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Annual Commercial
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ELEVATE 2024

BerryDunn's Commercial Summit

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December 11, 2024

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Annual Commercial
Summit | 2024



Economic Update

Curated Information for the Busy Executive

 BerryDunn

December 11, 2024

Presenter



Erik Olson
Senior Manager



Learning objectives

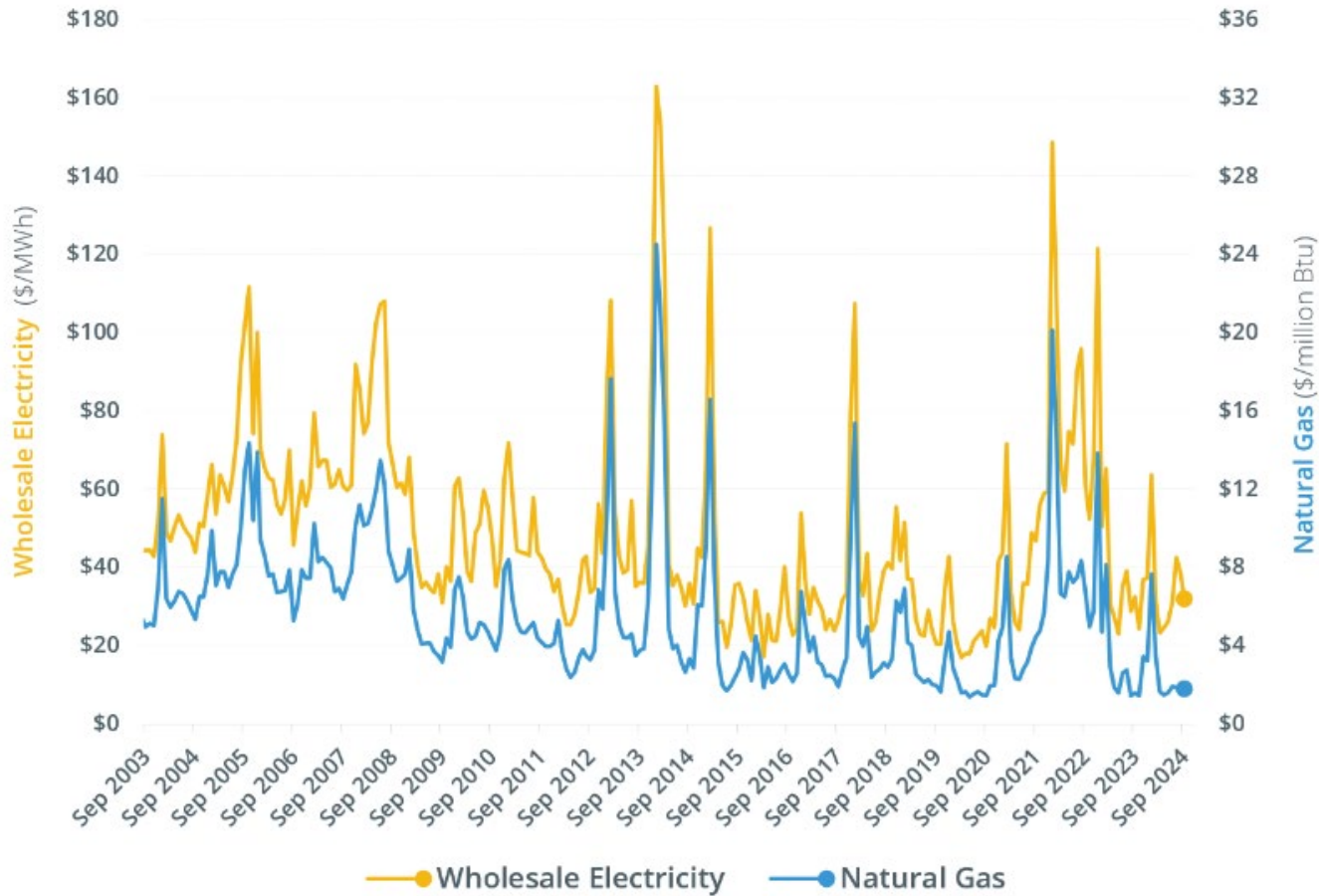


- ▲ Obtain an update and perspective of current trends driving business results
- ▲ Share information through polling to provide a sample sentiment on the data provided
- ▲ Obtain links to useful sites and resources for future use



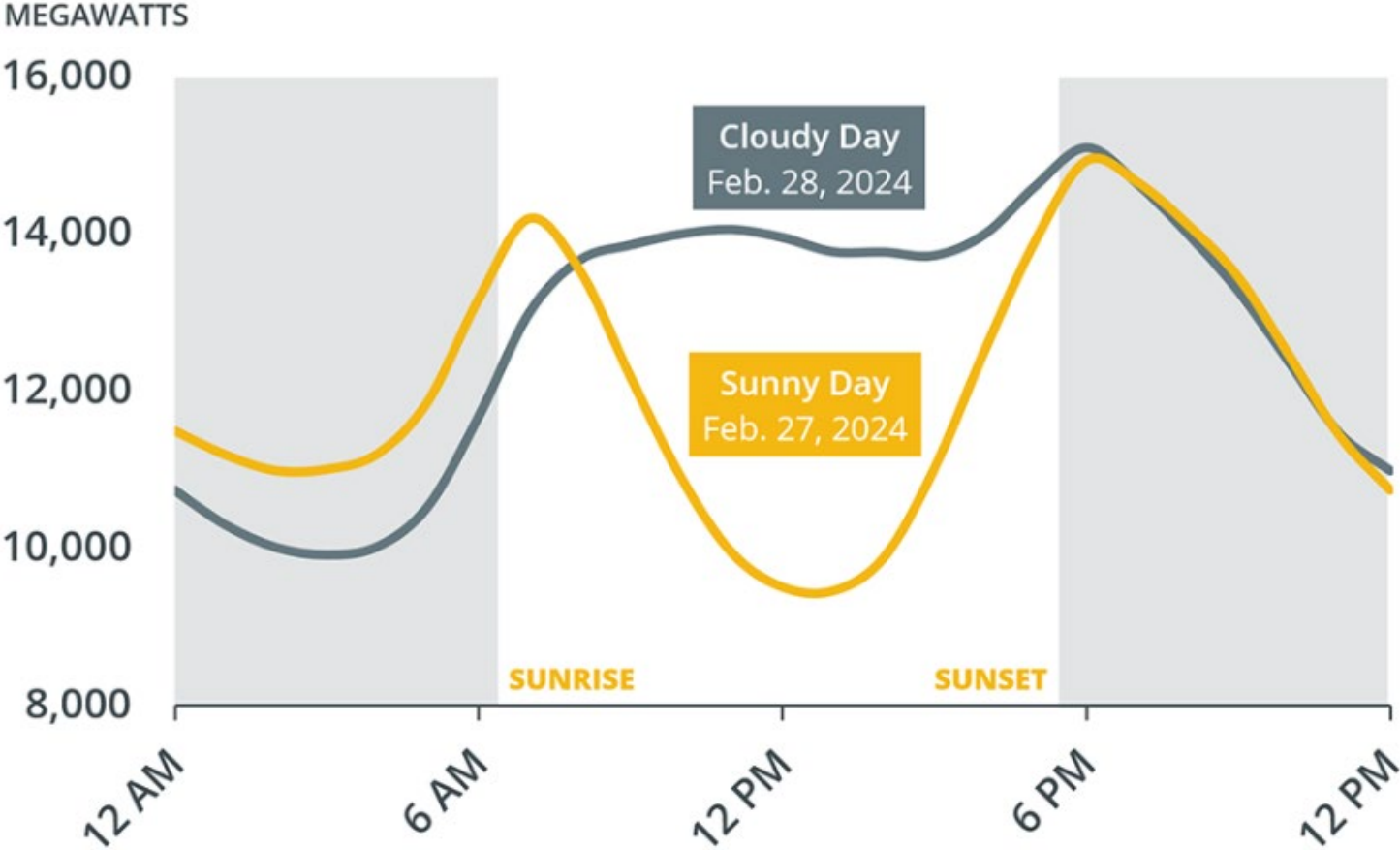
Energy

Wholesale electricity and natural gas prices



<https://www.iso-ne.com/>

The impact of behind-the-meter solar can vary widely one day to the next



<https://www.iso-ne.com/>

The grid is changing

TODAY'S GRID

Nearly 400 dispatchable generators

More than 6,500 MW of solar power, with most installations connected "behind the meter"

More than 1,400 MW of wind power

THE 2040 GRID

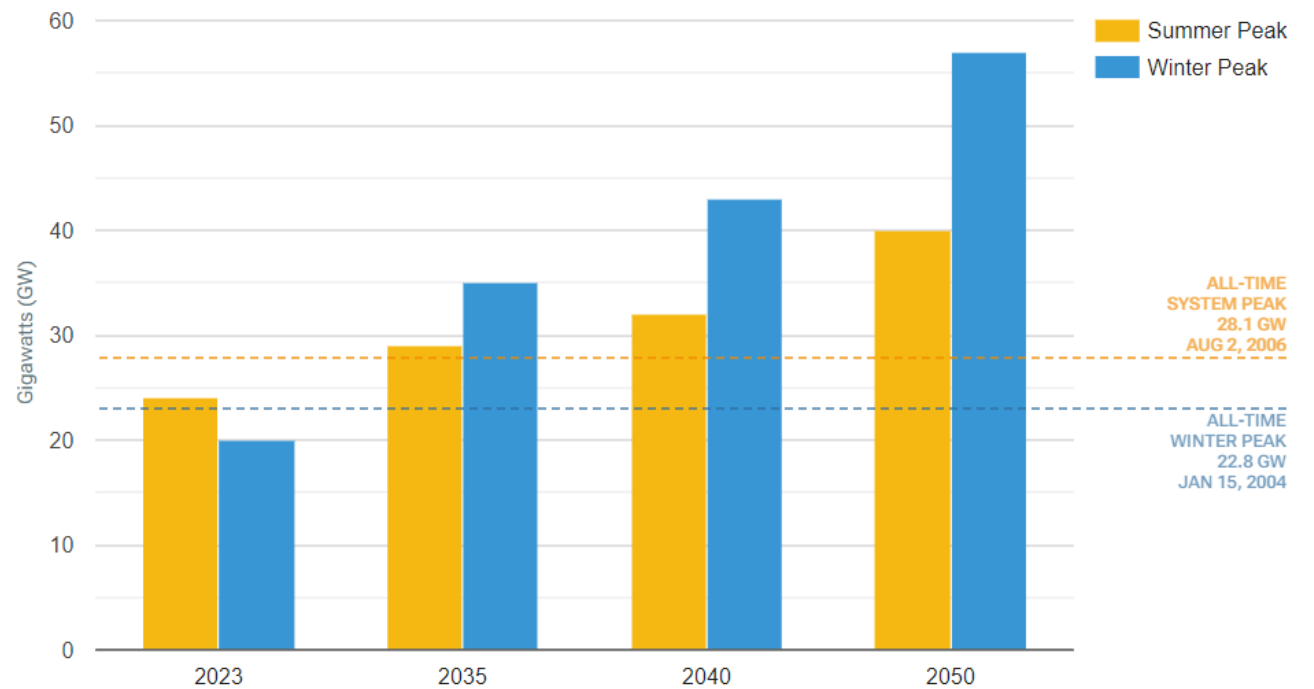
Potential for more than 1 million nondispatchable, weather-dependent generators

An additional 28,000 MW of solar power

An additional 17,000 MW of offshore wind

Significant demand growth as system peak shifts to winter

The transition to electric heat and vehicles will drive significant demand growth over the next quarter century.



Source: Massachusetts Energy Pathways to Deep Decarbonization study and ISO New England 2050 Transmission Study



Requested rate increases by gas and electric utilities (\$M)



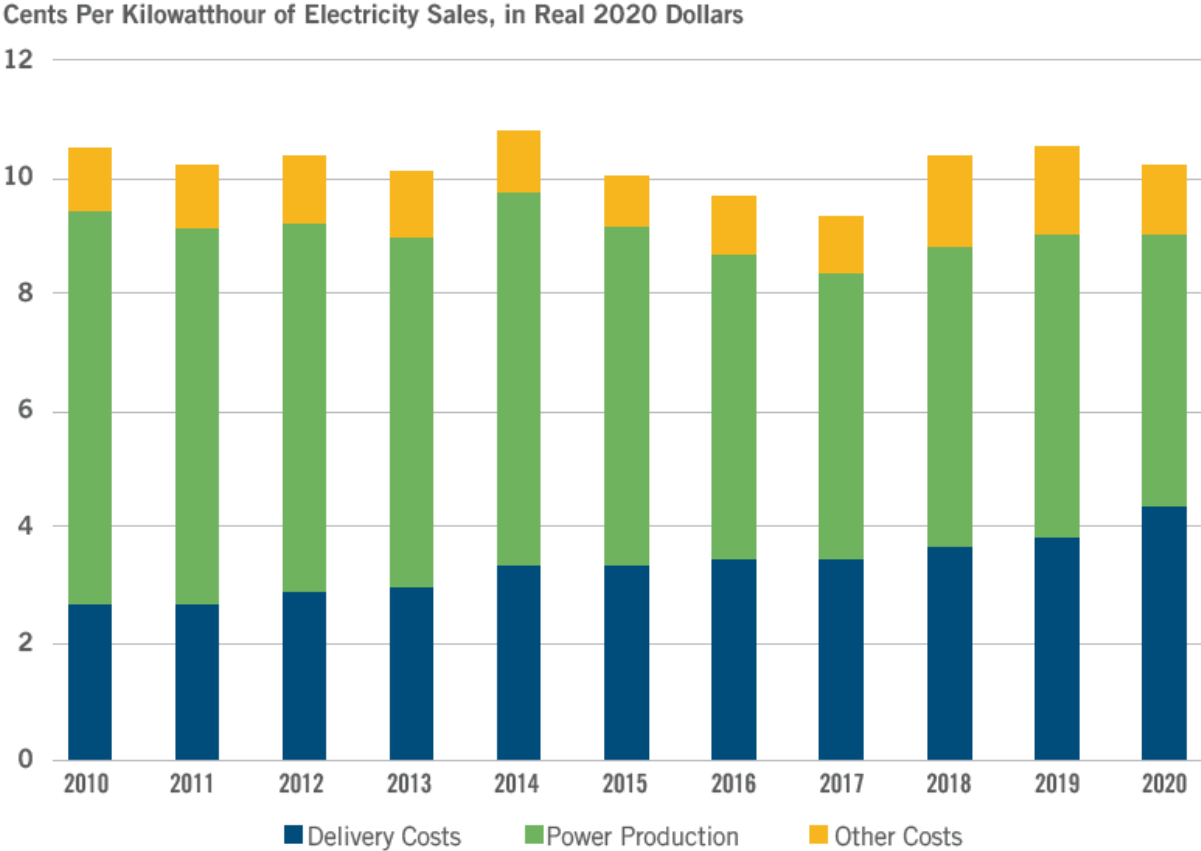
As of Jan. 23, 2024.
Source: Regulatory Research Associates, a group within S&P Global Commodity Insights.
© 2024 S&P Global.



