Blue Line Capital

The State Of American Business

Industrials, Defense & Semiconductors

Economic Dynamics

PCE & Oil Data

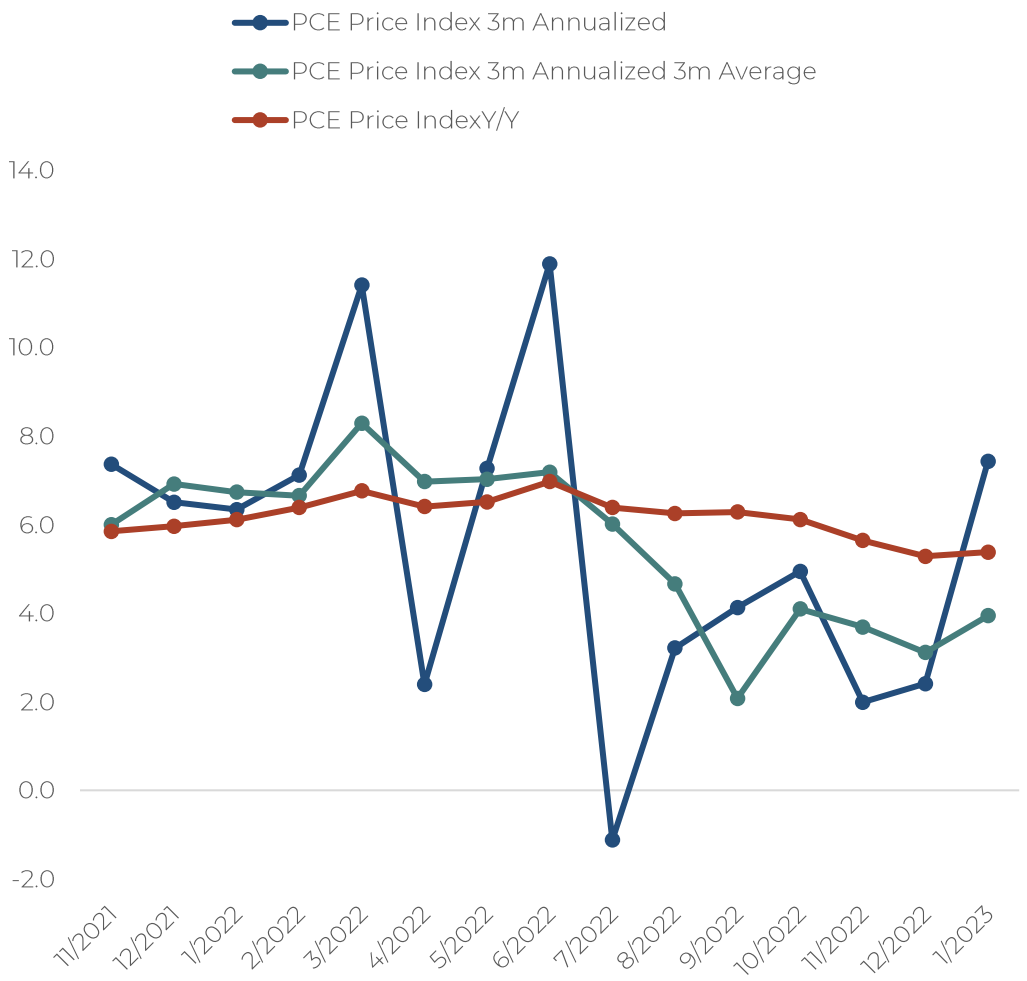
PCE Table

	2022				2023
	Sept.	Oct.	Nov.	Dec.	Jan.
	Percent change from preceding month				
Personal income:					
Current dollars	0.5	0.9	0.4	0.3	0.6
Disposable personal income:					
Current dollars	0.5	1.1	0.5	0.4	2.0
Chained (2012) dollars	0.1	0.7	0.3	0.2	1.4
Personal consumption expenditures (PCE):					
Current dollars	0.6	0.7	-0.2	-0.1	1.8
Chained (2012) dollars	0.3	0.3	-0.3	-0.3	1.1
Price indexes:					
PCE	0.3	0.4	0.2	0.2	0.6
PCE, excluding food and energy	0.5	0.3	0.2	0.4	0.6
Price indexes:	Percent change from month one year ago				
PCE	6.3	6.1	5.6	5.3	5.4
PCE, excluding food and energy	5.2	5.1	4.8	4.6	4.7

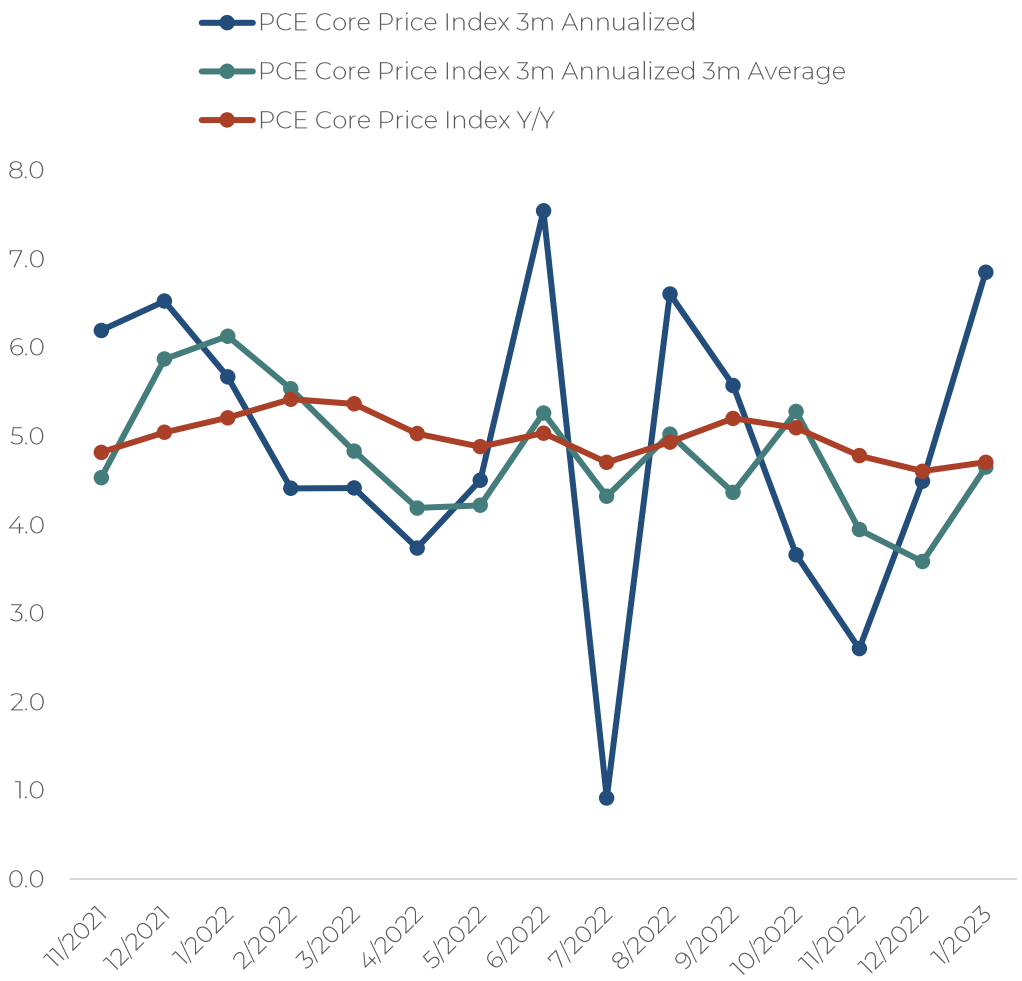
Sources: BEA, Blue Line Capital, Blue Line Futures

