



Paul Sankey, President



## A Financial Market Perspective on Natural Gas





Independent Research from a former #1 Ranked Oil & Gas Analyst  
(Deutsche Bank, Wolfe Research, Mizuho Securities, formerly IEA, Wood Mac)

*Thanks for having me back*



Big Bank Research:

1. Self-serving (positive about companies to generate banking business, never rude about China)
2. Silos (Oil analyst cannot opine that Tesla is a short – because the Tesla analyst is bullish – see point 1))
3. Compliance is CYA from the risk of the dumbest analyst
4. Has powerful institutional knowledge (smart analysts cover all subjects; sees client flows)
5. Offers salary and benefits

# Education

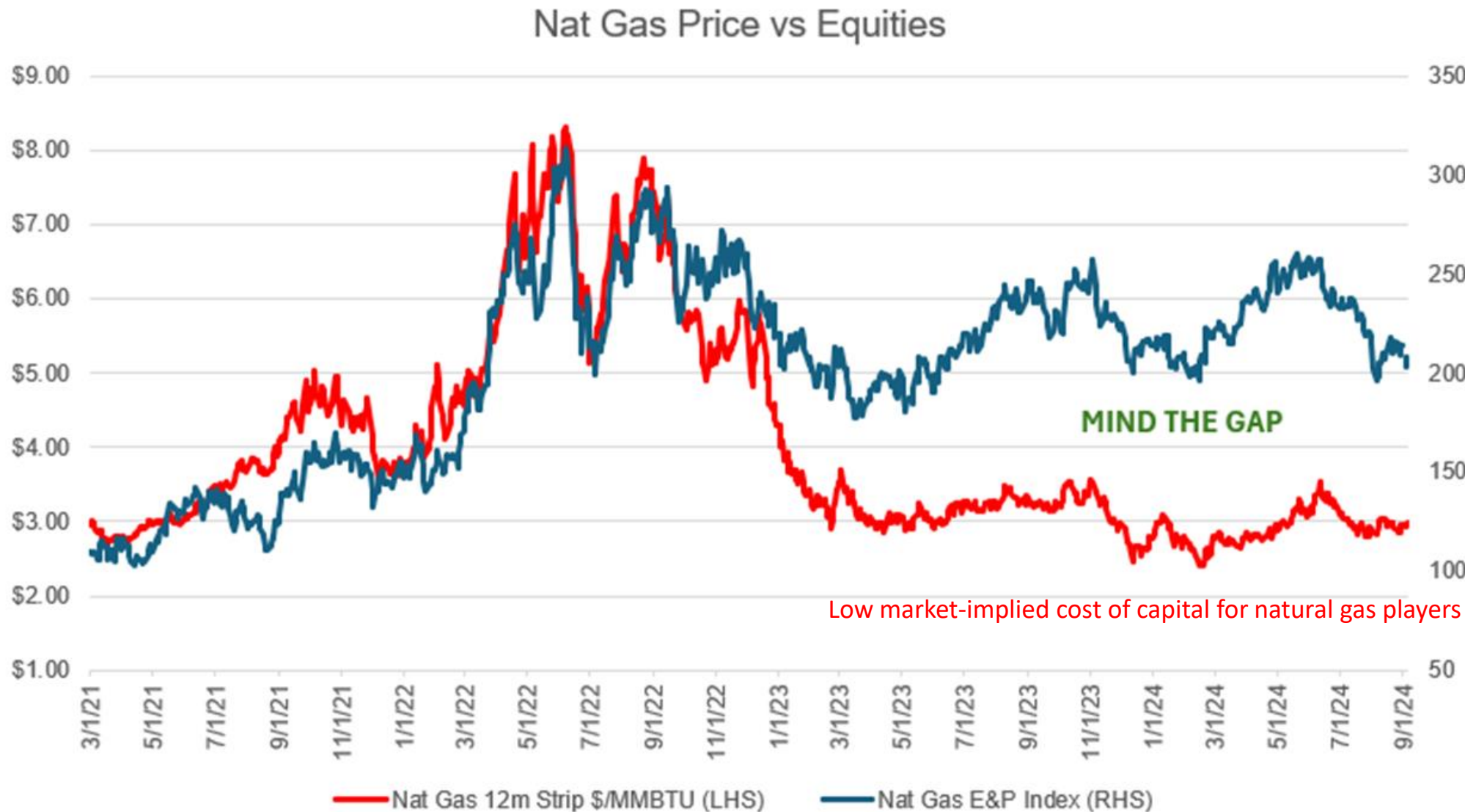
## Politicians - Undergrad

Alexandria Ocasio-Cortez:	BA International Relations & Economics
Elizabeth Warren:	BSc Speech Pathology & Audiology
Jennifer Granholm:	BA Political Science & French
Rick Perry:	BSc Animal Science
Donald Trump:	BSc Economics
Joe Biden:	BA History & Political Science
Hunter Biden:	BA History
Kamala Harris:	BA Political Science & Economics

