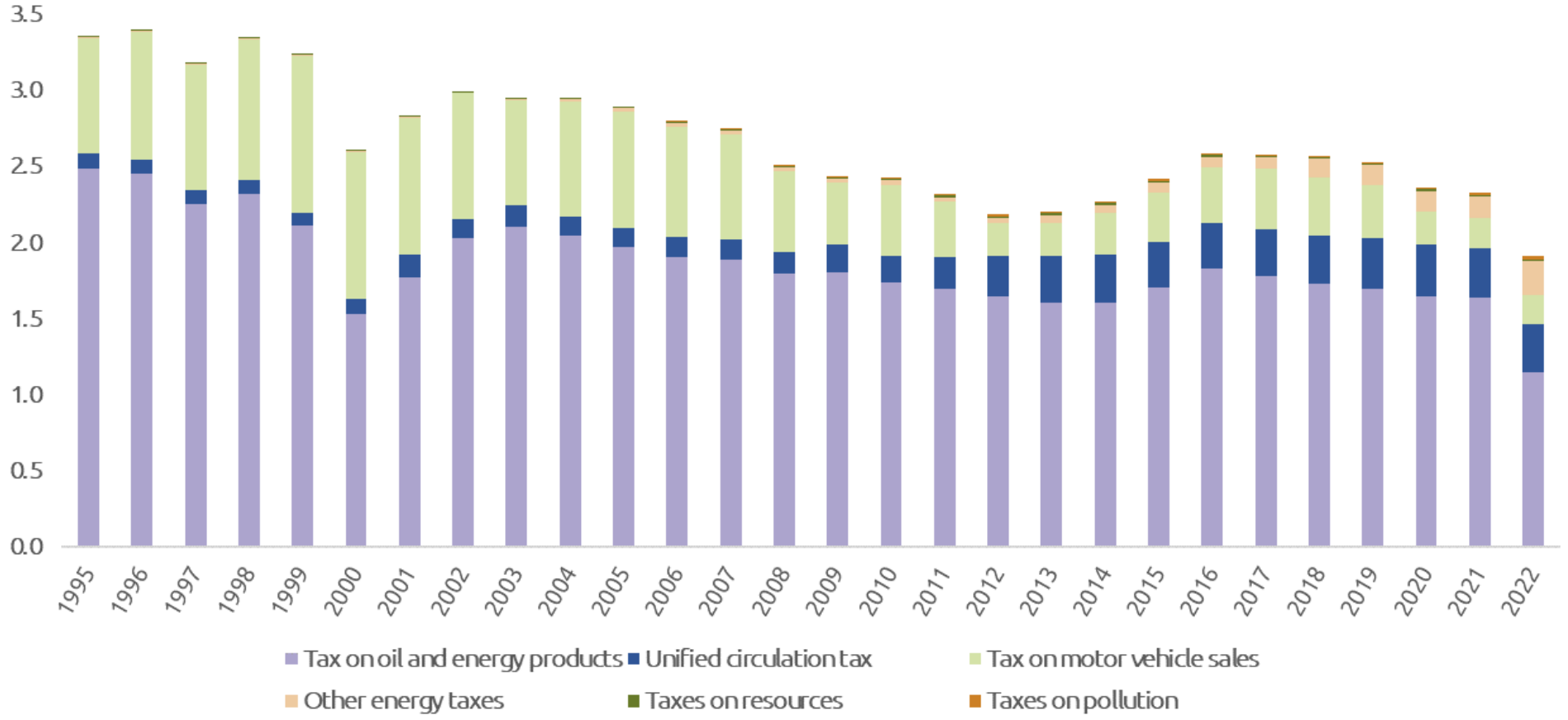


Weight of each institutional sector in 2019 (%)



Source: Eurostat.

The evolution of environmental taxes in Portugal, in % of GDP (1995-2022)



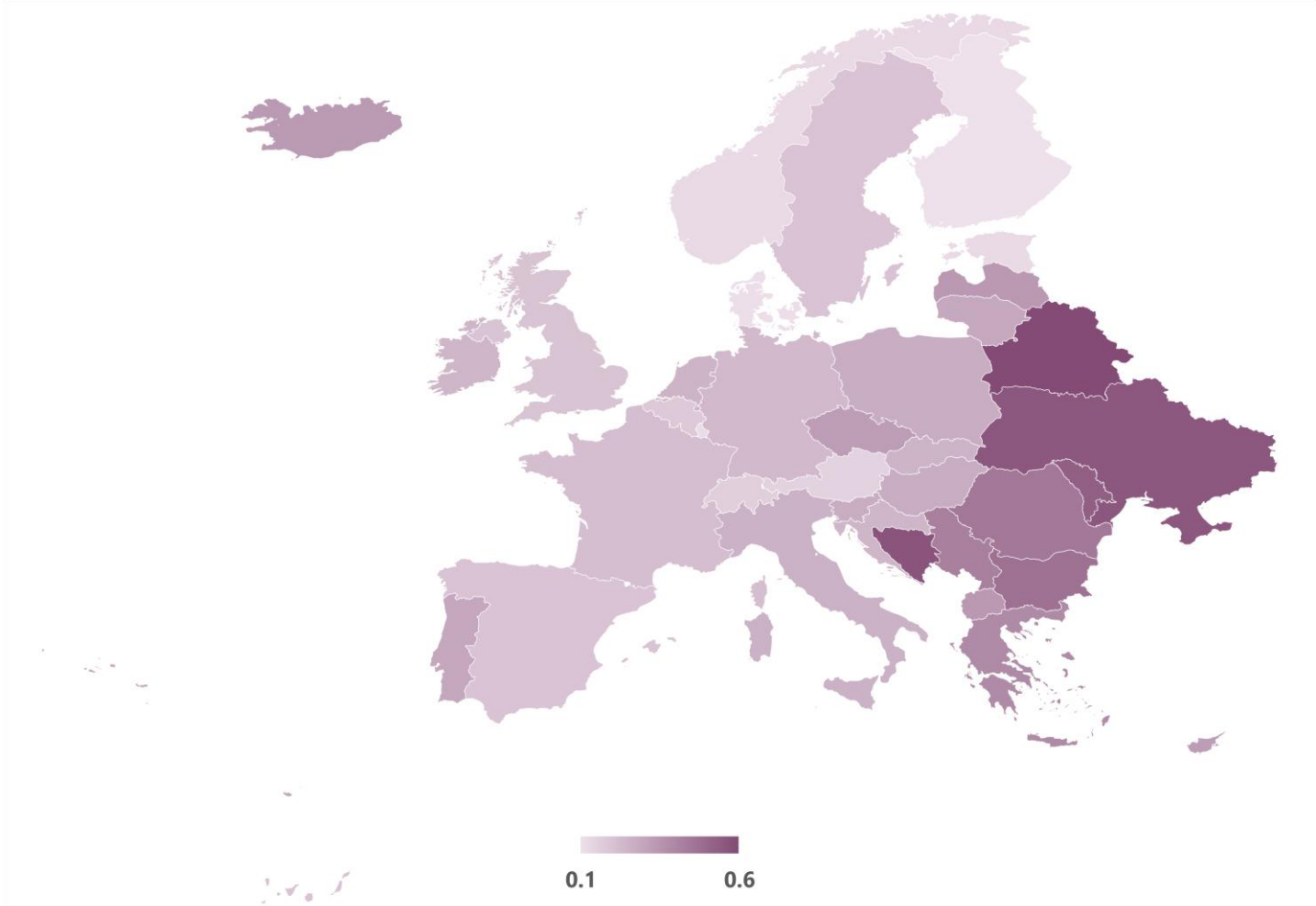
Source: Statistics Portugal | Note: To simplify, for 2007 and earlier, the Unified Circulation Tax (UCT) incorporates the local tax on vehicles, and the traffic and haulage road taxes.