Headline & Core PCE Deflators

PCE Headline Inflation



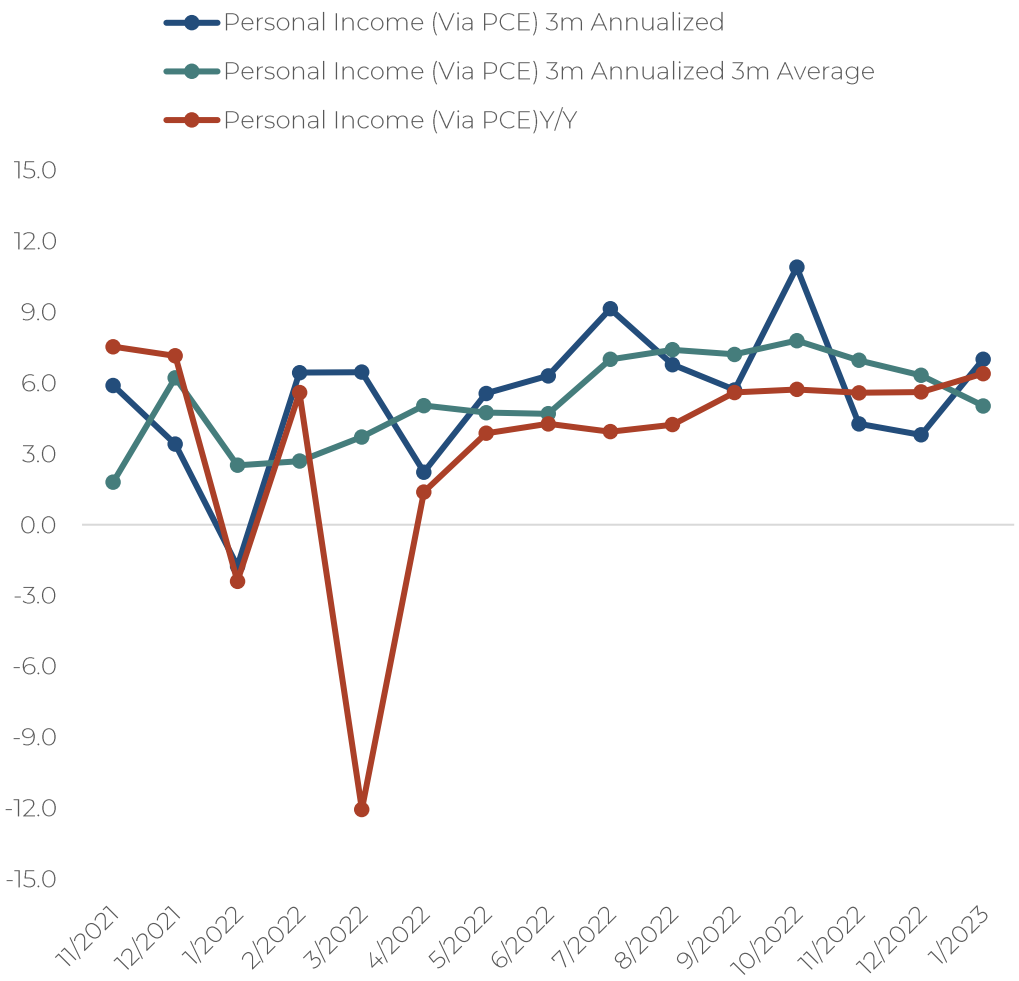
Core-PCE Inflation



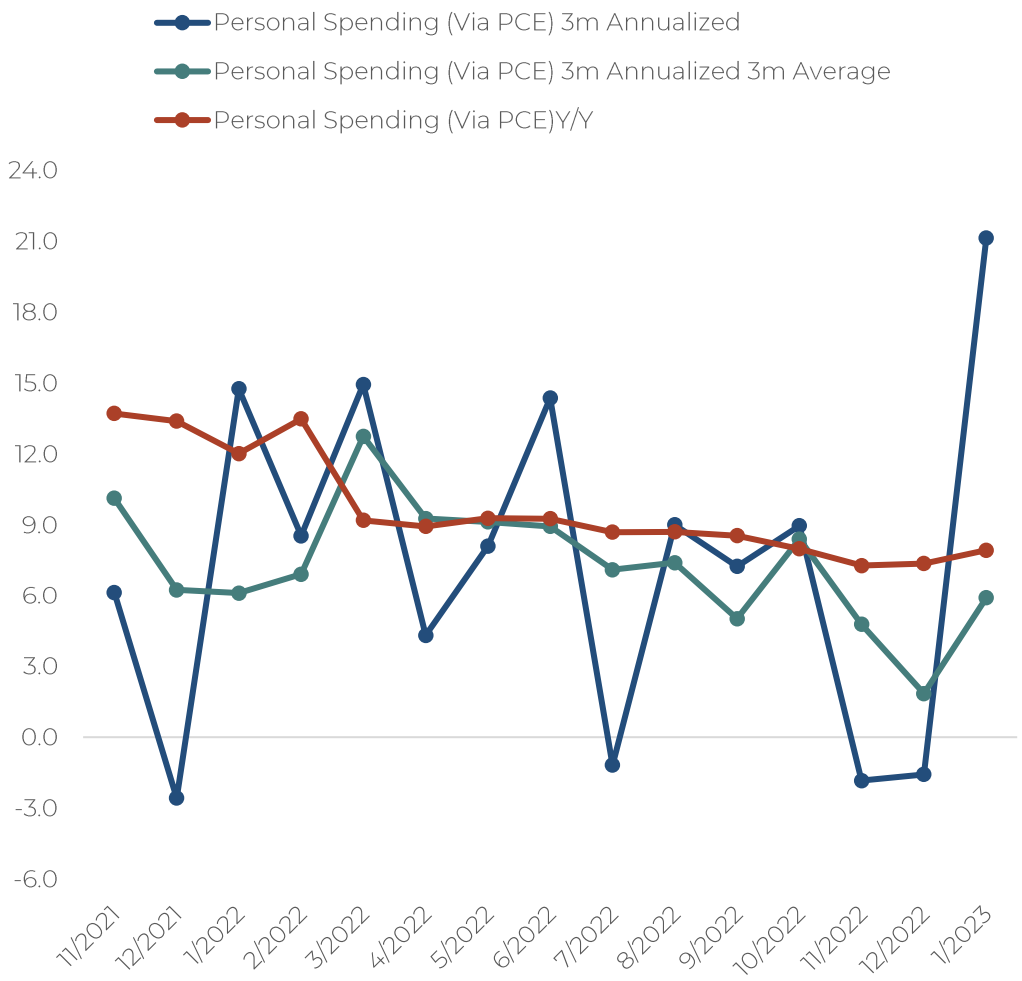
Sources: FRED, BEA, Blue Line Capital, Blue Line Futures