<https://www.spglobal.com/market-intelligence/en/news-insights/research/rate-requests-by-us-energy-utilities-set-record-in-2023-for-3rd-straight-year#:~:text=Rate%20case%20determinations%20in%202023,billion%20by%20these%20tracked%20utilities>

Exhibit 1:

Major U.S. utilities' annual spending by category



Source: EIA





Oregon Biochar Solutions Biochar

CORCs in stock ⓘ Price per tonne Durability
734 **On demand** CORC 100+

Operational

Oregon Biochar produces a high-quality, high-carbon and high surface area biochar (Rogue Biochar) from local forestry biomass...

Location

United States



Details



Red Trail Energy LLC Geologically stored carbon

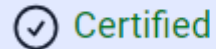
CORCs in stock ⓘ Price per tonne Durability
103,316 **On demand** CORC 1000+

Operational

Red Trail Energy is a North Dakota bioethanol plant operator who began operations in 2007. The facility utilizes locally sourced corn...

Location

United States



Details



Scotts Valley Energy Corporation - Red ... ⓘ Biochar

CORCs in stock ⓘ Price per tonne Durability
0 **On demand** CORC 100+

Future facility

Scotts Valley Energy Corporation (SVEC) is developing 7 bioenergy and biochar production facilities in Lake County,...

Location

United States

Details



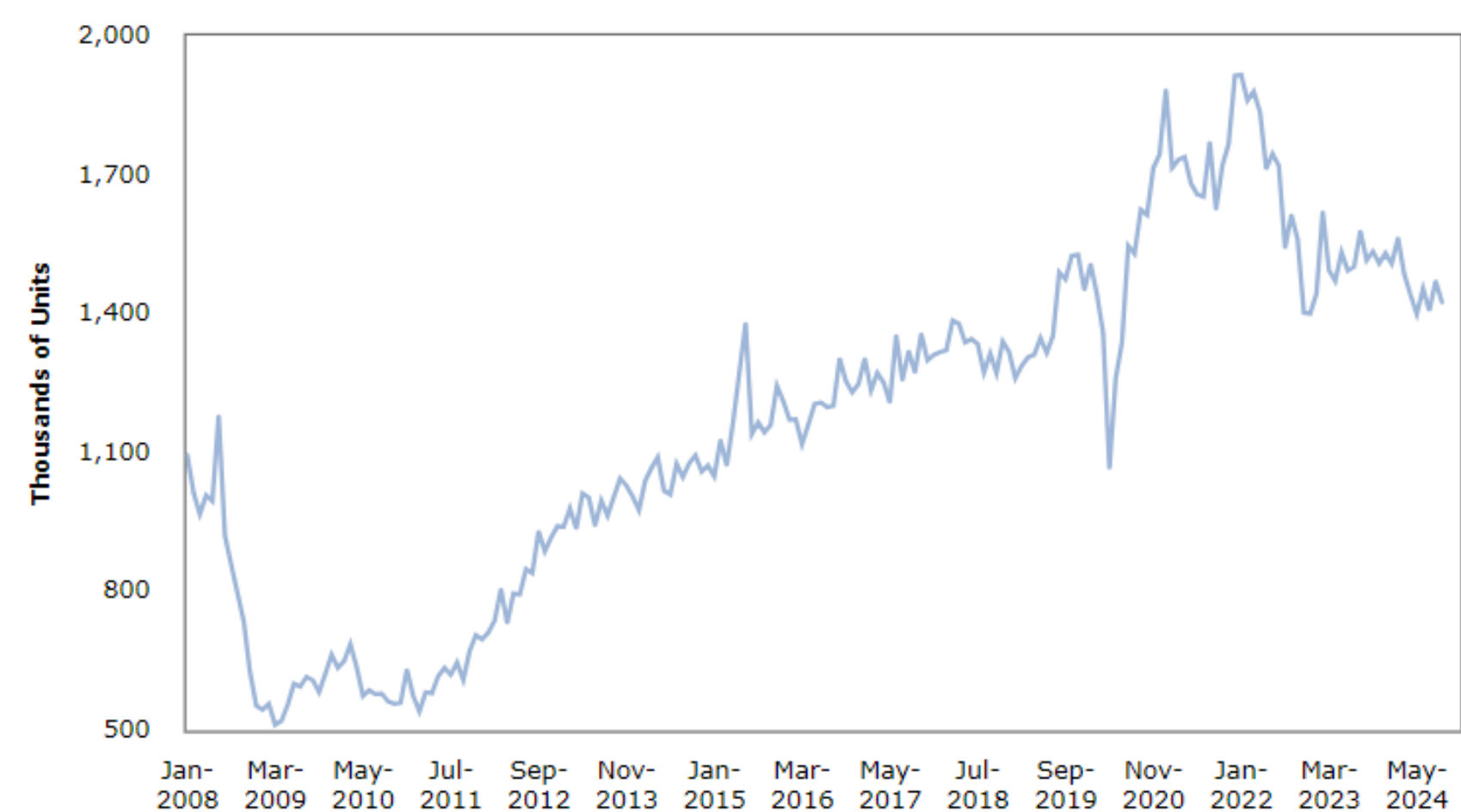
Polling question #1





Housing

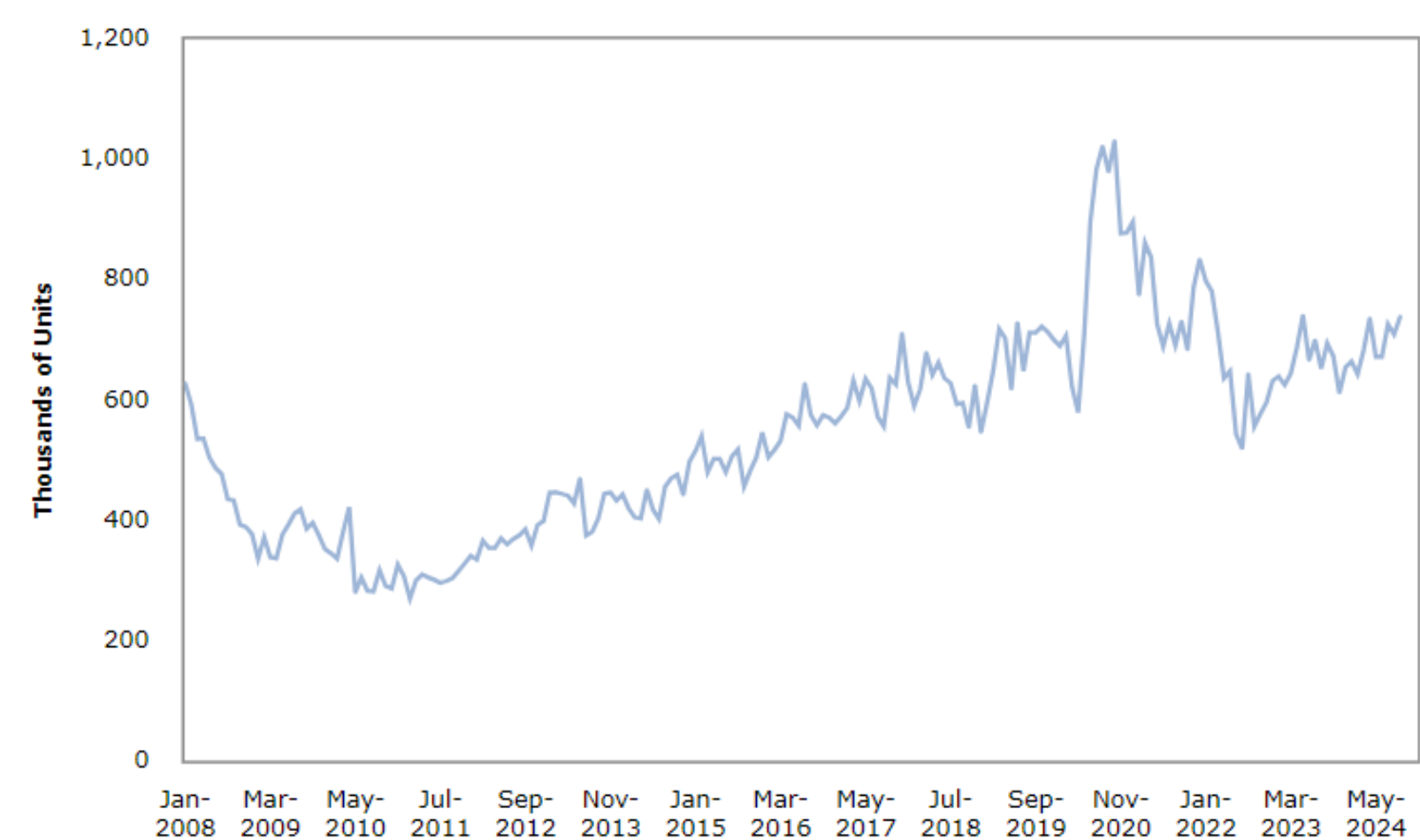
Seasonally adjusted total units



Source: New Residential Construction Annual Rate for Housing Units
Authorized in Permit-Issuing Places: United States Jan-2008 to Dec-2024
<https://fred.stlouisfed.org/categories/32302>



Seasonally adjusted all houses

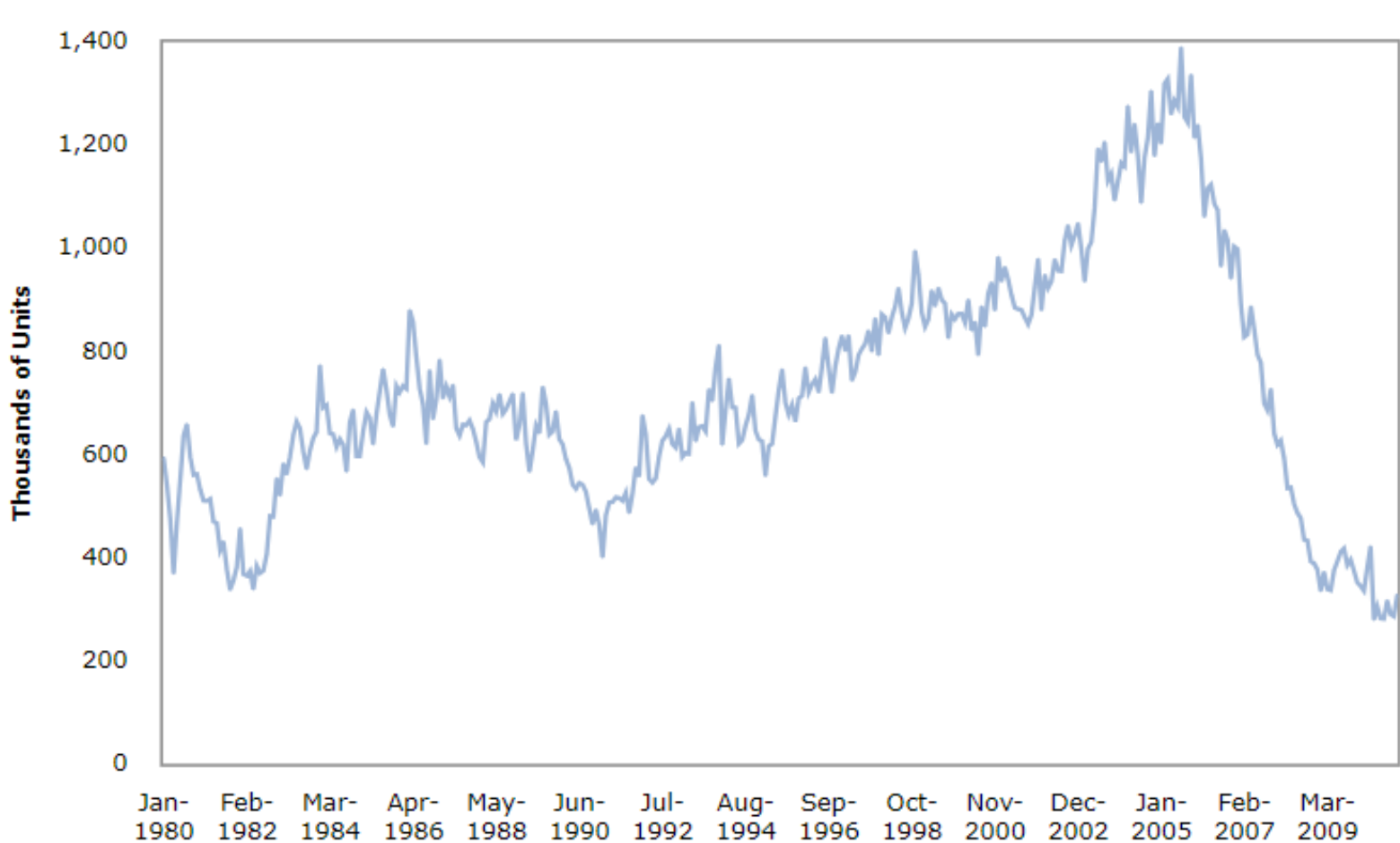


Source: New Home Sales Annual Rate for New Single-family Houses Sold:
United States Jan-2008 to Dec-2024

<https://fred.stlouisfed.org/categories/32302>



Seasonally adjusted all houses



Source: New Home Sales Annual Rate for New Single-family Houses Sold:
United States Jan-1980 to Dec-2010