Macroeconomic Risks: (3) Other catastrophic events

Other catastrophic events, such as earthquakes, *tsunamis* or cyber-attacks may also threat economic growth in the medium and long run:

- Earthquakes and *tsunamis* can destroy the productive capacity of the economy (capital stock) and cause the loss of thousands of lives (labour).
- Cyber-attacks can paralyse the economic activity and cause great financial losses.

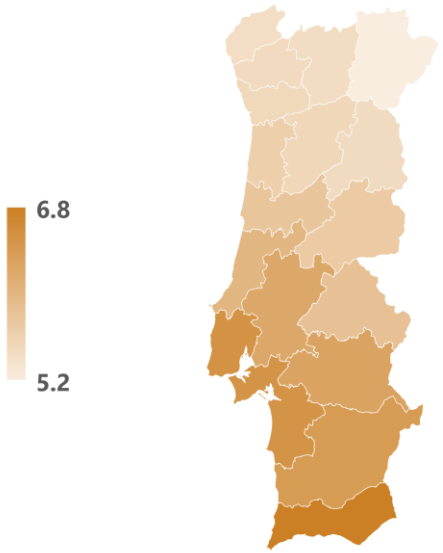
Cybersecurity Exposure Index (2020)



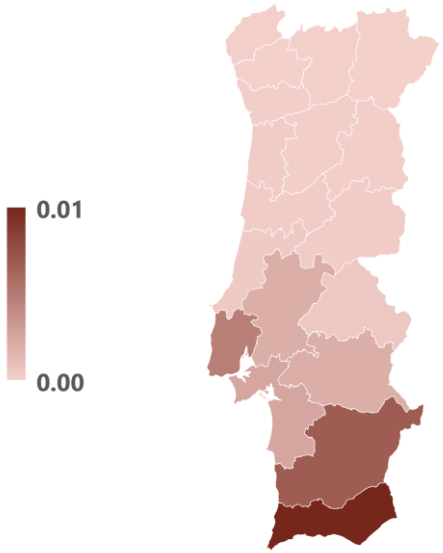
Source: PasswordManagers.co - Cybersecurity Exposure Index 2020. | Note: Values ranging from 0 to 1, with 0 being the lowest level of cybersecurity exposure and 1 the highest.

Seismic risk assessment index (2006)

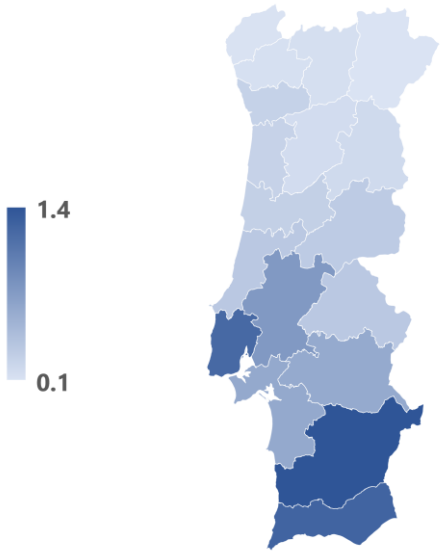
Seismic hazard index



Expected annualized losses of seismic risk in terms of fatalities (‰)

