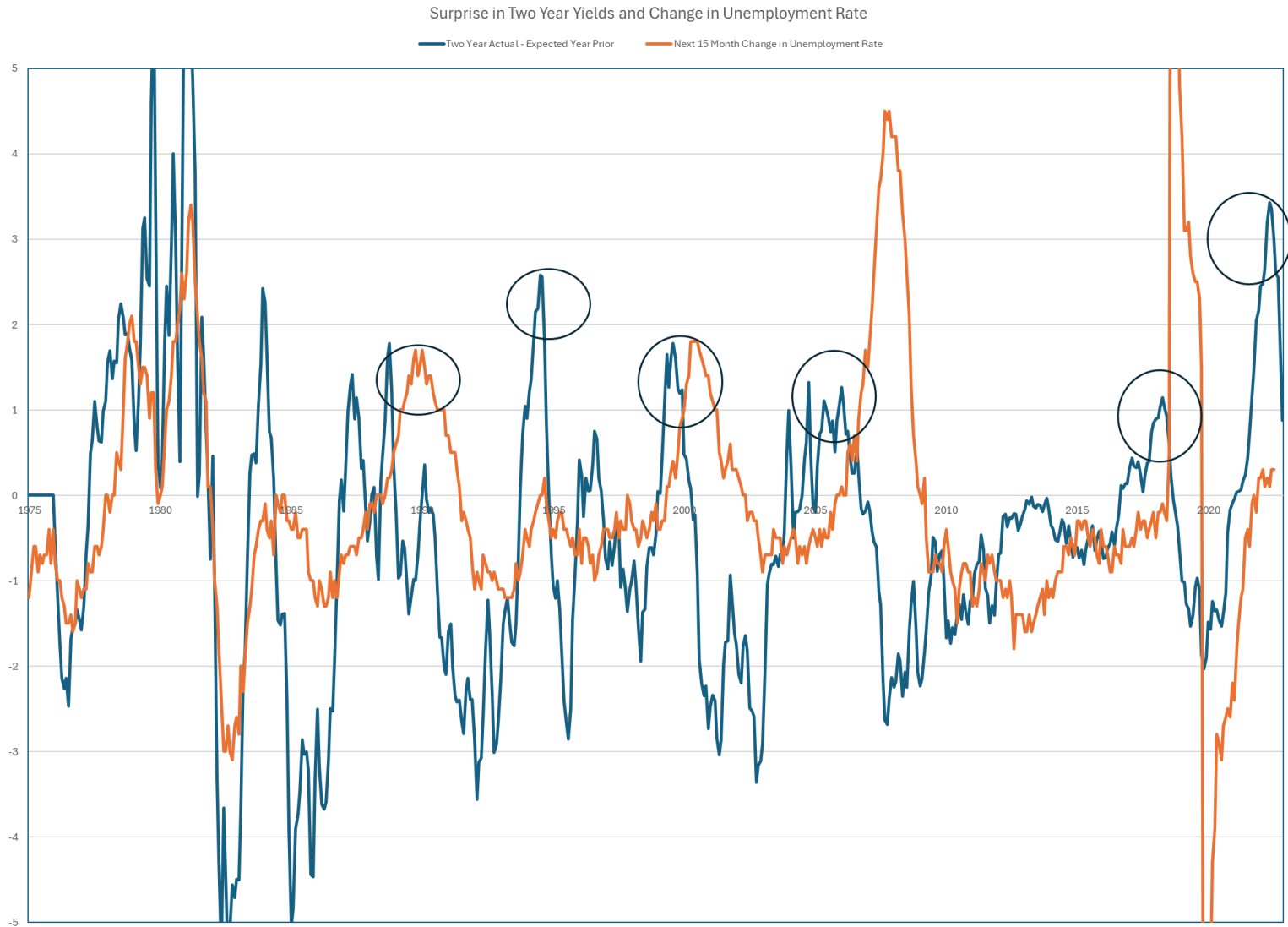


Is US Monetary Policy Restrictive?

