conseil d'analyse économique

Trajectory of the French public finances

April 2024

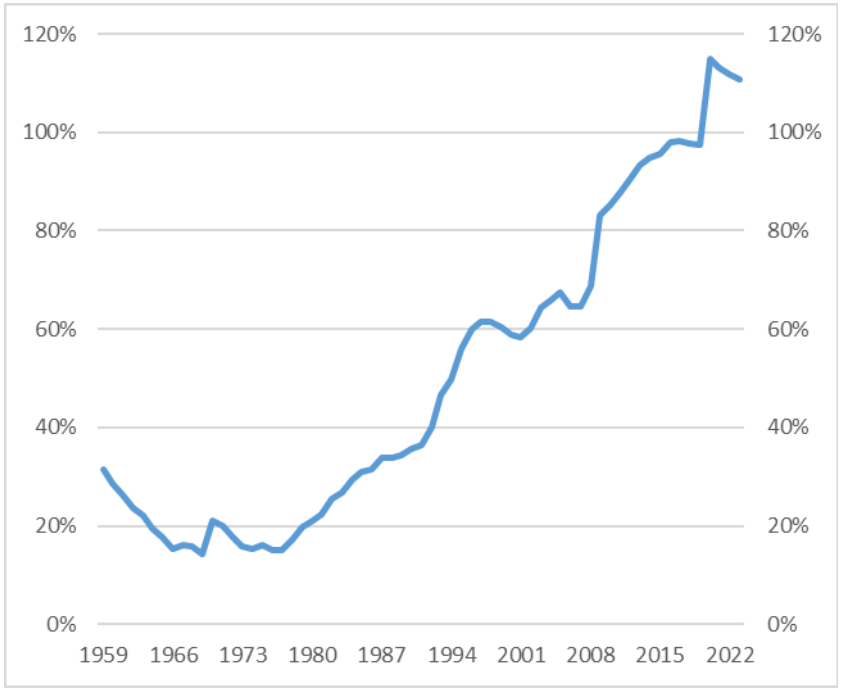
Plan

1. Debts and deficits
2. Forecast assumptions
3. Long-term forecasts
4. Short-term forecats
5. The 2023 deficit

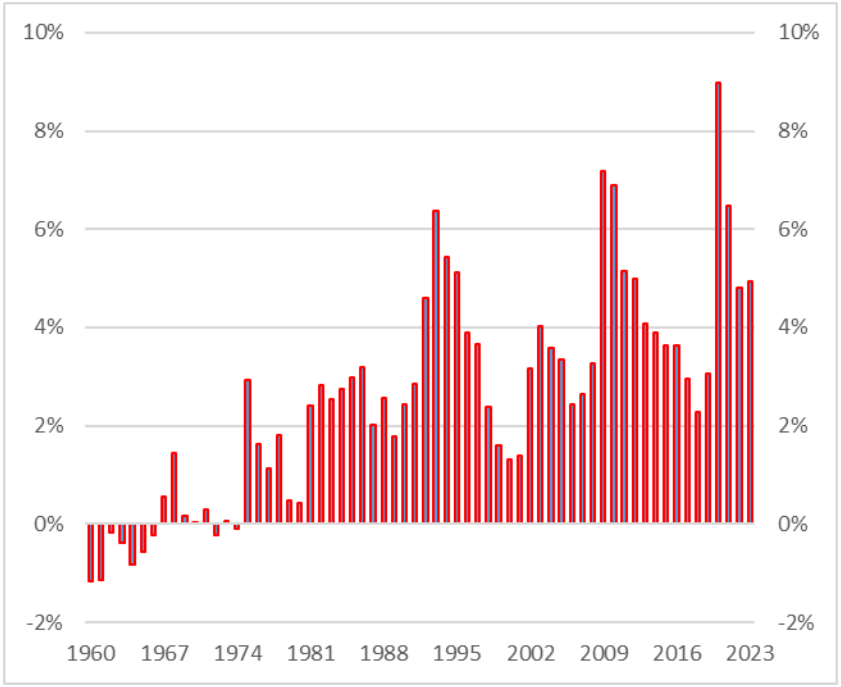
Debt and deficits

Continuous growth in public debt since the 70s

Public debt % PIB



Public deficit en % PIB



Source : Insee (comptes nationaux) et base de données historique Jordà-Schularick-Taylor

Debt dynamics

Dynamic debt equation:

$$B_t = (1 + i_t) B_{t-1} + D_t$$

B(t): nominal debt – b(t)=B(t)/Y(t)

i(t) : effective nominal interest rate

D(t): primary deficit (inclusive of stock-flow adjustment)