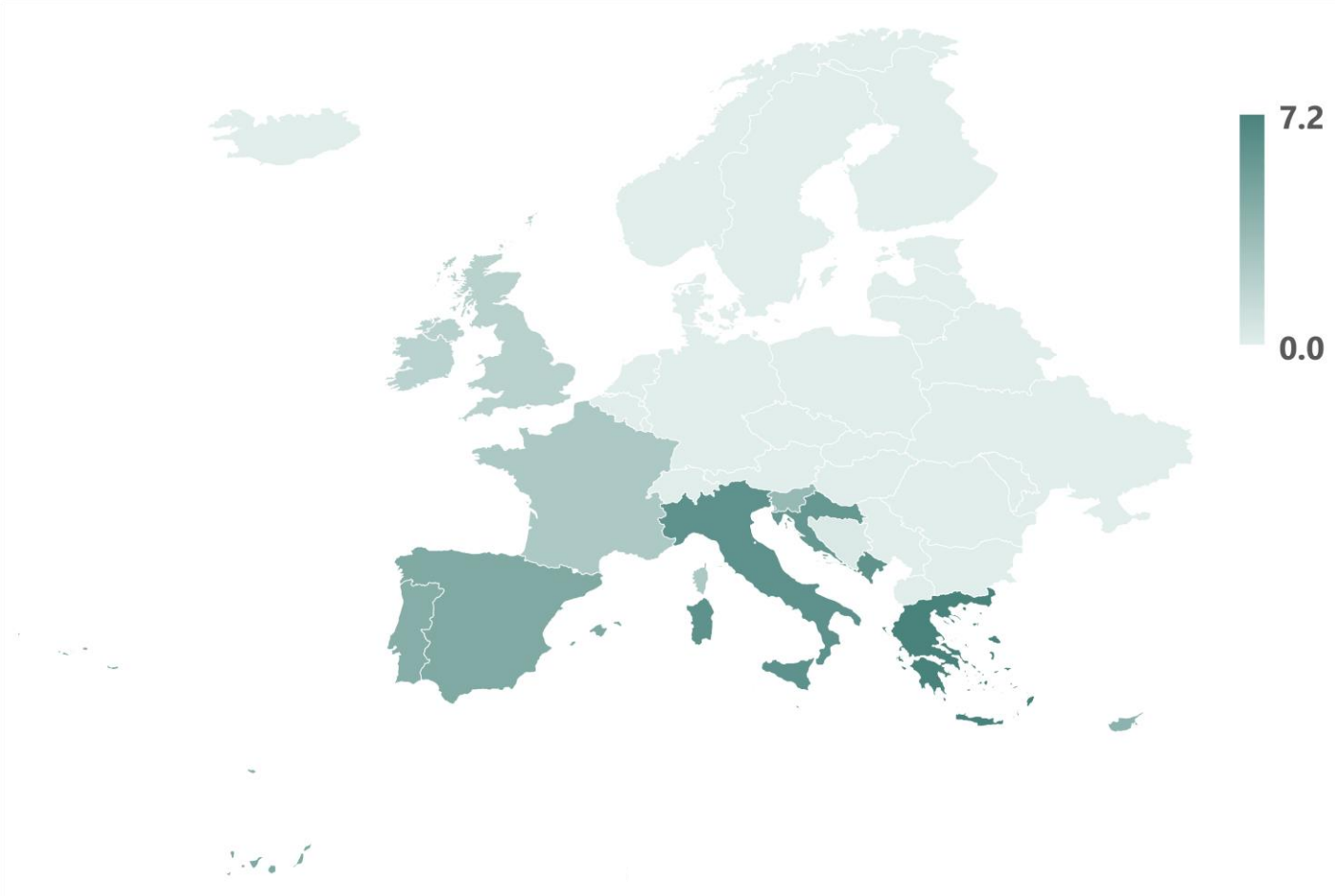


Expected annualized losses of seismic risk in economic terms (‰)



Source: Adapted from Sotto-Mayor (2006).

Tsunami risk assessment index (2023)



Source: European Commission, INFORM Risk Index 2024. The INFORM project is a collaboration between the Inter-Agency Standing Committee Reference Group on Risk, Early Warning and Preparedness and the European Commission. The European Commission Joint Research Centre is the scientific leader of the INFORM project.

Addressing/mitigating impacts on Public Finances

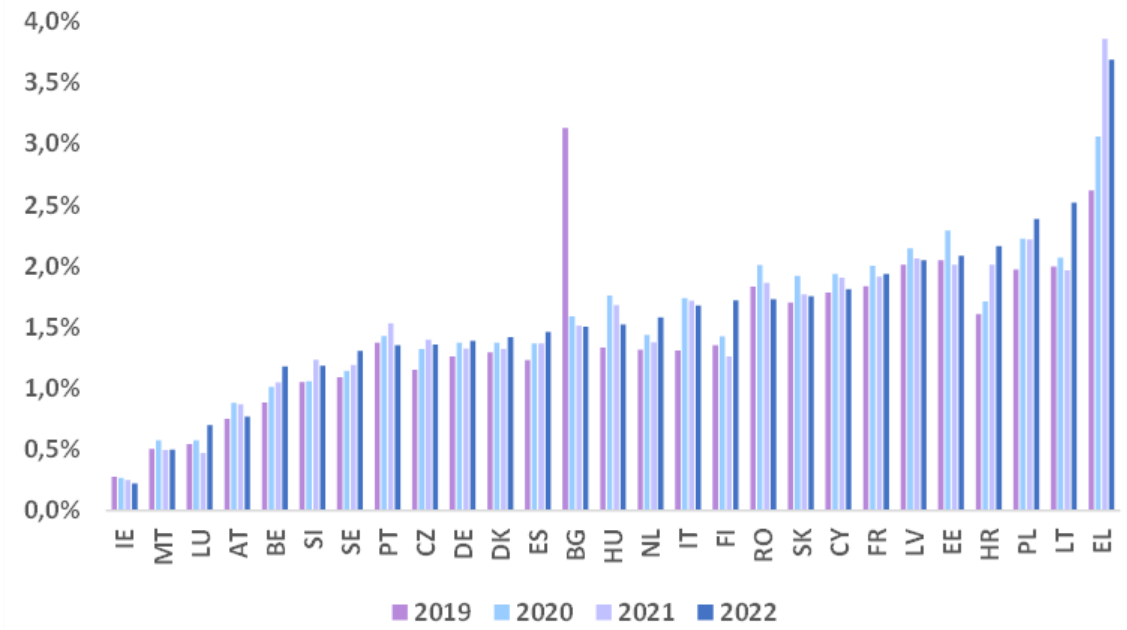
Risks related to Government policy or programmes

❑The Sector of Defence

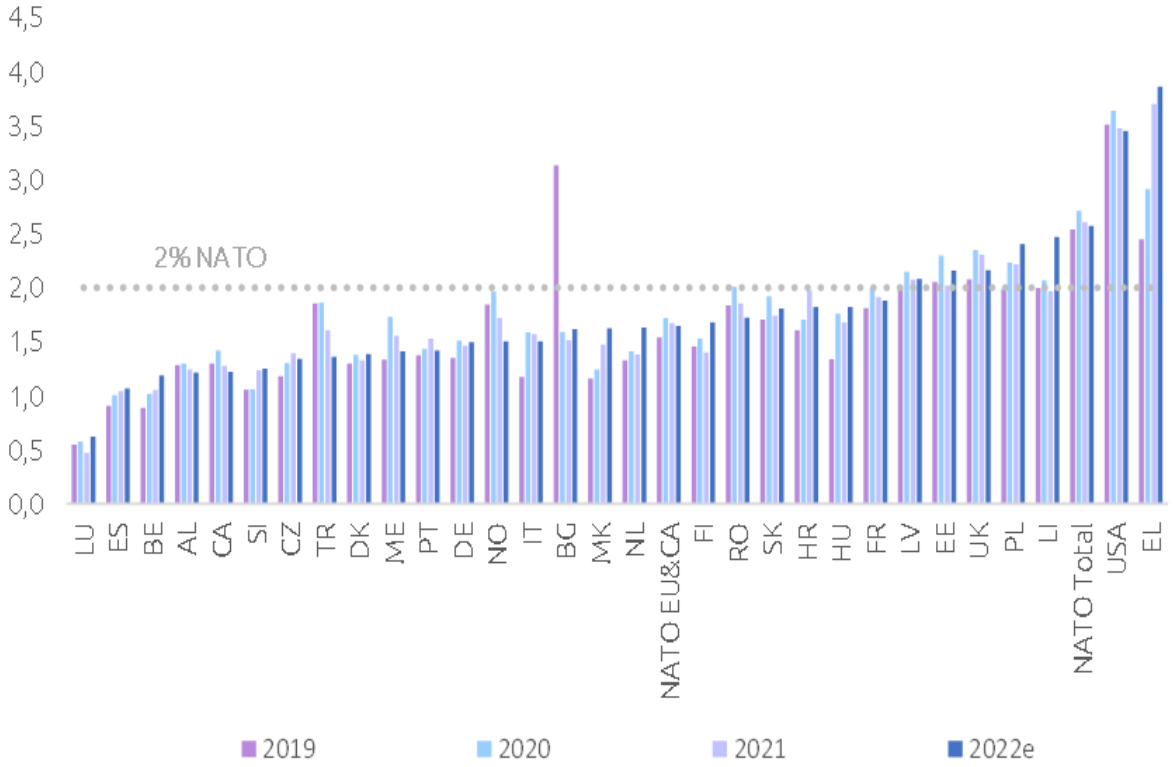
Why?