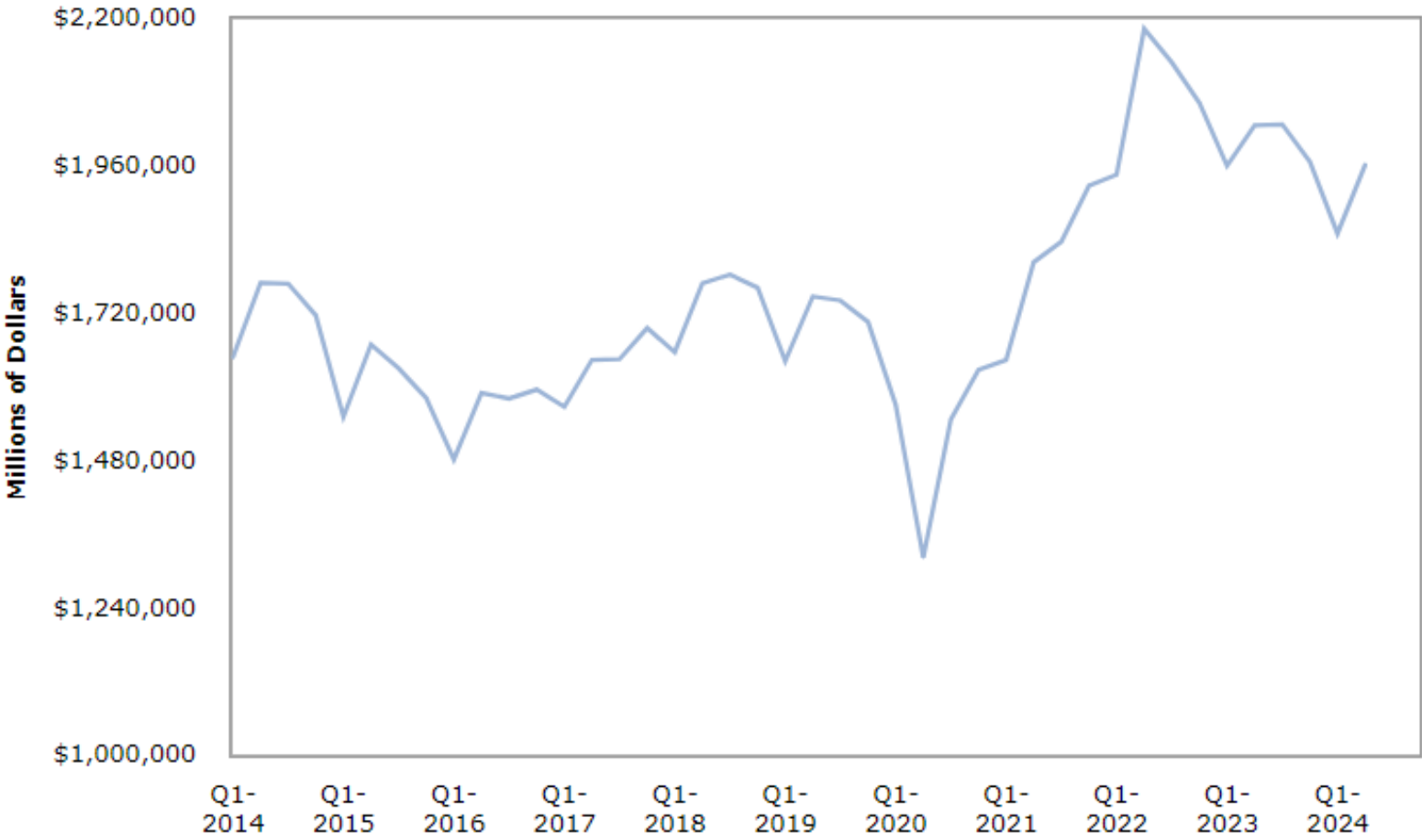
<https://fred.stlouisfed.org/categories/32302>





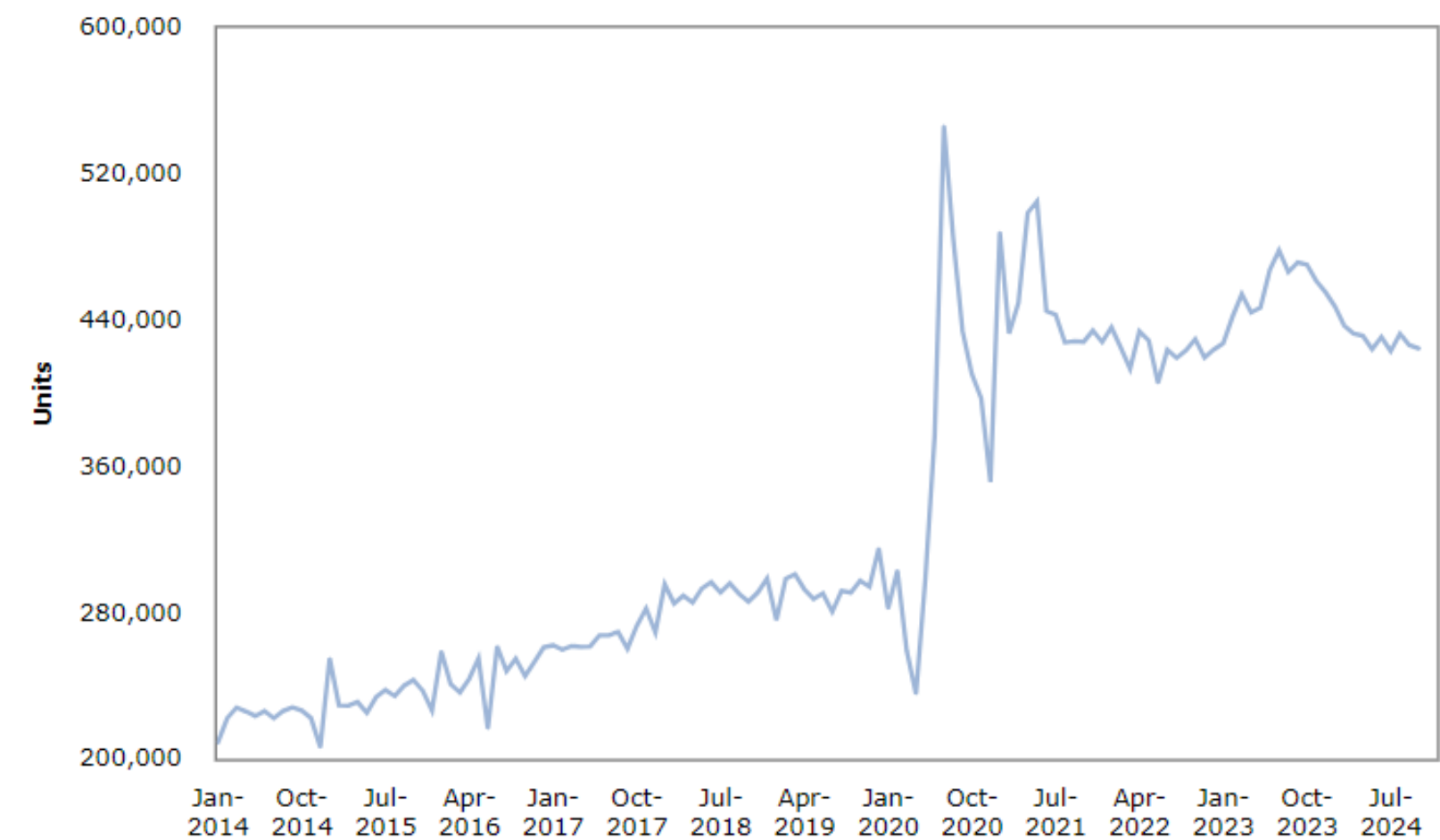
Select business statistics

Not seasonally adjusted net sales, receipts, and operating revenues



Source: Quarterly Financial Report All Manufacturing: U.S. Total Q1-2014 to Q4-2024

Seasonally adjusted business applications



Source: Business Formation Statistics Total for all NAICS: U.S. Total Jan-2024 to Dec-2024



Economic statistics

EXHIBIT 2A: Historical Economic Data 2010-2023 and Forecasts 2024-2034

														CONSENSUS FORECASTS**							
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-2034
Real GDP*	2.6	1.6	2.2	1.8	2.5	2.9	1.8	2.5	3.0	2.5	-2.2	5.8	1.9	2.5	2.5	1.7	2.1	1.9	1.9	1.9	1.8
Industrial production*	5.5	3.2	3.0	2.0	3.0	-1.4	-2.2	1.4	3.2	-0.7	-7.1	4.4	3.4	0.2	0.2	1.2	2.3	2.1	2.0	1.9	1.9
Consumer spending*	1.7	1.9	1.5	1.5	3.0	3.4	2.5	2.6	2.7	2.0	-2.5	8.4	2.5	2.2	2.3	1.8	2.0	2.0	2.0	2.0	1.9
Real disposable personal income*	1.0	2.5	3.1	-1.4	4.0	4.1	1.8	2.8	3.3	3.1	6.4	3.2	-6.0	4.1	1.4	2.3	2.5	2.3	2.1	2.1	2.0
Business investment*	4.5	8.7	9.5	4.1	6.9	1.8	0.7	4.1	6.5	3.7	-4.7	5.9	5.2	4.5	3.7	2.7	3.5	3.2	3.0	2.9	2.9
Nominal pretax corp. profits*	25.0	4.0	10.0	1.7	5.4	-2.8	-2.4	4.5	8.6	4.4	-3.5	22.6	9.8	1.5	5.2	2.5	3.4	3.0	3.4	3.6	3.6
Total government spending*	0.0	-3.1	-2.1	-2.4	-0.9	2.0	2.0	0.6	2.0	3.9	3.2	-0.3	-0.9	4.1	2.9	1.1	N/A	N/A	N/A	N/A	N/A
Consumer price inflation*	1.6	3.2	2.1	1.5	1.6	0.1	1.3	2.1	2.4	1.8	1.2	4.7	8.0	4.1	3.0	2.2	2.3	2.2	2.2	2.2	2.2
Core PCE*					1.6	1.2	1.6	1.6	1.9	1.6	1.3	3.6	5.2	4.1	2.7	2.2	N/A	N/A	N/A	N/A	N/A
3-month Treasury bill rate	0.1	0.1	0.1	0.1	0.0	0.2	0.5	1.4	2.4	1.5	0.1	0.1	4.3	5.3	4.6	3.5	3.1	3.0	2.9	3.0	3.0
10-year Treasury bond yield	3.2	2.8	1.8	2.4	2.5	2.2	2.5	2.8	2.7	1.9	0.9	1.6	3.9	3.9	3.8	3.7	3.6	3.6	3.6	3.7	3.7
Unemployment rate	9.6	8.9	8.1	7.4	6.2	5.3	4.9	4.4	3.9	3.7	8.1	5.4	3.6	3.6	4.1	4.4	N/A	N/A	N/A	N/A	N/A
Housing starts (millions)	0.6	0.6	0.8	0.9	1.0	1.1	1.2	1.2	1.3	1.3	1.4	1.6	1.6	1.4	1.4	1.4	N/A	N/A	N/A	N/A	N/A



EXHIBIT 2A: Historical Economic Data 2010-2023 and Forecasts 2024-2034

														CONSENSUS FORECASTS**							
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-2034
Real GDP*	2.6	1.6	2.2	1.8	2.5	2.9	1.8	2.5	3.0	2.5	-2.2	5.8	1.9	2.5	2.5	1.7	2.1	1.9	1.9	1.9	1.8
Industrial production*	5.5	3.2	3.0	2.0	3.0	-1.4	-2.2	1.4	3.2	-0.7	-7.1	4.4	3.4	0.2	0.2	1.2	2.3	2.1	2.0	1.9	1.9
Consumer spending*	1.7	1.9	1.5	1.5	3.0	3.4	2.5	2.6	2.7	2.0	-2.5	8.4	2.5	2.2	2.3	1.8	2.0	2.0	2.0	2.0	1.9
Real disposable personal income*	1.0	2.5	3.1	-1.4	4.0	4.1	1.8	2.8	3.3	3.1	6.4	3.2	-6.0	4.1	1.4	2.3	2.5	2.3	2.1	2.1	2.0
Business investment*	4.5	8.7	9.5	4.1	6.9	1.8	0.7	4.1	6.5	3.7	-4.7	5.9	5.2	4.5	3.7	2.7	3.5	3.2	3.0	2.9	2.9
Nominal pretax corp. profits*	25.0	4.0	10.0	1.7	5.4	-2.8	-2.4	4.5	8.6	4.4	-3.5	22.6	9.8	1.5	5.2	2.5	3.4	3.0	3.4	3.6	3.6
Total government spending*	0.0	-3.1	-2.1	-2.4	-0.9	2.0	2.0	0.6	2.0	3.9	3.2	-0.3	-0.9	4.1	2.9	1.1	N/A	N/A	N/A	N/A	N/A
Consumer price inflation*	1.6	3.2	2.1	1.5	1.6	0.1	1.3	2.1	2.4	1.8	1.2	4.7	8.0	4.1	3.0	2.2	2.3	2.2	2.2	2.2	2.2
Core PCE*					1.6	1.2	1.6	1.6	1.9	1.6	1.3	3.6	5.2	4.1	2.7	2.2	N/A	N/A	N/A	N/A	N/A
3-month Treasury bill rate	0.1	0.1	0.1	0.1	0.0	0.2	0.5	1.4	2.4	1.5	0.1	0.1	4.3	5.3	4.6	3.5	3.1	3.0	2.9	3.0	3.0
10-year Treasury bond yield	3.2	2.8	1.8	2.4	2.5	2.2	2.5	2.8	2.7	1.9	0.9	1.6	3.9	3.9	3.8	3.7	3.6	3.6	3.6	3.7	3.7
Unemployment rate	9.6	8.9	8.1	7.4	6.2	5.3	4.9	4.4	3.9	3.7	8.1	5.4	3.6	3.6	4.1	4.4	N/A	N/A	N/A	N/A	N/A