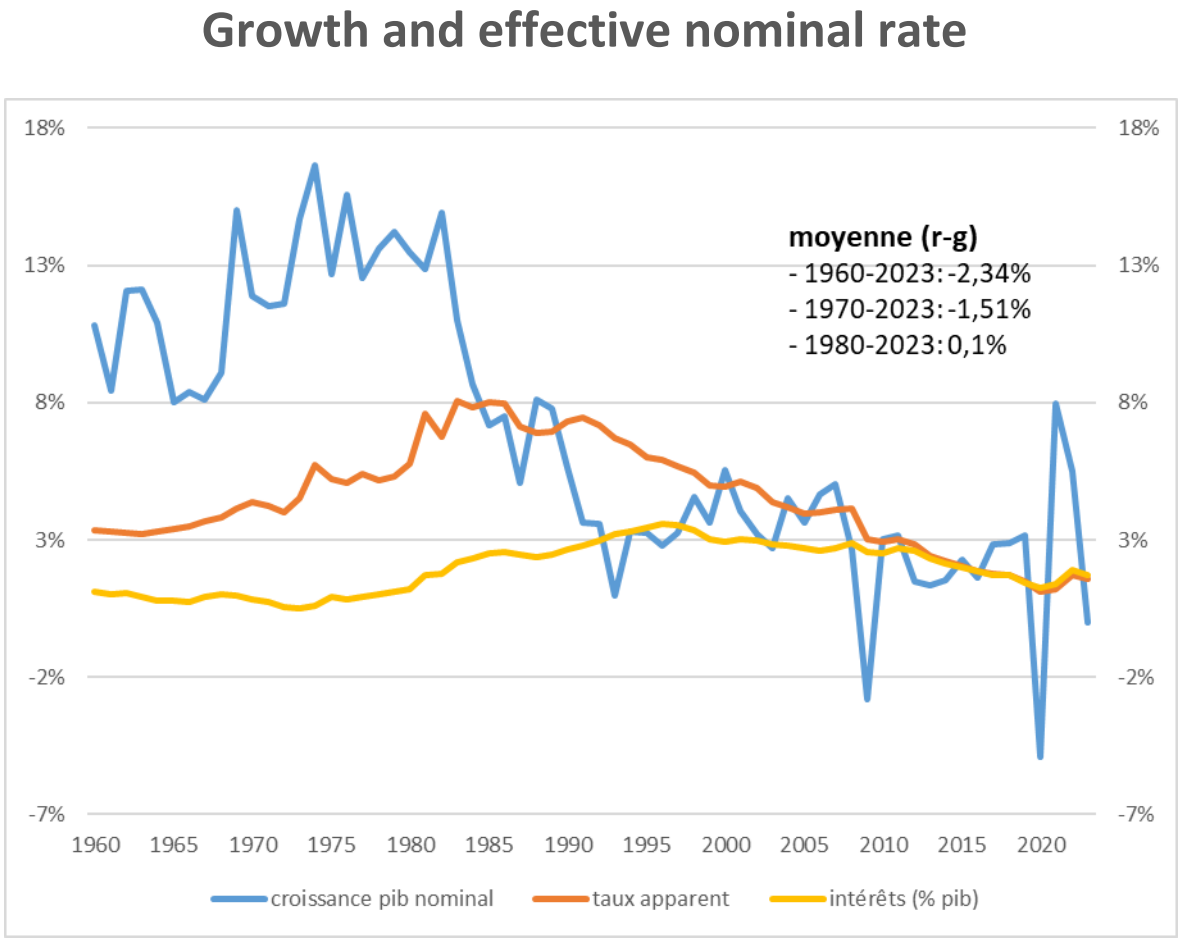
-> Change in debt-to-GDP ratio b(t)

$$b_t - b_{t-1} = d_t + \left(\frac{i_t - g_t^n}{1 + g_t^n} \right) b_{t-1}$$

g(t)^n nominal GDP growth, d(t) = primary deficit-to-GDP
d(t)^n nominal deficit to GDP:

$$d_t^n \equiv d_t + \frac{i_t}{1 + g_t^n} b_{t-1} \qquad b_t - b_{t-1} = d_t^n - \frac{g_t^n}{1+g_t^n} b_{t-1}$$

French history for i and g^n



The importance of the primary deficit

- In the 60s and 70s: g^n>i
- In the 80s and 90s : i>g^n
- Since 2000 : i-g^n is about 0

➔ ***On average over 1970-2022 : i-g^n is around 0***

When (i-g^n) = 0, the debt accumulation equation simplifies to

$$b_t - b_{t-1} \simeq d_t$$

To stabilize the debt-to-GDP ratio, must target a primary deficit of 0

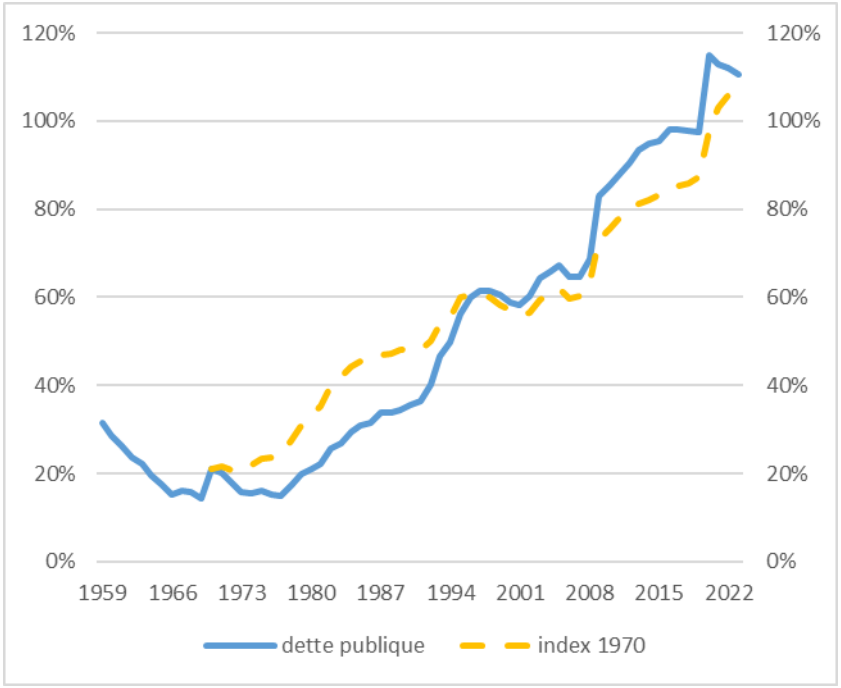
In this i=g^n scenario, the nominal deficit is d^nom=g^n/(1+g^n)*b_t.