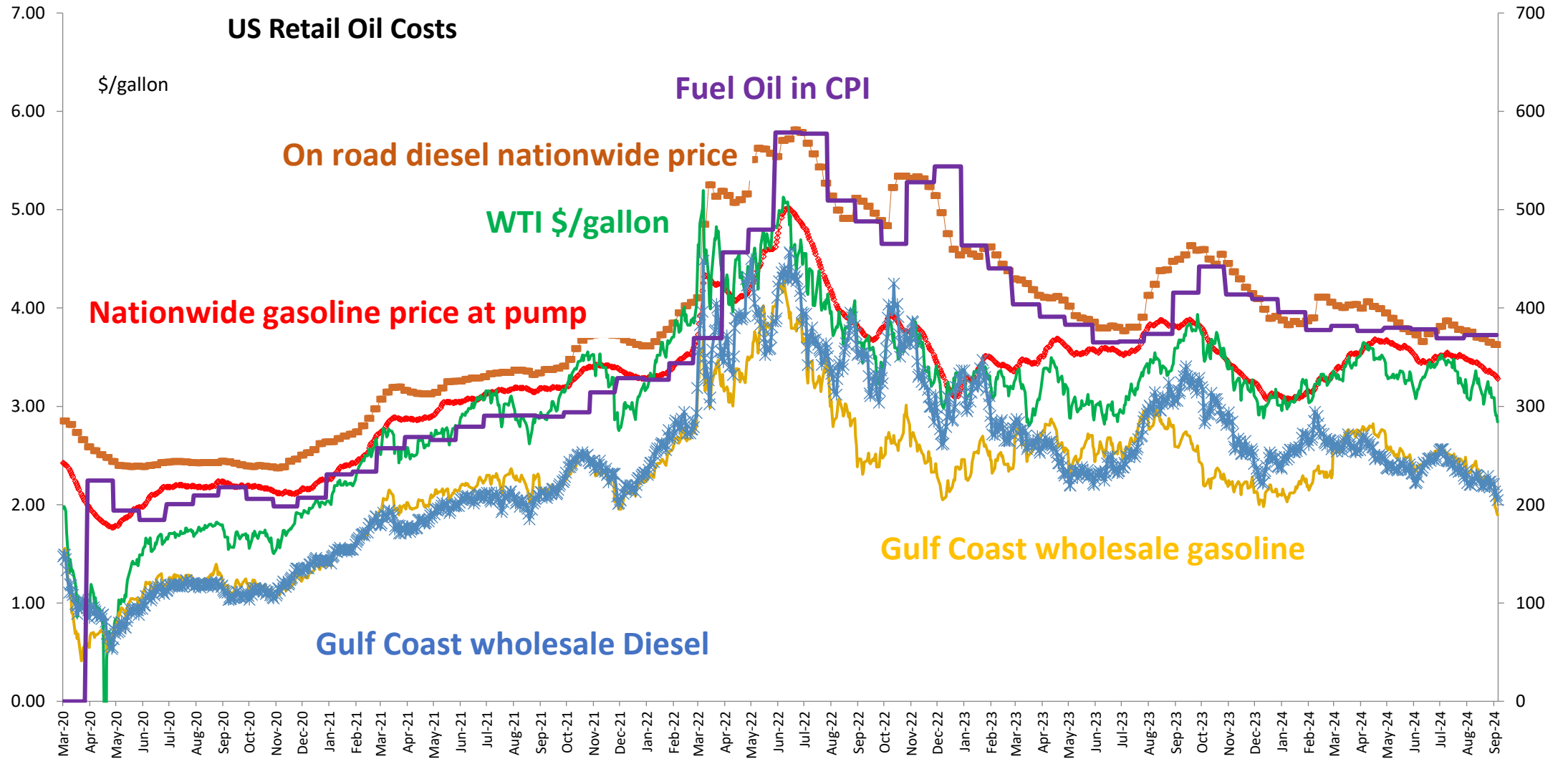
## Big Oil CEOs – Undergrad

Aramco Amin Yasser:	BSc Petroleum Engineering
ExxonMobil Darren Woods:	BSc Electrical Engineering
Chevron Mike Wirth:	BSc Chemical Engineering
Shell Wael Sawan:	BSc Chemical Engineering
TotalEnergies Pat Poyanne:	(Science Po) Engineering
BP Bernard Looney:	BSc Electrical Engineering
ConocoPhillips Ryan Lance:	BSc Petroleum Engineering
Oxy Vicki Hollub:	BSc Mineral Engineering
EOG Ezra Yacob:	MSc Geology
Pioneer Scott Sheffield:	BSc Petroleum Engineering

