

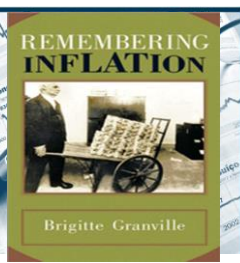


Inflation, past & present

A story of “generals fighting the last war”

Brigitte Granville

Convegno A/simmetrie, 25 November 2023



“Granville has read almost everything and has a good eye for the central issues. I liked this book very much.”

—Thomas J. Sargent, Nobel Laureate in Economics

“Granville recalls the inflation of the 1970s, which, she fears, is in danger of being forgotten in the wake of the recent financial crisis and the ongoing recession. She covers a wide swath of macroeconomics and takes in the causes of inflation, the relation between unemployment and inflation, the Phillips curve, the role of expectations, and much more. I don't know of any other book quite like this.”

—John Driffill, Birkbeck, University of London



LUCAS (1976)



- *Given that the structure of an econometric model consists of optimal decision rules of economic agents, and that optimal decision rules vary systematically with changes in the structure of series relevant to the decision maker, it follows that any change in policy will systematically alter the structure of econometric models.*

2% inflation target originated in an offhand comment in a 1988 TV interview by New Zealand Finance Minister Roger Douglas



- <https://www.cfr.org/blog/history-and-future-federal-reserves-2-percent-target-rate-inflation-0#:~:text=The%202%20percent%20target%20widely,a%20period%20of%20high%20inflation>

Categorizing inflation episodes by severity

Inflation Type	Annual Rate (%)
Low Inflation	2 to 4
Moderate Inflation	5 to 35
High Inflation	Above 35
	Monthly Rate (%)
Hyperinflation	Above 50

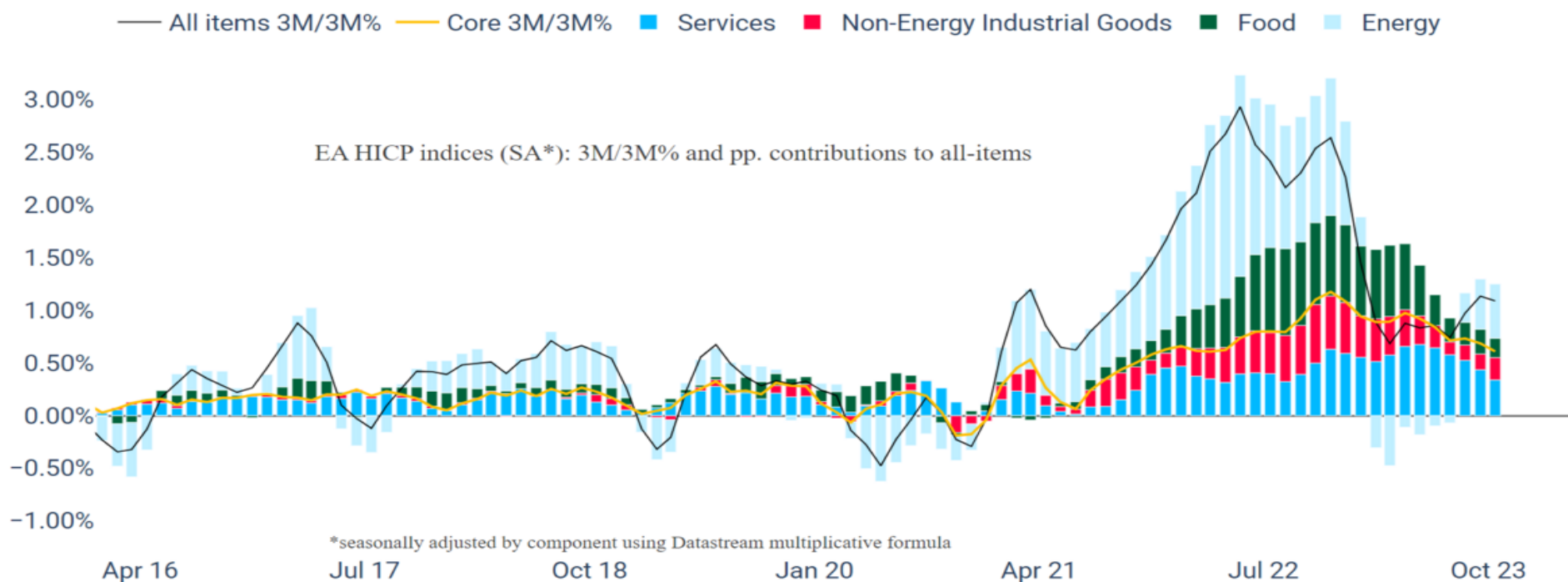
Difference between once-and-for-all price increases and persistent price rises:

A once-and-for-all price increase comes from particular shocks, such as one-time increases in world oil prices.