Maastricht: b=60% and g^n=5%, so need a ~3% deficit

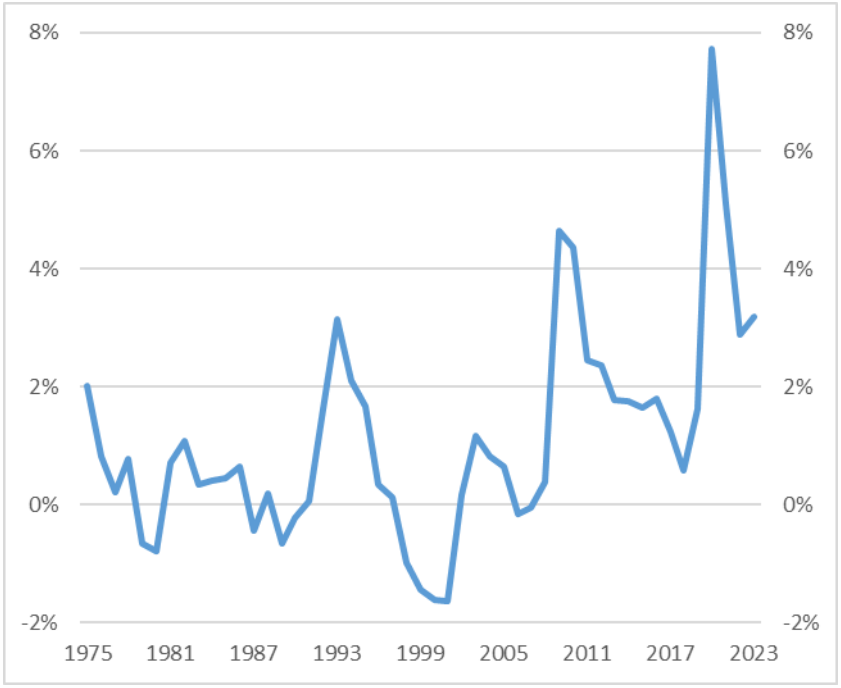
More realistic: b=100% et g^n=3%, which yields the same

A historic i=g^n counterfactual explains todays level of debt (note 2 crises in 10 years)