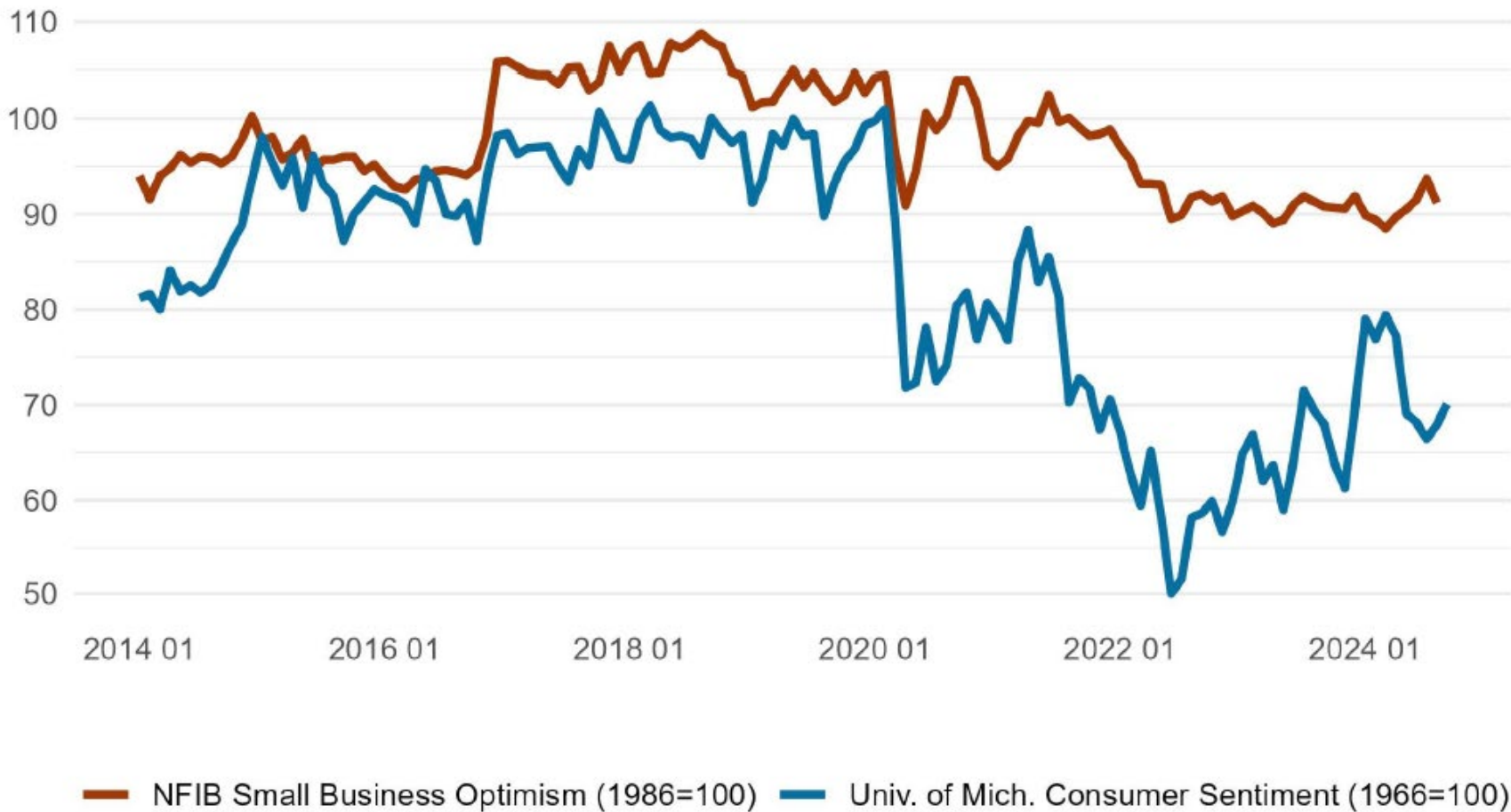


EXHIBIT 2B: Historical Energy Data 2011-2023 and Forecasts 2024-2025

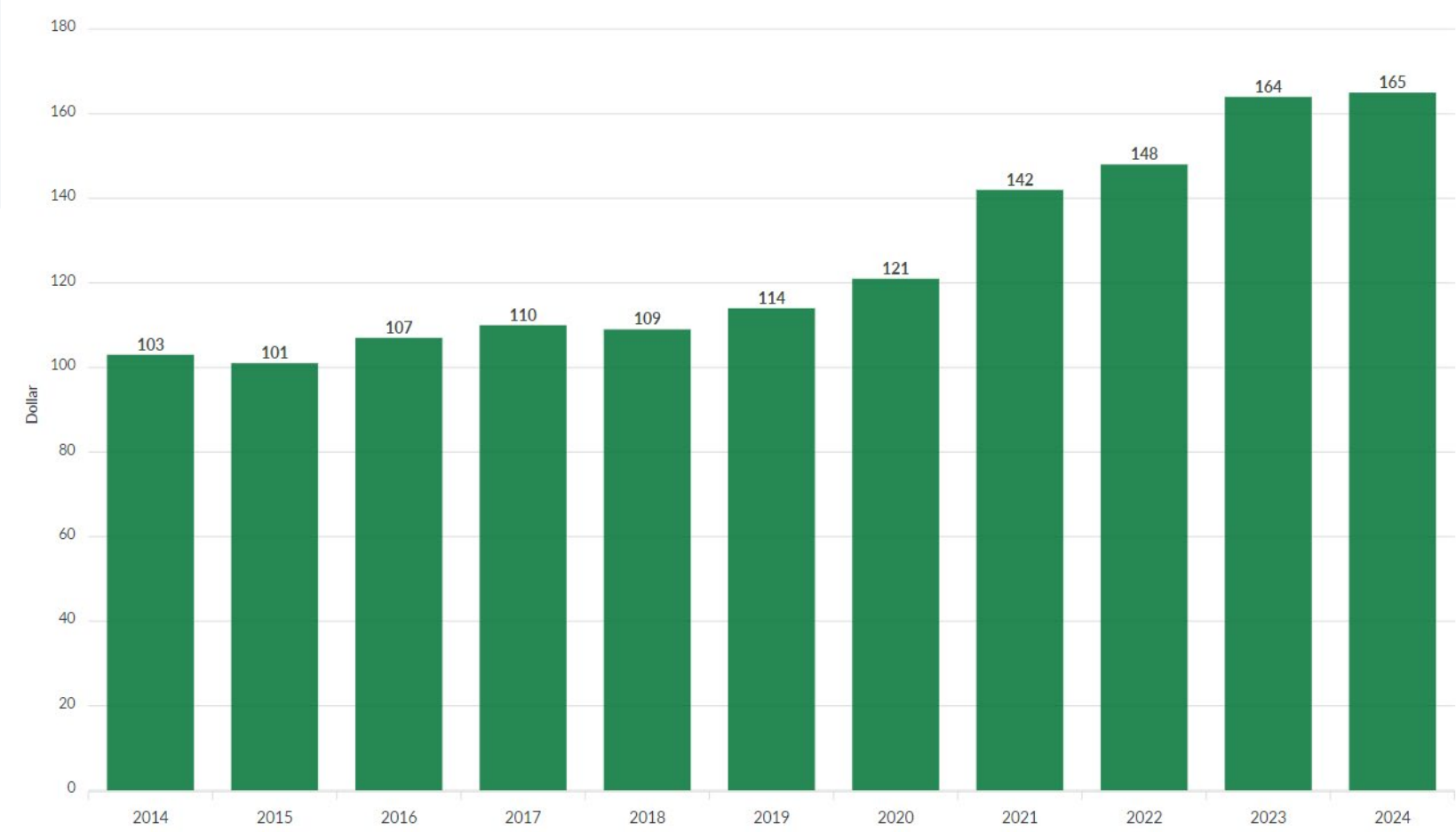
	HISTORICAL DATA													EIA FORECASTS		% CHANGE	
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2024	2025
Brent crude oil spot price*	111.33	111.65	108.56	98.89	52.32	43.74	54.15	71.21	64.34	41.69	70.89	100.94	82.41	80.89	77.59	-0.02	-0.04
West Texas intermediate crude oil price*	94.90	94.08	97.98	93.17	48.67	43.33	50.79	65.07	56.99	39.17	68.21	94.91	77.58	76.91	73.13	-0.01	-0.05
Heating oil retail price**	365.70	378.60	378.28	371.35	264.92	210.28	250.69	301.15	299.91	244.34	300.00	466.00	384.00	356.00	343.00	-7.3%	-3.7%
Gasoline regular grade retail price**	352.60	362.70	350.55	336.38	242.83	214.92	241.69	272.66	260.37	218.37	302.00	397.00	352.00	333.00	322.00	-5.4%	-3.3%
Electricity residential retail price***	11.72	11.88	12.13	12.52	12.65	12.55	12.89	12.87	13.01	13.20	13.72	15.12	15.98	16.29	16.59	1.9%	1.8%
Electricity commercial retail price***	10.23	10.09	10.26	10.74	10.64	10.37	10.66	10.67	10.67	10.65	11.27	12.55	12.74	12.96	13.24	1.7%	2.2%
Electricity industrial retail price***	6.82	6.67	6.89	7.10	6.91	6.76	6.88	6.92	6.81	6.66	7.26	8.45	8.05	8.18	8.25	1.6%	0.9%
Natural gas Henry Hub spot price****	4.00	2.75	3.73	4.39	2.63	2.51	2.99	3.15	2.57	2.03	3.91	6.42	2.54	2.28	3.06	-10.2%	34.2%



Consumer sentiment and small business optimism

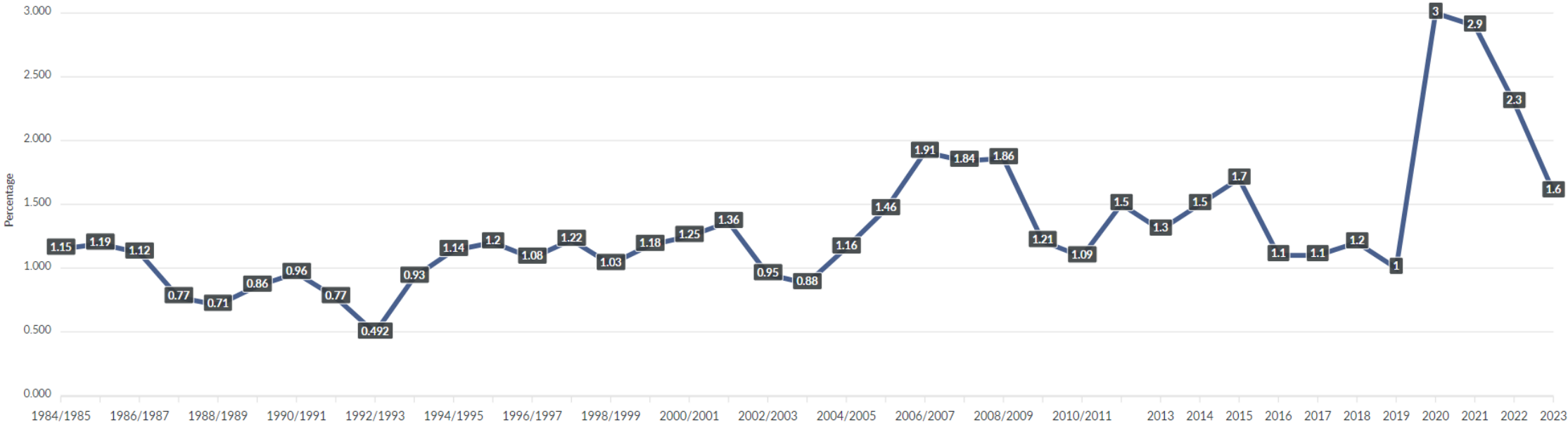


Weekly household grocery spend

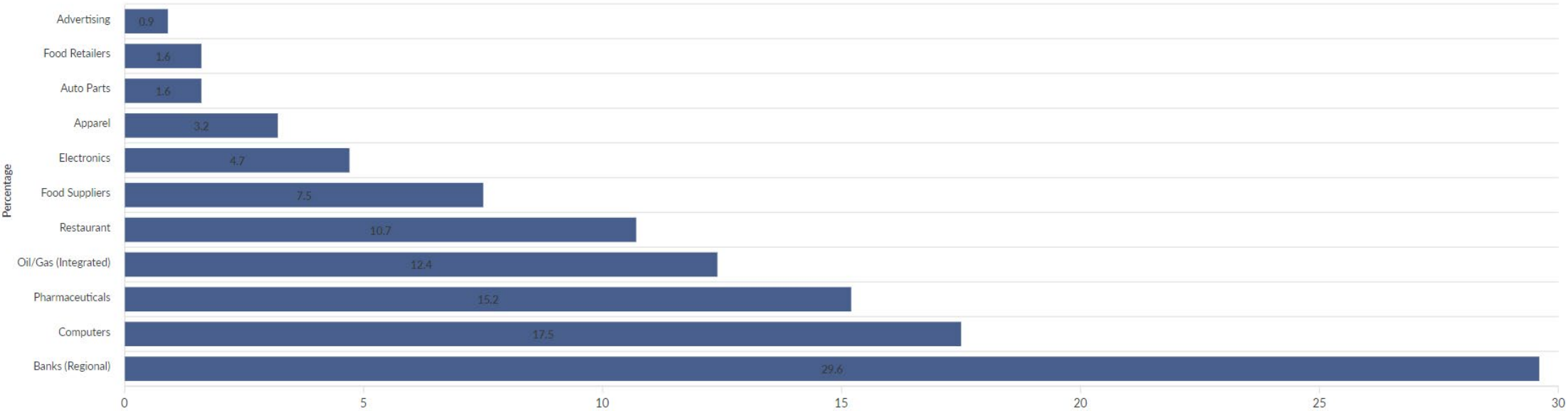


<https://www.fmi.org/our-research/research-reports/u-s-grocery-shopper-trends>

Food retailer profit margins over time



Industry profit margins



<https://www.fmi.org/our-research/research-reports/food-retailing-industry-speaks>
https://pages.stern.nyu.edu/~adamodar/New_Home_Page/datafile/margin.html