# Conclusion

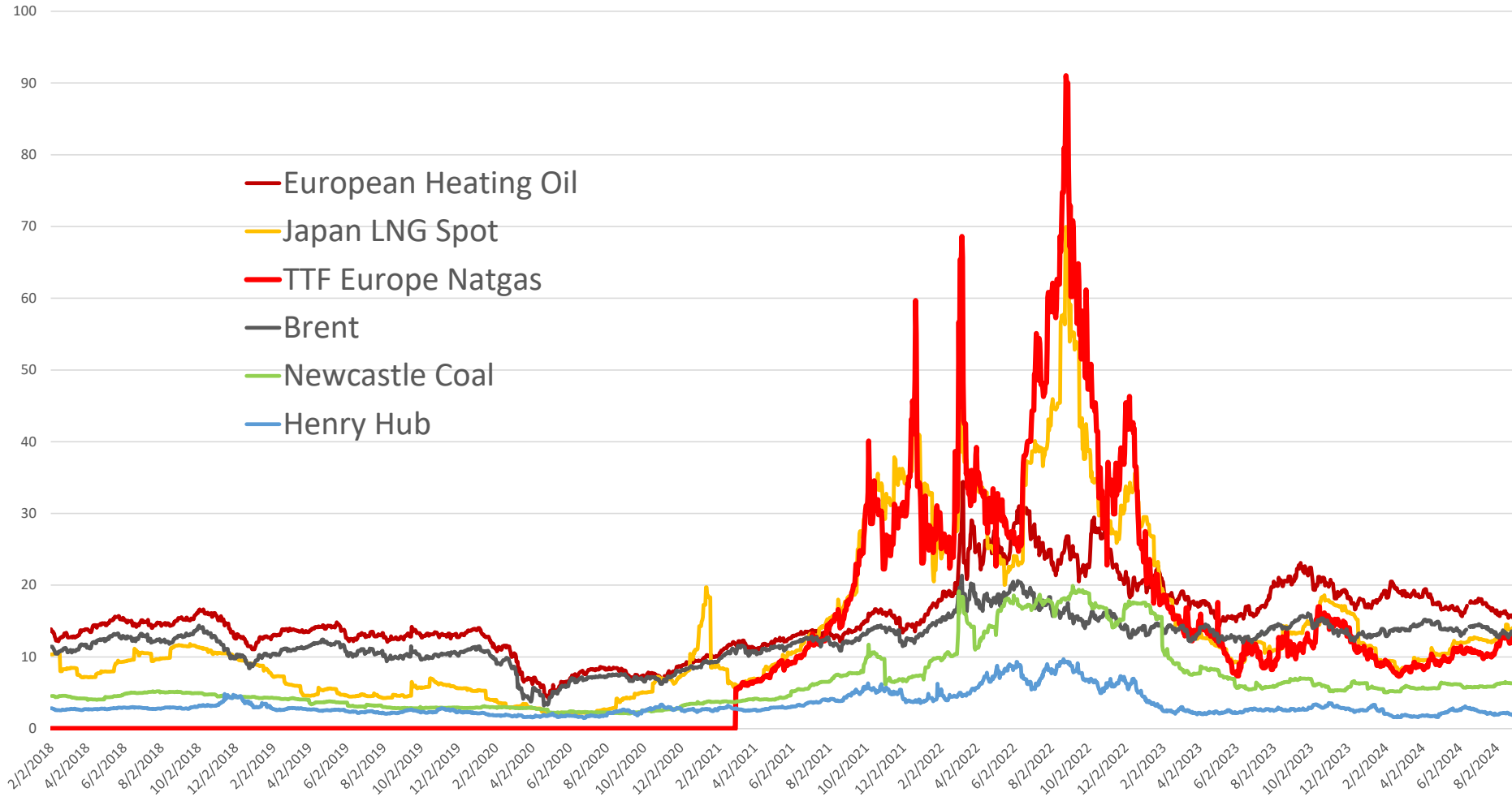


# Oil Prices Under Pressure

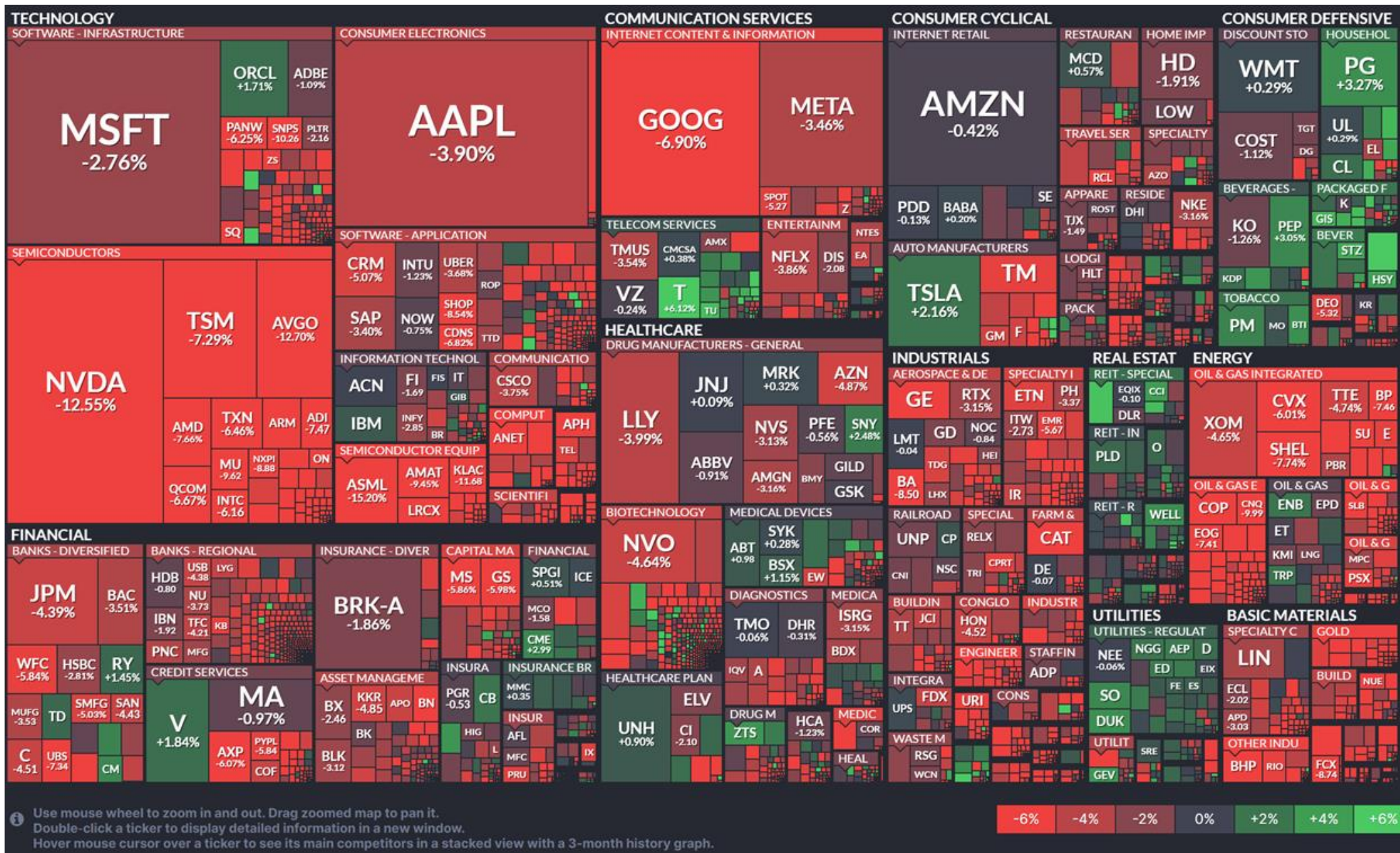


# Energy Order is Normalising

## US, European and Japanese Oil & Natural Gas prices US\$ per mmbtu

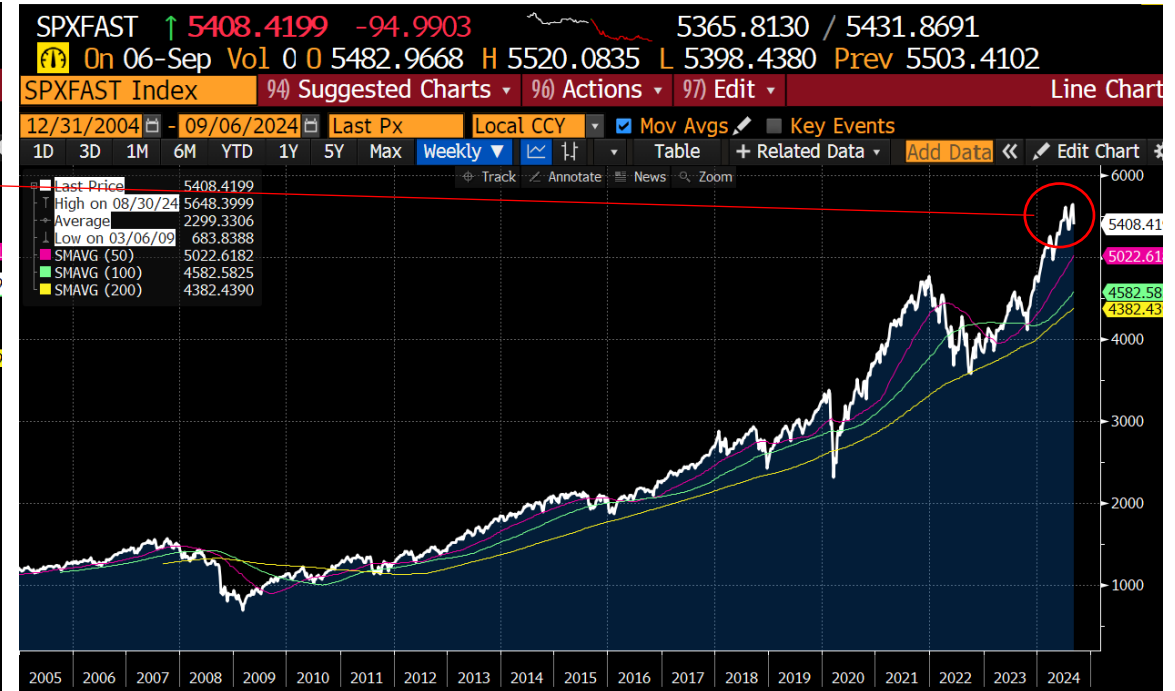


# Market Past Week



## S&P500 Year to Date

## S&P500 Since 2004

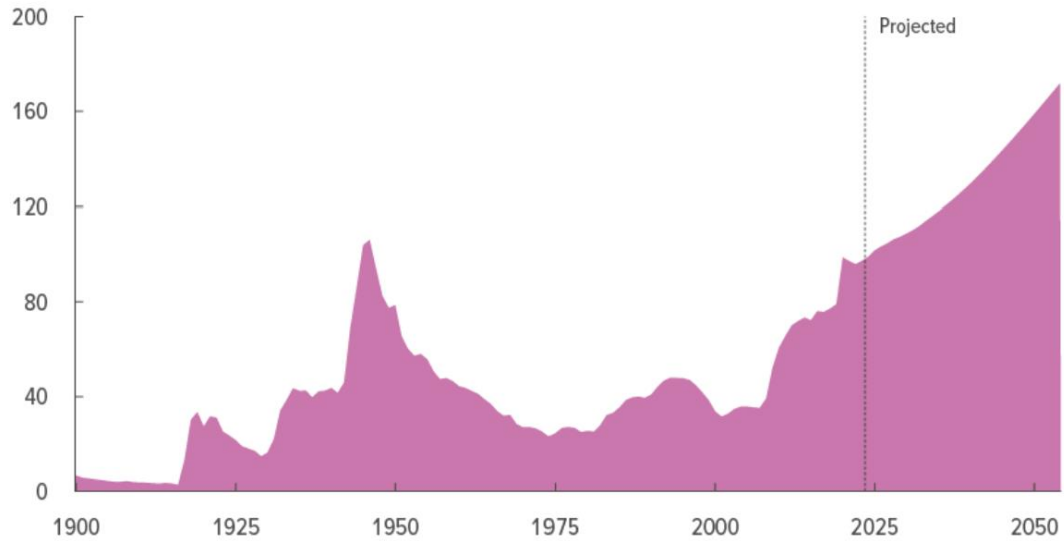




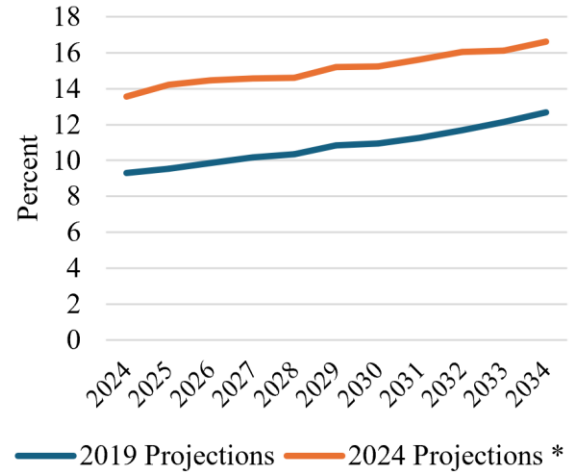
# Government Deficit Spending

## Federal Debt Held by the Public

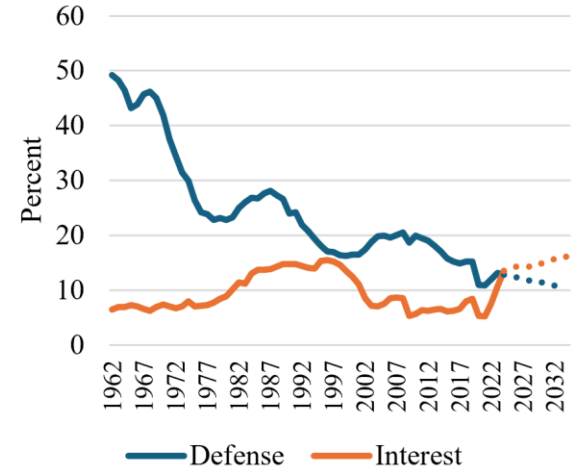