Public debt and trajectory with i-g^n = 0

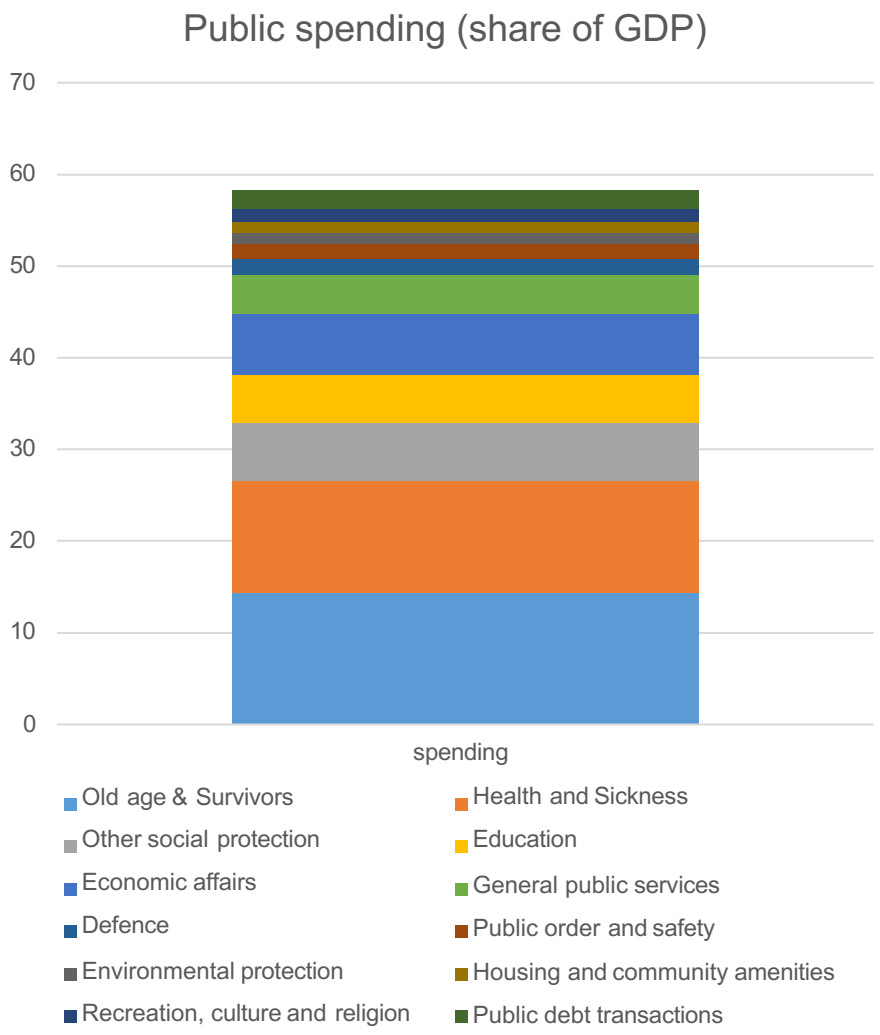


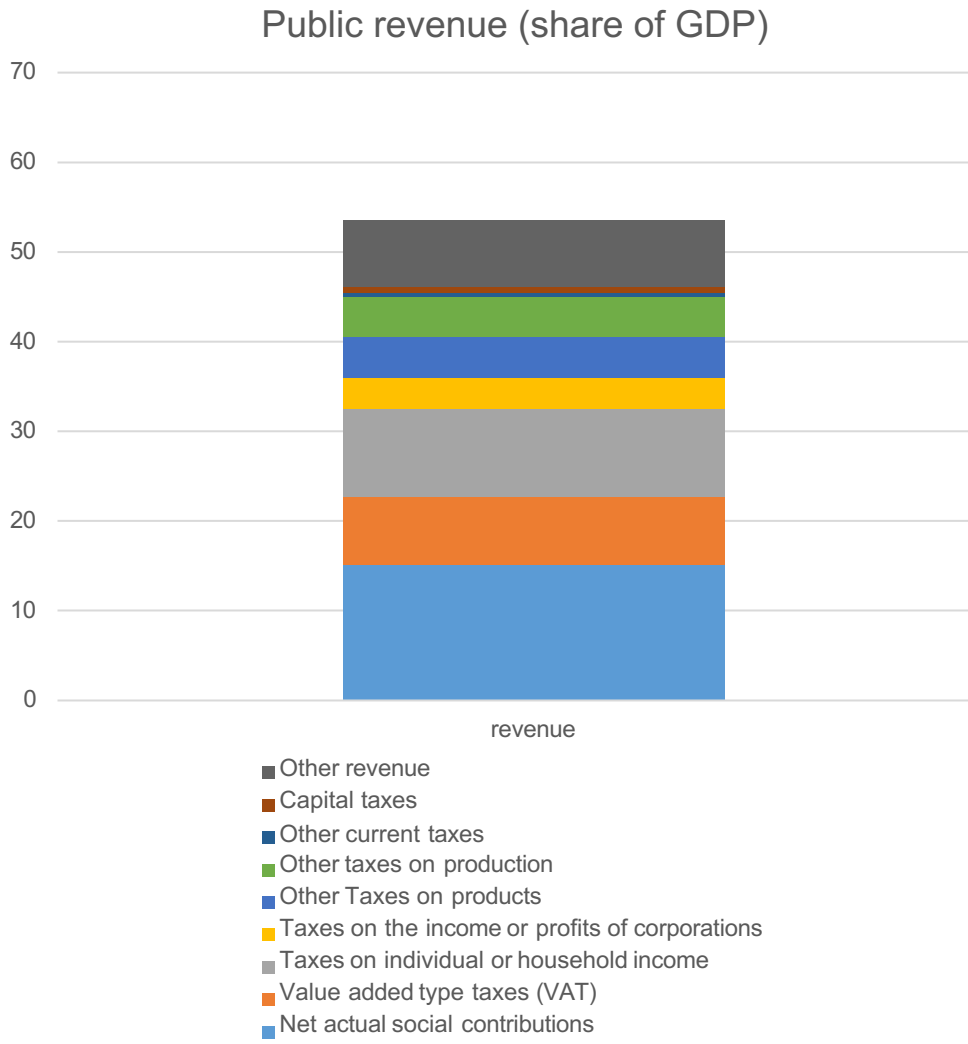
Primary deficits (plus stock-flow adjustment)



Forecast assumptions

Spending and revenue composition in France





Forecasting spending and revenue

Primary deficit to GDP:

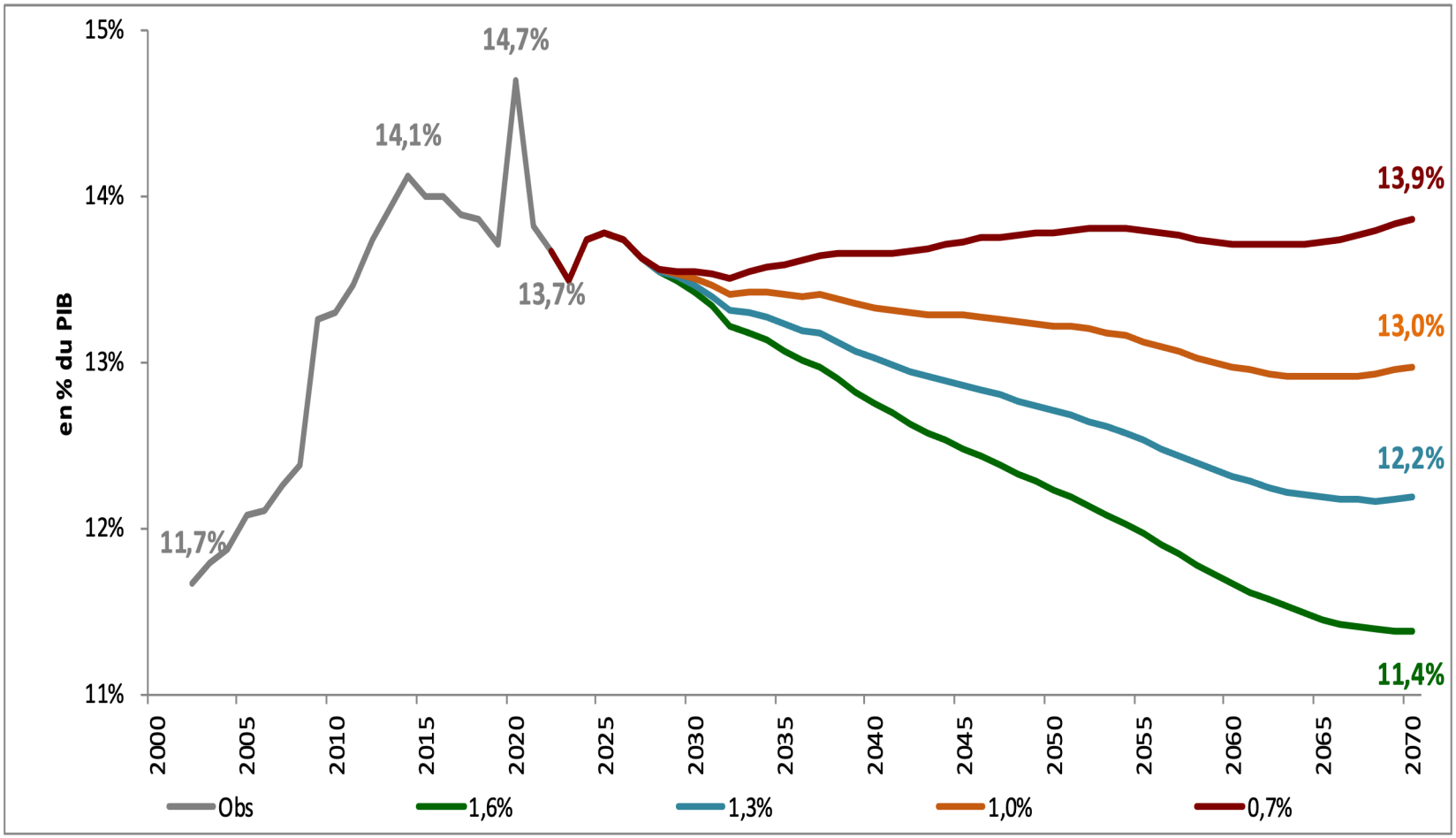
$$d_t = \frac{G_t}{Y_t} - \frac{T_t}{Y_t}$$

- G_t public spending (excluding interest), Y_t GDP
- T_t/Y_t public revenue/GDP

What do we know about G and T that helps us forecast d?

1. Population aging
2. Role of output gap and crises
3. Climate transition and defense spending in the short run

Share of pensions in GDP (from French COR)



Source : Conseil orientation des retraites (rapport juin 2023)

Why these trends?

In spite of population aging, in a central scenario, pensions/GDP are stable

Why?

Pensions/GDP = (Retirees-to-worker ratio) * (average pension/average wage) * (average wage / GDP-to-worker)

The first term grows by 20% but the second falls by the same amount

Productivity is critical, since pensions are indexed to CPI not wages, so the semielasticity of the pension/wage ratio to productivity equals minus life expectancy at retirement

1pp productivity growth -> 20% decline in the Pension/GDP ratio in the long-term

-> This is very sensitive to productivity assumptions

Role de la conjoncture et des crises

$$d_t = \frac{G_t}{Y_t} - \frac{T_t}{Y_t}$$

1. Usual scenario: Semielasticity of d_t to output gap of 0.6 (European Commission)

- T/Y semielasticity about 0 (level of T has elasticity of 1 so 0 for T/Y)

- G/Y seminelasticity around G/Y=0.55 with no G response. G does decline a little due to unemployment benefits.

➔ Since output gap averages to 0, this does not affect average d_t

2**. Recurring crises**. Almost 10 points to d every 10 years (2008 et 2020)

➔ We should expect there to be more such episodes

Climate and defense

- Climate: Pisany-Mahfouz report
  - +1 point of GDP/year to 2040
  - Then linearly falling to 2050

- Defense
  - 1% per year to 2040 (getting back to the Cold War era defense spending)

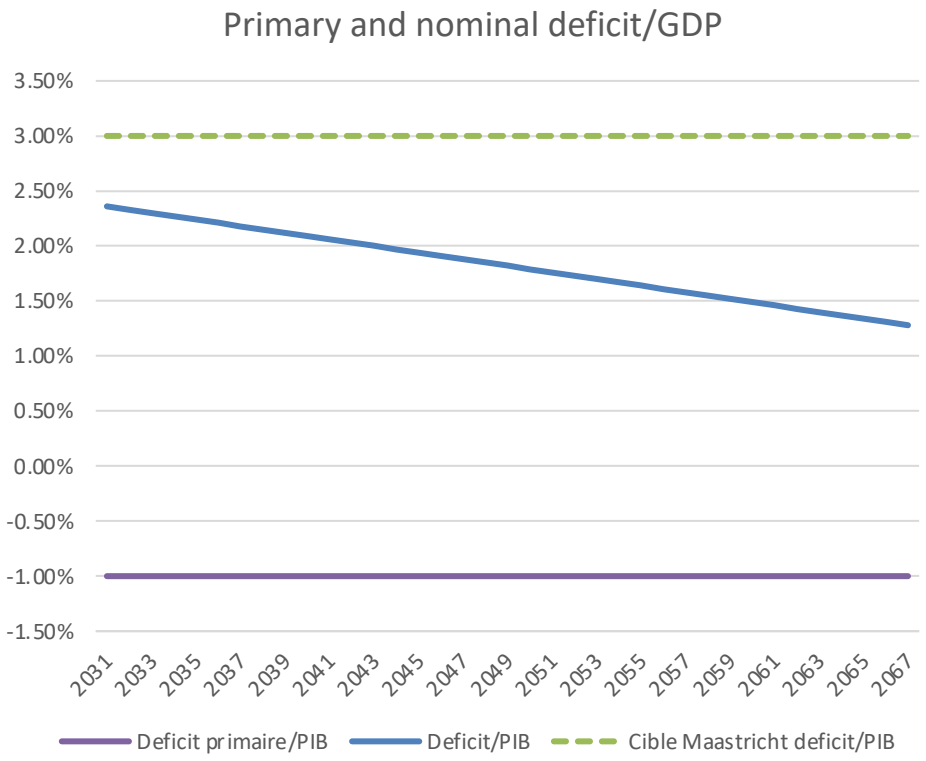
➔ Of course there are large standard errors