- ➢New Geopolitical risks
- ➢International commitments taken by Portugal before its NATO allies (public expenditure allocated to Defence corresponding to 2% in GDP). Portugal has not yet reached this value.
- ➢Reaching the target would imply an annual increase by around 0.6 p.p. of GDP

EU Military expenditure (% GDP)

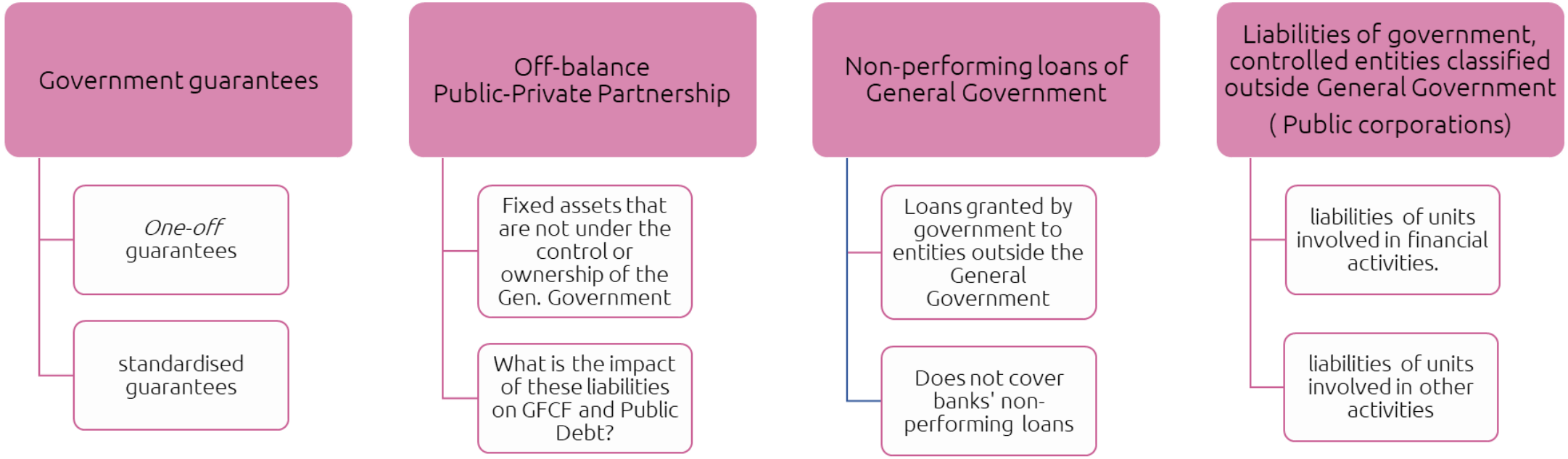


NATO Defence expenditure (%GDP)

