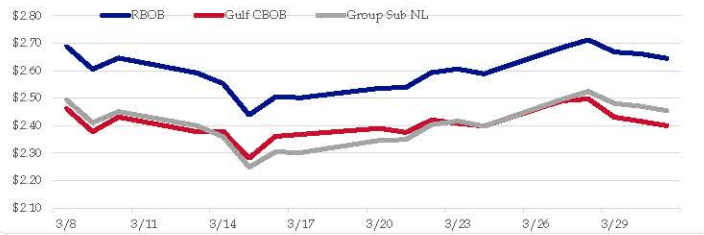


Gasoline

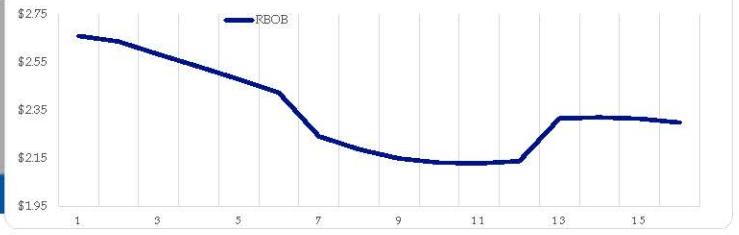
	RBOB	Change	Gulf CBOB	Change	Group Sub NL	Change	Gulf Basis	Group Basis	LA Basis
3/31	\$2.6450	-\$0.0164	\$2.3993	-\$0.0161	\$2.4545	-\$0.0169	\$(0.2462)	\$(0.1908)	\$0.1459
3/30	\$2.6614	-\$0.0067	\$2.4154	-\$0.0146	\$2.4704	-\$0.0104	\$(0.2460)	\$(0.1910)	\$0.1474
3/29	\$2.6681	-\$0.0440	\$2.4300	-\$0.0671	\$2.4808	-\$0.0434	\$(0.2381)	\$(0.1873)	\$0.1152
3/28	\$2.7121	\$0.0279	\$2.4971	\$0.0067	\$2.5242	\$0.0284	\$(0.2151)	\$(0.1879)	\$0.0810
3/27	\$2.6842	\$0.0957	\$2.4904	\$0.0924	\$2.4958	\$0.0980	\$(0.1938)	\$(0.1885)	\$0.0895
3/24	\$2.5885	-\$0.0174	\$2.3981	-\$0.0098	\$2.3978	-\$0.0183	\$(0.1905)	\$(0.1908)	\$0.1097
3/23	\$2.6059	\$0.0127	\$2.4079	-\$0.0127	\$2.4161	\$0.0127	\$(0.1981)	\$(0.1898)	\$0.0546
3/22	\$2.5932	\$0.0543	\$2.4205	\$0.0456	\$2.4034	\$0.0543	\$(0.1727)	\$(0.1898)	\$0.0018

RBOB Technicals		
Indicator	Direction	Resistance
MACD	Neutral	3.0221 Oct High
Stochastics	Overbought	2.8122 2023 High
RSI	Neutral	2.3795 March Low
ADX	Bullish	2.0204 Dec 2022 Low
Momentum	Bearish	Support
Bias:	Neutral	