Persistent price rises come from chronic economic problems, such as large and persistent budget deficits.

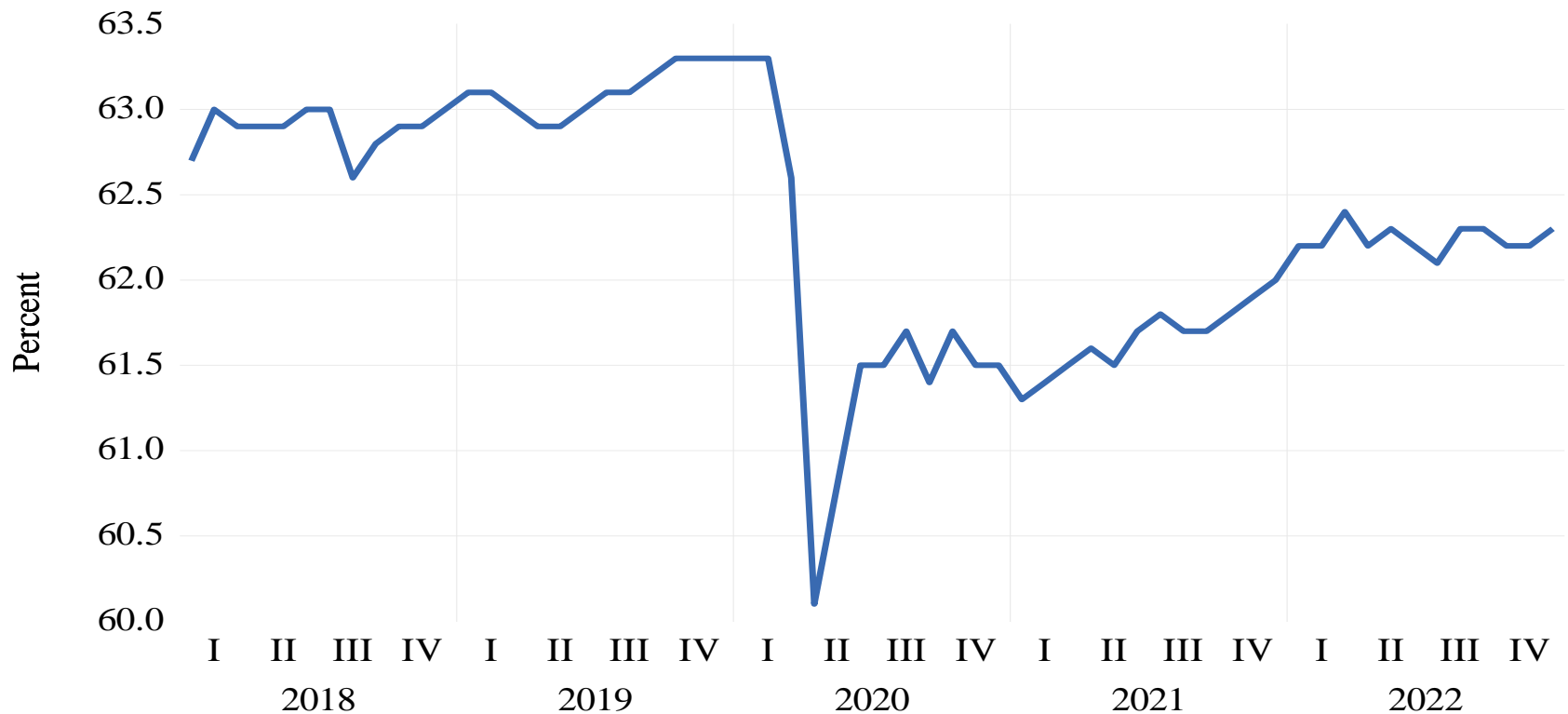
Transitory after all: Core HICP rose less than 1% in the past quarter relative to the previous quarter