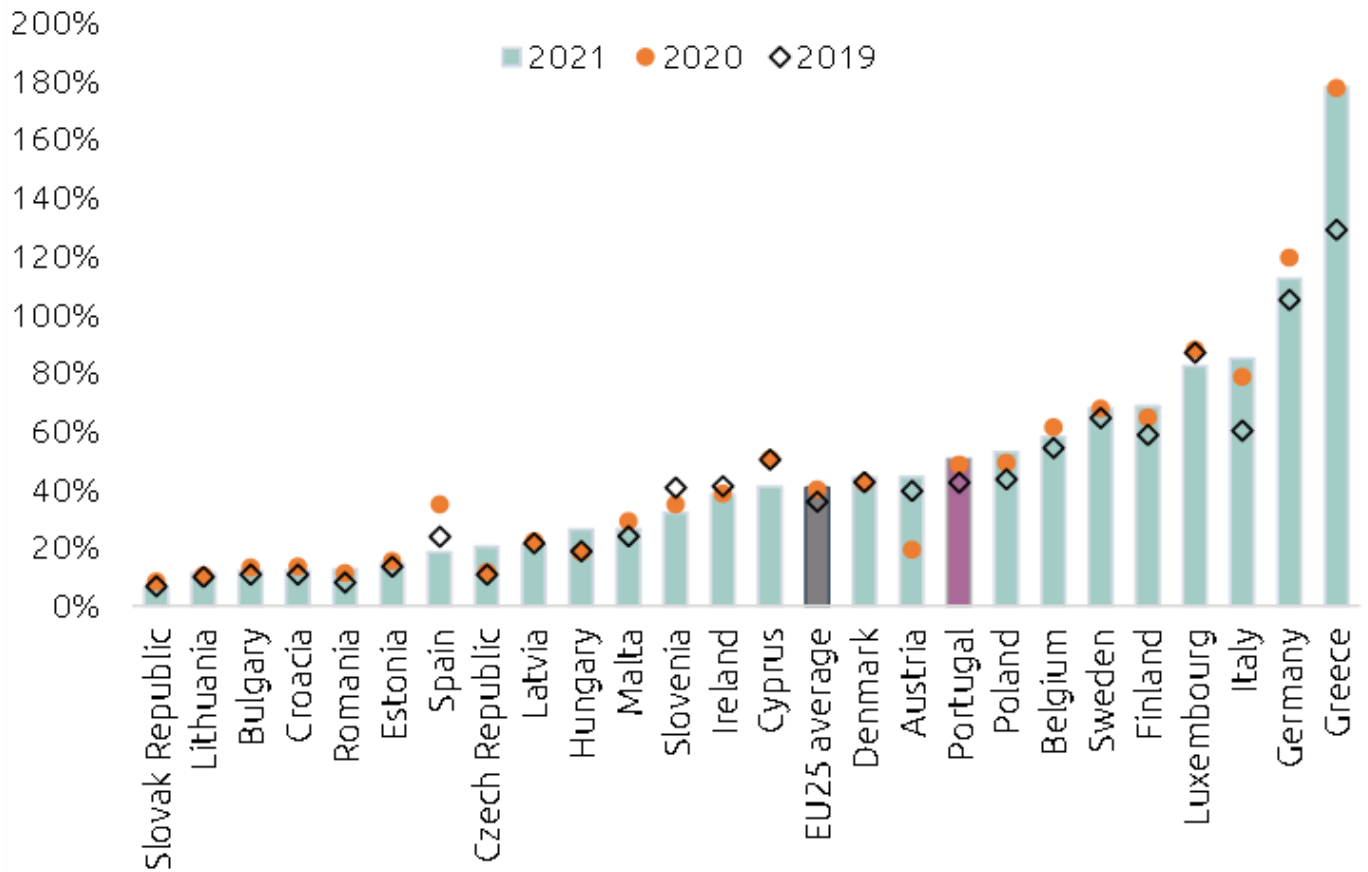


Risks related to Contingent Liabilities

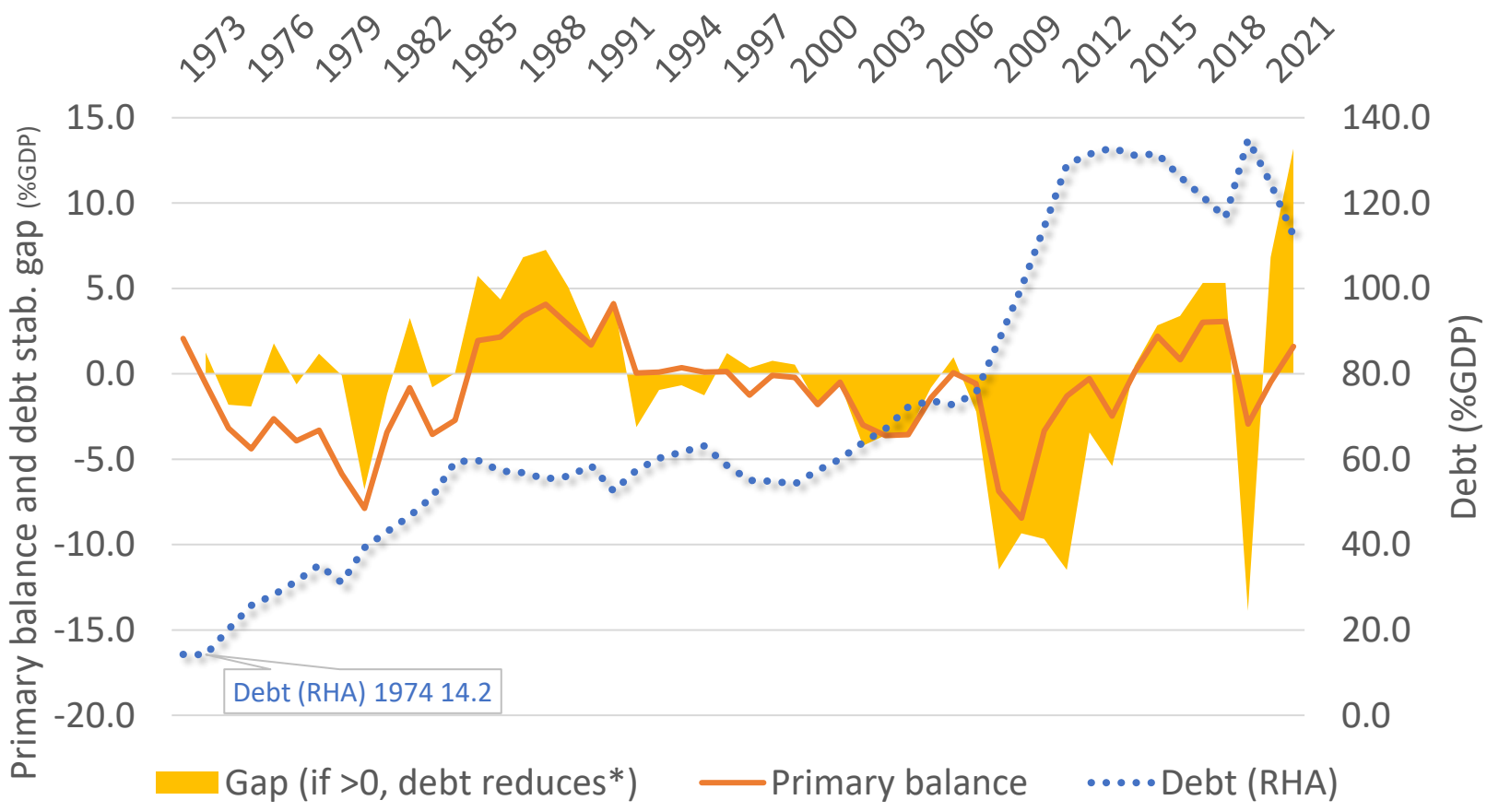
Indicators:



Contingent liabilities



Public Debt sustainability



** Gap : primary balance - debt stabilising primary balance (ignoring stock-flow adjustments)*

- 3 IMF interventions (1977, 1983, 2011)
- Balance of payments & sovereign debt crisis (2011)
- Public debt: low in 1973; ~60% 1985-2002; >130% 2013-16; 102,6% 2023(P)
- r-g and primary balance critical (stock-flow adjustments not to be ignored)

Public Debt sustainability

PRT: Large shocks and different reaction of primary balance to debt accumulation

- Gap between pb and debt stabil. pb
  - Negative 2008-2014
  - Positive and growing 2015-2019
  - Strongly positive post-pandemic (13,2 p.p. GDP 2022)

✓Portugal among just 5 EU countries that managed to achieve in 2022 a debt ratio lower than the 2019 level