Lawrence Summers

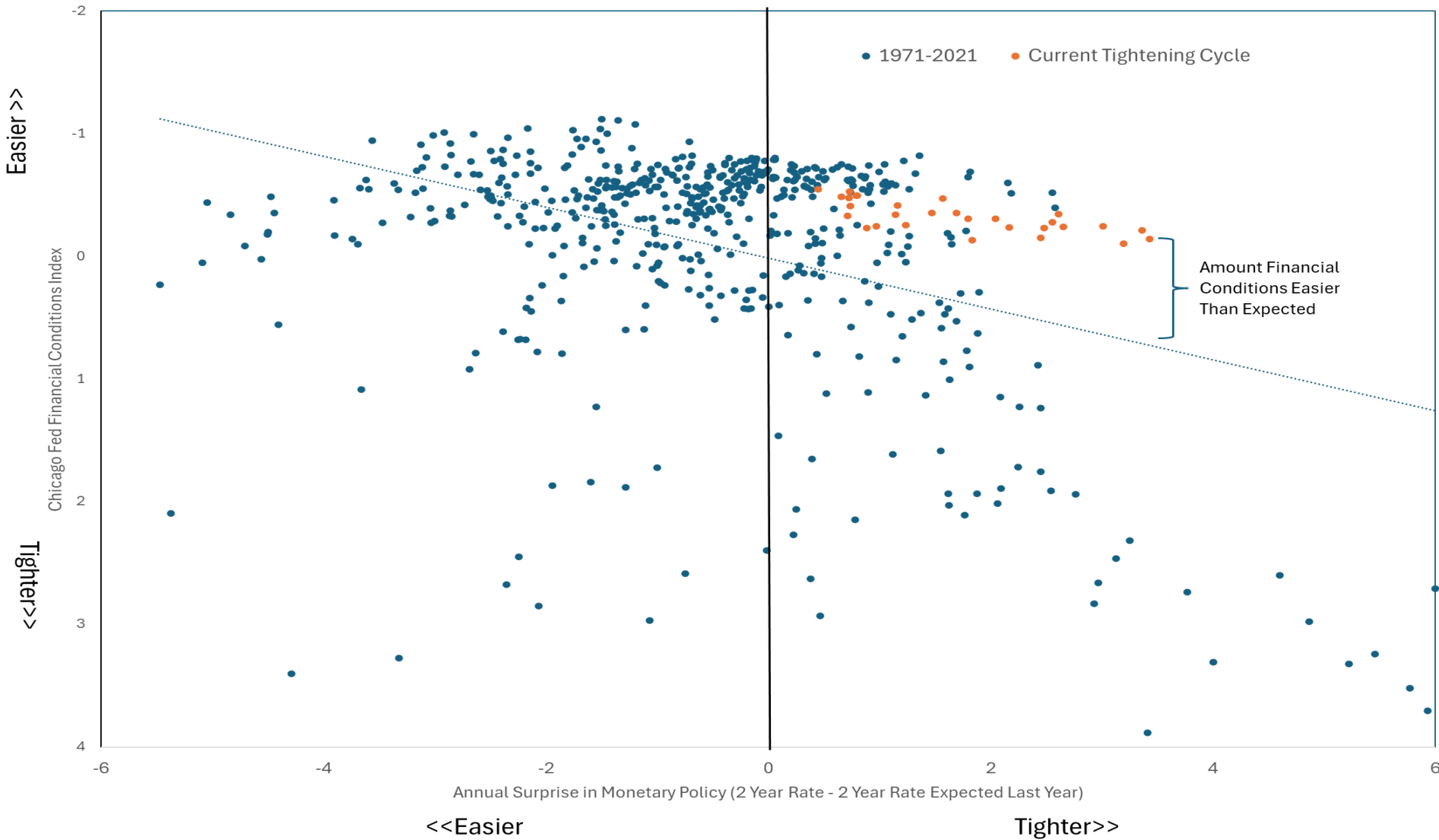
April 3, 2024

Economy Not Consistent With Tight Policy



Financial Conditions Looser Than Expected

Monetary Policy Surprise and Financial Conditions



Sources: Federal Reserve Selected Interest Rates, Chicago Federal Reserve, Bloomberg