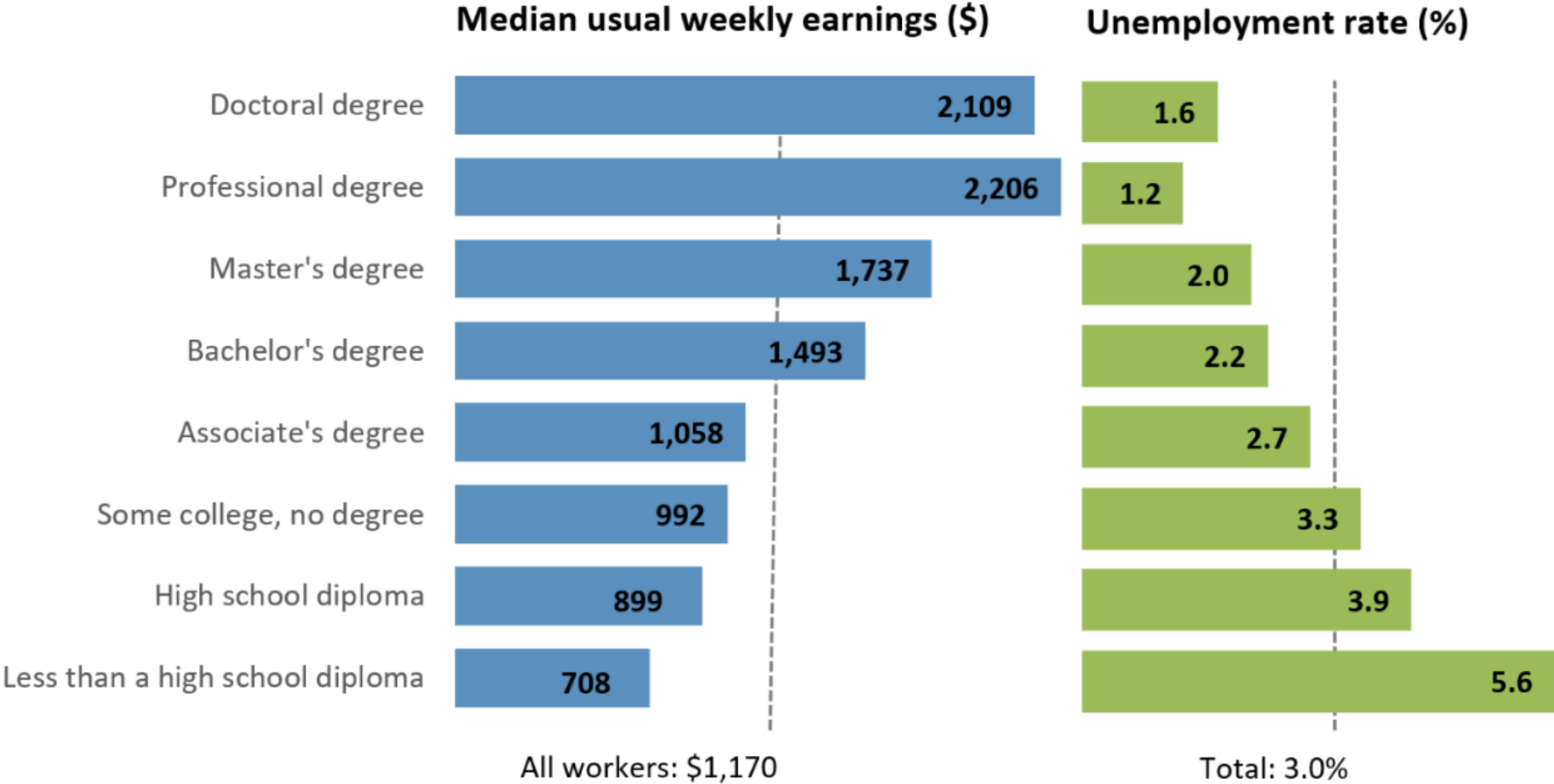
Polling question #2





 **Labor**

Earnings and unemployment rates by educational attainment, 2023



Note: Data are for persons ages 25 and over. Earnings are for full-time wage and salary workers.
 Source: U.S. Bureau of Labor Statistics, Current Population Survey.

https://www.bls.gov/emp/images/ep_chart_001.png



Top 10 fastest growing occupations

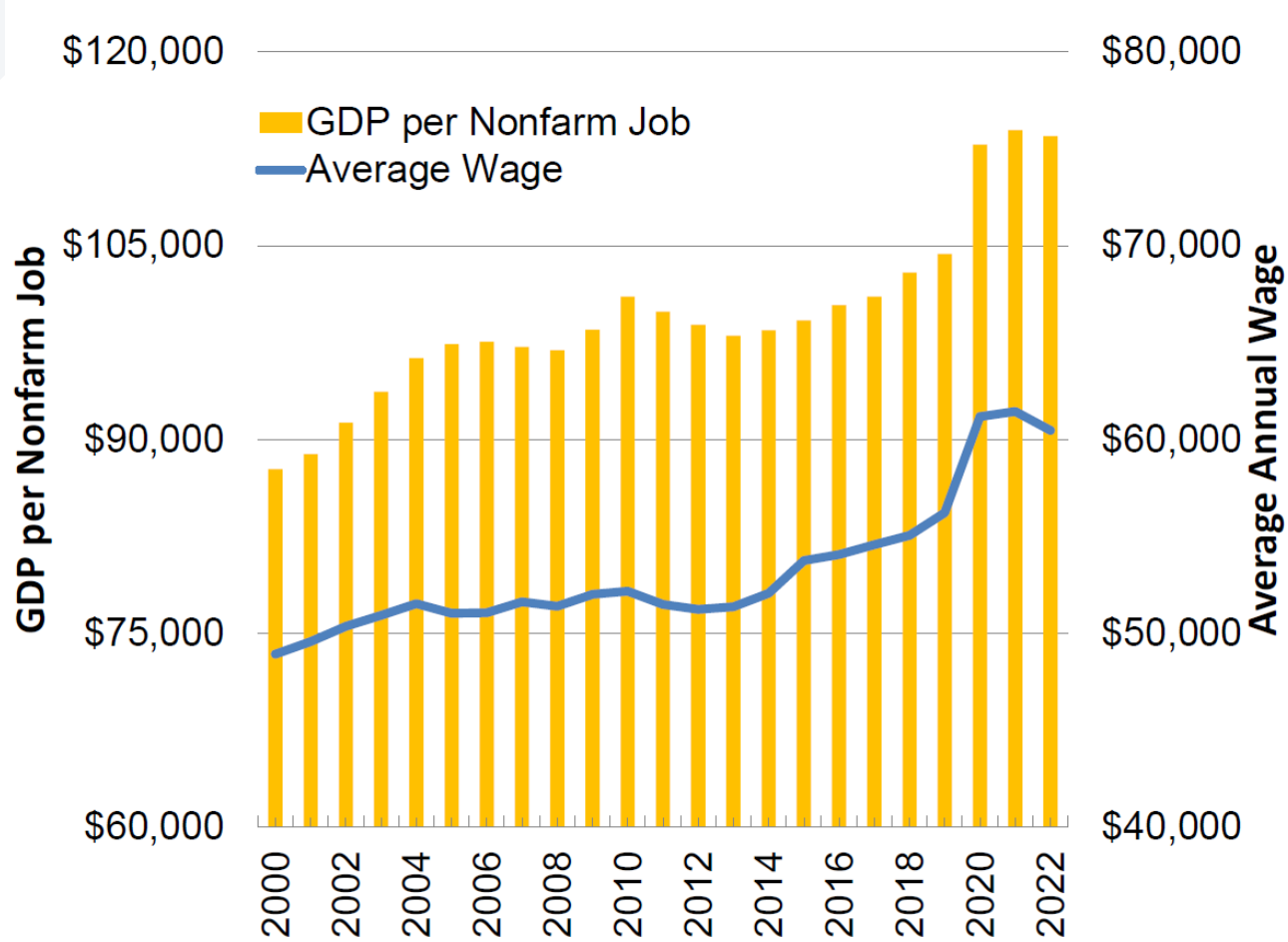
	Percent employment change, projected 2023–33	Employment change, projected 2023–33, in thousands	Median annual wage, May 2023
Wind turbine service technicians	60.1%	6.8	\$61,770
Solar photovoltaic installers	48.0%	12.0	\$48,800
Nurse practitioners	46.3%	135.5	\$126,260
Data scientists	36.0%	73.1	\$108,020
Information security analysts	32.7%	59.1	\$120,360
Medical and health services managers	28.5%	160.6	\$110,680
Physician assistants	28.5%	43.7	\$130,020
Computer and information research scientists	25.6%	9.4	\$145,080
Physical therapist assistants	25.4%	27.5	\$64,080
Operations research analysts	23.0%	28.3	\$83,640

Note: Wage data are from the Occupational Employment and Wage Statistics program, US Bureau of Labor Statistics.

https://www.bls.gov/emp/images/ep_chart_001.png

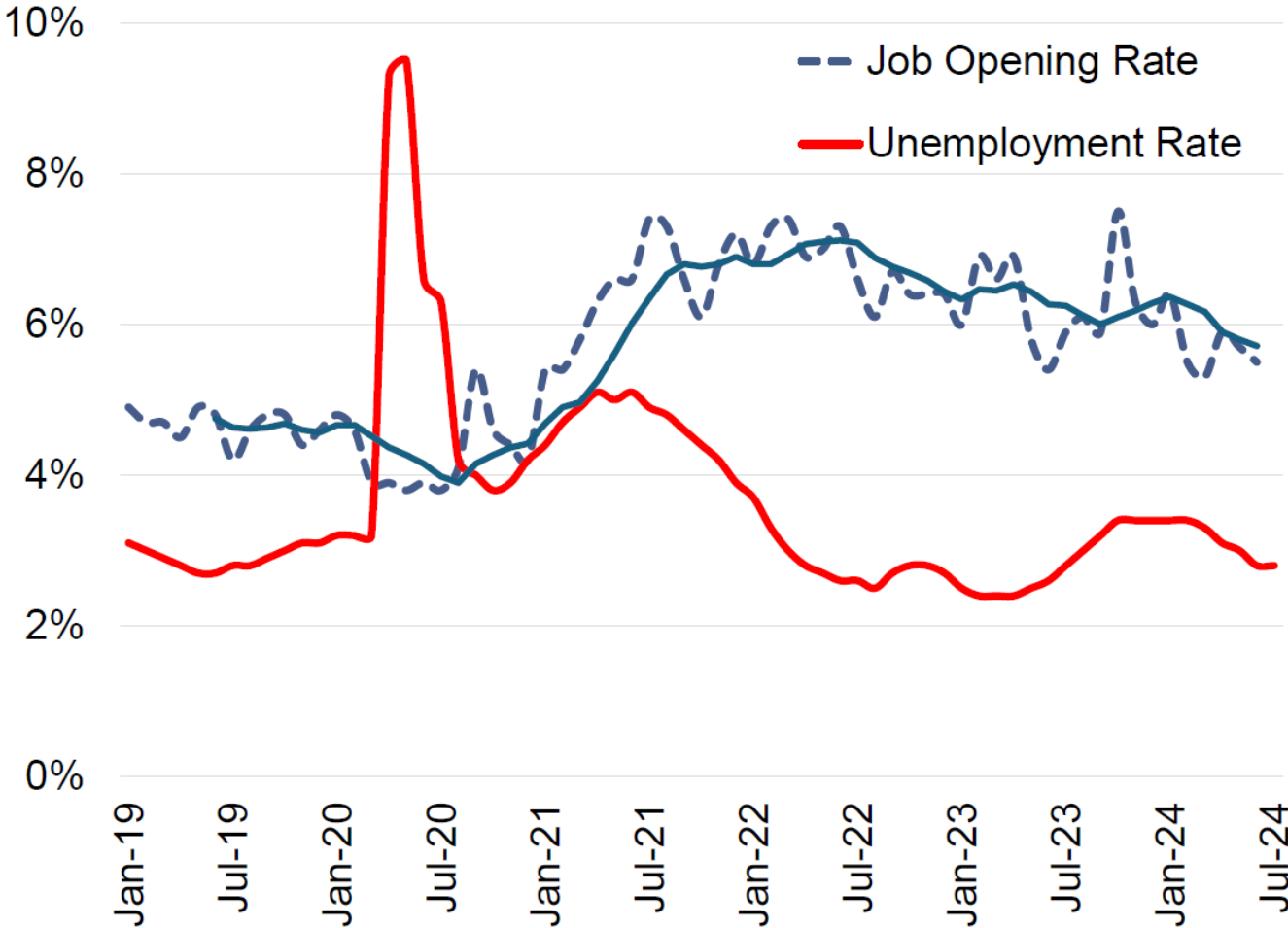


Real output per nonfarm job and average wage



Unemployment and job opening rates

Seasonally adjusted



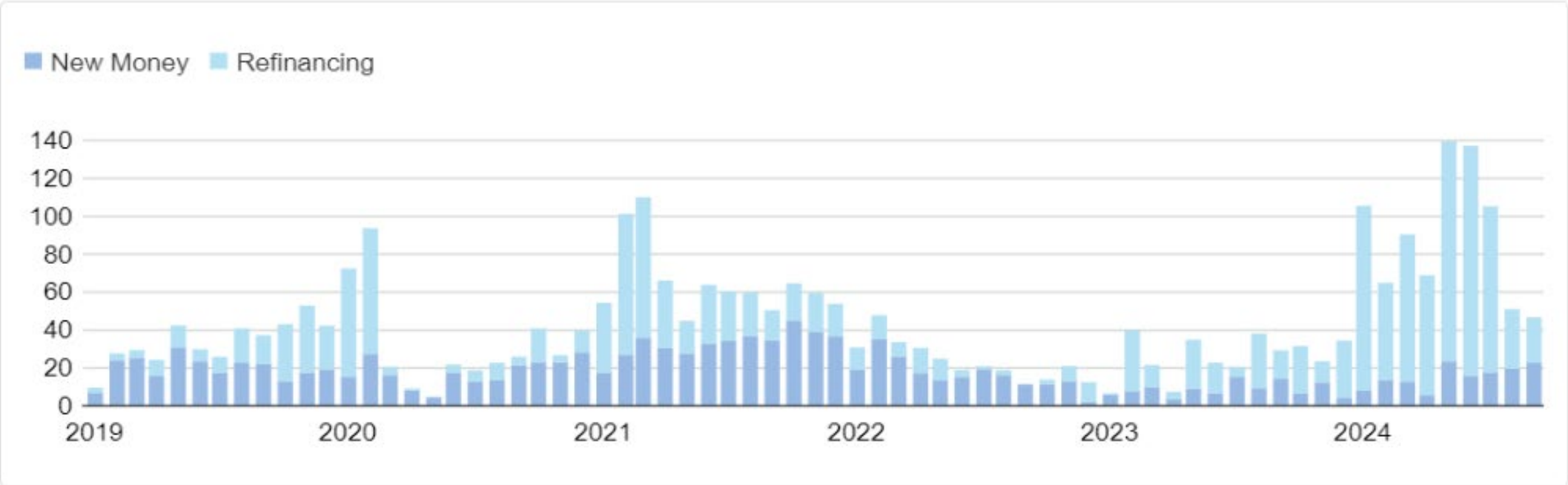
<https://www.maine.gov/dafs/economist/economic-forecasting>



Capital

Loan refinancings skyrocketed in 2024

Institutional loan issuance, new money, and refinancings (\$ billions)