Gasoline History



Gasoline Forward Curve

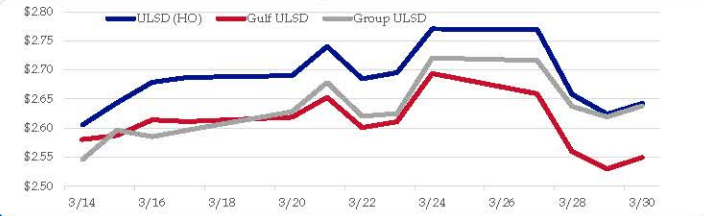


Diesel

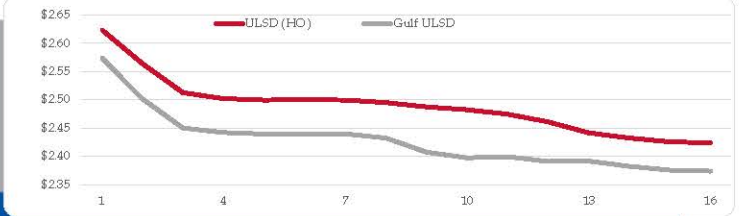
	ULSD (HO)	Change	Gulf ULSD	Change	Group ULSD	Change	Gulf Basis	Group Basis	LA Basis
3/31	\$2.6424	\$0.0187	\$2.5494	\$0.0194	\$2.6380	\$0.0189	\$(0.0943)	\$(0.0046)	\$(0.1994)
3/30	\$2.6237	-\$0.0344	\$2.5299	-\$0.0295	\$2.6191	-\$0.0181	\$(0.0938)	\$(0.0046)	\$(0.2004)
3/29	\$2.6581	-\$0.1115	\$2.5593	-\$0.0998	\$2.6373	-\$0.0789	\$(0.0988)	\$(0.0209)	\$(0.2321)
3/28	\$2.7696	-\$0.0008	\$2.6591	-\$0.0347	\$2.7161	-\$0.0044	\$(0.1105)	\$(0.0535)	\$(0.2640)
3/27	\$2.7704	\$0.0752	\$2.6938	\$0.0829	\$2.7205	\$0.0956	\$(0.0766)	\$(0.0499)	\$(0.2594)
3/24	\$2.6952	\$0.0105	\$2.6110	\$0.0101	\$2.6249	\$0.0047	\$(0.0842)	\$(0.0703)	\$(0.2227)
3/23	\$2.6847	-\$0.0566	\$2.6008	-\$0.0518	\$2.6202	-\$0.0581	\$(0.0839)	\$(0.0645)	\$(0.2155)
3/22	\$2.7403	\$0.0501	\$2.6526	\$0.0338	\$2.6783	\$0.0503			

HO Technicals		
Indicator	Direction	Resistance
MACD	Bearish	4.6841 Oct High
Stochastics	Oversold	3.5800 2023 High
RSI	Oversold	2.5021 2023 Low
ADX	Bearish Trend	2.3134 2022 Low
Momentum	Bearish	Support
Bias:	Neutral	

Diesel History



Diesel Forward Curve



Crude

	WTI	Change	Brent	Change
3/31	\$74.84	\$0.47	\$79.42	\$0.15
3/30	\$74.37	\$1.40	\$79.27	\$0.99
3/29	\$72.97	-\$0.23	\$78.28	-\$0.37
3/28	\$73.20	\$0.39	\$78.65	\$0.53
3/27	\$72.81	\$3.55	\$78.12	\$3.13
CPL space	Line 1	Change	Line 2	Change
	0.0193	\$0.0105	-\$0.0095	\$0.0012

Refinery Margins

		Vs WTI				Vs Brent				Group / WCS
		Gulf Gas	Gulf Diesel	3/21	5/3/2	Gulf Gas	Gulf Diesel	3/21	5/3/2	3/21
3/31		\$27.08	\$31.88	\$28.68	\$29.00	\$22.18	\$26.98	\$23.78	\$24.10	32.87
3/30		\$29.09	\$34.52	\$30.90	\$31.26	\$23.78	\$29.21	\$25.59	\$25.95	33.41
3/29		\$31.68	\$38.48	\$33.94	\$34.40	\$26.23	\$33.03	\$28.49	\$28.95	35.50
3/27		\$31.79	\$40.33	\$34.63	\$35.20	\$26.48	\$35.02	\$29.32	\$29.89	35.16

RINs and Price Drivers

Current Year Biodiesel RINs			Current Year Ethanol RINs		
	Settle	Net Change		Settle	Net Change
	1.5545	-0.002		1.5285	0.003
Price Drivers			Price Drivers		
	Settle	Net Change		Settle	Net Change
Soybeans	1474.50	4.000	Ethanol	2.16	0.000
Soybean Oil	54.37	0.210	Com	649.50	0.750
BOHO Spread	1.454		Com Crush	-0.159	
Soy Crush	593.44		RVO Estimate		
			Per Gallon	\$ 0.1700	\$ -
			Per Barrel	\$ 7.14	\$ -