Percentage of GDP



## Net Interest Cost as Share of Total Federal Outlays



## Share of Total Federal Outlays by Category



Sources: Congressional Budget Office (CBO), FRED, and authors' calculations

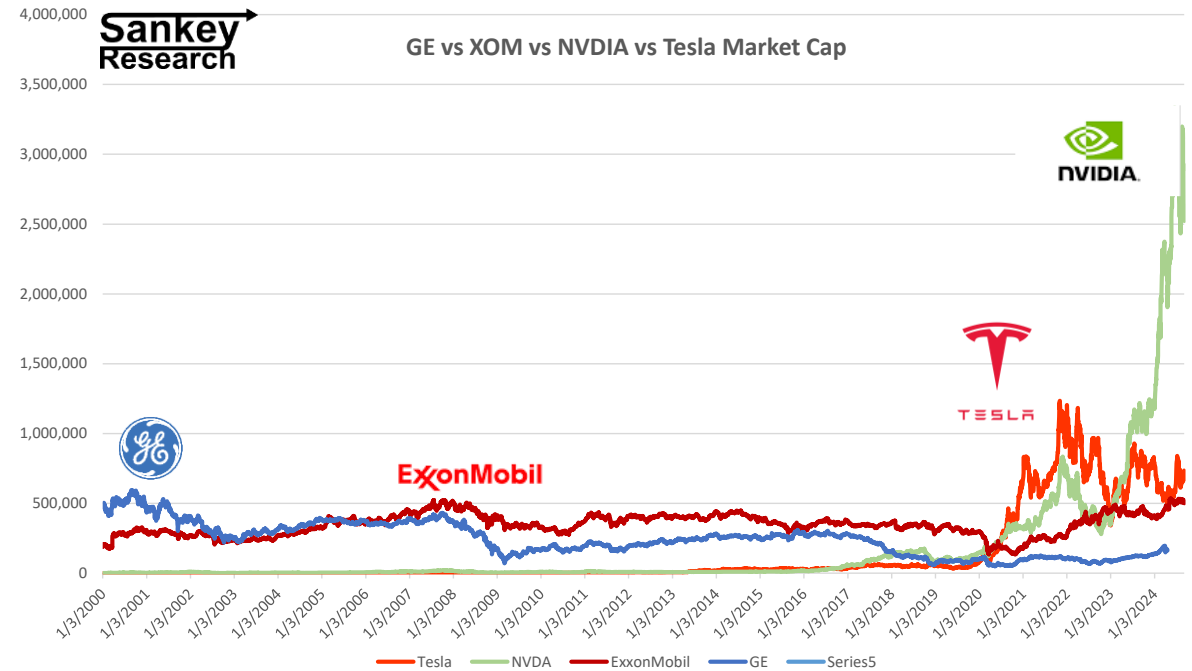
\* Estimation is revised with an interest rate 10 basis points higher than the CBO's original 2024 calculations due to the Fed's projection of a higher longer-run interest rate in its most recent Summary of Economic Projections.