Eurozone's main inflation indicator ("HICP") shown here as the change in the rate of price increase in each quarter compared to the previous quarter, with a breakdown of the contributions to inflation from the main sources



Labour supply constraint

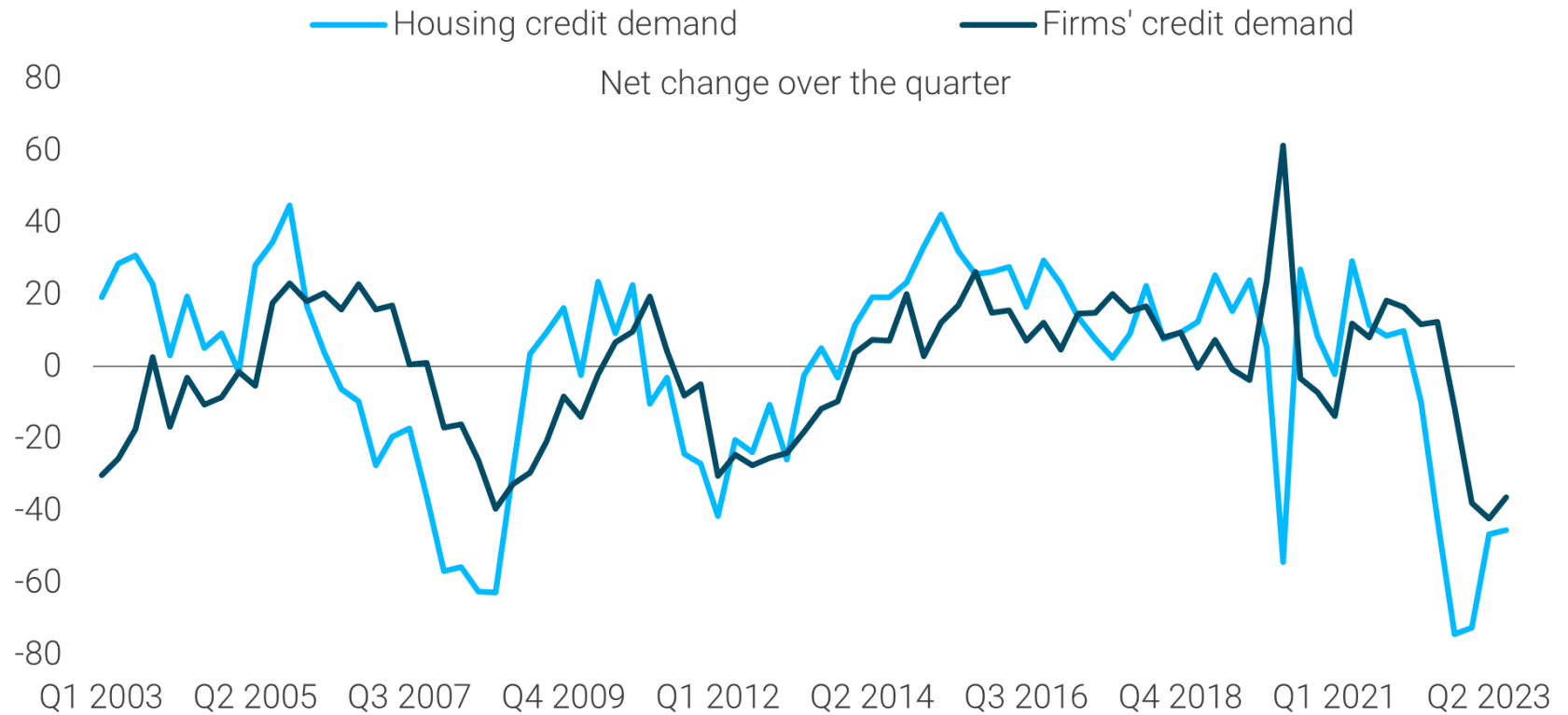
Labor Force Participation Rate, Seasonally Adjusted



Source: U.S. Bureau of Labor Statistics

Eurozone recession signal: No one wants to borrow!