Economic Indicators

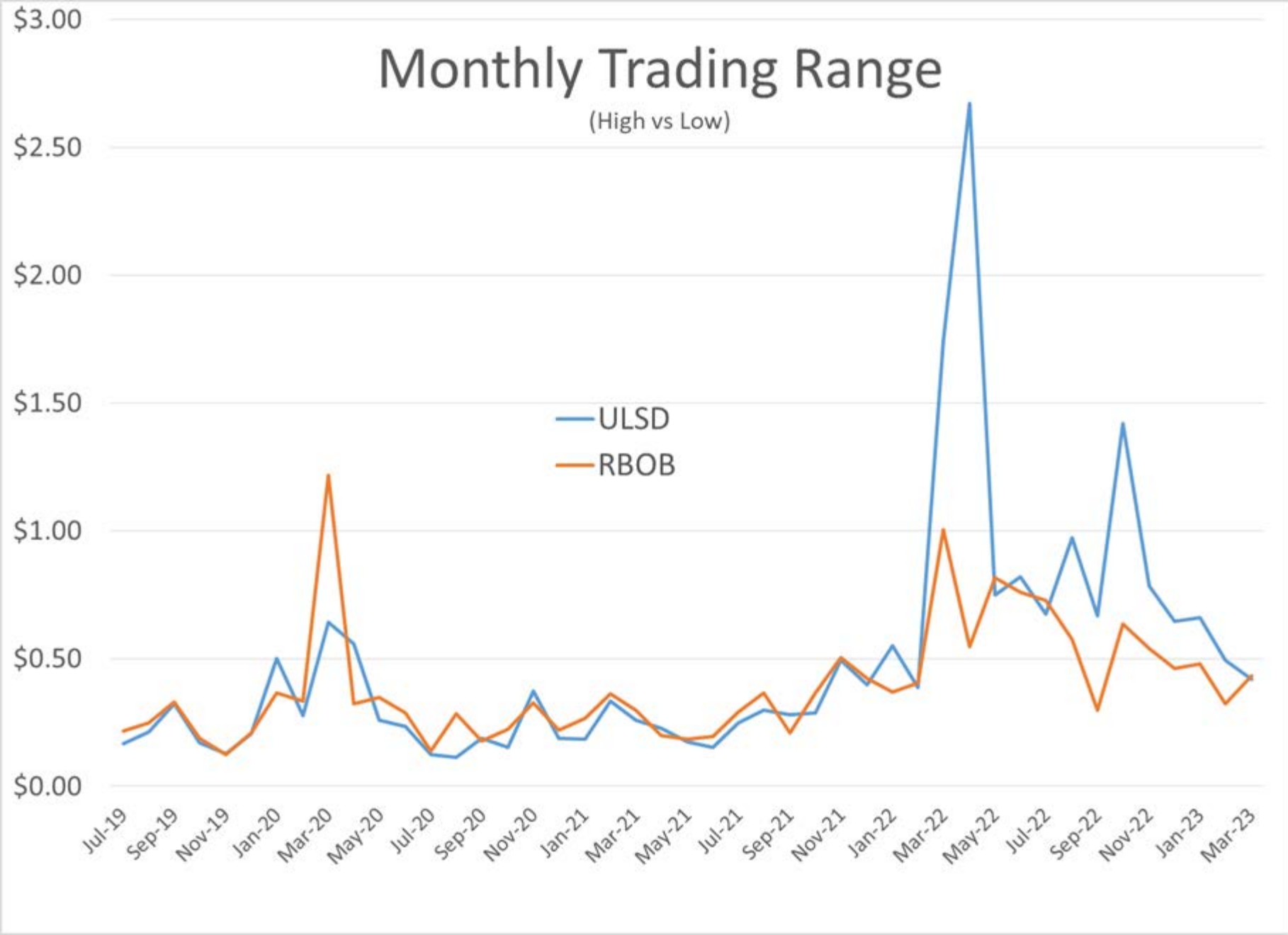
Commodity Futures

	Settle	Change		Settle	Change
S&P 500 Futures	4,091	11.25	NatGas	2.104	-0.080
DJIA	32,859	141.43	Gold	1,980	4.9
EUR/USD	1.0915	-0.0015	Silver	23.90	0.0
USD Index	101.82	0.16	Copper	4.09	-0.059
US 10 YR YIELD	3.55%	-0.02	FCOJ	266.30	-1.30
US 2 YR YIELD	4.10%	0.02	Wheat	692.25	-3.00
Oil Volatility Index	43.33	-1.31	Butane	0.962	-0.001
S&P Volatility Index (VIX)	19.12	-0.10	Propane	0.794	-0.001
Nikkei 225 Index	28,000	140.00	Bitcoin	27,965	190