Personal Income & Spending

Personal Income Metrics



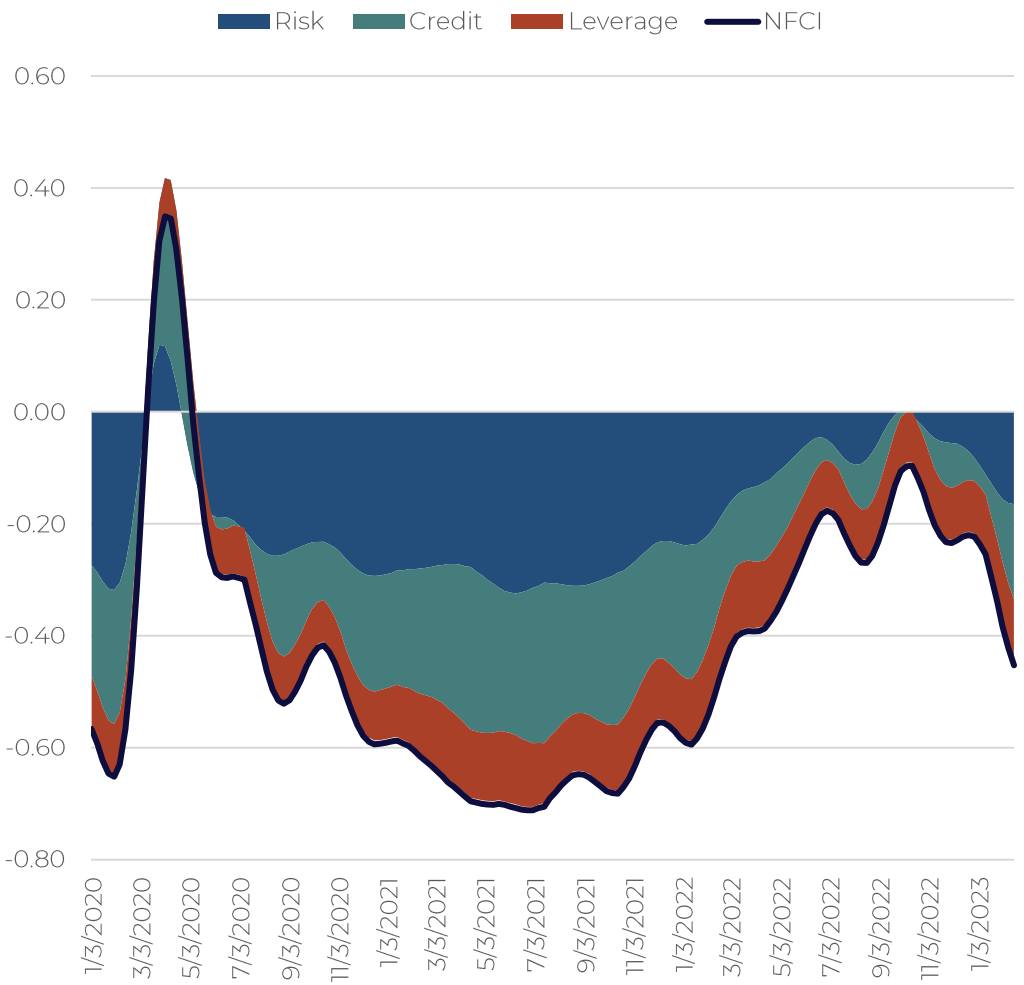
Personal Spending Metrics



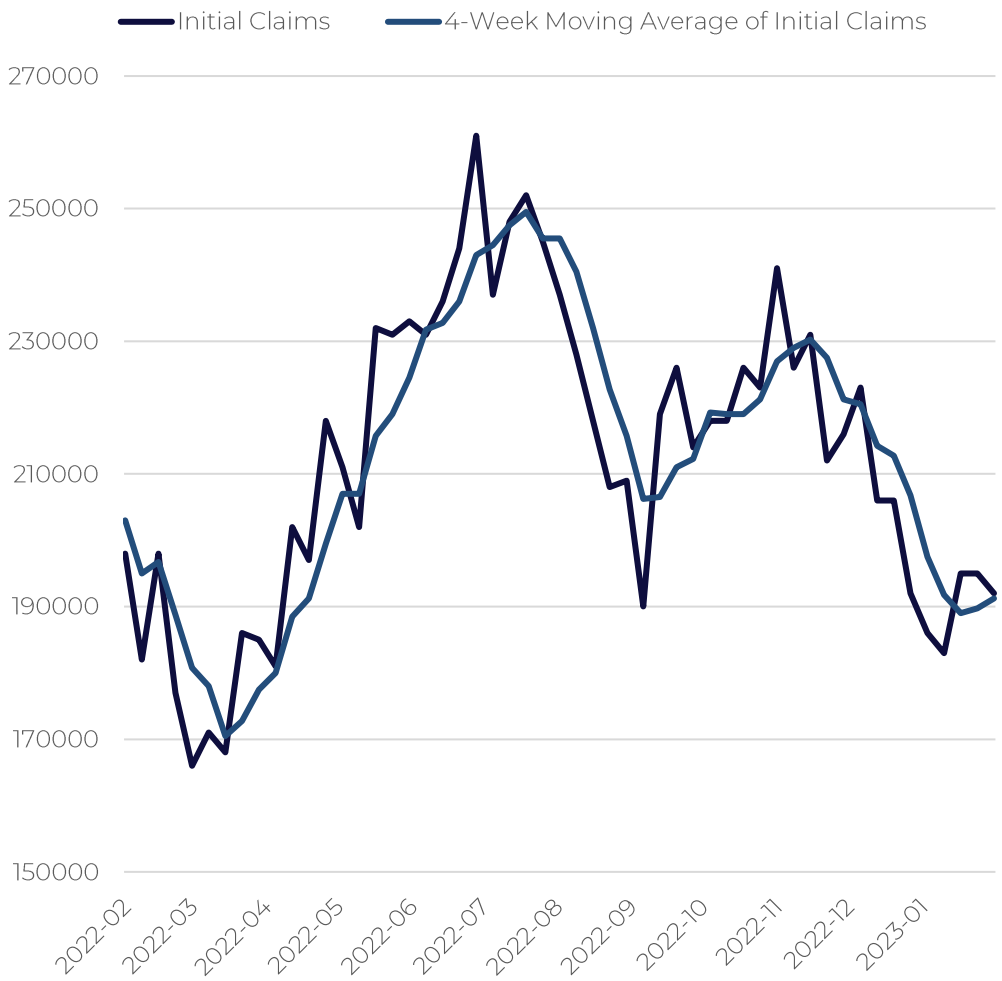
Sources: FRED, BEA, Blue Line Capital, Blue Line Futures

Financial Conditions Easy & Jobs Tight

Financial Conditions Index Have Retraced More Than Half-Way From Where They Started Tightening