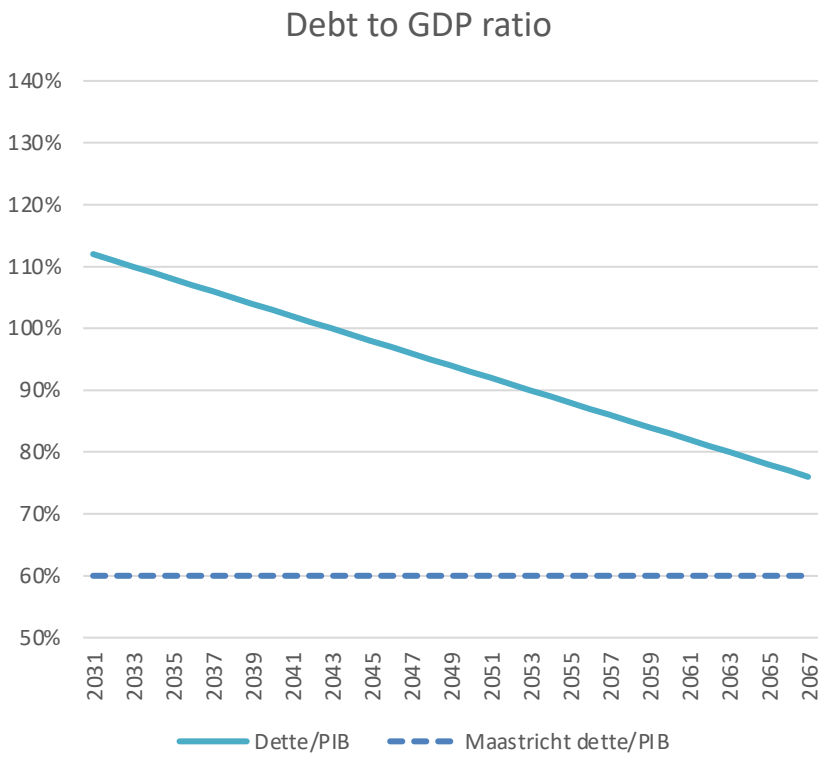
Long term forecasts

Assumptions

- Start in 2031 (after the short-term adjustment):
  - Public debt (b) = 114%
  - Primary surplus= 1%
  - i = g = 3% (2% inflation, 1% growth)
  - Output gap = 0%
  - Crisis every 10 years adds +5% to deficit
  - Start without crises or climate/defense transition, then add