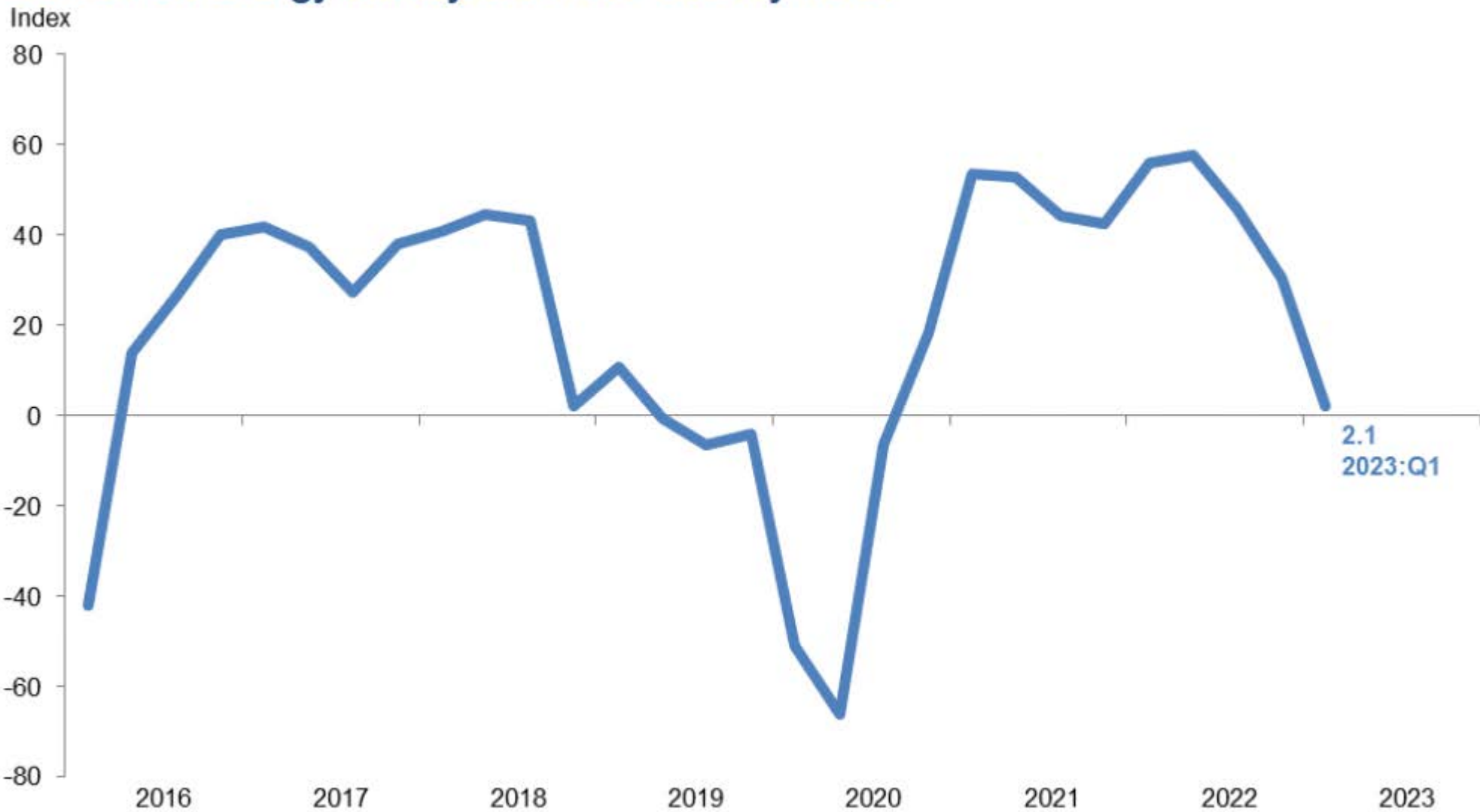
*SOURCES: Nymex, CBOT, NYSE, ICE, NASDAQ, CME Group, CBOE. Prices delayed.

Monthly Trading Range

(High vs Low)