Change in debt ratio 2019-2022

Public Debt- short term risks: heatmap

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Basic fiscal variables										
r-g (5 year average)	4,8	4,1	3,8	2,5	0,4	-0,5	-1,3	0,5	-0,6	-2,3
GG debt (% of GDP)	131,4	132,9	131,2	131,5	126,1	121,5	116,6	134,9	124,5	112,4
Cyclically adjusted primary balance (% of potential GDP)	2,0	-0,6	1,3	2,8	0,3	1,9	1,4	0,6	1,4	0,9
Asset and Liability Management										
GFN (% of GDP)	27,0	31,9	30,8	24,8	28,3	21,8	23,3	26,7	25,9	23,5
Share of s-t debt (% od SDD)	10,9	14,9	15,6	18,2	18,7	18,2	17,8	16,7	15,5	17,4
Debt held by nonresidents (% of total debt)	54,2	55,7	52,9	46,2	42,7	41,4	41,7	39,6	36,3	35,5
Average debt maturity (years)	7,8	7,8	7,3	7,3	7,0	6,8	6,7	6,6	6,9	6,7
Long-Term Trend										
Fertility rate (deviation from 2.1)	0,9	0,9	0,8	0,7	0,7	0,7	0,7	0,7	0,8	0,7
L-t projections of public health expenditure (% of GDP)	2,4	2,4	1,7	1,7	1,8	2,3	2,2	2,2	1,7	1,7
L-t projections of public pension expenditure (% of GDP)	0,0	0,0	-0,4	-0,4	-0,6	-1,6	-1,6	-1,6	-2,2	-2,2
Dependency ratio	31,1	34,5	25,1	25,1	25,6	32,7	32,9	32,9	31,6	27,9

high risk average risk low risk

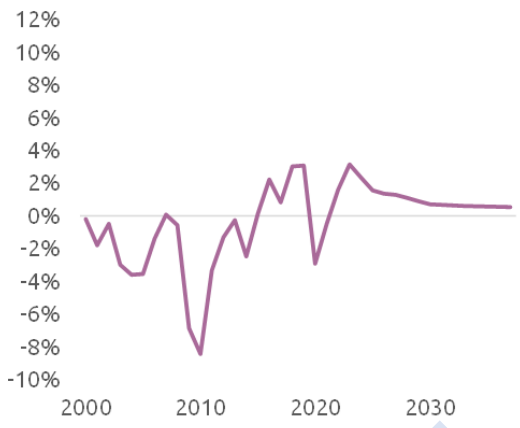
Based on Baldacci, E., I. Petrova, N. Belhocine, G. Dobrescu, e S. Mazraani, (2011a). "Assessing Fiscal Stress." *International Monetary Fund*, Working Paper 11/100.

Debt Sustainability Assessment

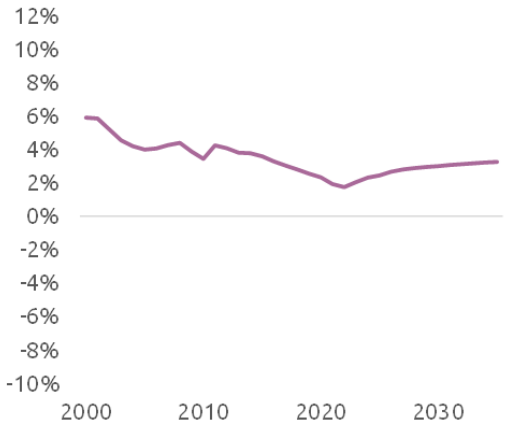
Inputs for sustainability analysis

Nominal GDP (y-o-y, %)

Primary Balance (% of GDP)



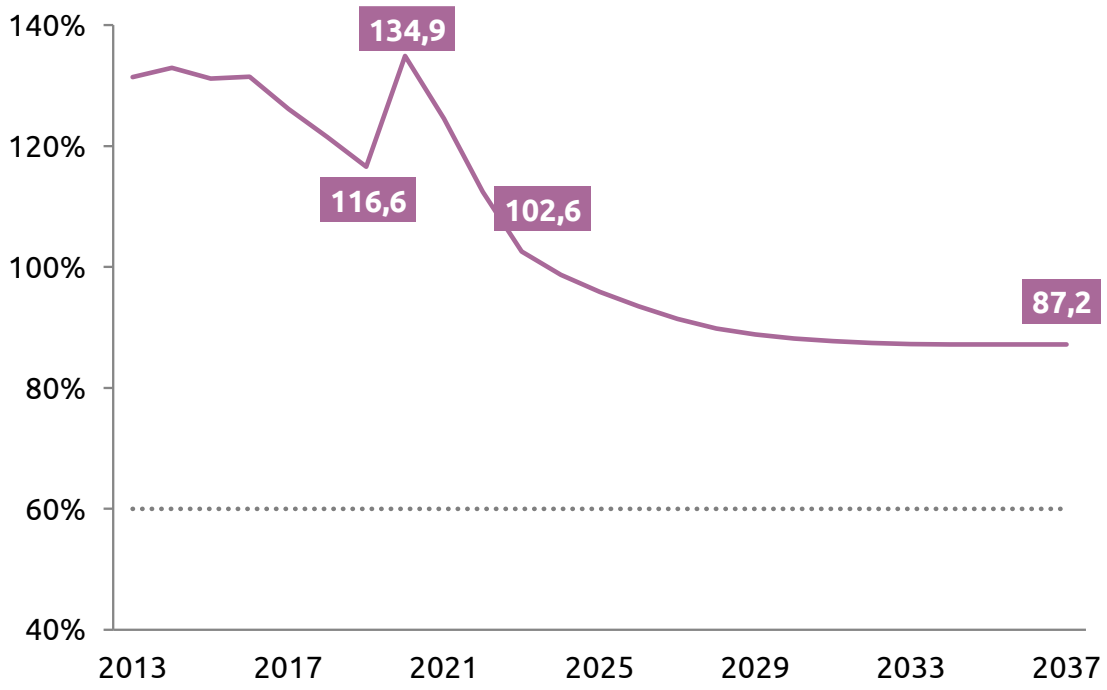
Implicit interest rate (%)