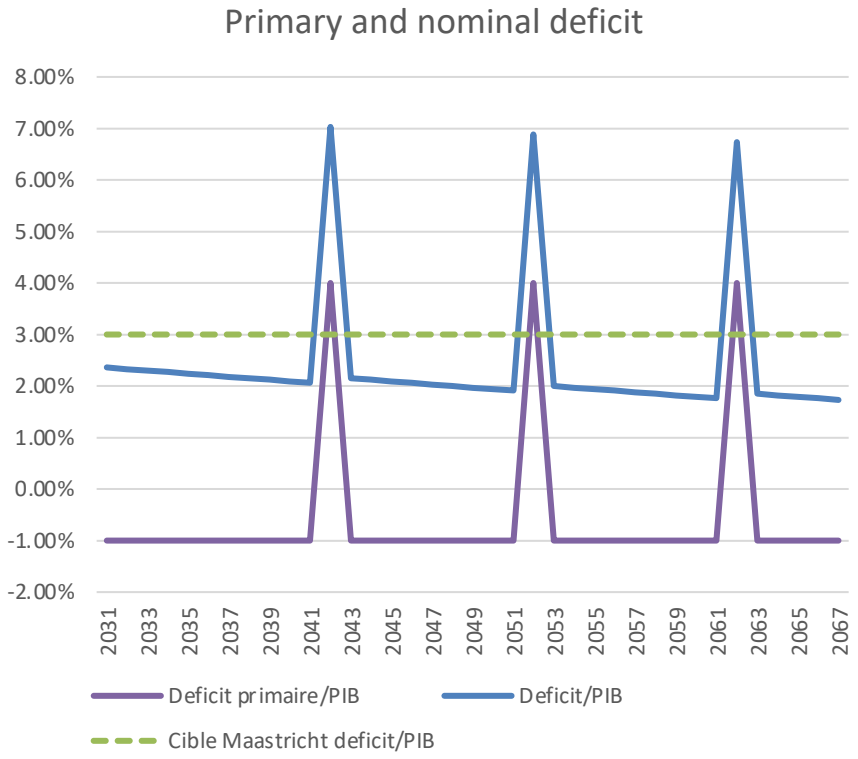
Long-term forecast

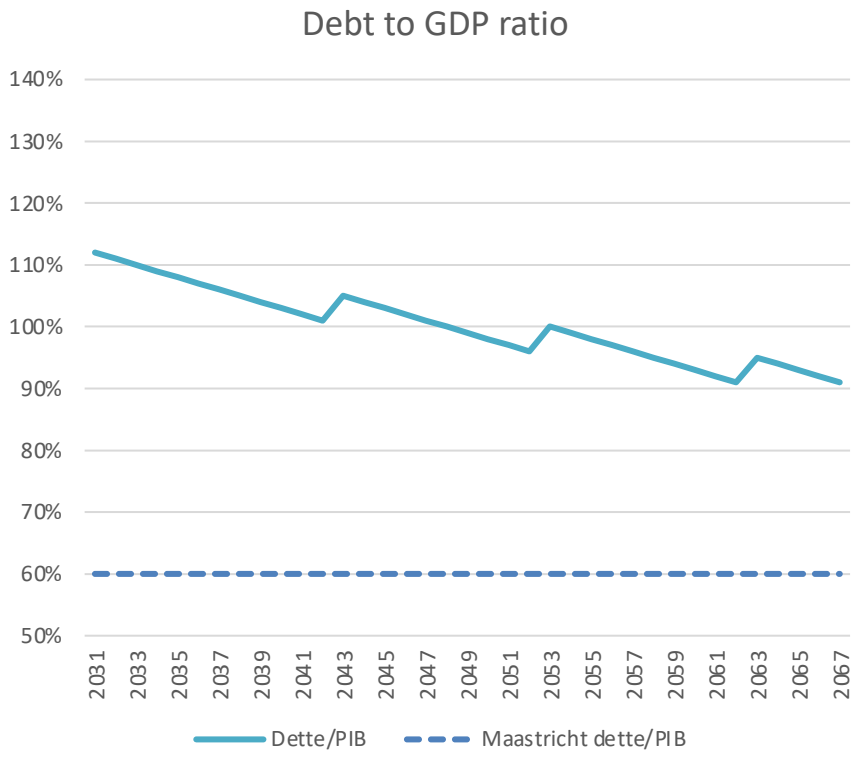




-> With primary surplus at 1%, slow convergence to 60% Maastricht target

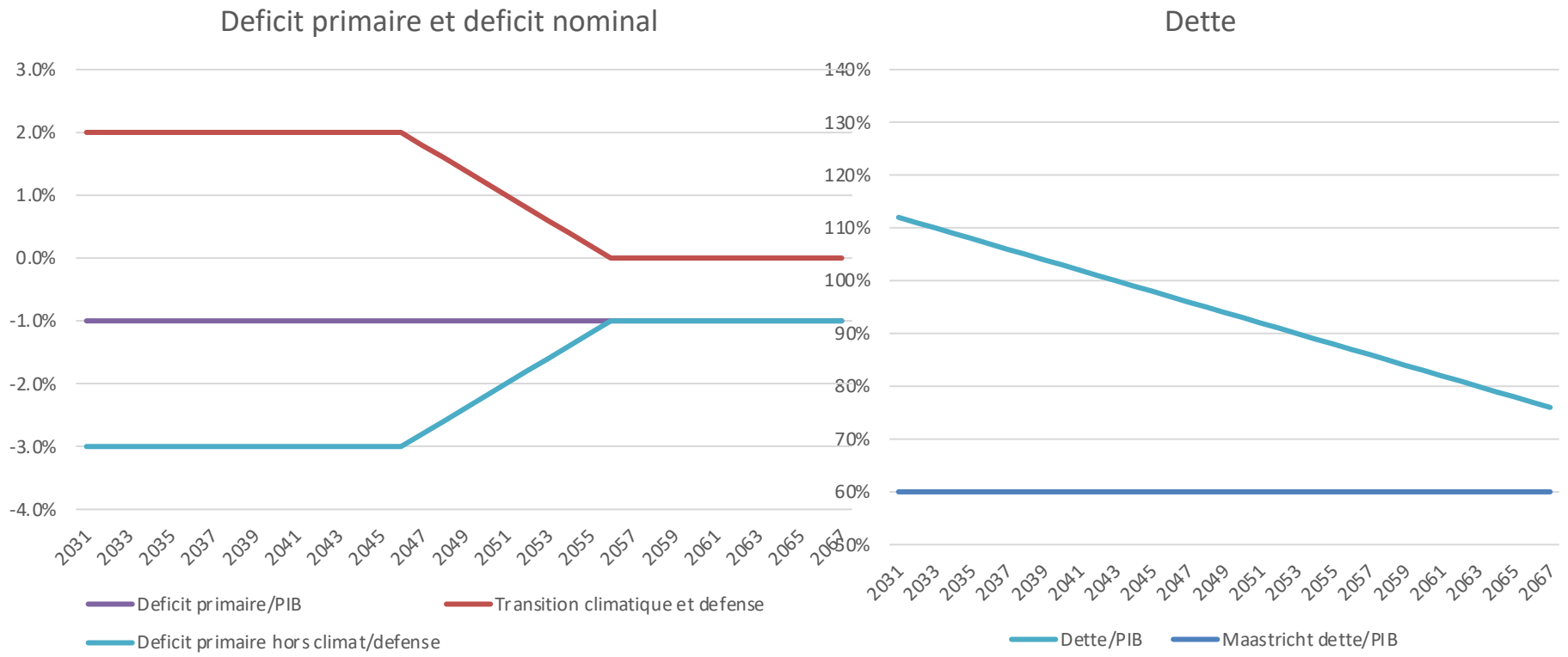
Role of recurring crises





-> Even with moderate crises, debt remains under control in this scenario

Adding climate and defense transition



-> Excluging climate/defense, want a primary surplus at 3%

Short term scenarios

European fiscal rules

- An adjustment period of 4 years that can be extended up to 7 years
  subject to a commitment to structural reforms and an investment program meeting a certain number of conditions

- Corrective arm : EDP procedure
  - ✓ reduction of the primary structural balance by at least 0,5 pt of GDP per year (2025 to 2027)
  - ✓ reduction of the structural balance by at least 0,5 pt of GDP per year from 2028

- Preventive arm
  - ✓ Debt safeguard : reduction of the public debt by at least 1 pt of GDP per year (if the debt ratio exceeds 90% of GDP)
  - ✓ Deficit safeguard : reduction of the structural balance by 0,25 pt of GDP per year (7 years adjustment) if the structural deficit is higher than 1,5% of GDP
  - ✓ No backloading safeguard : the annual fiscal adjustment cannot increase during the adjustment period

European fiscal rules : application to France

- Starting point 2024
  - ✓ 5% overall deficit
  - ✓ Output gap = 0 -> structural balance = public balance
- Adjustment period of 7 years : from 2025 to 2031

From 2026, r – g = +0,5%

	2024	2025	2026	2027	2028	2029	2030	2031
primary balance	-2,90	-2,4	-1,9	-1,4	-0,9	-0,4	0,1	0,4
public balance	-5,00	-4,9	-4,7	-4,3	-3,8	-3,3	-2,8	-2,5
public debt	111,90	113,4	114,7	115,6	115,9	115,7	115,0	114,0