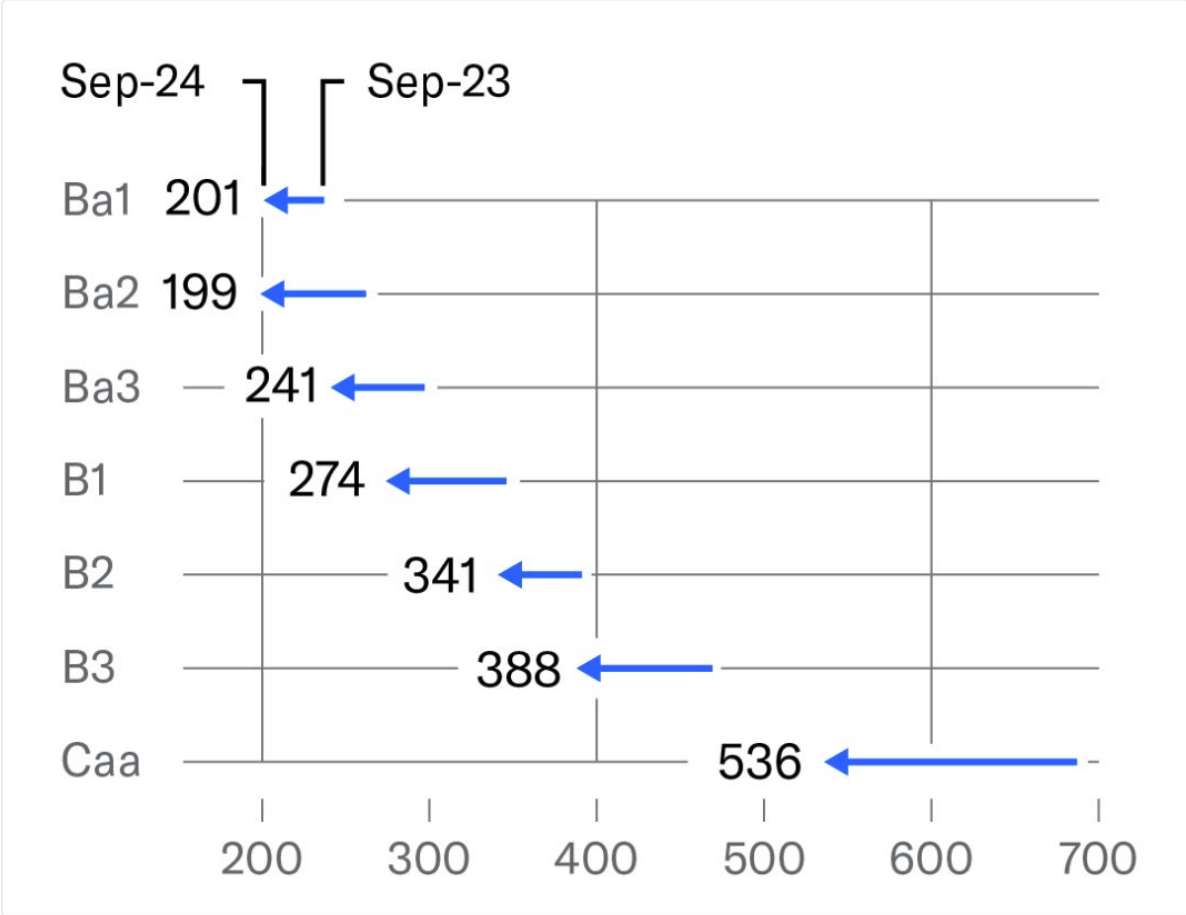
Source: LSEG LPC

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<https://www.moody.com/web/en/us/insights/credit-risk/outlooks/leveraged-finance-clo-2025.html?cid=web-ntrnlbnnr-18292>



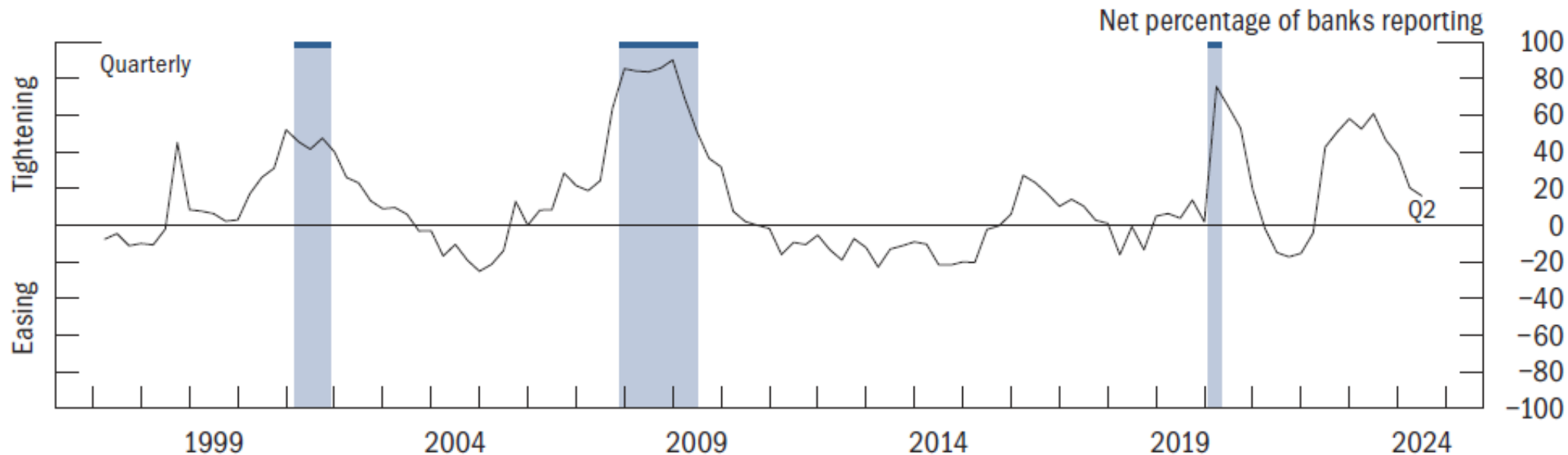
Credit spreads tightened across the board from a year ago (in basis points)

Exhibit 8



Credit spreads represented as median bond yields over seven-year US Treasurys for Moody's-rated Debt.
Source: [Maturities top \\$2 trillion, refinancing needs rise as debt wall gets steeper, closer | Sector In-Depth | Moody's](#)

Figure 1.16. Banks reported having tightened lending standards for commercial real estate loans



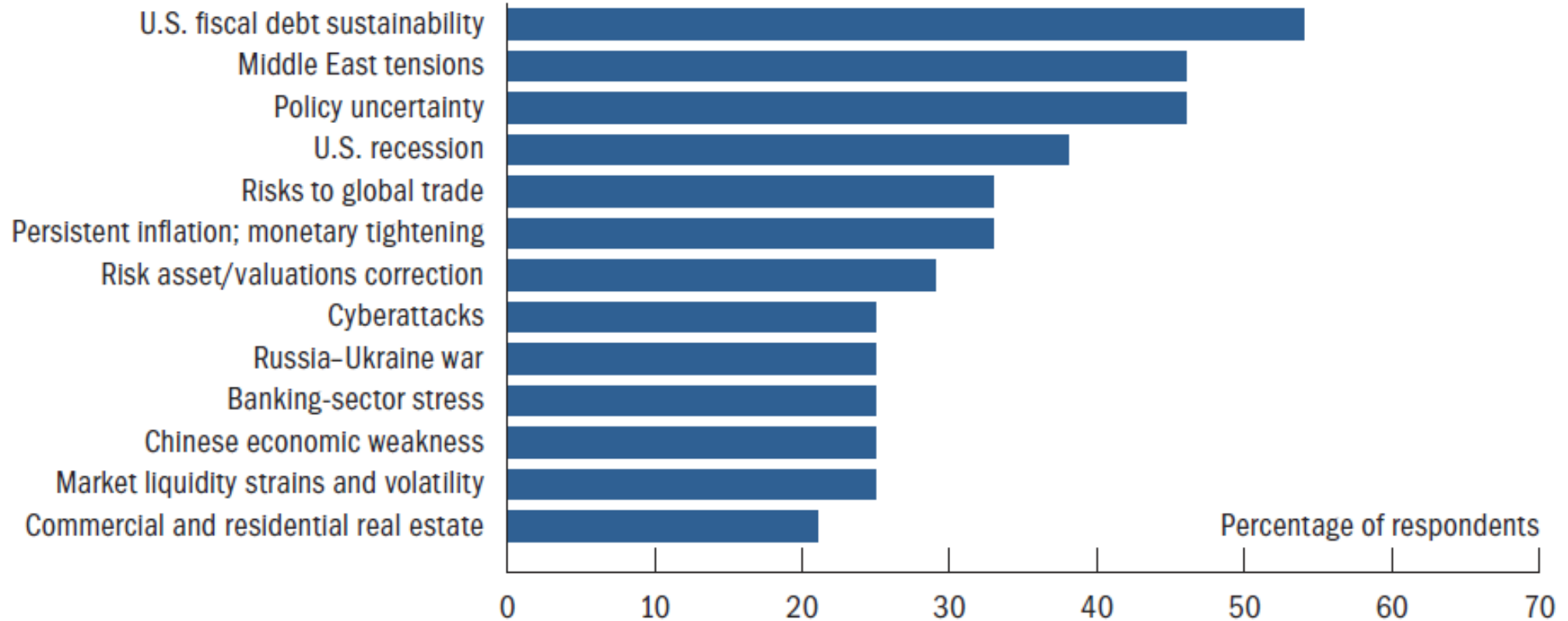
Source: Federal Reserve Board, Senior Loan Officer Opinion Survey on Bank Lending Practices; Federal Reserve Board staff calculations

<https://www.federalreserve.gov/publications/files/financial-stability-report-20241122.pdf>

Polling question #3



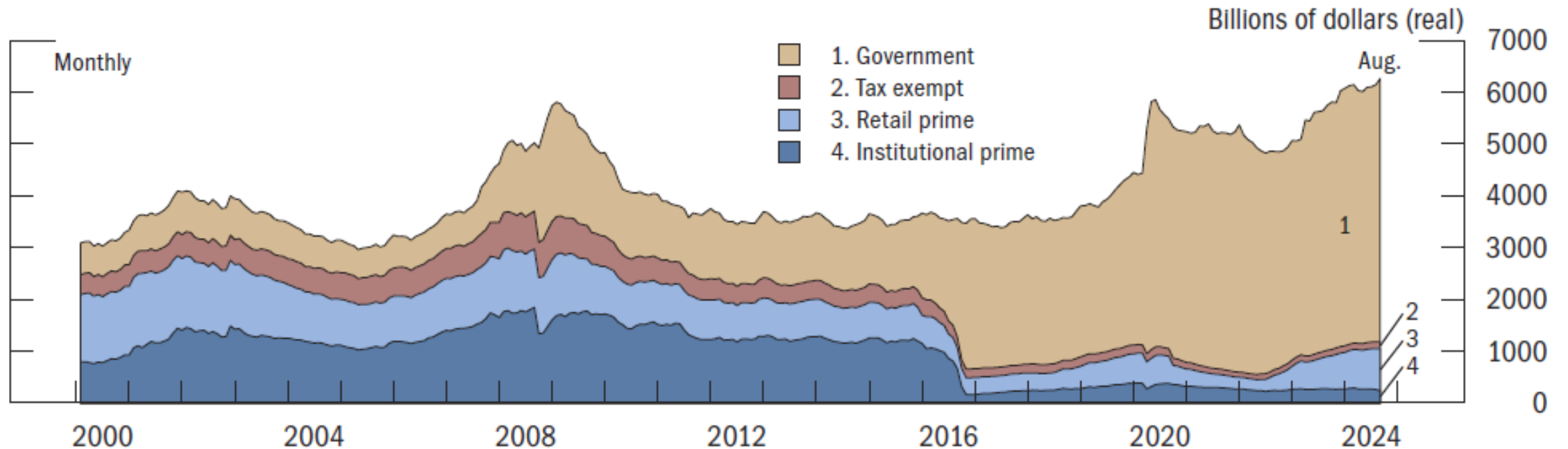
Figure A. Fall 2024: Most cited potential shocks over the next 12 to 18 months



Source: Federal Reserve Bank of New York survey of 24 market contacts from August to October.
<https://www.federalreserve.gov/publications/files/financial-stability-report-20241122.pdf>



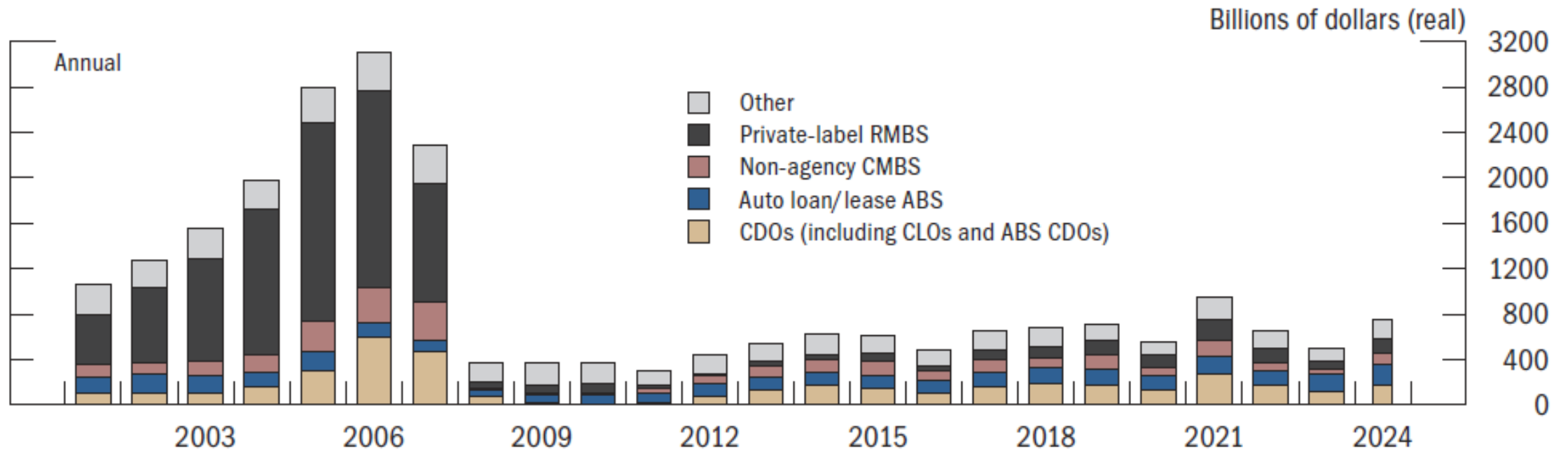
Figure 4.4. Assets under management at money market funds increased to an all-time high in August



Source: Federal Reserve Board staff calculations based on Investment Company Institute data: consumer price index, Bureau of Labor Statistics via Haver Analytics.