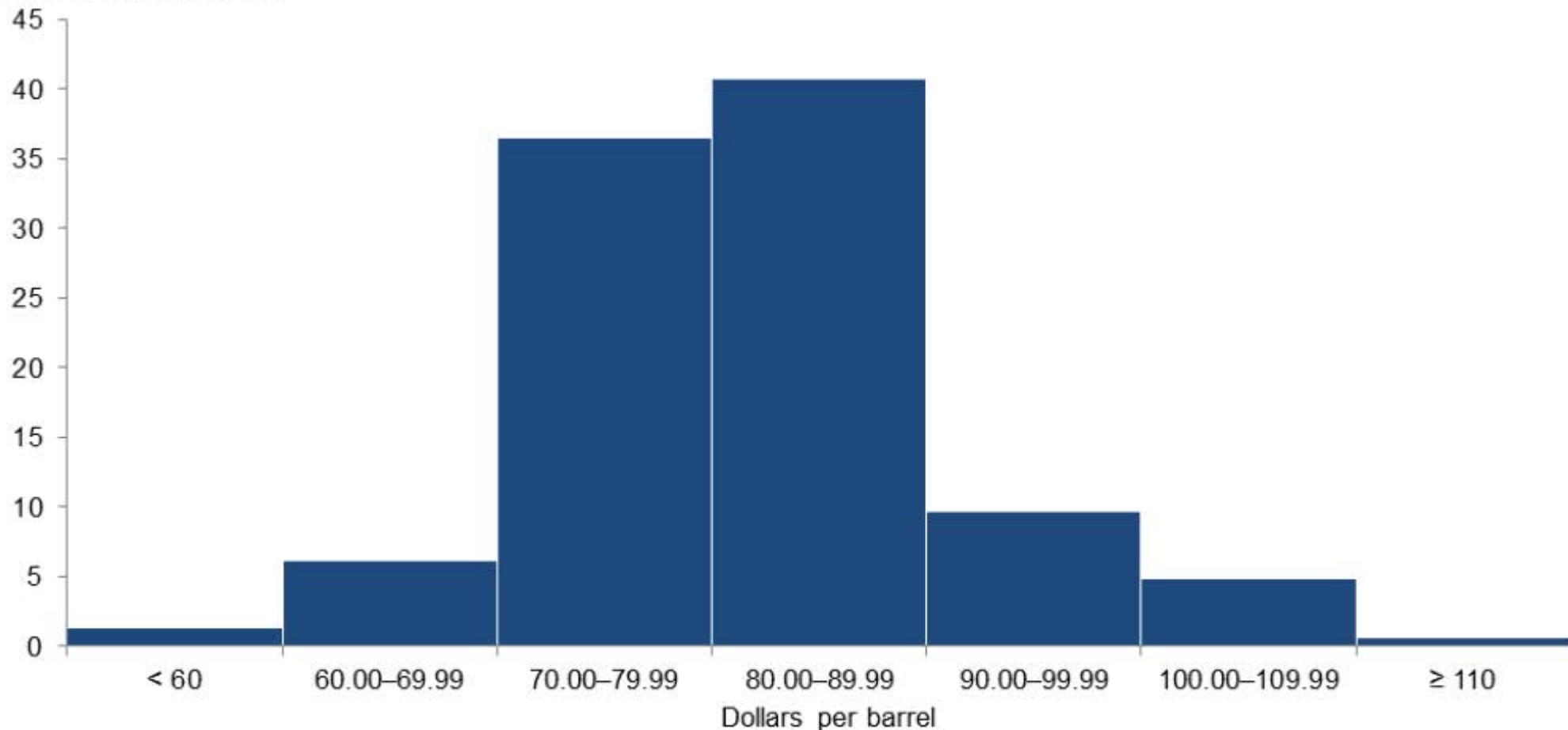
Dallas Fed Energy Survey Business Activity Index



SOURCE: Federal Reserve Bank of Dallas.

What do you expect the WTI crude oil price to be at the end of 2023?

Percent of respondents



NOTES: Executives from 145 oil and gas firms answered this question during the survey collection period, March 15–23, 2023. The average response was \$80 per barrel. For reference, WTI (West Texas Intermediate) spot prices averaged \$68.51 per barrel during the period.

SOURCES: Federal Reserve Bank of Dallas; Energy Information Administration (reference price).

Henry Hub natural gas price (dollars per MMBtu), year-end 2023

Indicator	Survey Average	Low Forecast	High Forecast	Price During Survey
Current quarter	\$3.43	\$1.75	\$12.50	\$2.23
Prior quarter	\$5.64	\$2.50	\$9.00	\$5.93