Credit demand has collapsed across the board



Source: ECB Bank Lending Survey

The single-period budget constraint :

$$\Delta b = (r - n)b + d - s$$

b = debt/GDP ratio

r = real rate of interest on government bonds

n = rate of real GDP growth

d = primary budget

s = seigniorage = rate of high powered money growth as a share of GDP

CONCLUSION

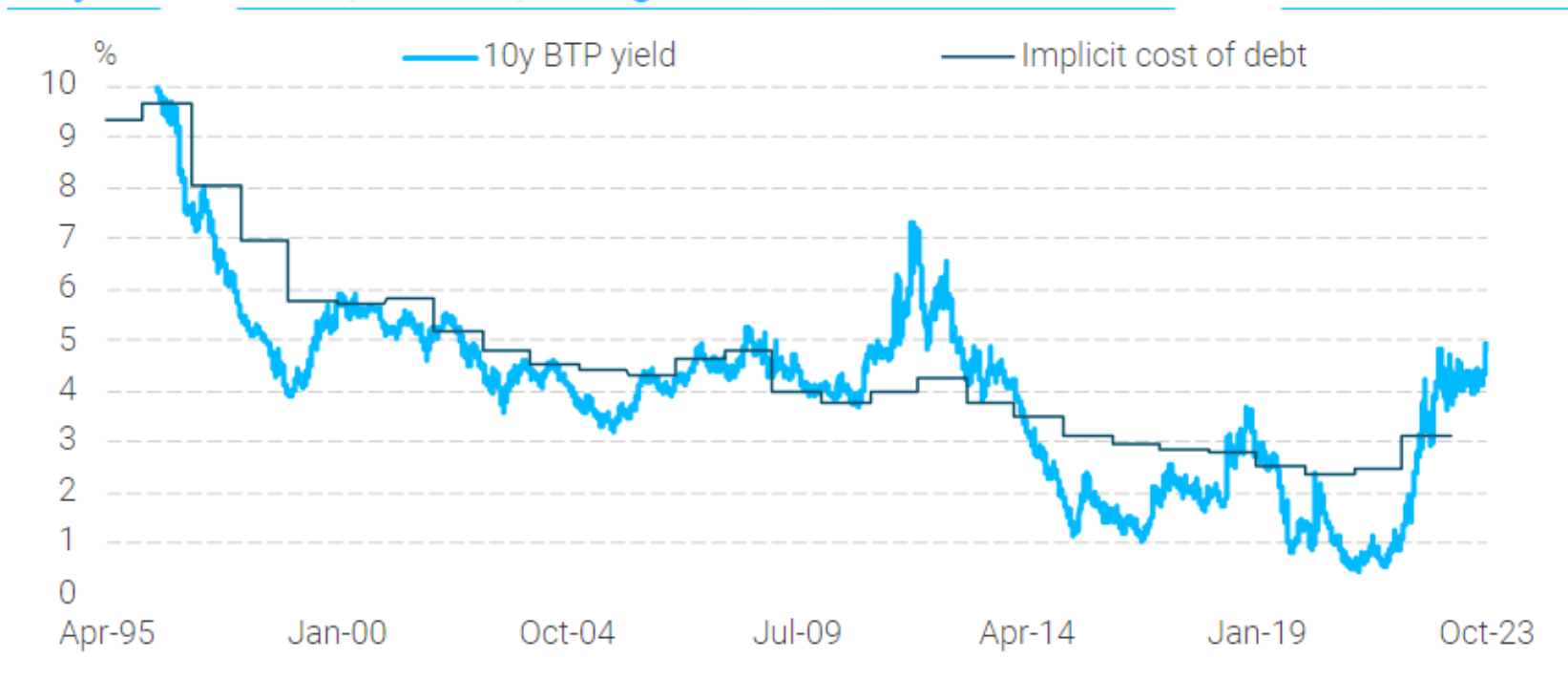
Explosive if $r > n$:

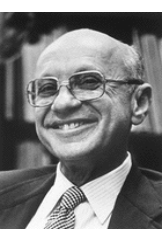
Debt accumulates faster than GDP grows

Italy's -R minus G - goes above zero = danger signal for public debt sustainability

The implicit cost of servicing the public debt rose to 3% in 2022.