# Last Hurrah for the Market?

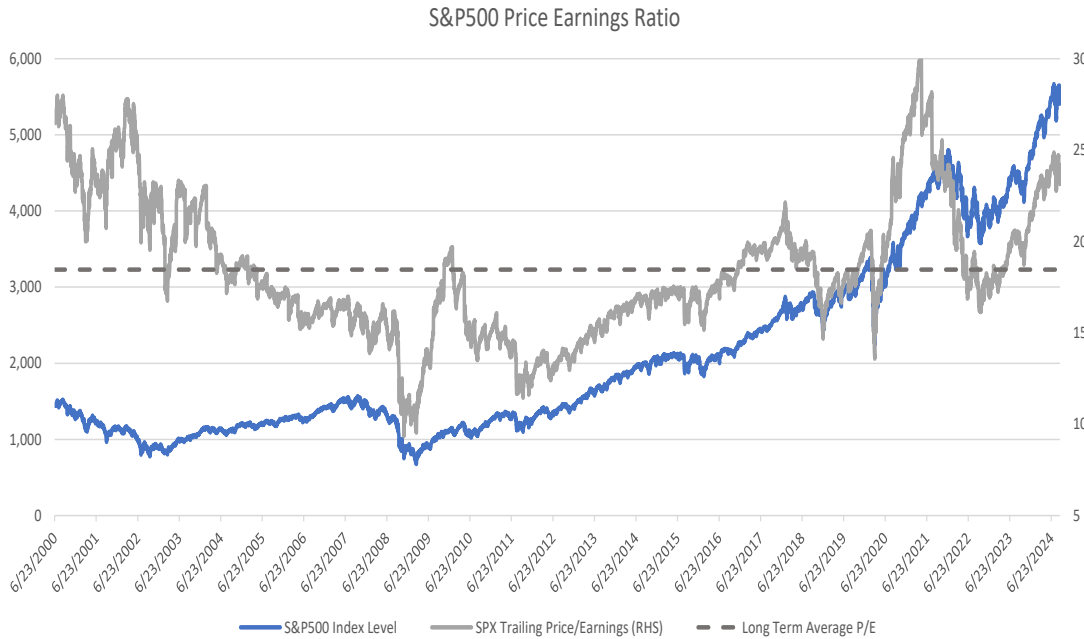
## S&P500 vs Equal Weight S&P500



## GE vs XOM vs Tesla vs NVDA Since 2004

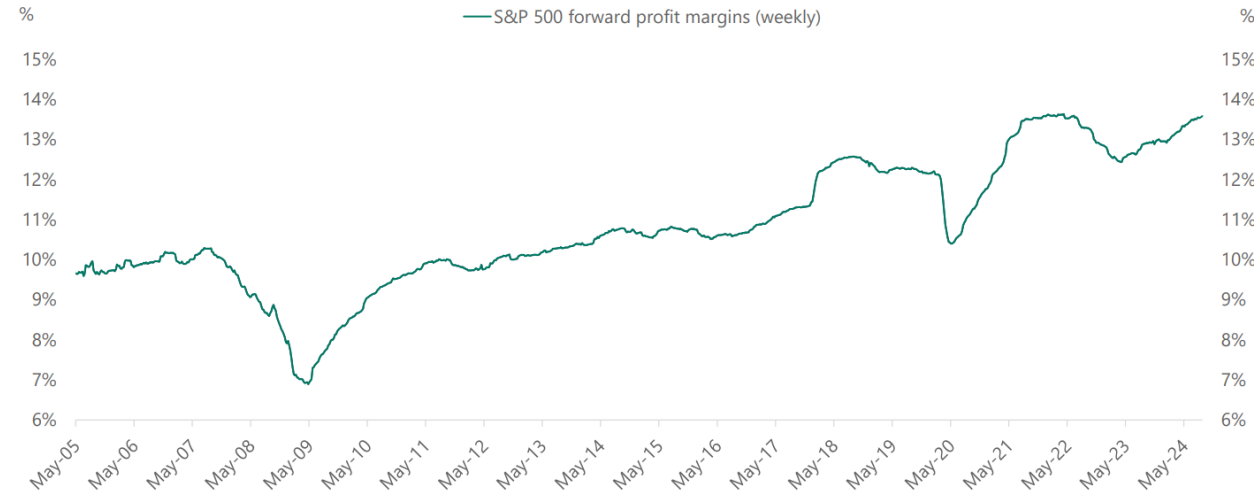


## S&P500 Year to Date



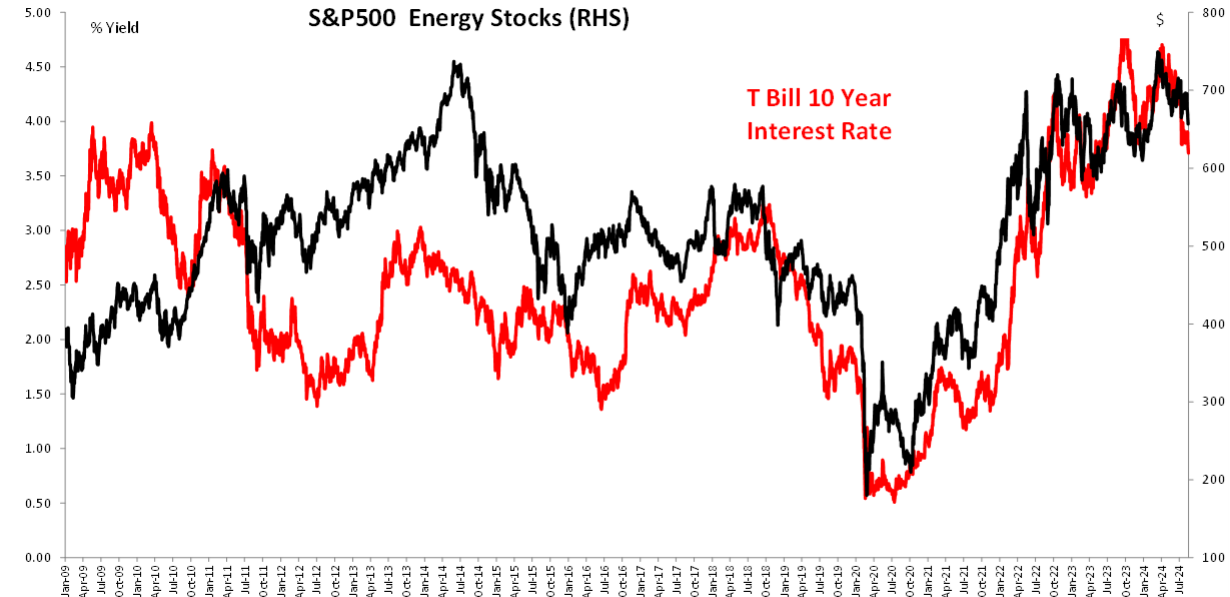
## S&P500 Since 2004

### S&P 500 weekly forward profit margins near record high levels

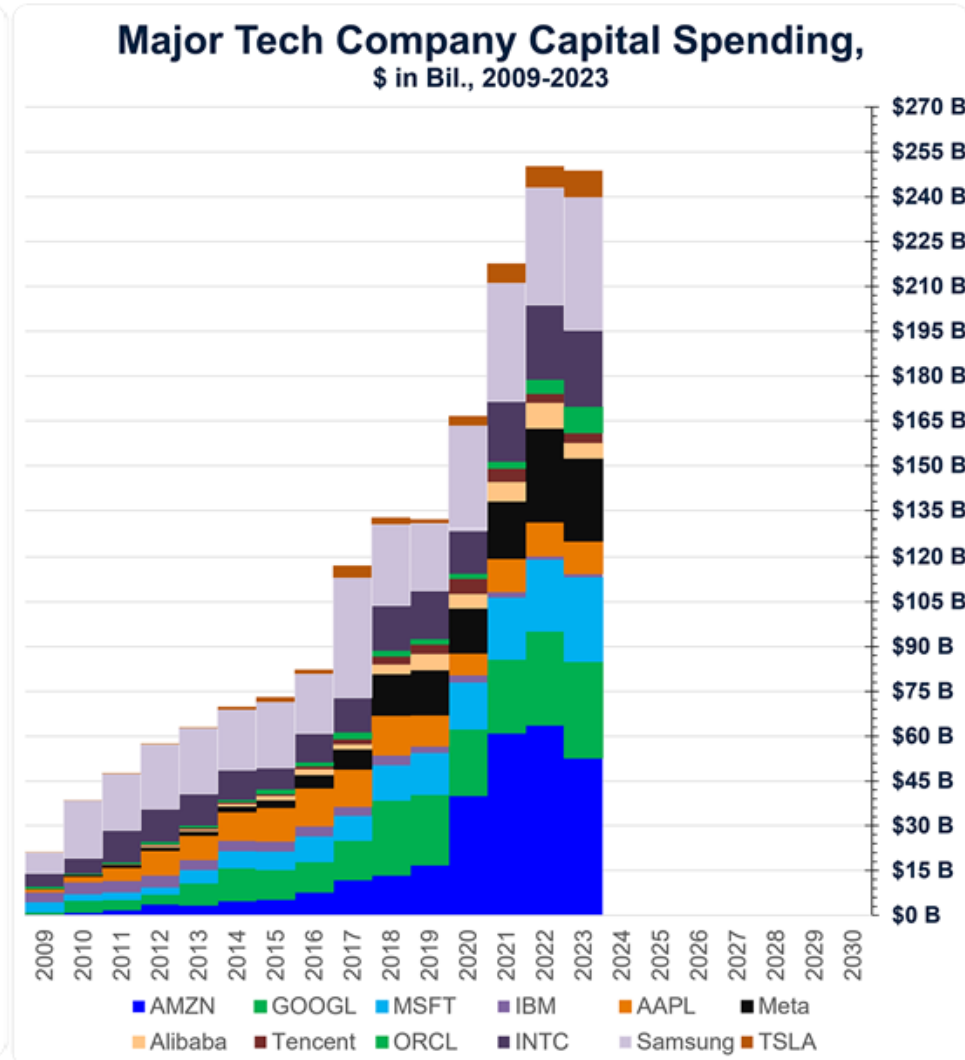
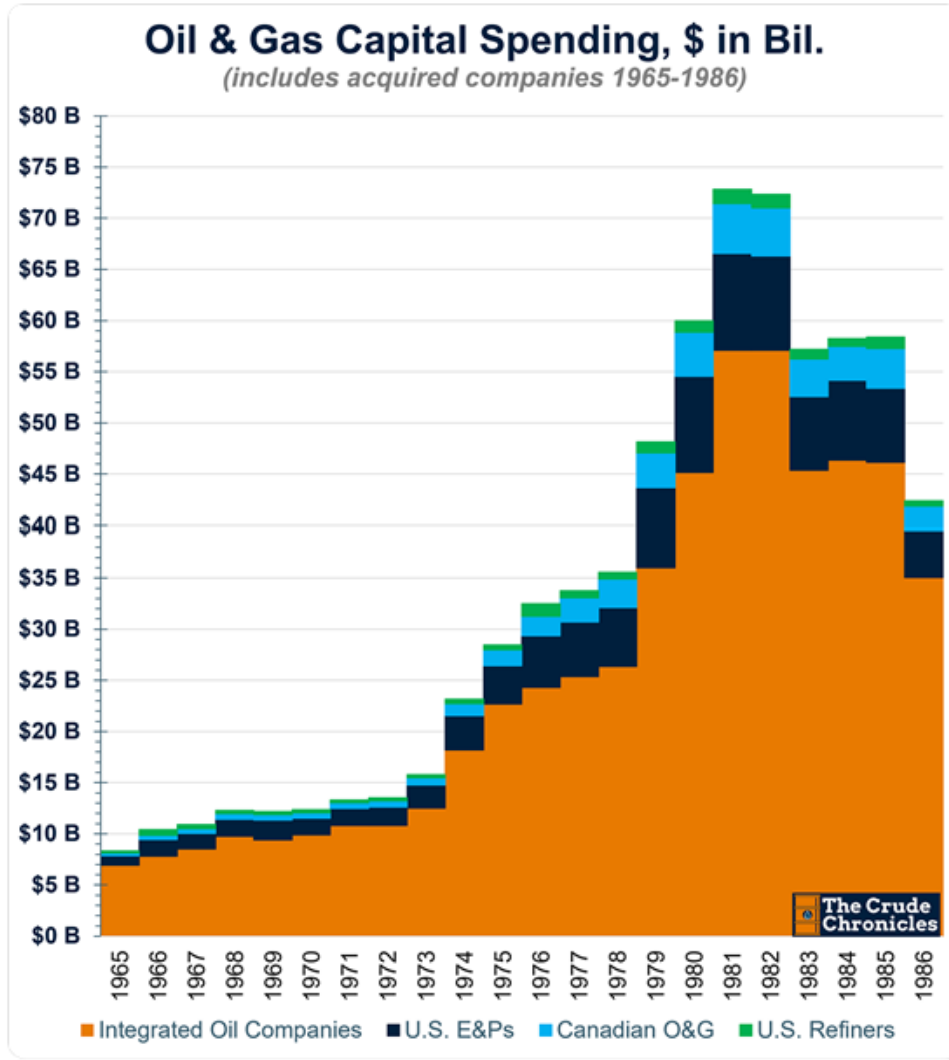


Source: Bloomberg, Apollo Chief Economist. Note: The 12 months forward profit margins are calculated by using the weighted average of 1FY (current year estimate) and 2FY (next year estimate) to smooth out fiscal year transitions.