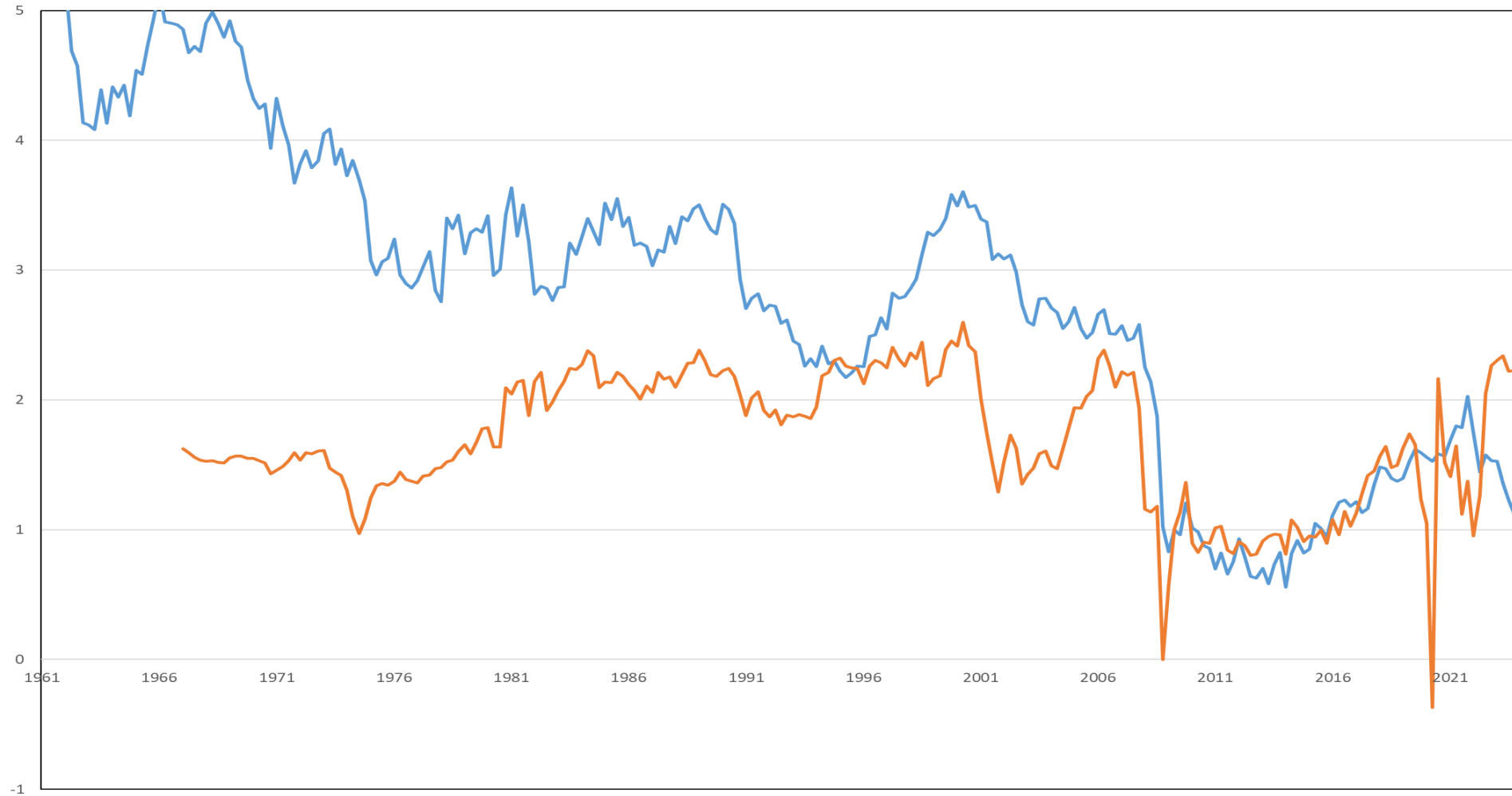
Two Possible Explanations

- Neutral Rate Has Risen
- Spending is Less Interest Rate Sensitive

The Fault Is In R-Star's?