<https://www.federalreserve.gov/publications/files/financial-stability-report-20241122.pdf>

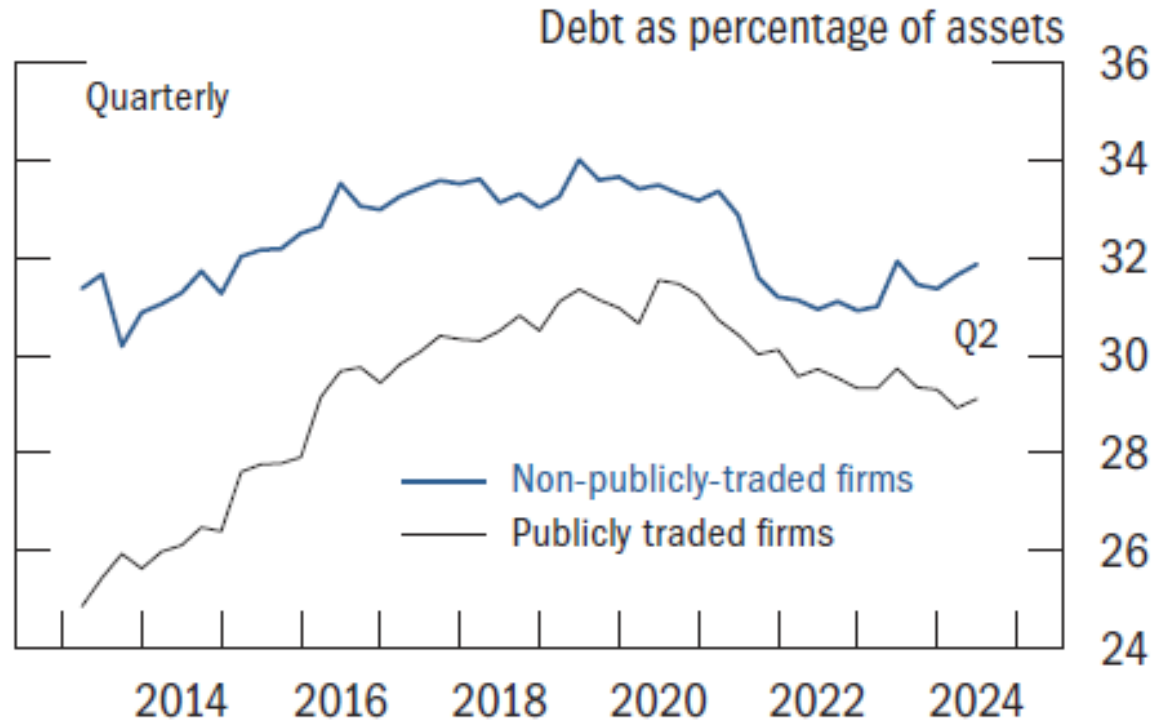
Figure 3.14. The pace of issuance of securitized products in 2024 has been strong



Source: Green Street, Commercial Mortgage Aler’s SMBS Database and Asset-Backed Alert’s ABS Database; consumer price index, Bureau of Labor Statistics via Haver Analytics.

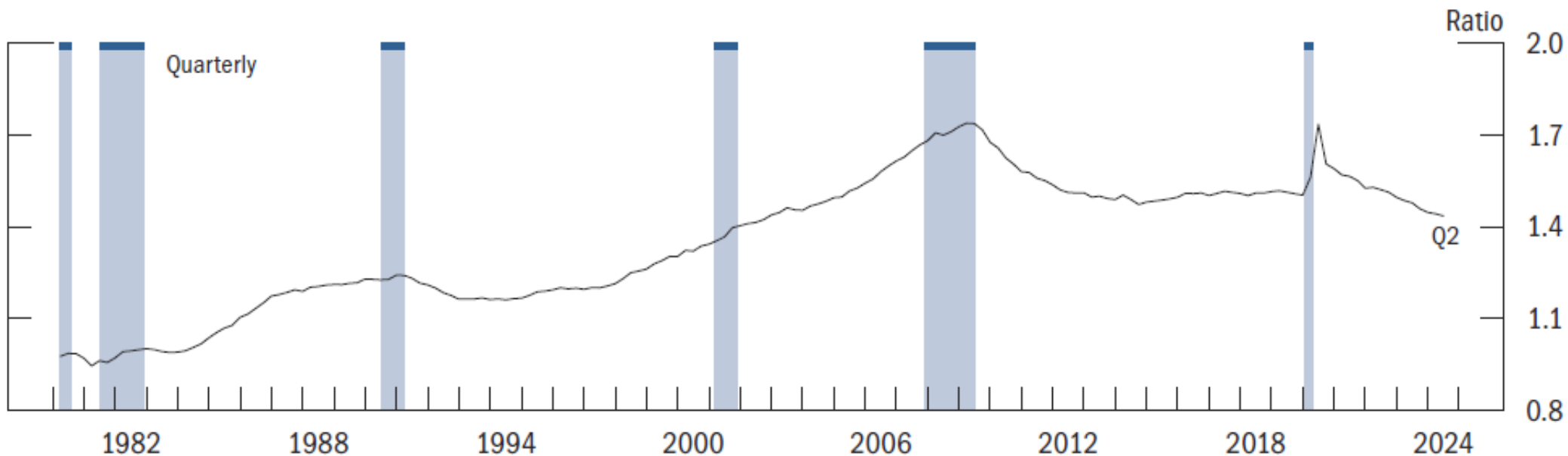
<https://www.federalreserve.gov/publications/files/financial-stability-report-20241122.pdf>

Figure 3.5. The financial condition of firms with commercial and industrial bank loans remained sound



Source: Federal Reserve Board, FORM FR Y-14Q (Schedule H.1), Capital Assessments and Stress Testing.
<https://www.federalreserve.gov/publications/files/financial-stability-report-20241122.pdf>

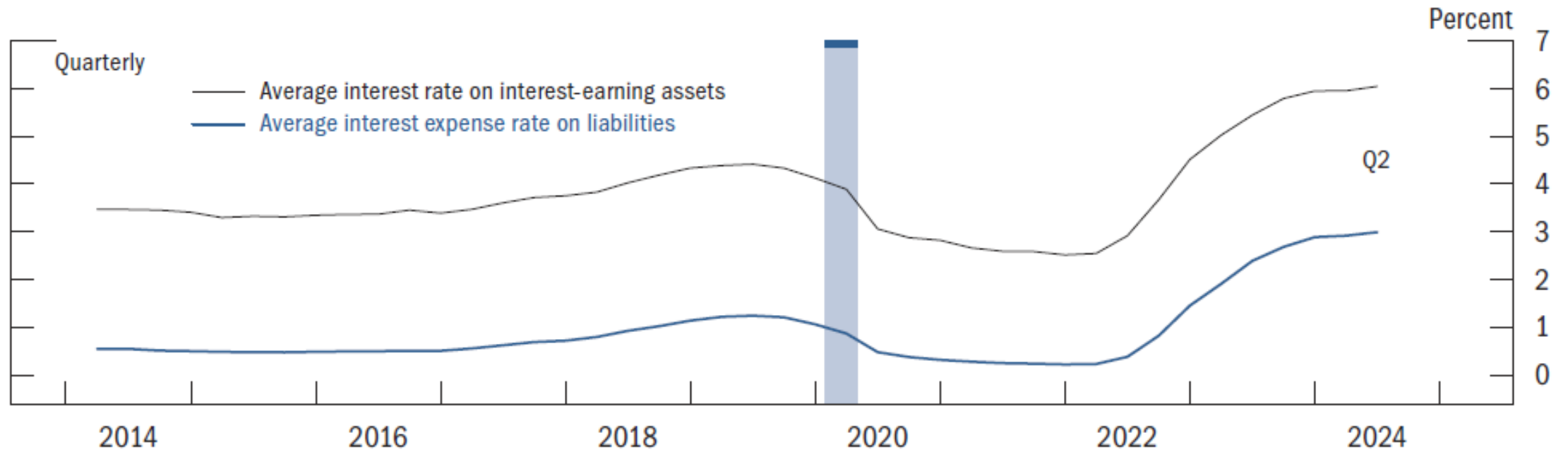
Figure 2.1. The total debt of businesses and households relative to GDP declined to its lowest level in 20 years



Source: Federal Reserve Board staff calculations based on Bureau of Economic Analysis, national income and product accounts, and Federal Reserve Board, Statistical Release Z.1, “Financial Accounts of the United States.”

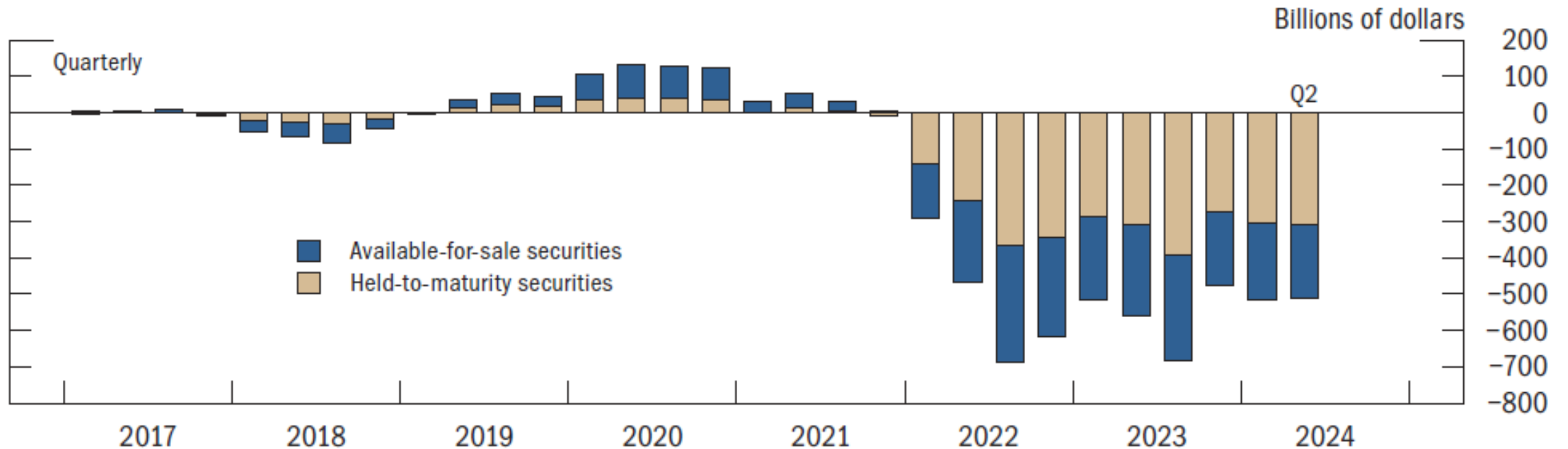
<https://www.federalreserve.gov/publications/files/financial-stability-report-20241122.pdf>

Figure 3.1. Banks maintained sound net interest margins



Source: Federal Reserve Board, Form FR Y-9C, Consolidated Financial States for Holding Companies.
<https://www.federalreserve.gov/publications/files/financial-stability-report-20241122.pdf>

Figure 3.3. The fair value losses of banks' securities portfolios remained sizable



Source: Federal Financial Institutions Examination Council, Call Report Form FFIEC 031, Consolidated Reports of Condition and Income (Call Report); Federal Reserve Board, Form FR Y-9C, Consolidated Financial Statements for Holding Companies.

<https://www.federalreserve.gov/publications/files/financial-stability-report-20241122.pdf>