Italy's nominal economic growth is no more than 3% (i.e. 1% real + 2% inflation)





Causes of Inflation



For Milton Friedman, “inflation is always and everywhere a monetary phenomenon”

- When π is high for *sustained periods*, M growth is also high:
 - Latin American inflations
 - German Hyperinflation, 1921–23

This is a tautology

Some Unpleasant Monetary Arithmetic.

For Sargent and Wallace (1981) permanently higher government deficits must eventually be accommodated by increases in the monetary base.

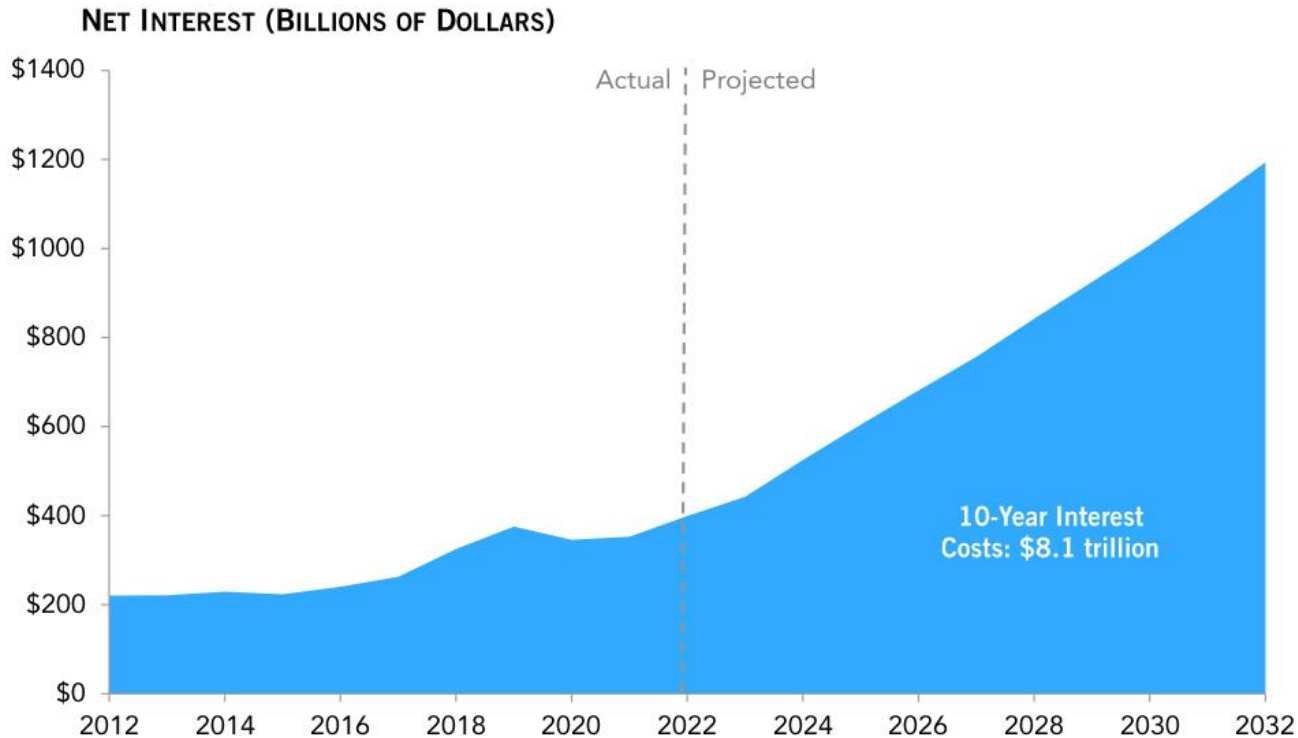
- Sargent, T. and N. Wallace (1981). "Some Unpleasant Monetarist Arithmetic." Federal Reserve Bank of Minneapolis, Quarterly Review 5(3): 1-17.