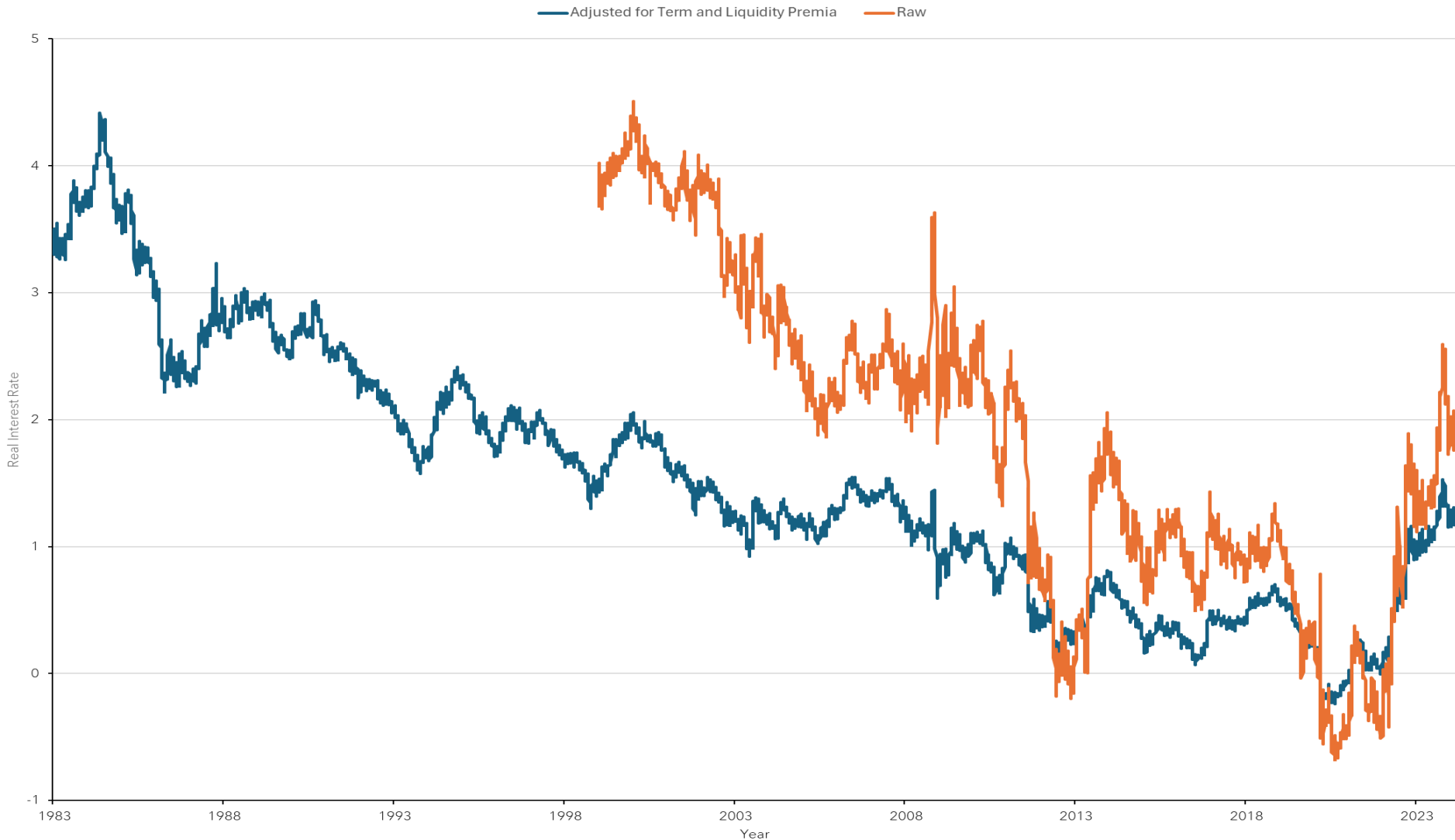
Estimates of R-Star

— Laubach-Williams (NYFED) — Lubik-Matthes (Richmond Fed)