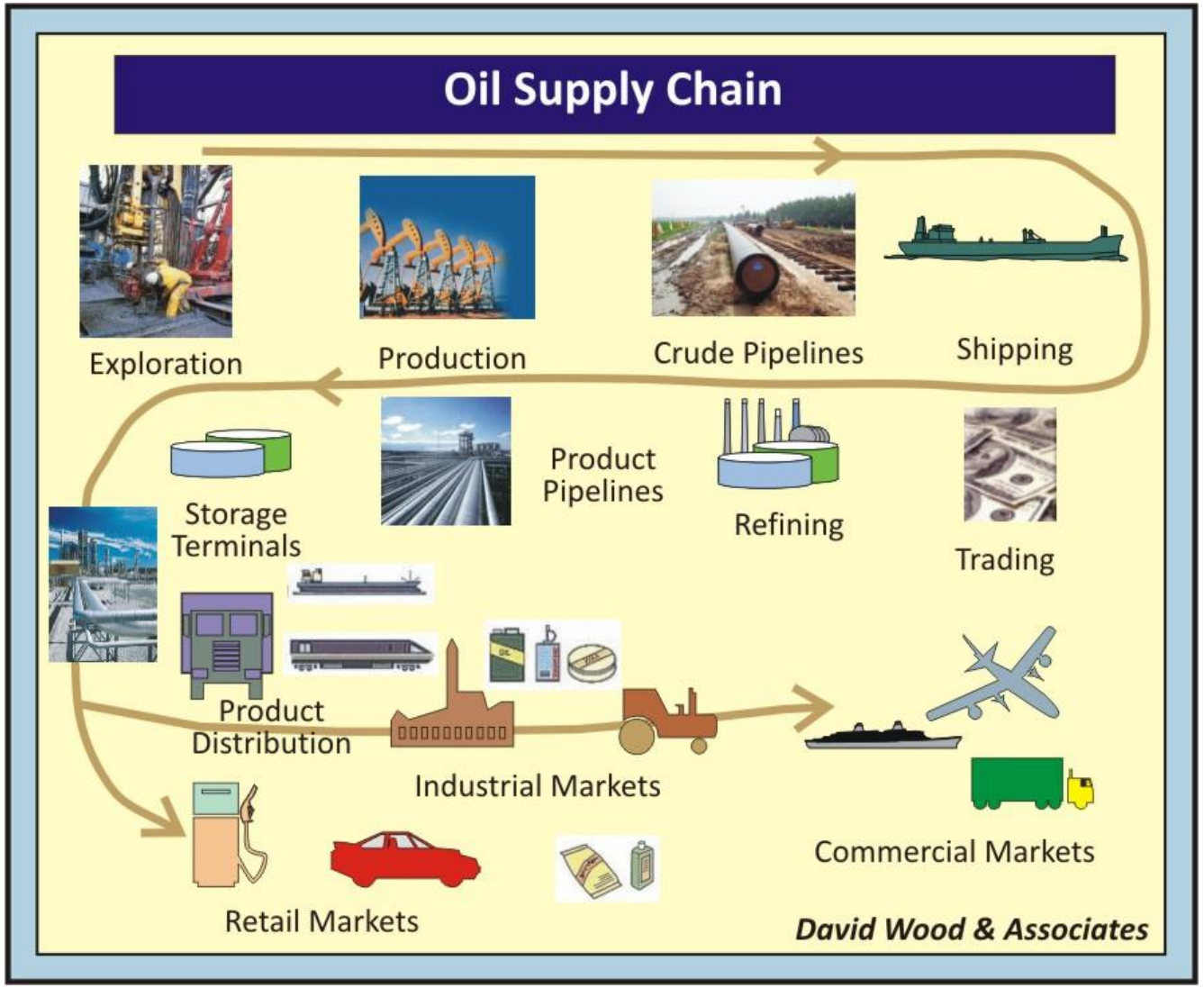


Initial Jobless Claims Remain Very Tight At +192k Last Week



Sources: Chicago Fed, FRED, Blue Line Capital, Blue Line Futures

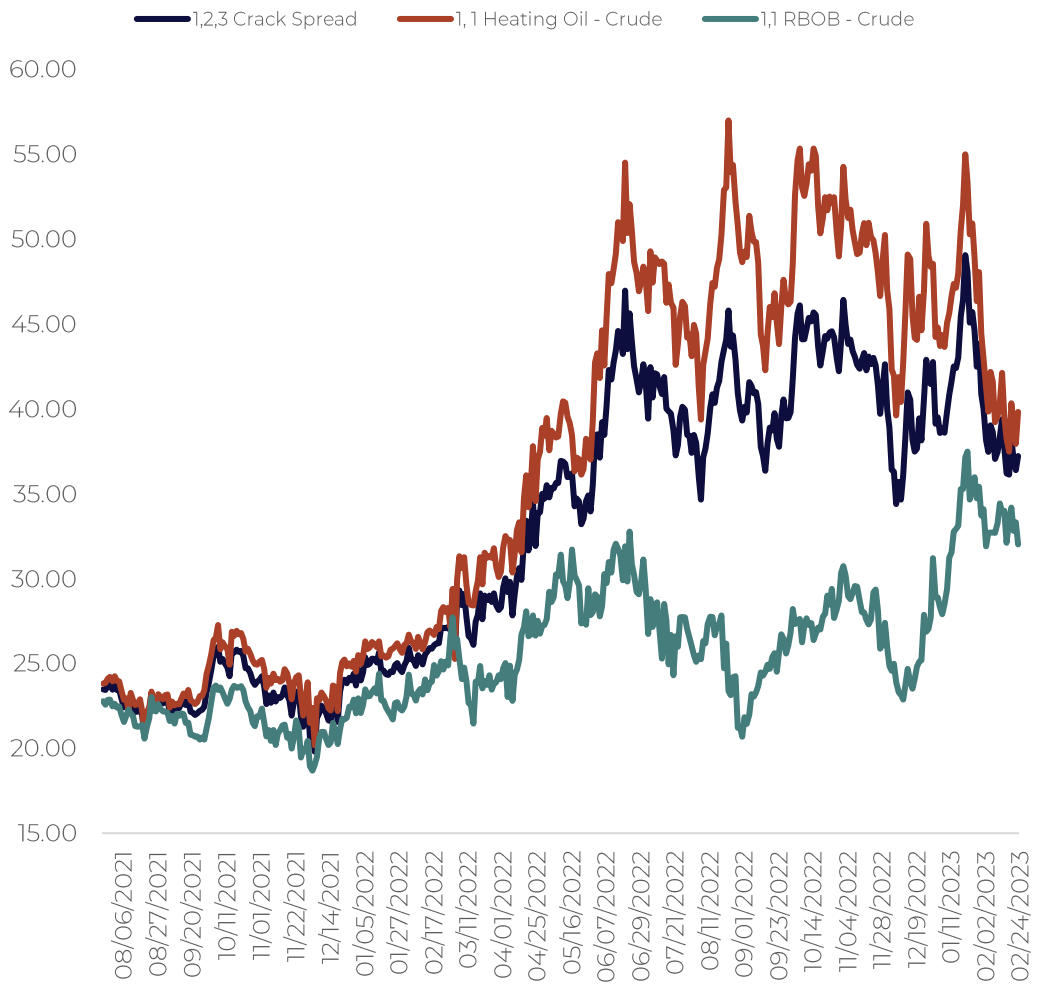
The Oil Supply Chain Illustrated



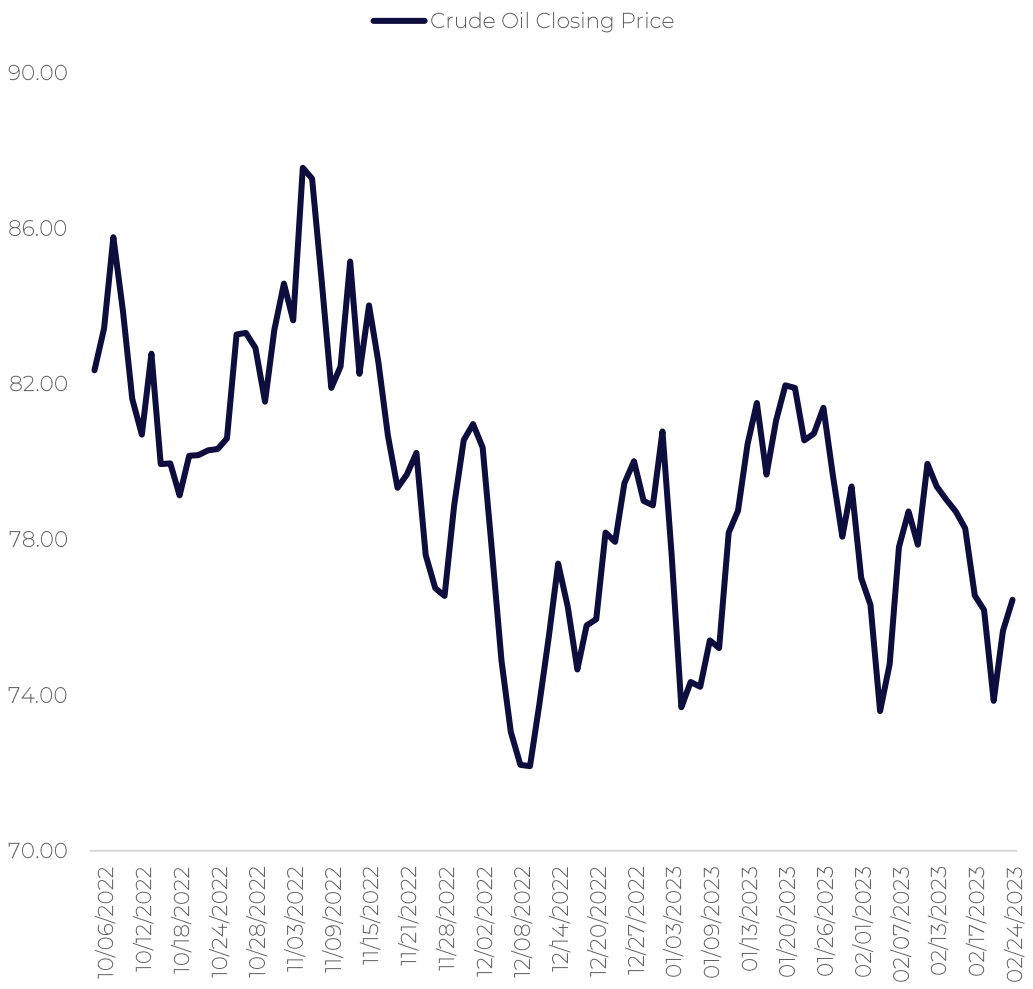
Sources: Ohio State University

Crack Spreads Tight But Off Highs