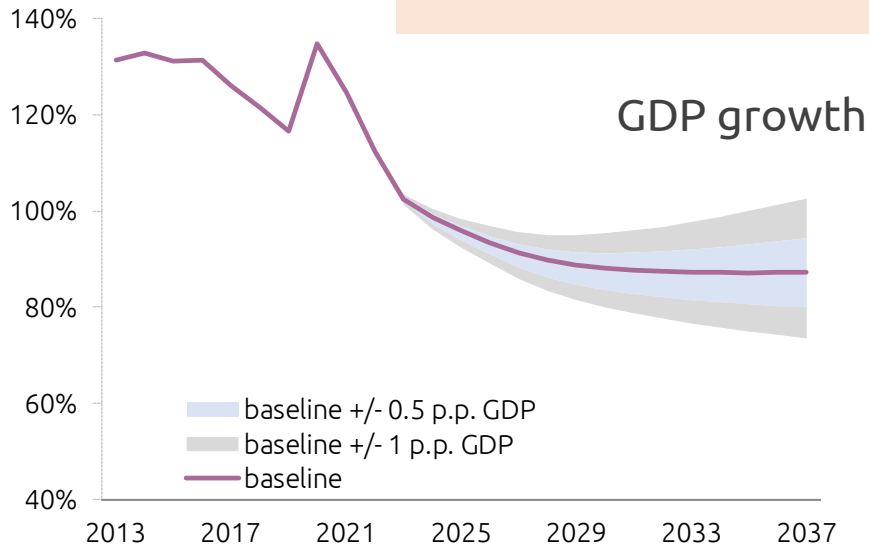
FRF

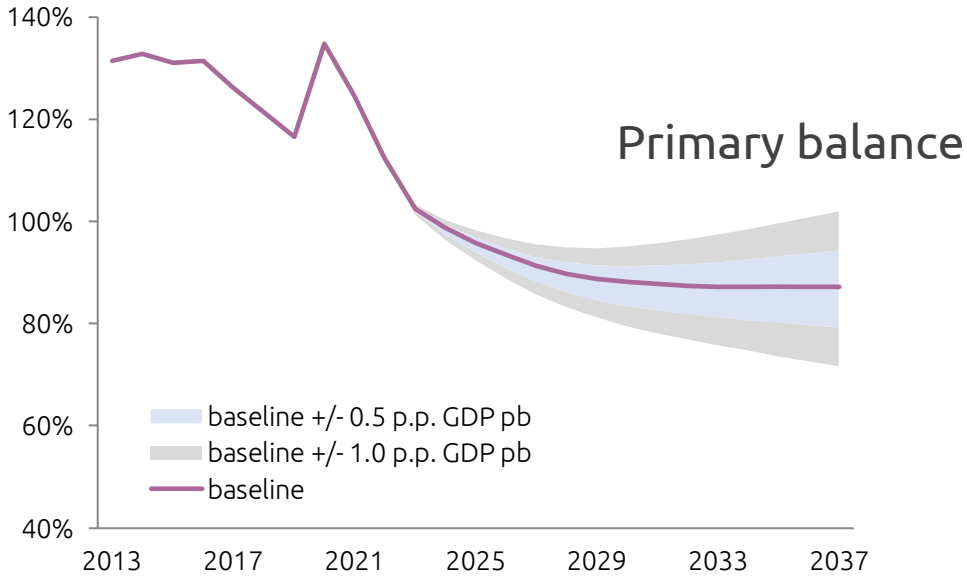
Debt Sustainability Assessment

Baseline

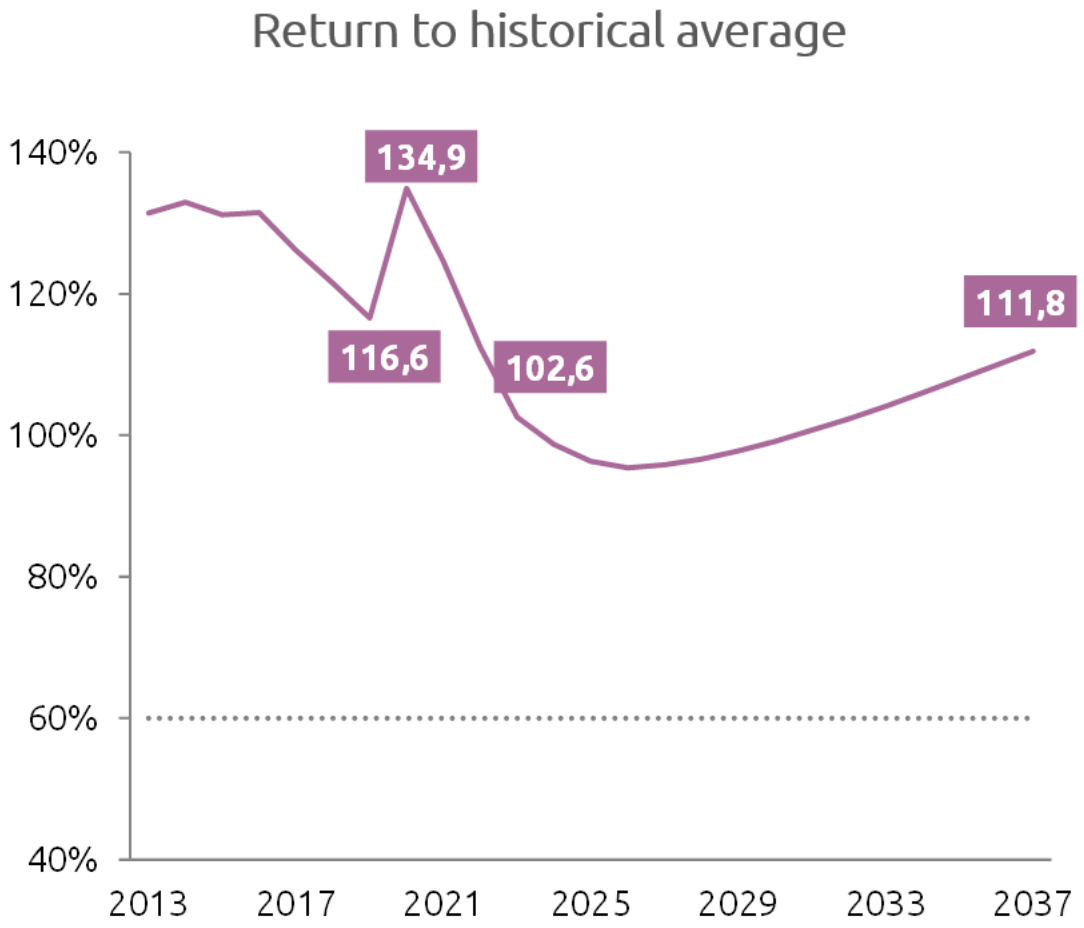


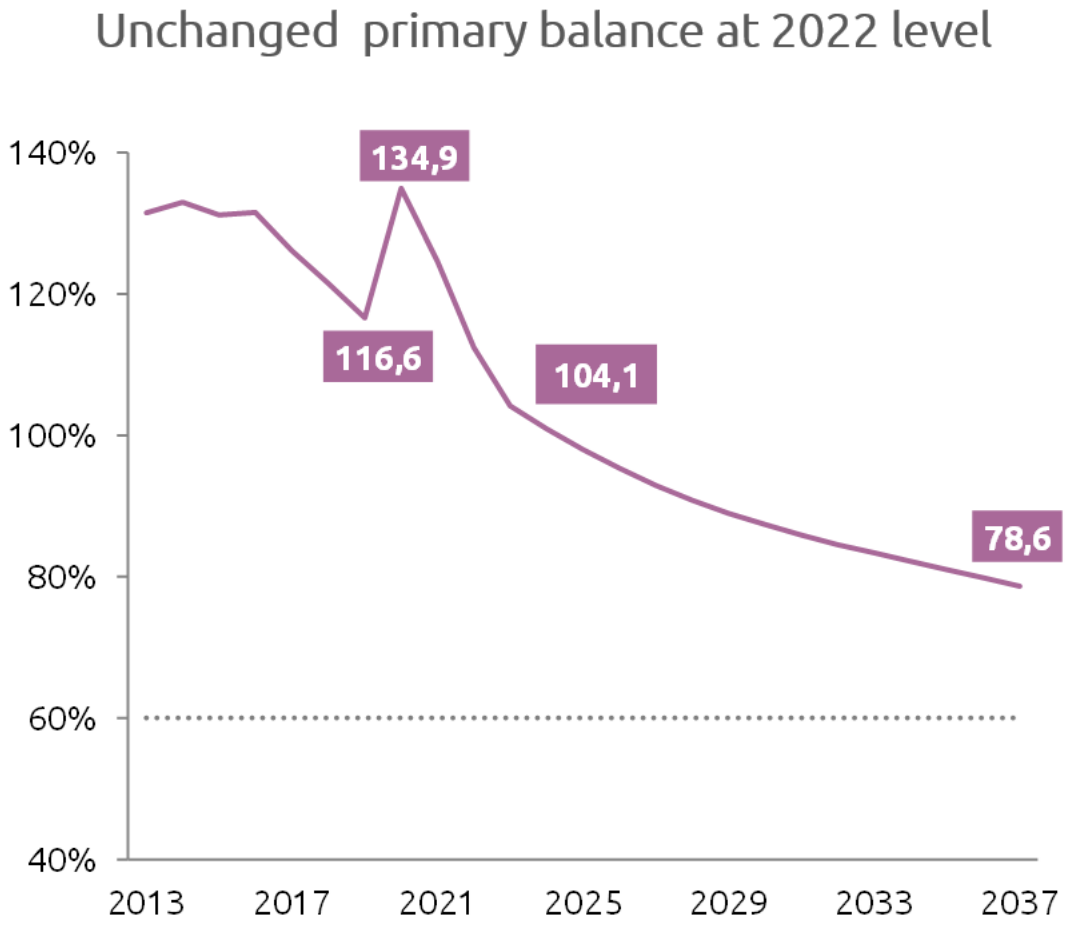
Sensitivity analysis



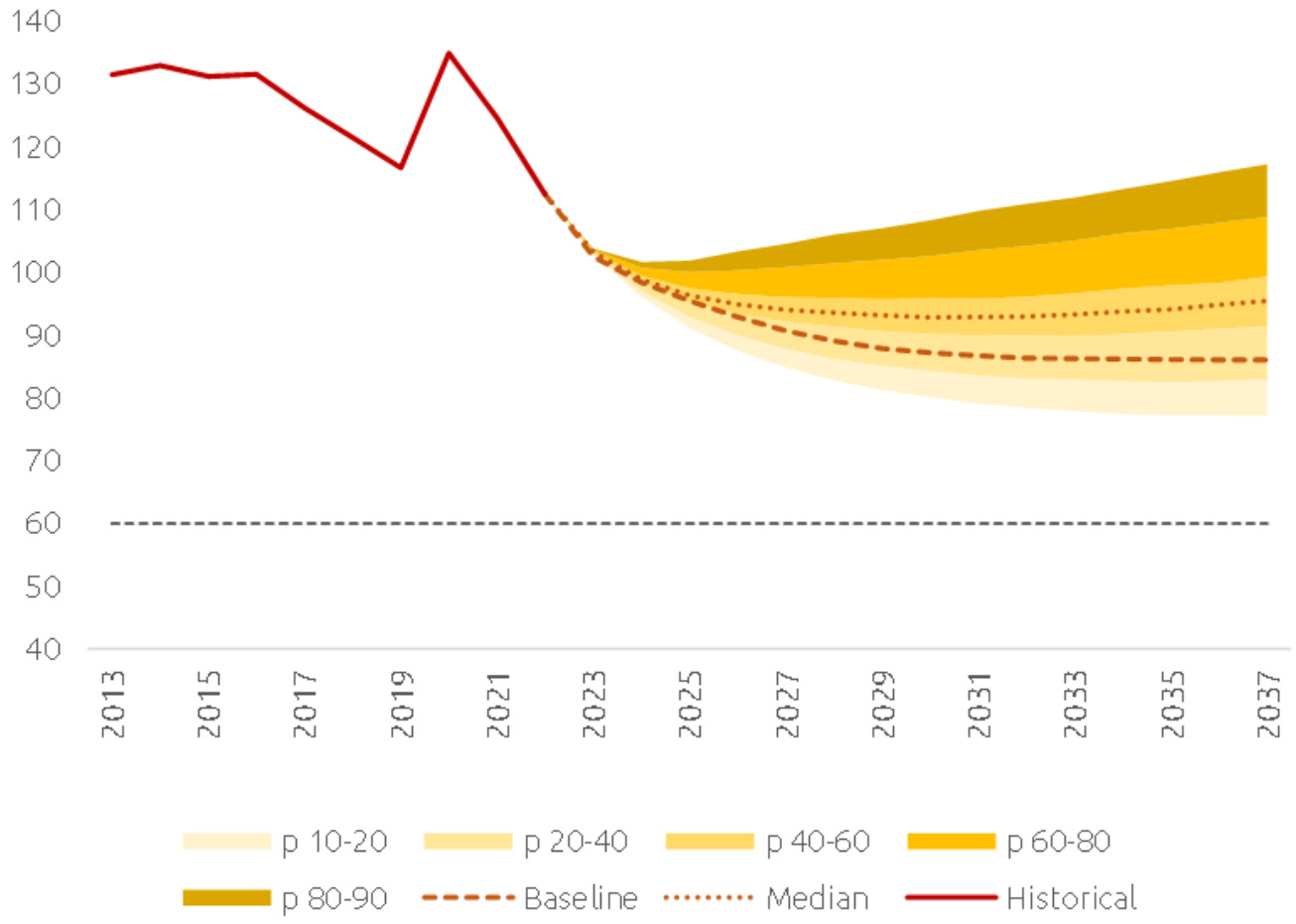


The importance of the primary balance





Stochastic DSA



- Highlights the high size of the past shocks that hit the Portuguese economy in the past
- Countries with a history of higher volatility in macro-fiscal indicators and conditions [such as Portugal] necessarily have a broader spectrum of possible future paths in their stochastic projections (EC, 2023: *Debt Sustainability Monitor 2022*)

Conselho das Finanças Públicas

Thank you!

Report available at:
https://www.cfp.pt/en/publications/risks-and-sustainability