# Yields falling on GDP Outlook, Bad for Oil & Gas



# AI Arms Race



# What are daily and weekly indicators telling us about the US economy?

## Daily data:

**Restaurant bookings:** Strong

**TSA air travel data:** Strong

**Daily debit card data:** Strong

## Weekly data:

**Atlanta Fed GDPNow:** 2.1%

**Fed's weekly GDP index:** 2.4%

**Retail sales:** Strong

**Jobless claims:** Sideways

**Hotel occupancy rate, daily rate, and RevPAR:** Strong

**Bank lending to firms and consumers:** Growing

**Bankruptcy filings:** Trending lower

**Credit and debit card data:** Solid

**Global jet fuel demand:** Strong

**Broadway show attendance:** Strong

**Box office weekly grosses:** Strong

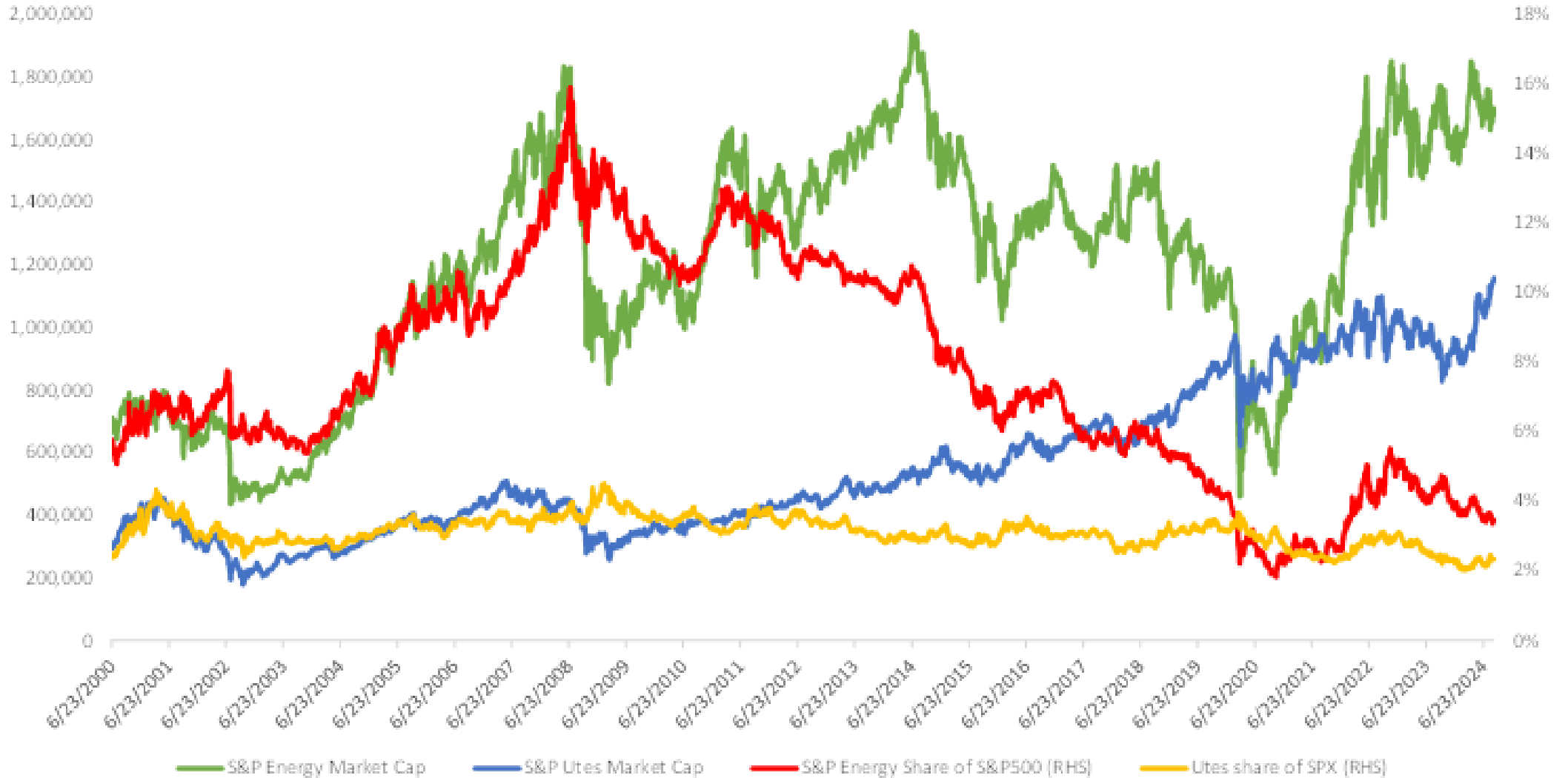
**S&P 500 forward profit margins:** Near record highs

**Business formation:** Rebounding

**ASA temp worker staffing index:** Sideways

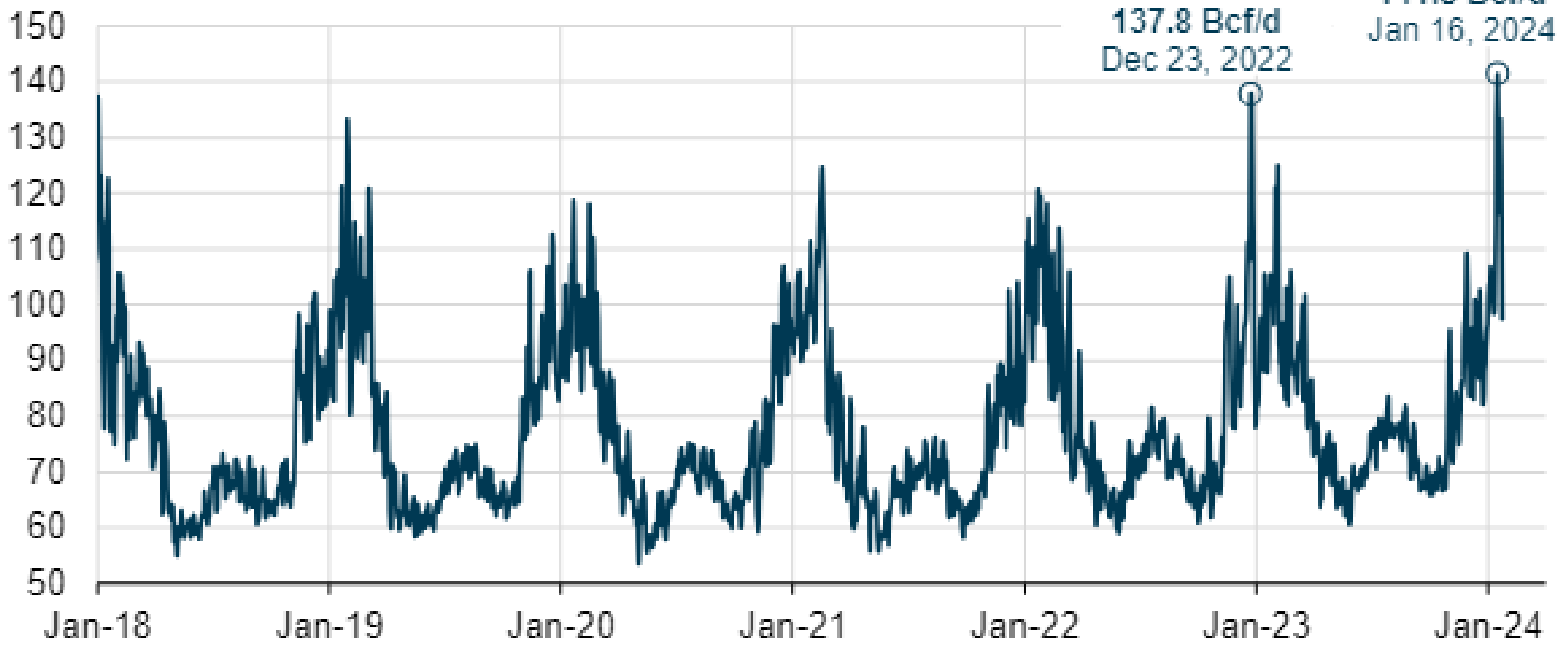
Note: Data as of Saturday September 7, 2024. Source: Apollo Chief Economist