Fighting inflation adds to the Debt Burden by increasing the annual debt service

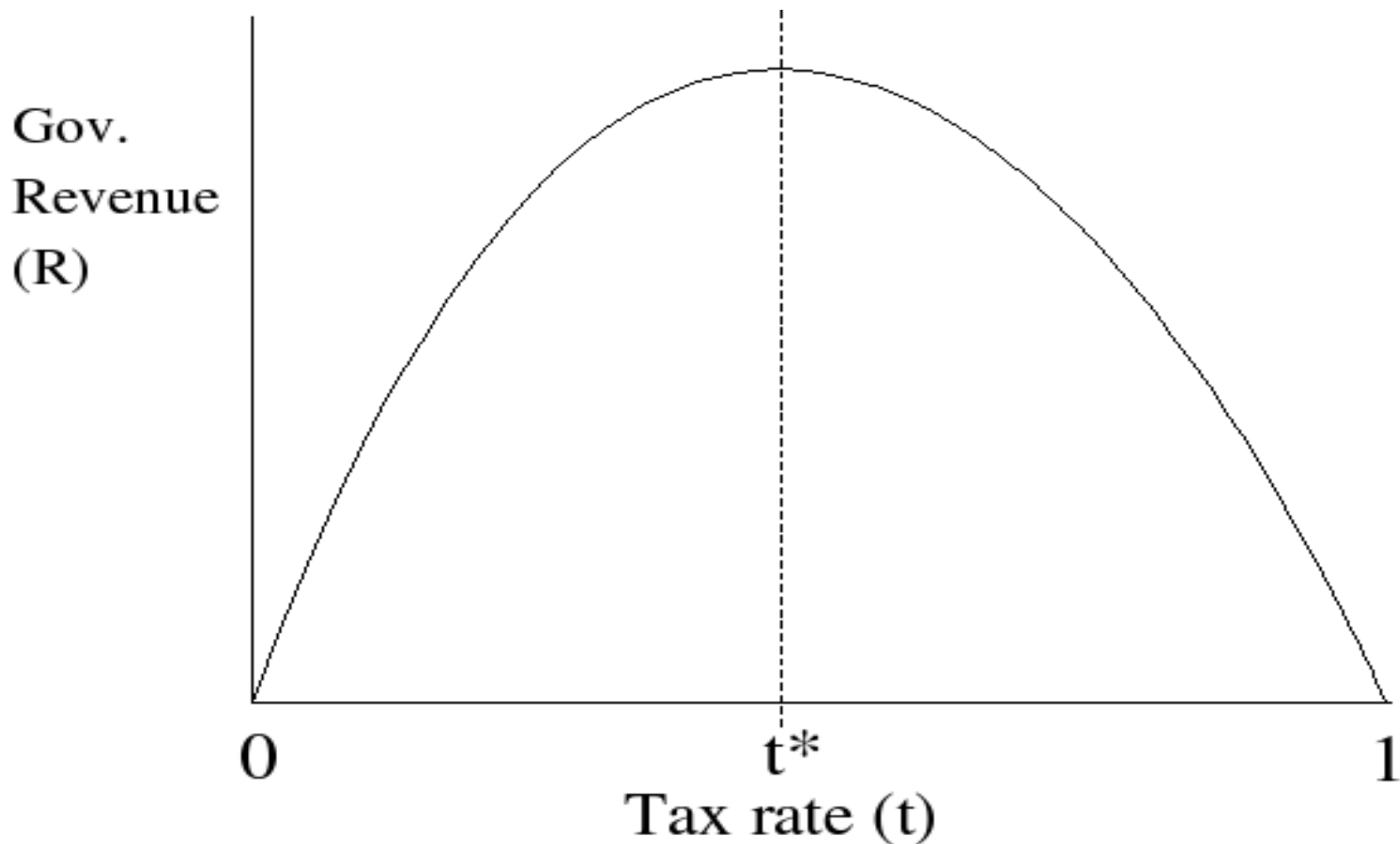


Net interest costs are projected to rise sharply



SOURCE: Congressional Budget Office, *The Budget and Economic Outlook: 2022 to 2032*, May 2022; and Office of Management and Budget, *Historical Tables, Budget of the United States Government: Fiscal Year 2023*, March 2022.

“Inflation is the one form of taxation that can be imposed without legislation.” (Milton Friedman)
But this tax has its limits



Time to revisit the 2% inflation target

(Olivier Blanchard, FT, November 28 2022)

- With a higher target, central bank rate hikes would become less aggressive.
- Central banks' credibility would be enhanced.

Parting thought

Austin Muñoz @moon_yose · 2 Nov ...

Something that most economists don't realize but which is obvious to those who've worked in a business:

High demand *induces* high productivity. When tons of people are trying to buy your product/service, you figure out ways to increase production with the tools available to you