Crack Spreads Are Off Their Highs, But Stubbornly High Still



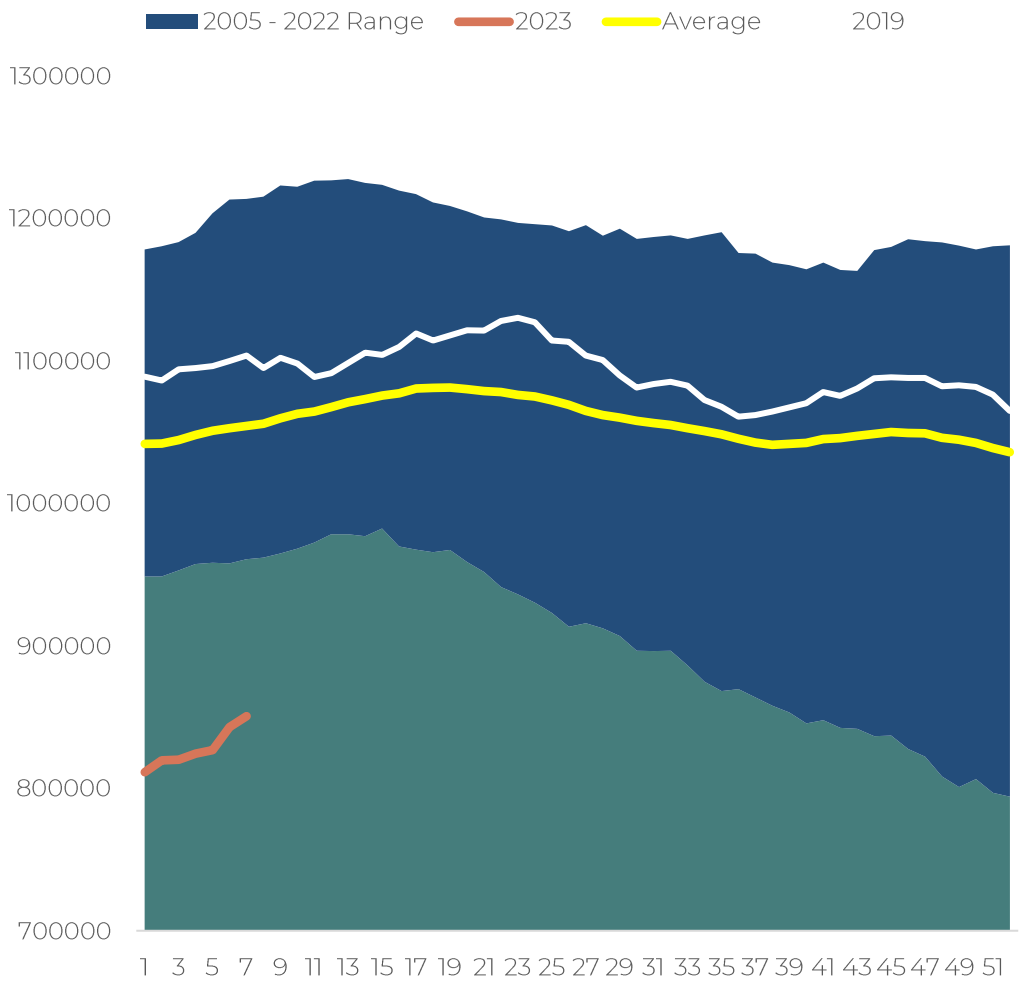
Crude Oil Traders Have Been Eagerly Awaiting China's Reopening



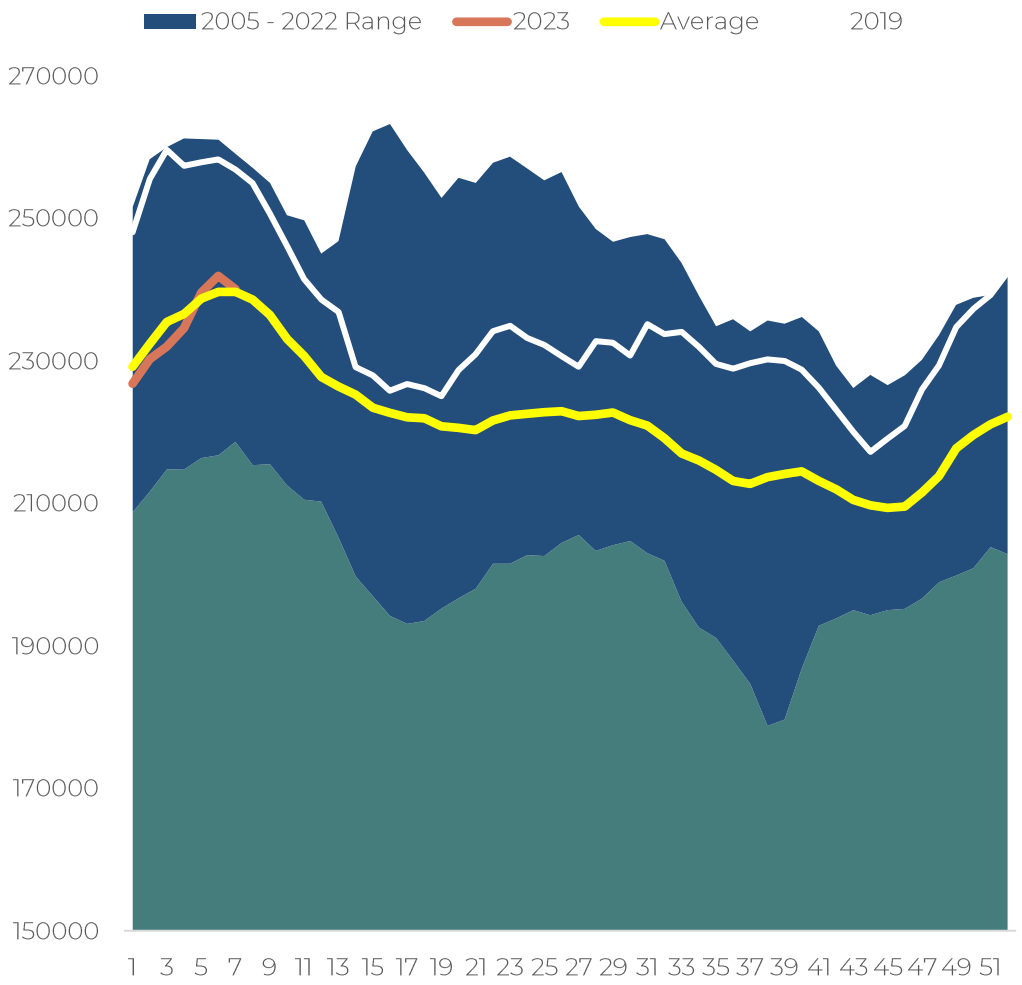
Sources: CQG, Blue Line Capital, Blue Line Futures

Crude Inventories Historically Low, Gasoline Near Average

U.S. Crude Oil Inventories Have Recovered From 2022, But Trend Below Historical Norms