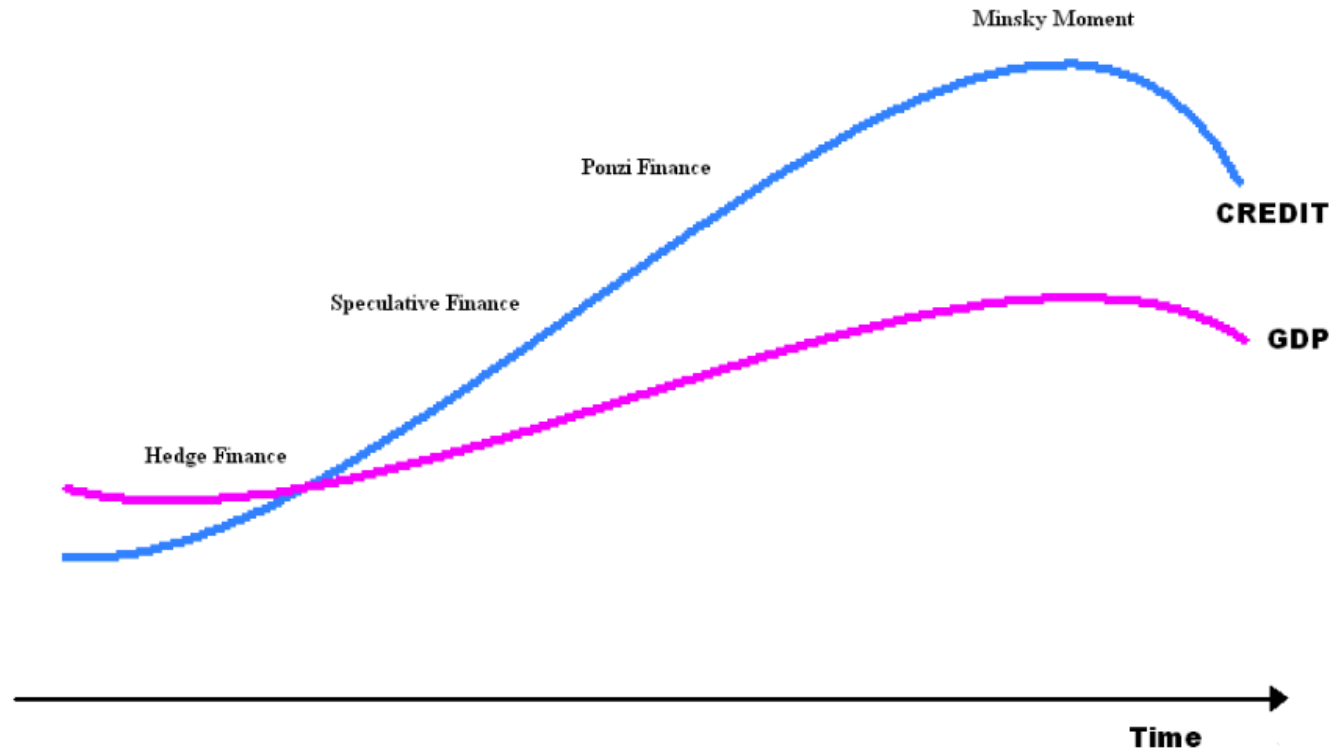
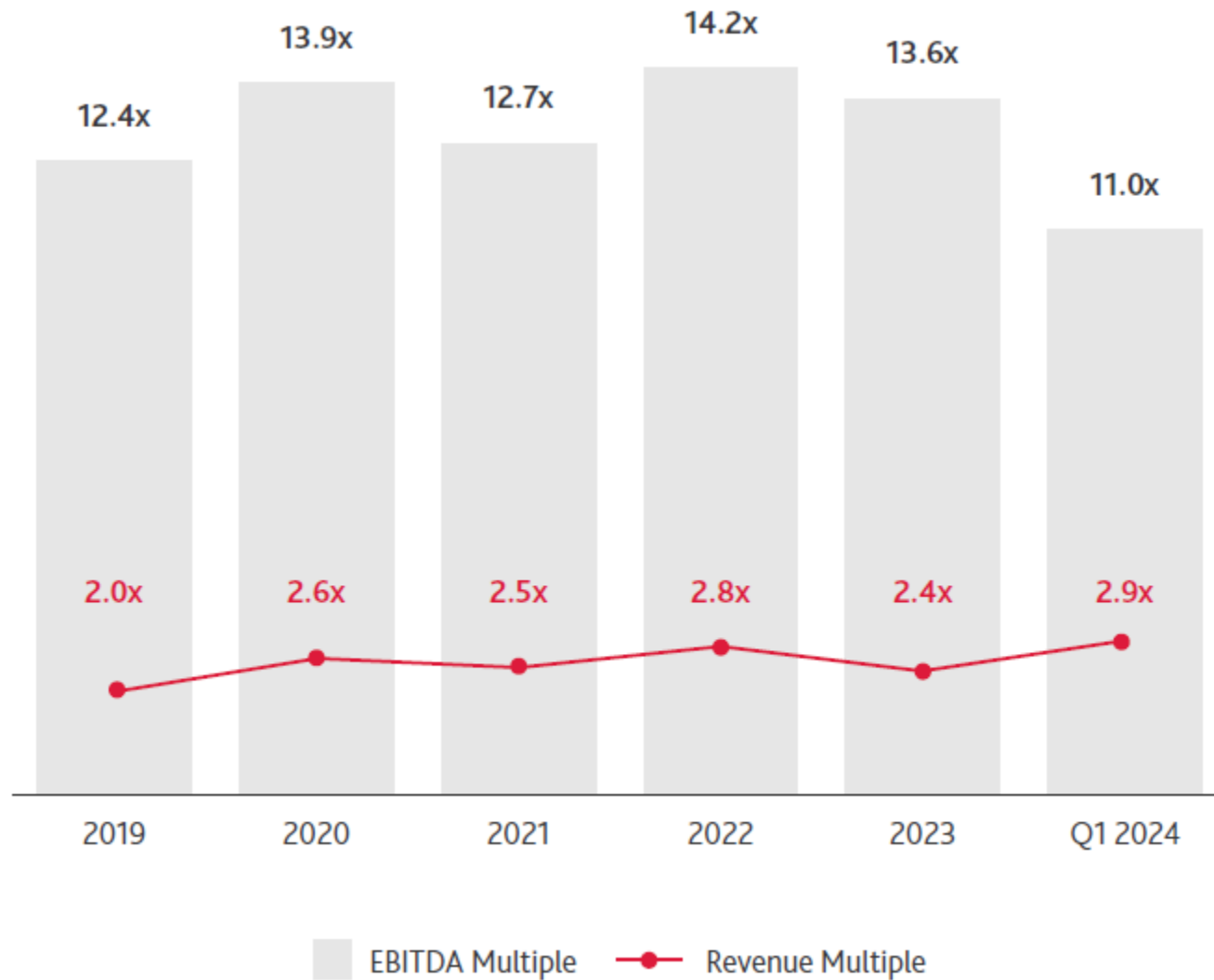


Fig. 1: Stylized Minsky Cycle (Source)

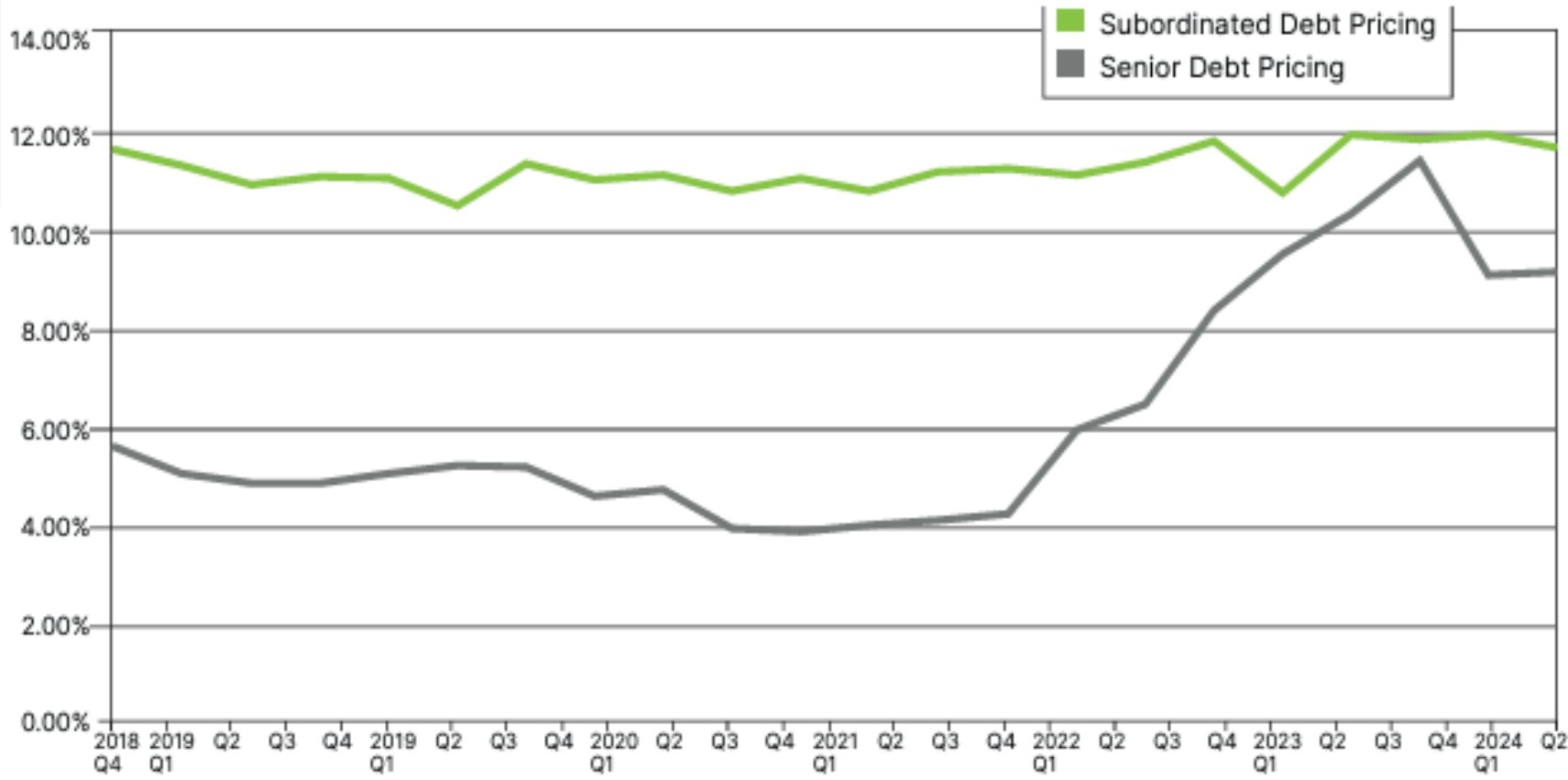
Source: MSIM Global Multi Asset Team analysis
[Minsky Moment - Overview, Catalysts, Effects, Phases](#)



Source: S&P Capital IQ / Note: Multiples between 1x and 10x; EBITDA Multiples between 1x and 30x
[BDO Capital Q2 2024 Manufacturing M&A Market Update](#)



Senior and subordinated debt pricing



TEV/EDITDA – by industry (\$10–250M TEV)

Chart 16

INDUSTRY	2003 -2019	2020	2021	2022	2023	YTD 2024	Total	N =
Manufacturing	6.2	6.7	7.1	7.3	6.5	6.8	6.4	2070
Business Services	6.7	7.1	7.3	7.4	7.2	7.2	6.9	1189
Health Care Services	7.4	7.6	8.1	8.4	8.9	7.2	7.6	460
Retail	7.0	6.5	8.3	8.0	6.0	6.4	7.1	143
Distribution	6.6	7.5	7.2	7.2	7.1	7.2	6.8	558
Media & Telecom	7.6	8.3	7.0	9.1	7.8	7.3	7.6	81
Technology	8.5	7.6	10.3	8.1	10.2	7.2	8.6	179
Other	6.3	6.2	7.3	6.7	6.9	6.4	6.4	495
N=								5175

Please note that N for 2003-19 encompasses 17 years of activity..



Valuation drilldown by type of buyer – 2024 YTD

TEV	ALL	PE Group	Family Office*	Mezz/Jr. Capital	SBIC	Buyouts Only	
						Platforms	Add-Ons
10-25	6.4	6.4	6.8	6.0	5.8	5.3	7.0
25-50	6.4	6.5	6.7	6.0	6.1	6.3	6.6
50-100	8.7	8.8	8.8	8.0	7.1	9.2	8.9
100-250	8.3	8.1	8.1	7.4	7.4	8.4	8.0
250-500	9.8	10.1	10.1	7.7	NA	10.1	NA
Total	7.1	7.1	7.5	6.6	6.2	6.9	7.2
N =	180	137	17	26	35	88	69

* Note: The Family Office grouping also includes deals done by other sponsors not organized as committed funds, e.g. independent sponsors.

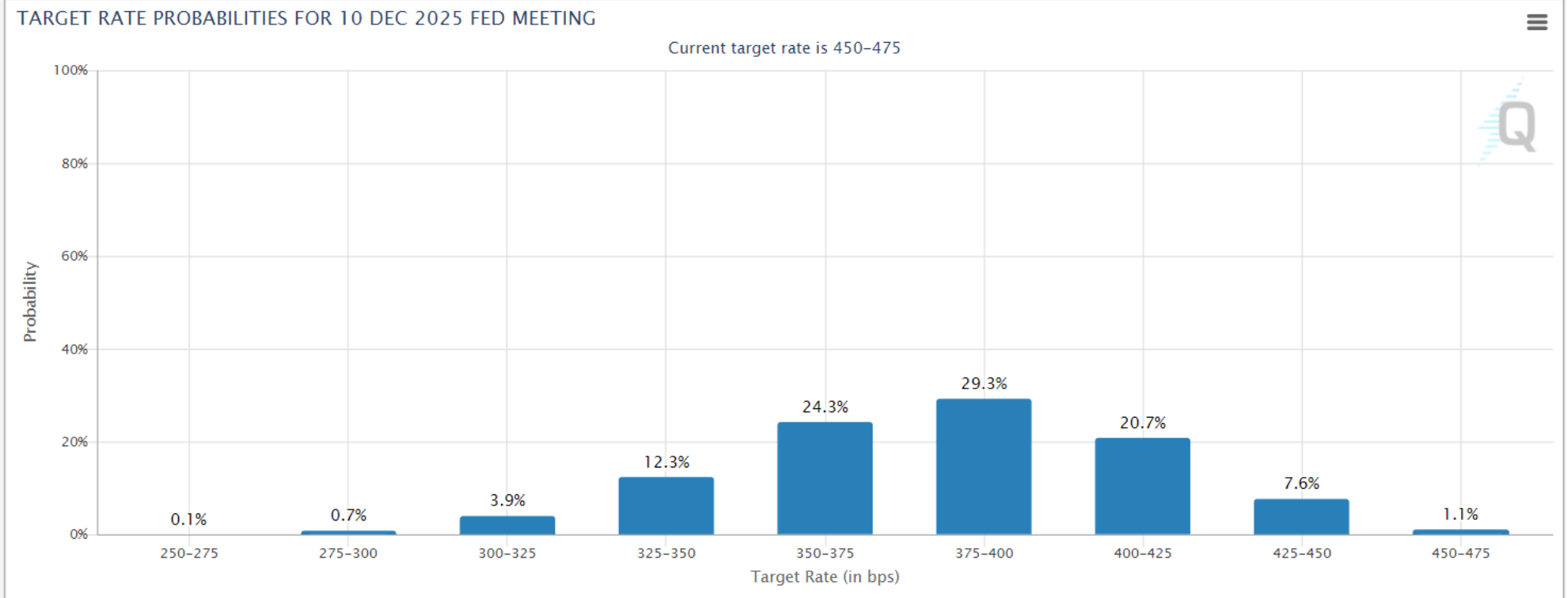




Target Rate: 18 Dec24 | 29 Jan25 | 19 Mar25 | 7 May25 | 18 Jun25 | 30 Jul25 | 17 Sep25 | 29 Oct25 | **10 Dec25**

- Current**
- Compare
- Probabilities
- Aggregated
- Historical**
- Historical
- Downloads
- Prior Hikes
- Dot Plot**
- Chart
- Table
- Tools**
- CVOL
- SOFR Watch
- ESTR Watch

MEETING INFORMATION						PROBABILITIES		
MEETING DATE	CONTRACT	EXPIRES	MID PRICE	PRIOR VOLUME	PRIOR OI	EASE	NO CHANGE	HIKE
10 Dec 2025	ZQZ5	31 Dec 2025	96.2225	256	937	98.9 %	1.1 %	0.0 %







Polling question #4





Closeout

Summary of national economic drivers of business value

Variable	3Q 2024 Trend	Effect on Business Value ²	Comment
Inflation	Flat	Flat	Inflation in 3Q 2024 remained at a sustainable level. The consumer price index (CPI) increased by 0.5% in the third quarter. Inflation as measured by CPI was 3.3% for 2023, compared to 6.4% in 2022 and 7.2% in 2021.
Unemployment	Flat	Flat	The unemployment rate remained at 4.1% in Q3 2024.
Interest Rates			The bank prime loan rate decreased from 8.5% in the second quarter to 8.0% in the third quarter. After a couple years in which interest rates remained at 3.25%, rates began rising in March 2022. By January 2023, interest rates had reached 7.5%.
Housing Starts			Housing starts decreased 0.5% in September 2024 compared to one month prior and were down 0.1% year over year. Housing starts in 3Q 2024 were down 3.3% compared to 3Q 2023.



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Questions?

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