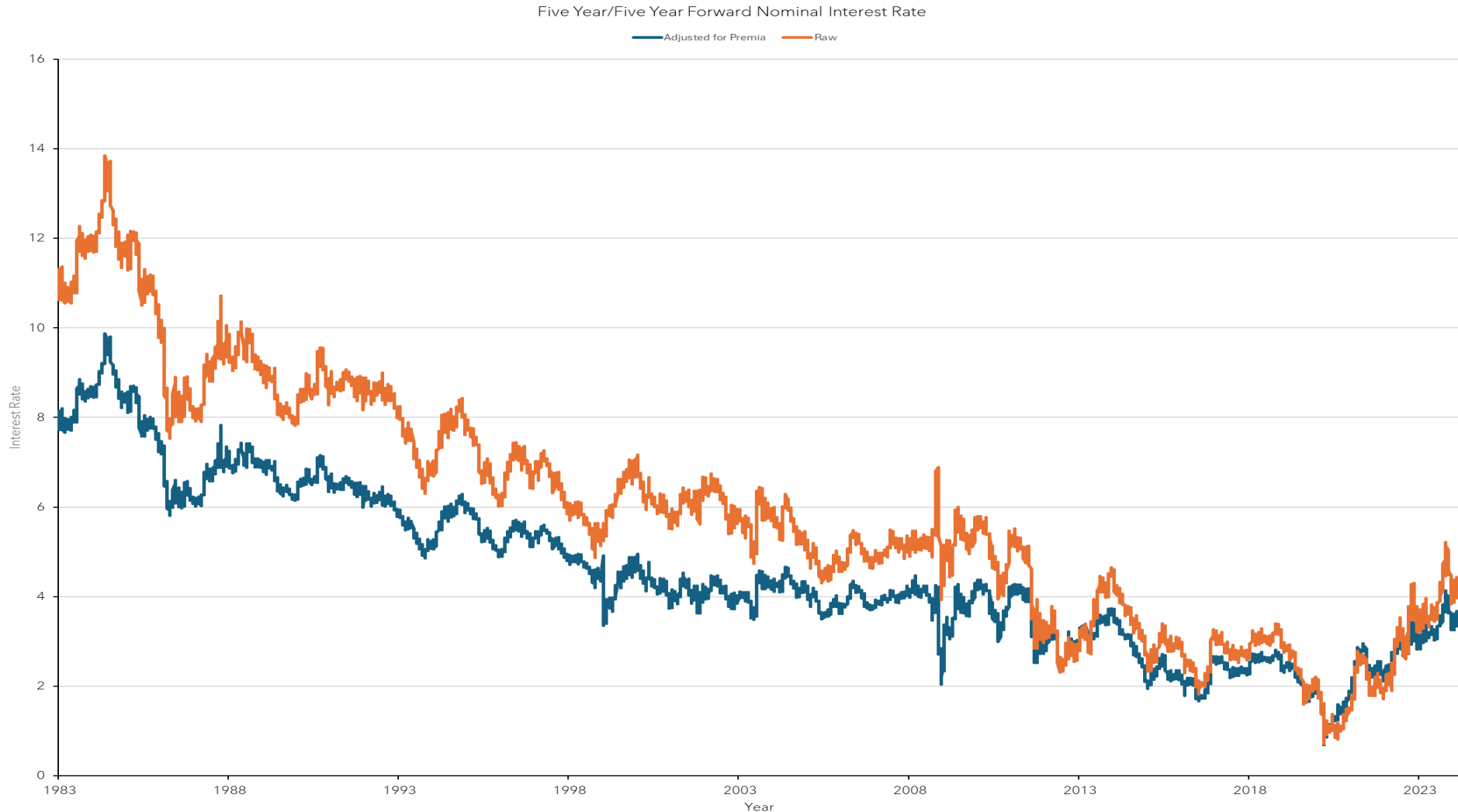
Expected Real Interest Rates Have Risen

Five Year/Five Year Forward Real Interest Rate



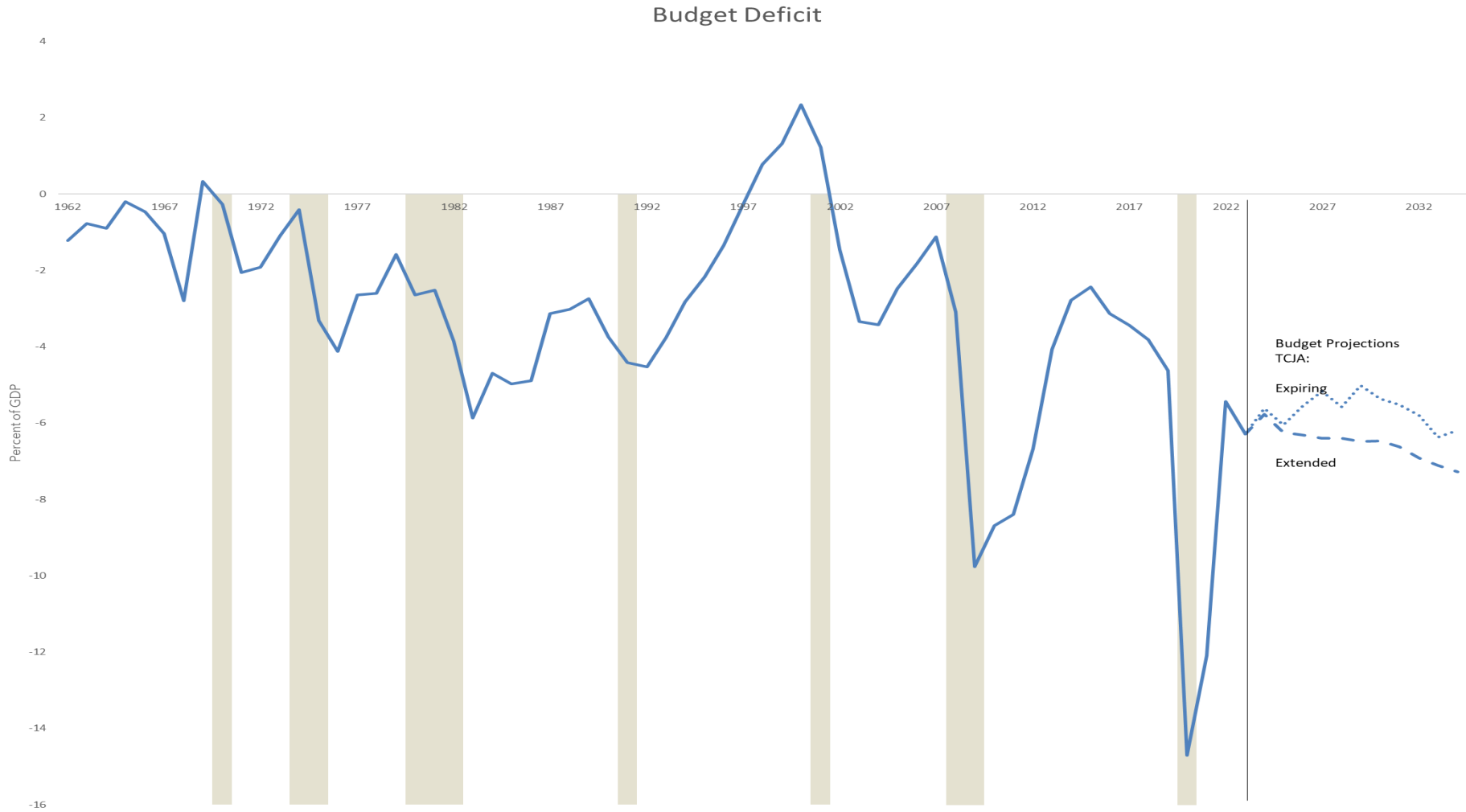
Sources: D'Amico, Kim, and Wei (2018), "Tips from TIPS: The Informational Content of Treasury Inflation-Protected Security Prices";
Gürkaynak, Sack, and Wright (2008) "The TIPS Yield Curve and Inflation Compensation"

Along with Nominal Counterparts



Sources: D'Amico, Kim, and Wei (2018), "Tips from TIPS: The Informational Content of Treasury Inflation-Protected Security Prices"