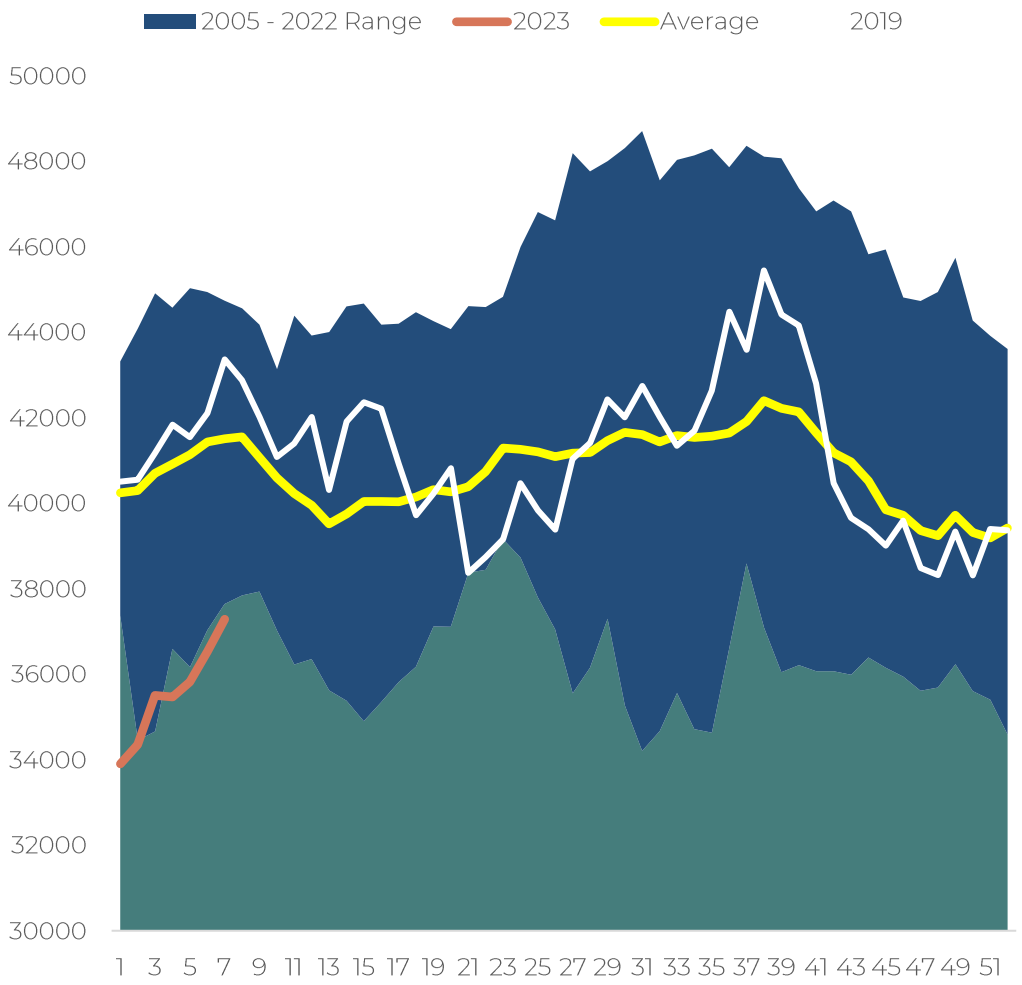
Gasoline Inventories At Average Despite Elevated Crack Spreads



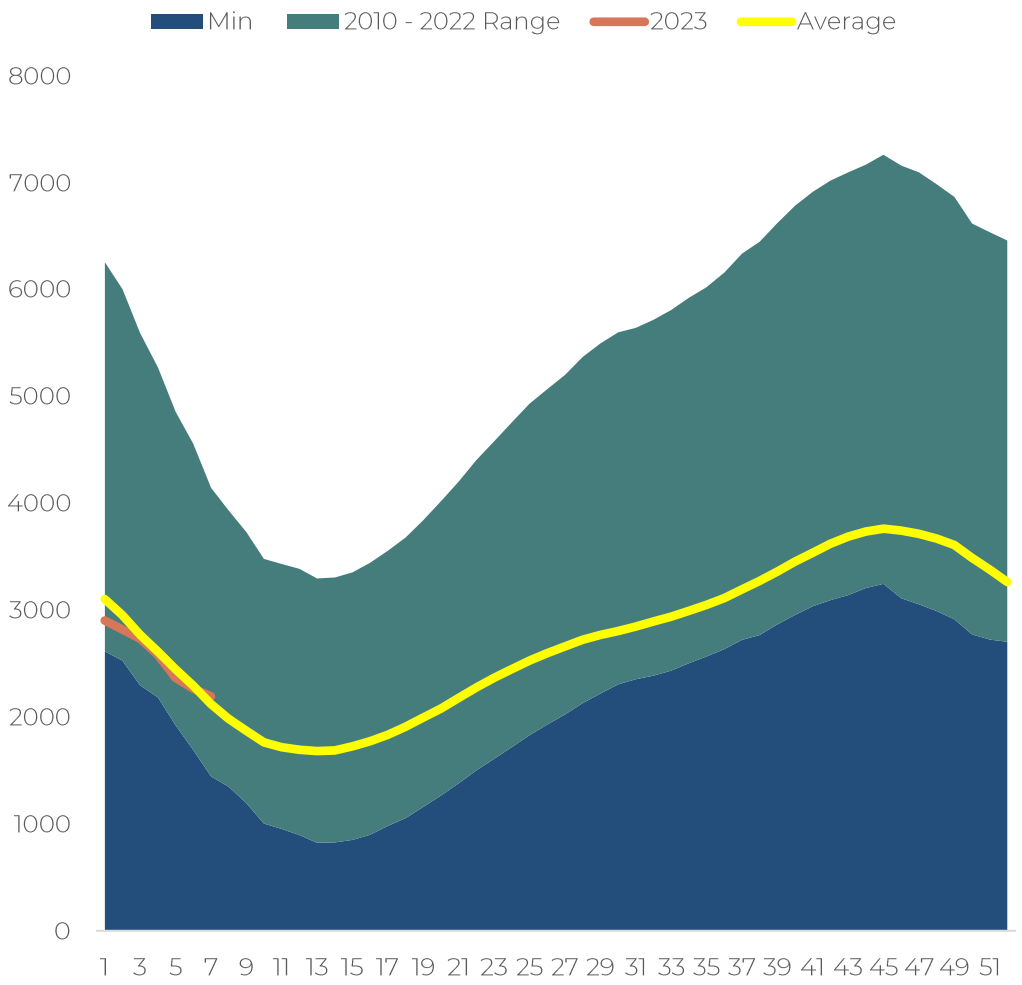
Sources: EIA, Blue Line Capital, Blue Line Futures