### Oils' + Utilities Share of the S&P500 Market Cap



# Strong demand

Daily natural gas consumption in the U.S. Lower 48 states (Jan 1, 2018–Jan 22, 2024)  
billion cubic feet per day (Bcf/d)

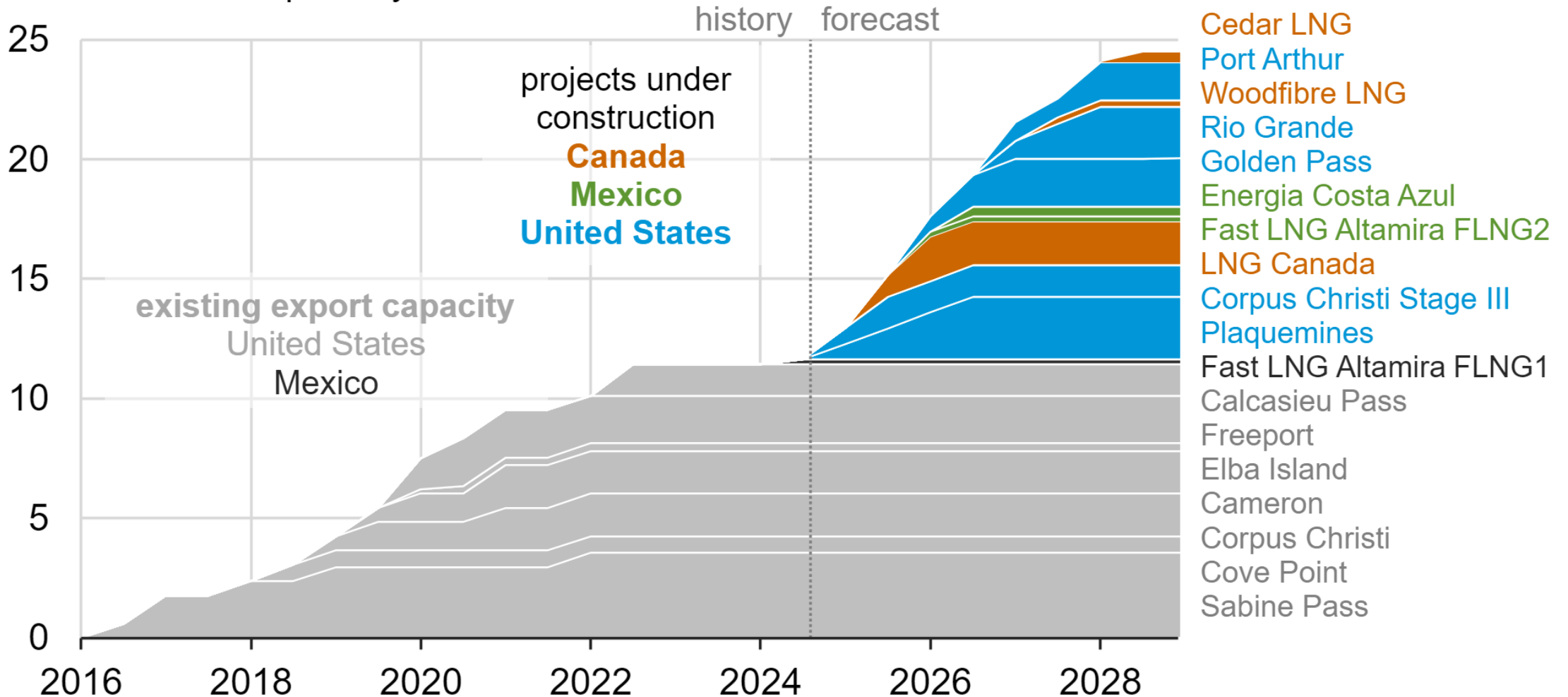




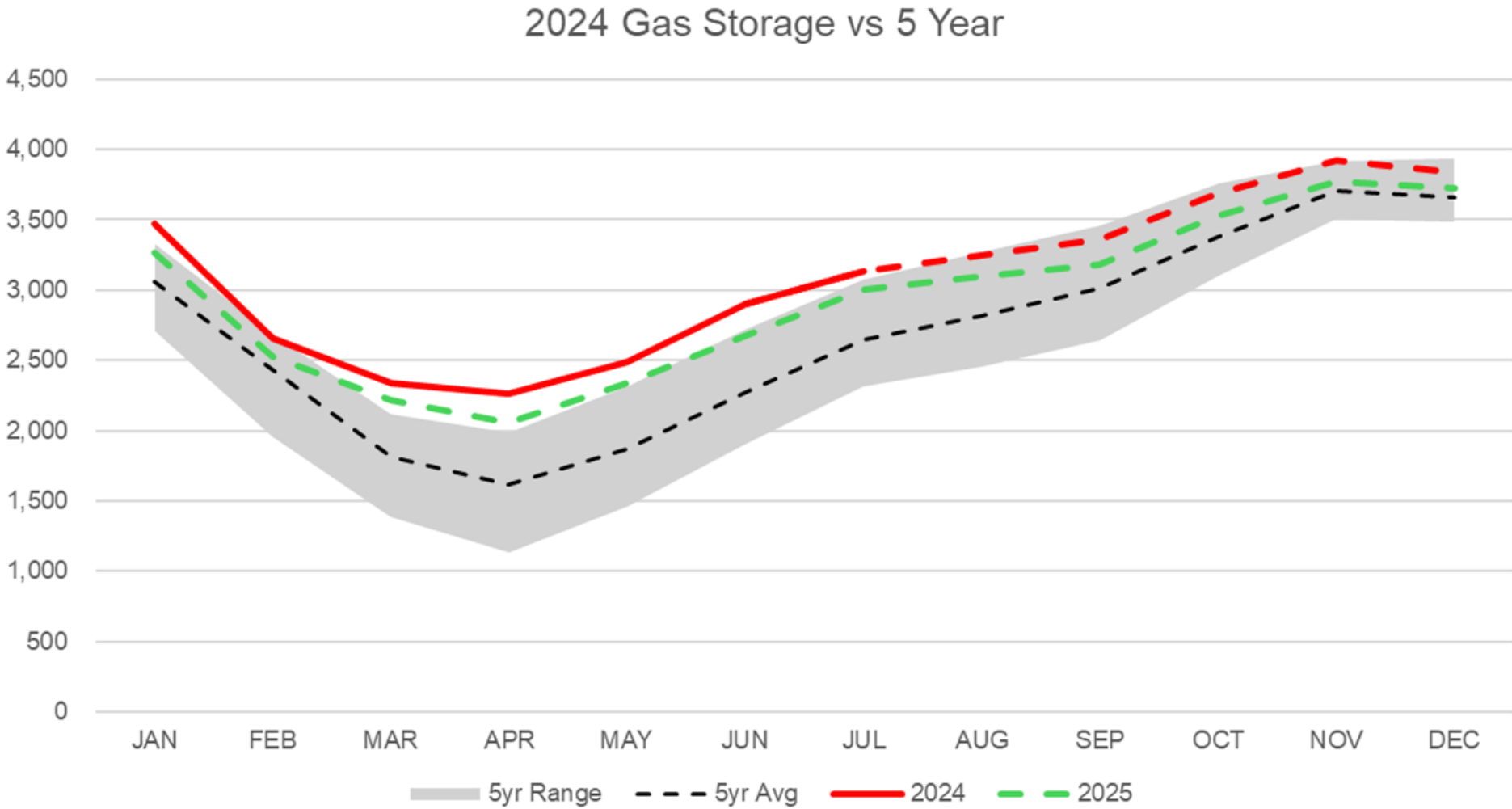
# Strong demand

## North America liquefied natural gas export capacity by project (2016–2028)

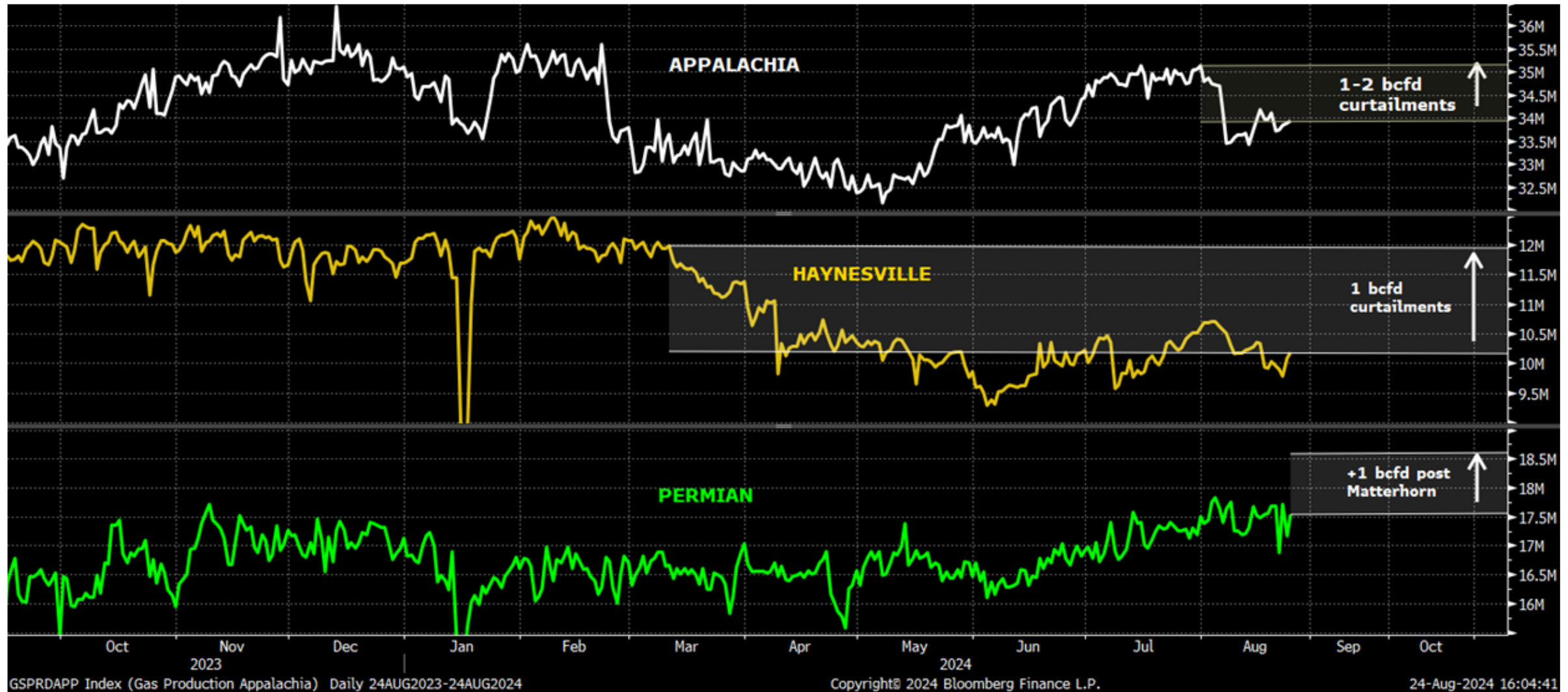