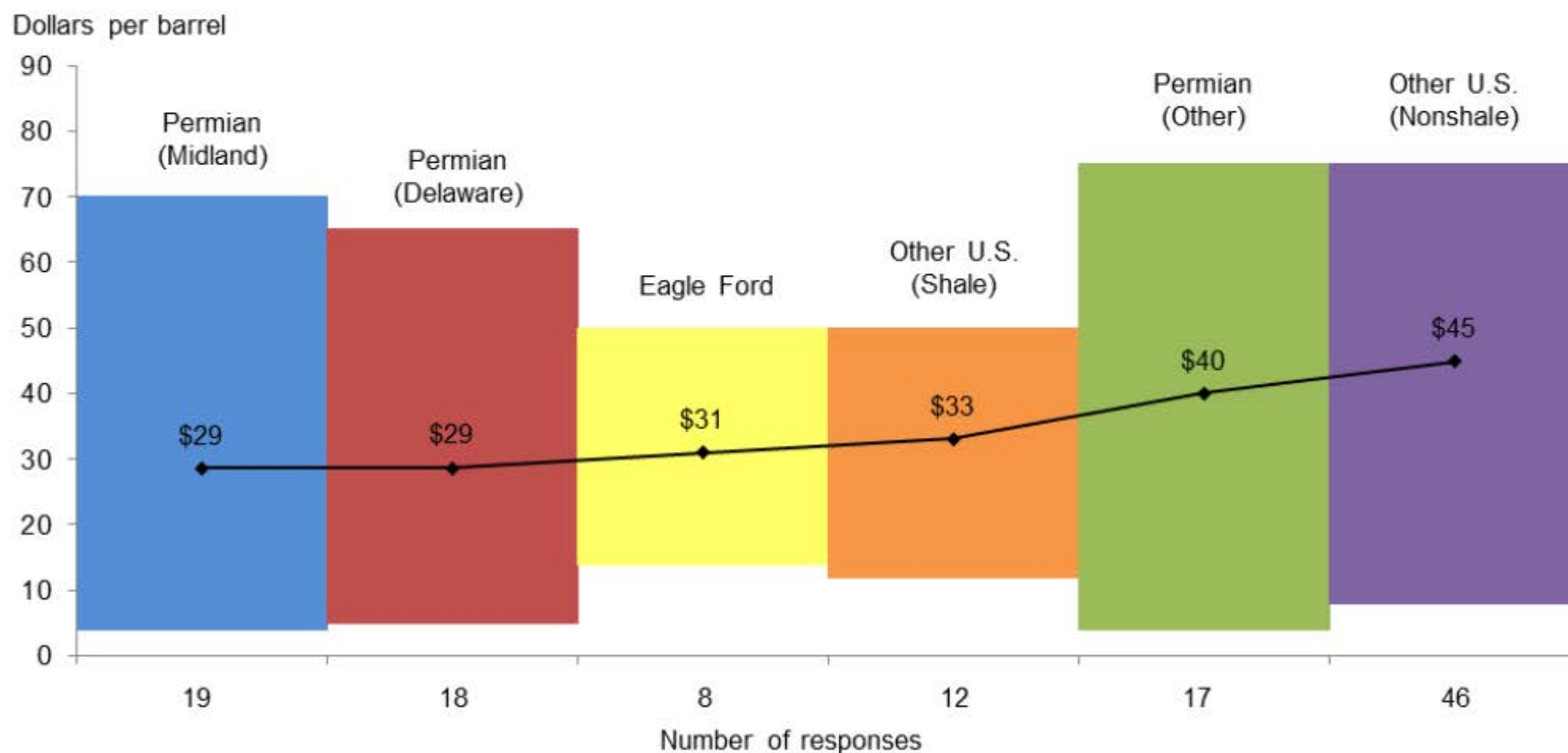
NOTE: Price during survey is an average of daily spot prices during the survey collection period.

SOURCES: Federal Reserve Bank of Dallas; Energy Information Administration.

Exploration and Production (E&P) Firms

In the top two areas in which your firm is active: What West Texas Intermediate (WTI) oil price does your firm need to cover operating expenses for existing wells?

The average price across the entire sample is approximately \$37 per barrel, up from \$34 last year. Across regions, the average price necessary to cover operating expenses ranges from \$29 to \$45 per barrel. Almost all respondents can cover operating expenses for existing wells at current prices.



NOTES: Lines show the mean, and bars show the range of responses. The average response was \$37 per barrel. Executives from 83 exploration and production firms answered this question during the survey collection period, March 15–23, 2023.

SOURCE: Federal Reserve Bank of Dallas.

In the top two areas in which your firm is active: What WTI oil price does your firm need to profitably drill a new well?

For the entire sample, firms need \$62 per barrel on average to profitably drill, higher than the \$56-per-barrel price when this question was asked last year. Across regions, average breakeven prices to profitably drill range from \$56 to \$66 per barrel. Breakeven prices in the Permian Basin average \$61 per barrel, \$9 higher than last year. Despite recent oil price declines, most firms in the survey can profitably drill a new well at current prices.

Large firms (with crude oil production of 10,000 barrels per day or more as of fourth quarter 2022) require prices of \$55 per barrel to profitably drill, based on the average of company responses. That compares with \$64 for small firms (fewer than 10,000 barrels per day).