Jet Fuel Inventories Recovering | Natural Gas Near Average

Jet Fuel Inventories Near Historical Lows, But Recovering



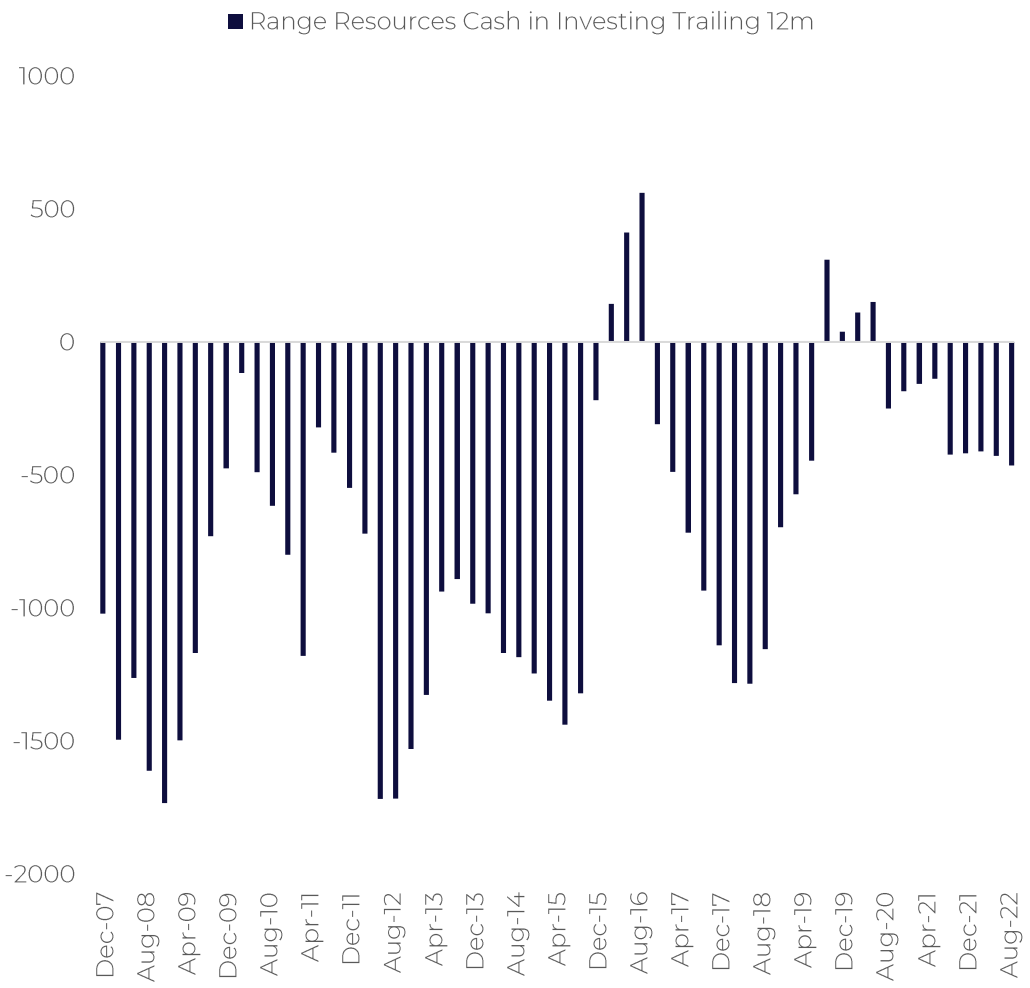
Natural Gas Inventories At Historical Average (Freeport Coming Back Online & European Gas Shortage On The Radar)



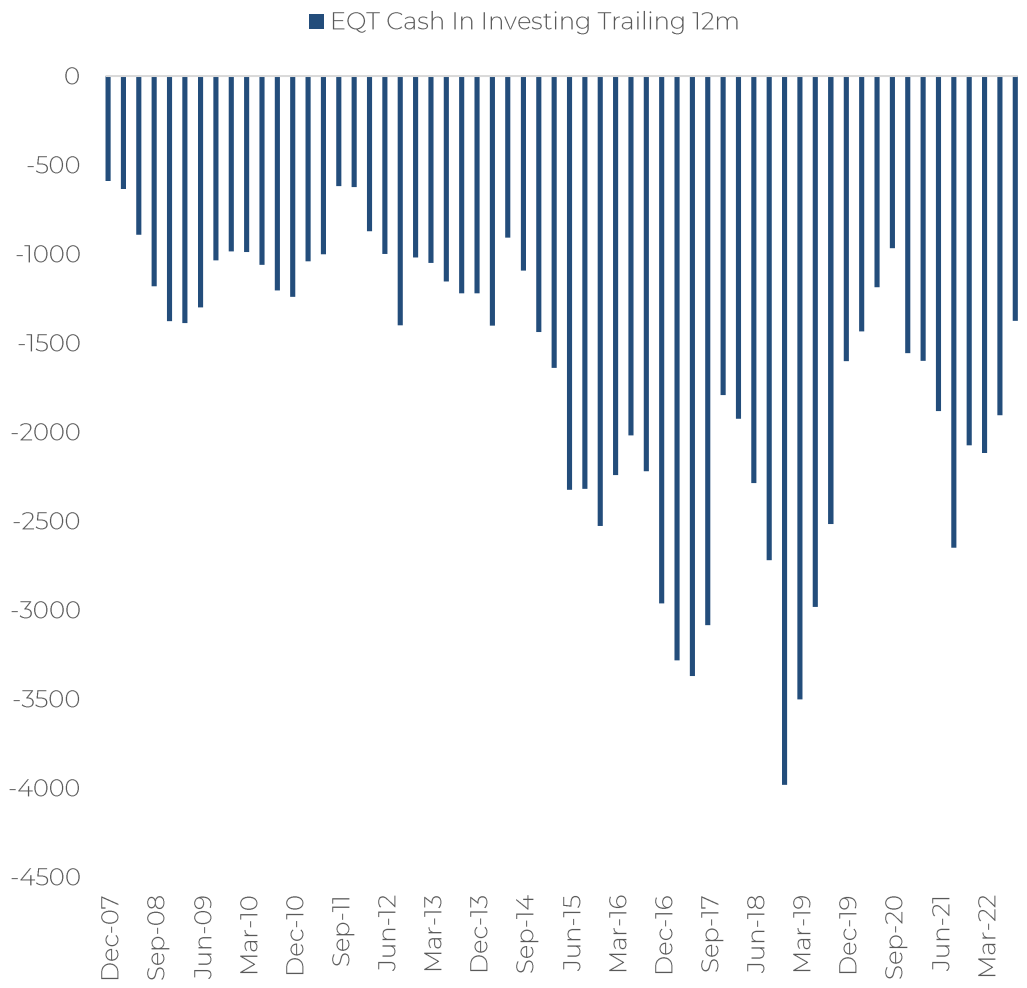
Sources: EIA, Blue Line Capital, Blue Line Futures

Natural Gas Producers Investment Activity

Range Resources Is Spending 27% Of What The Company Used To Spend At Peak



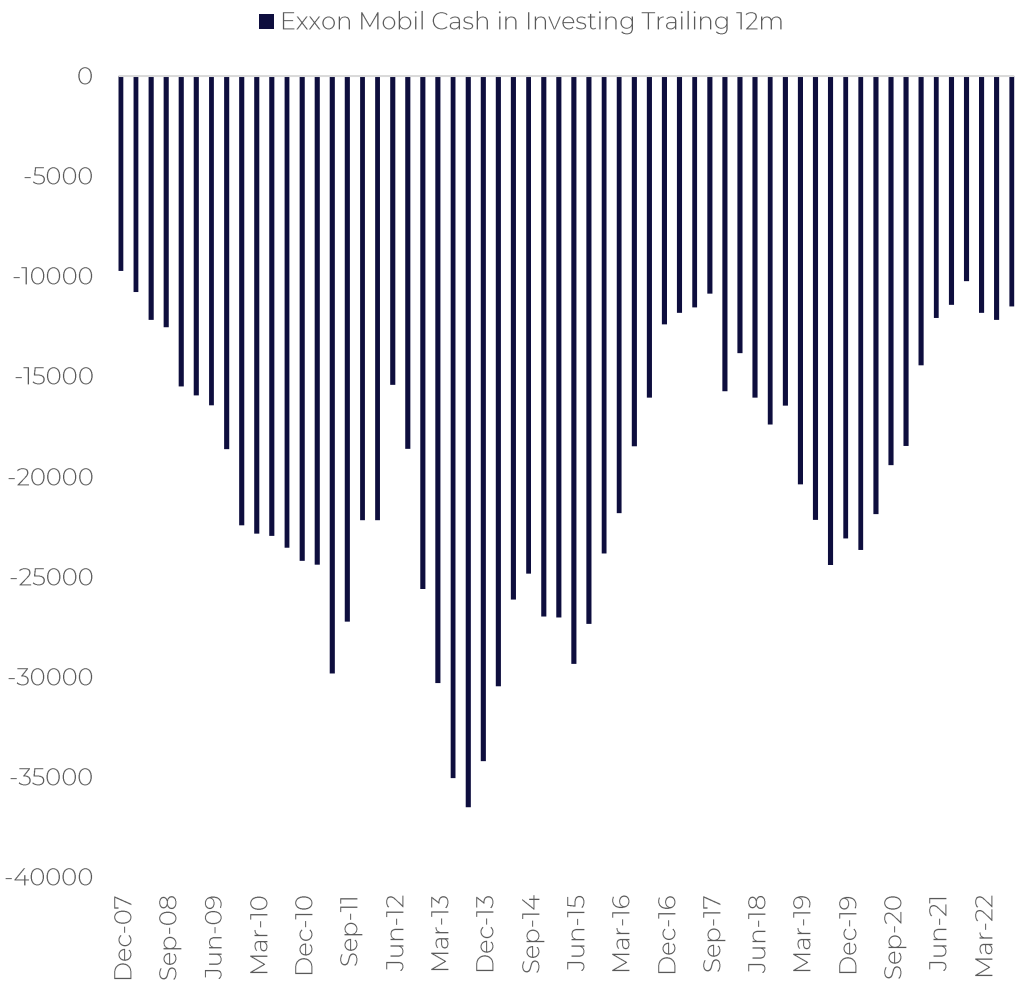
EQT Spends 35% Of What It Used To Spend During Peak Spending Years