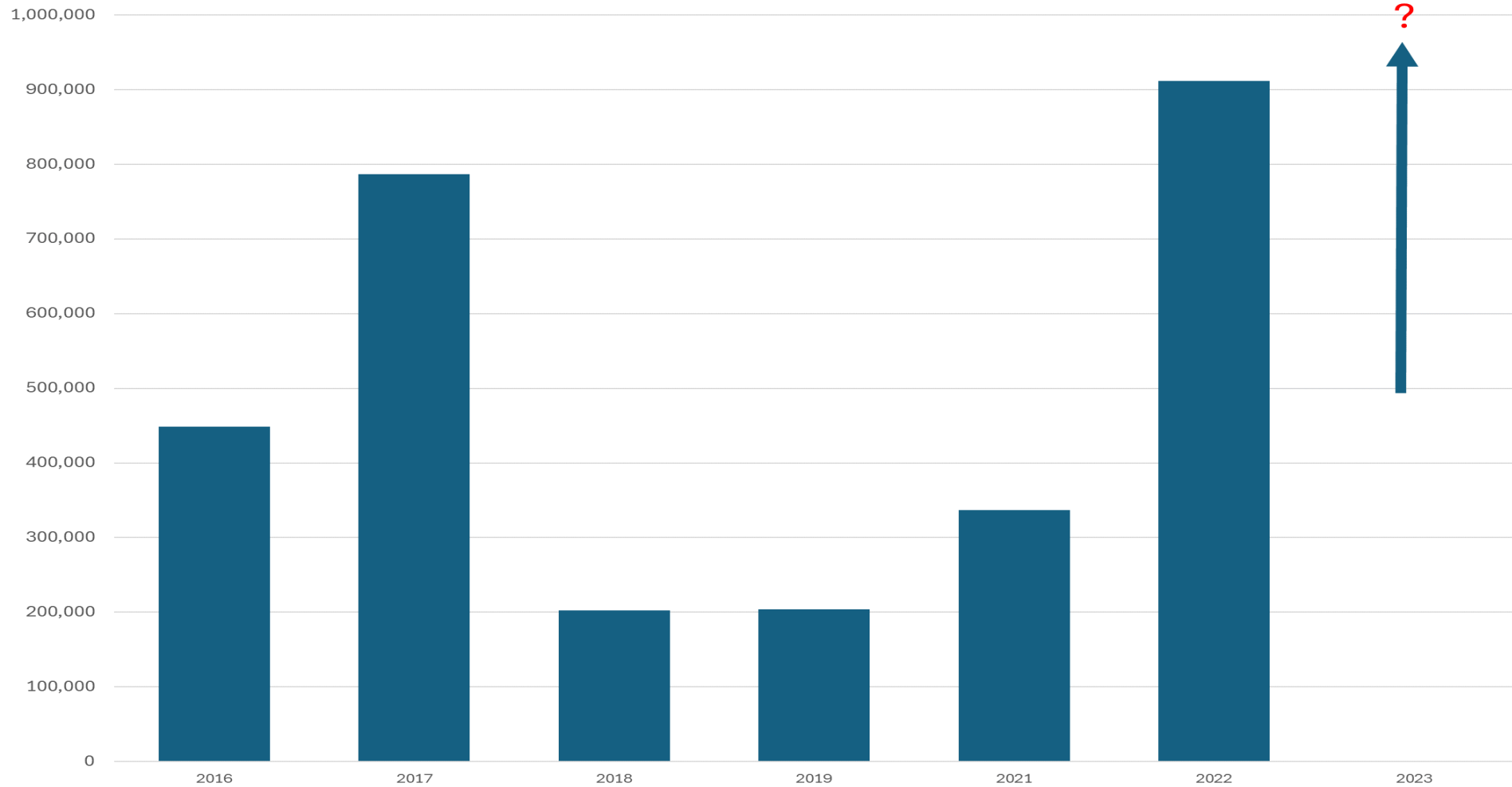
Fundamental Backdrop: Deficits



Sources: CBO 2024 Budget and Economic Outlook, Gokhale (2023) "THE LONG-TERM BUDGET EFFECTS OF PERMANENTLY EXTENDING THE 2017 TAX CUTS AND JOBS ACT'S EXPIRING PROVISIONS", NBER

Fundamentals: Immigration Rebound?

Net Immigration to United States



Fundamentals: AI Investment

Capital Expenditures at Major Datacenter Owners (Billions)

		Historical			Forecast	
	2020	2021	2022	2023	2024	2025
Amazon	40	61	64	53	63	68
Google	22	25	31	32	48	50
META	15	19	31	27	37	41
Microsoft	15	21	24	28	44	51
Total	93	125	150	140	192	210