billion cubic feet per day



# Strong Supply

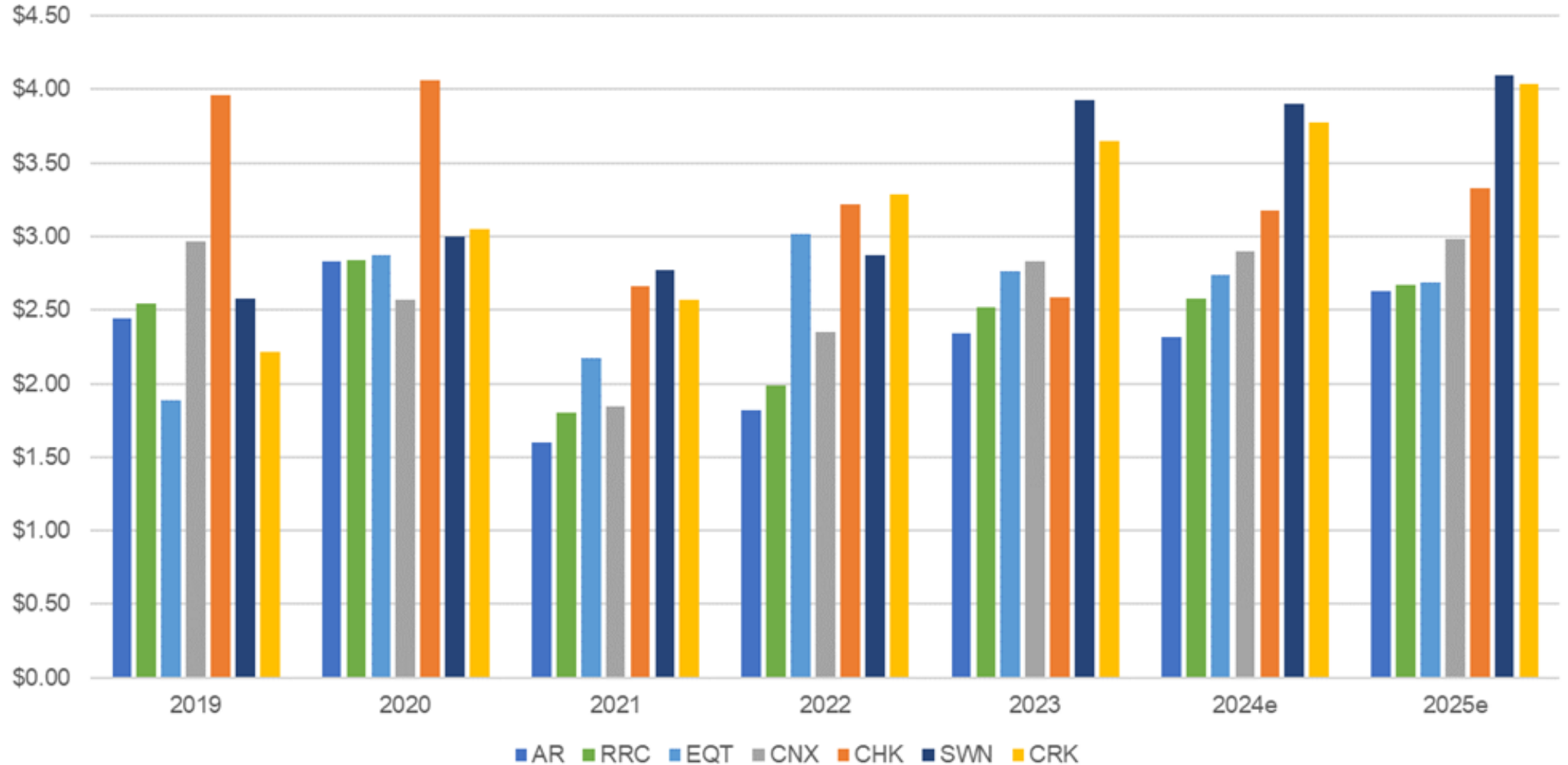


# Strong Supply – Spare Capacity in US Natgas



# Natgas Supply Marginal Cost

Cash Operating Cost + Reserve Replacement + FCF \$/MMBTU NYMEX Gas



# Natgas Futures and Forecasts Too High

## Henry Hub 2025 (\$/mmbtu)