Debt safeguard doesn't bite in 2031
Overall adjustement = 0,47 per year

From 2026, r – g = 0%

primary balance	-2,9	-2,4	-1,9	-1,4	-0,9	-0,3	0,2	1,0
public balance	-5,0	-4,9	-4,7	-4,3	-3,8	-3,3	-2,8	-2,0
public debt	111,9	114,0	115,9	117,3	118,1	118,5	118,3	117,3

Debt safeguard bites in 2031
Overall adjustement = 0,55 per year

EDP procedure

possible debt safeguard

Plausibility: 2023 deficit

Understanding the 2023 unexpected deficit (1/2)

The 2023 nominal deficit was 5.5% of GDP, much higher than the expected 4.9%: Unexpected shock, even for the government. What happened?

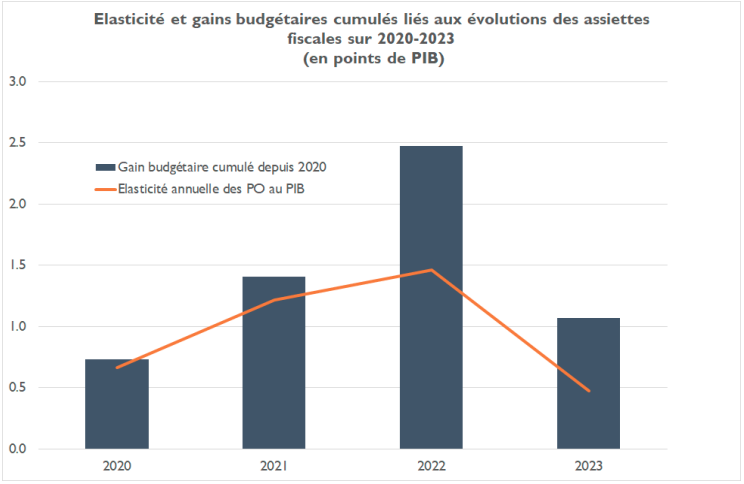
At the general level :

- growth forecast was correct. Tax return is lower than expected : the elasticity of taxes to growth lower than expected:

✓ In the long run, the elasticity is 1.

✓ It fell to 0,5 in 2023

✓ This low elasticity is observed after years of *high* elasticity (1.3 and 1.4) : back to normal?



Understanding the 2023 low elasticity (2/2)

-0.6% of GDP increase in deficit has to be explained.

Spending under control : Public spending growth is 3.7% (government forecast was 3.4%).

Tax return is lower than expected:

- Return on tax on energy providers : - 0.1% GDP
- Corporate income tax : - 0.4% of GDP
- Real estate tax (DMTO) : -0.1% of GDP (frozen housing market)
- +/- minor changes (VAT).

Where does this change in elasticity comes from :

- *change in inflation* (GDP deflator, production price, import price, consumer price): Inflation (CPI) : 4.9% in 2023 to 2.4% in 2024.
- Firms have to repay some emergency loans (PGE)

Can expect elasticity in 2024 to be closer to 1.

The projected French fiscal path

Government forecast :

	2024	2025	2026	2027
Growth	1%	1.4%	1.7%	1.8%
Deficit	5.1%	4.1%	3.6%	2.9%