Wealth Reduces Savings Incentive

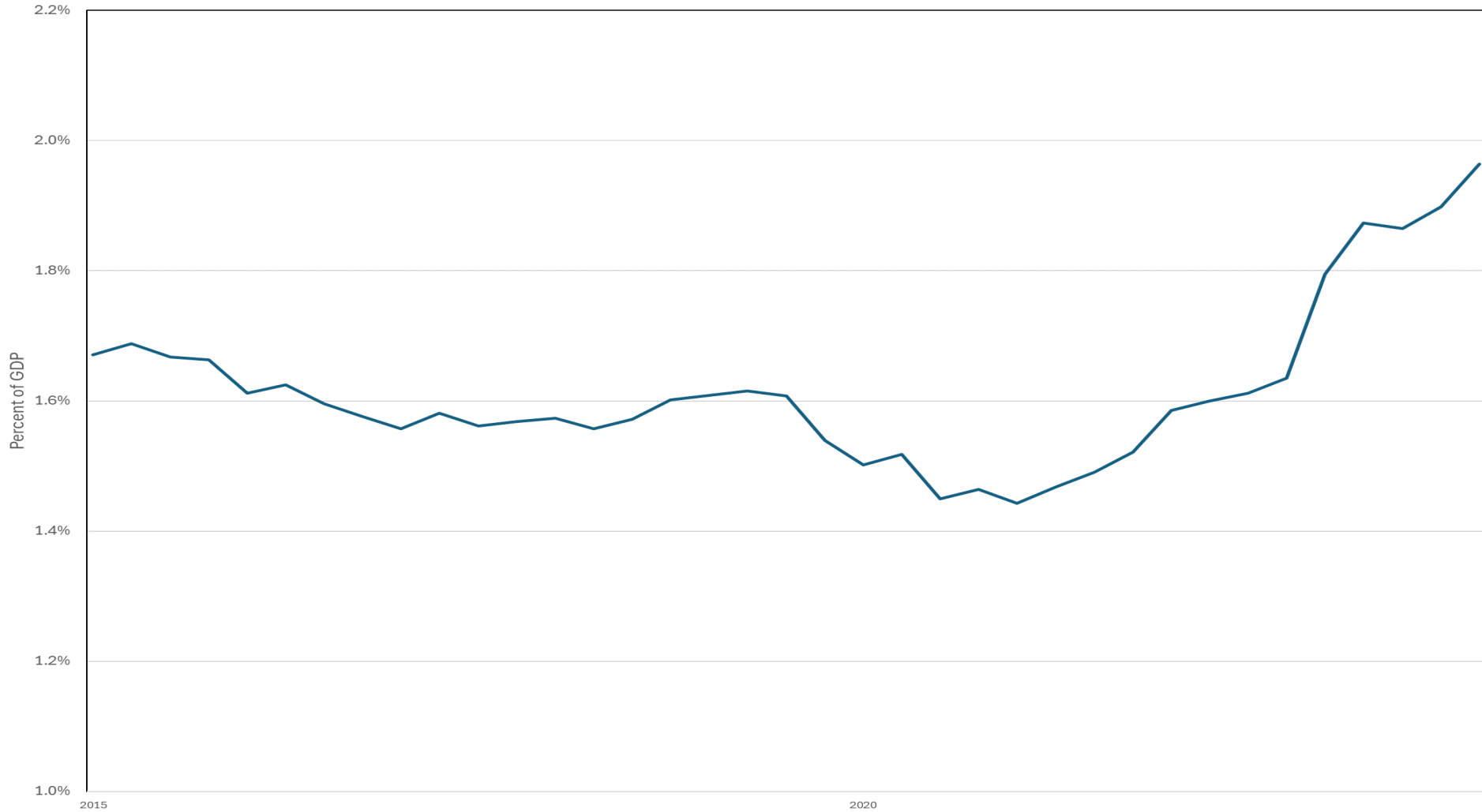
Net Worth to Disposable Income



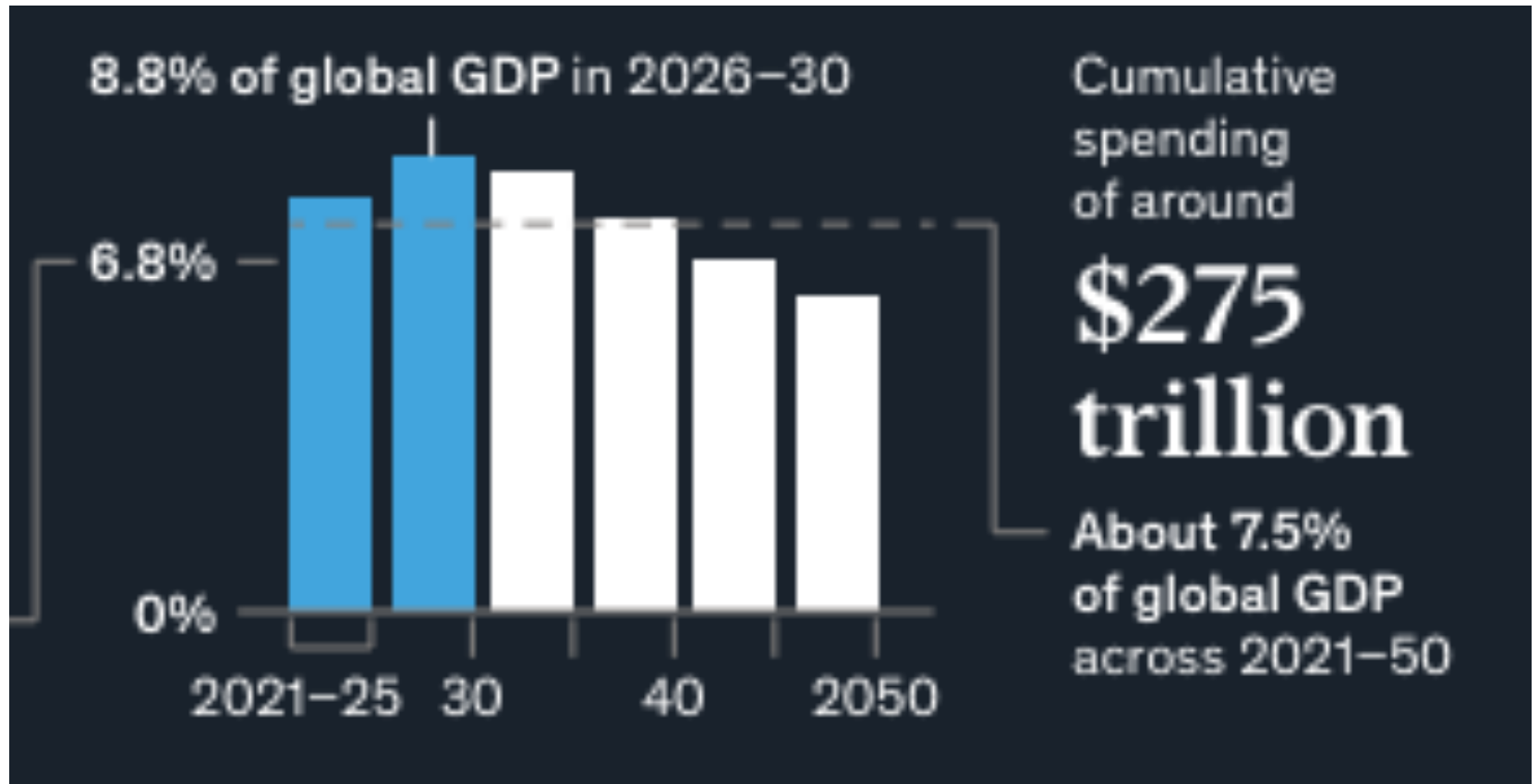
Sources: Federal Reserve Flow of Funds

Investment Stimulative Policy

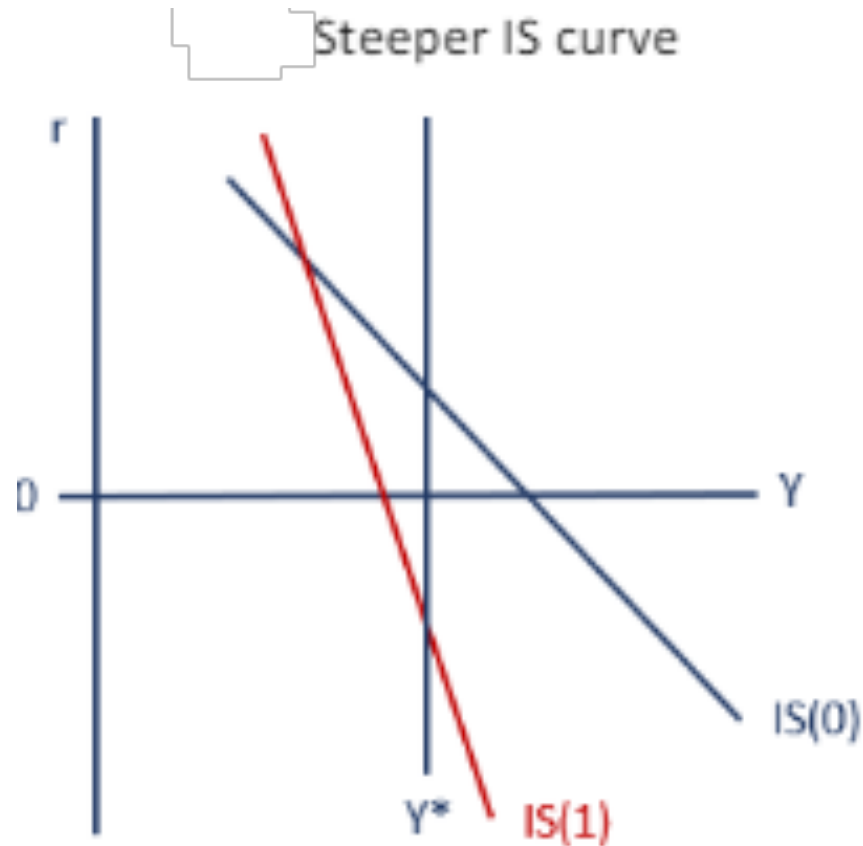
Investment in Equipment and Manufacturing Structures: GDP



Green Transition Investment



What If Interest-Rate Sensitivity is Much Smaller?



Reasons GDP Less Sensitive to Rates

- Interest sensitive component share of GDP has declined (Willis & Cao, 2015)
- Investment may be less sensitive to rates
 - Lean supply chain reduces cost of inventory investment
 - Shorter lived capital less sensitive to rates
- Consumption may be less interest sensitive, as larger holdings of government debt increases (positive) income effect from higher rates
- Higher macro uncertainty increases real option value of deferring investment, making rates less central