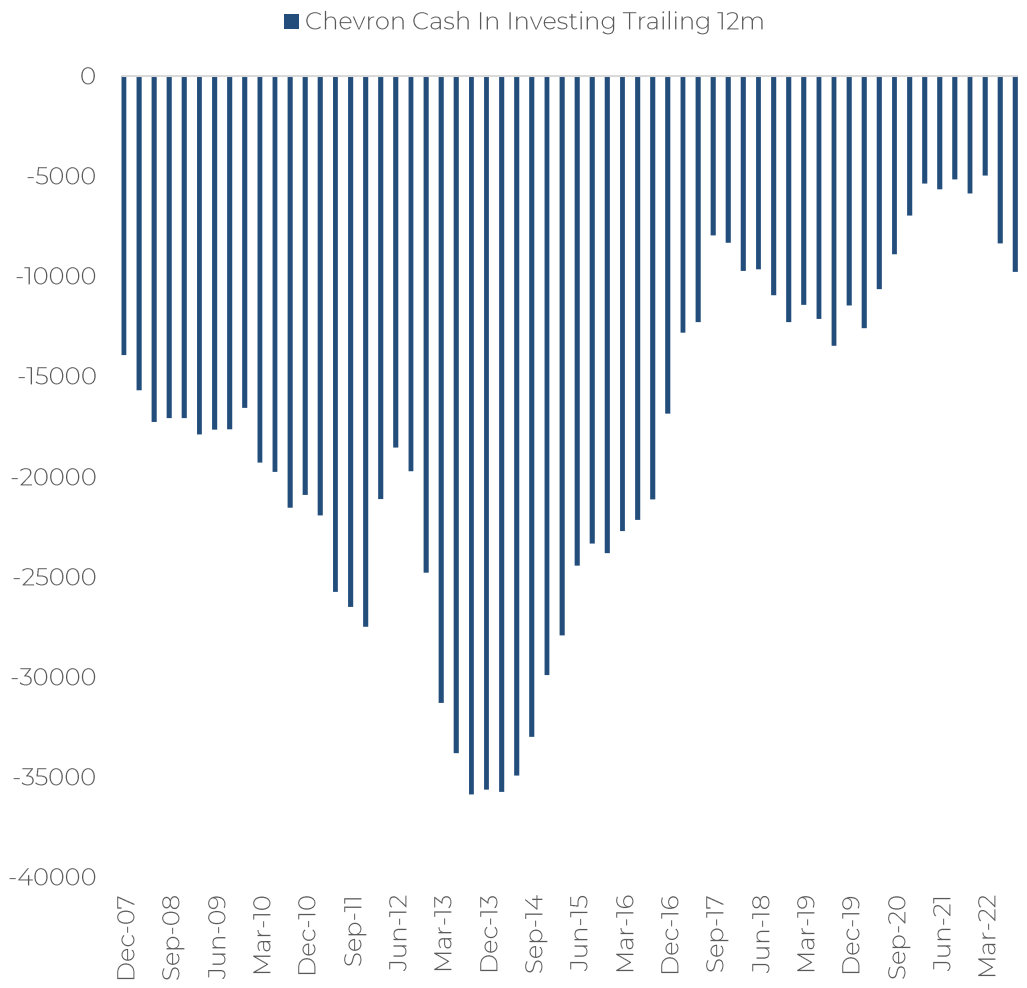
Sources: Range Resources IR, EQT IR, Blue Line Capital, Blue Line Futures

Oil Producers Investment Activity

Exxon Mobil CAPEX Is 32% Of What It Was At Peak



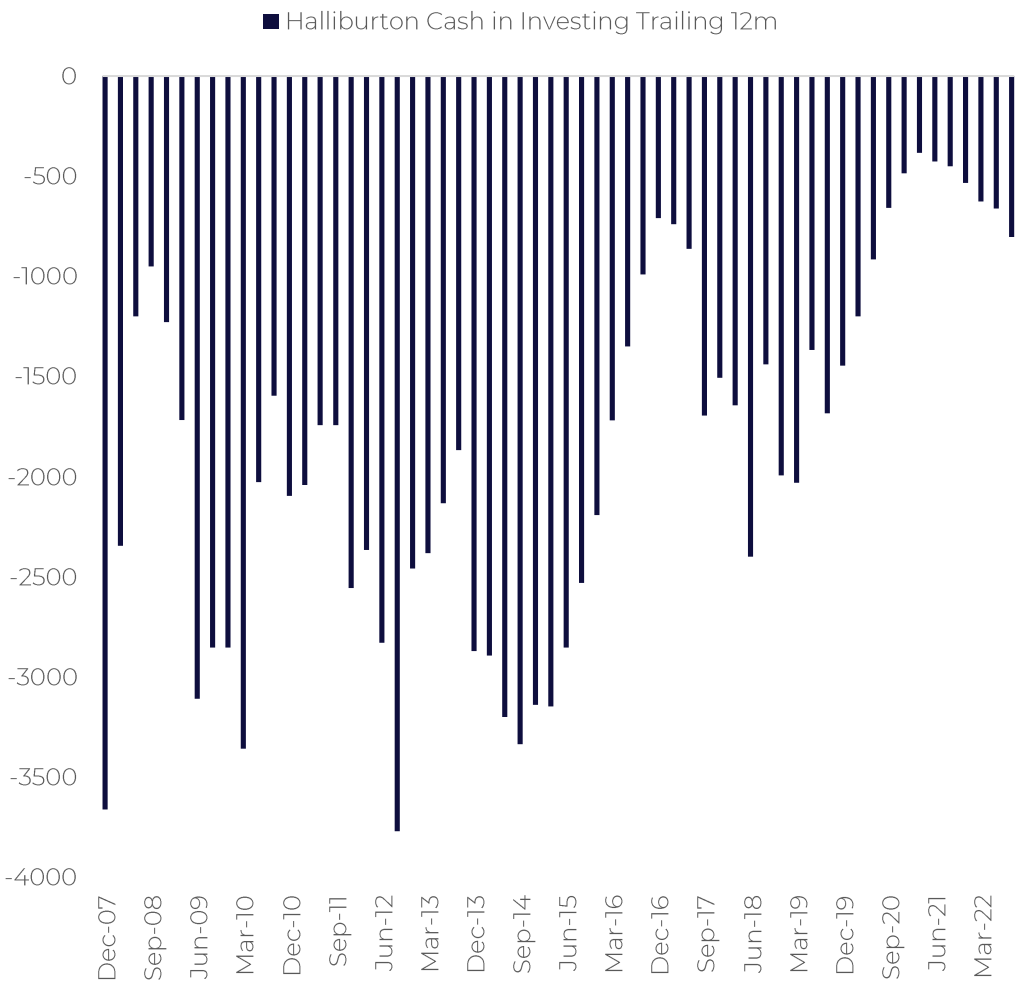
Chevron CAPEX Is 27% Of What It Was At Peak



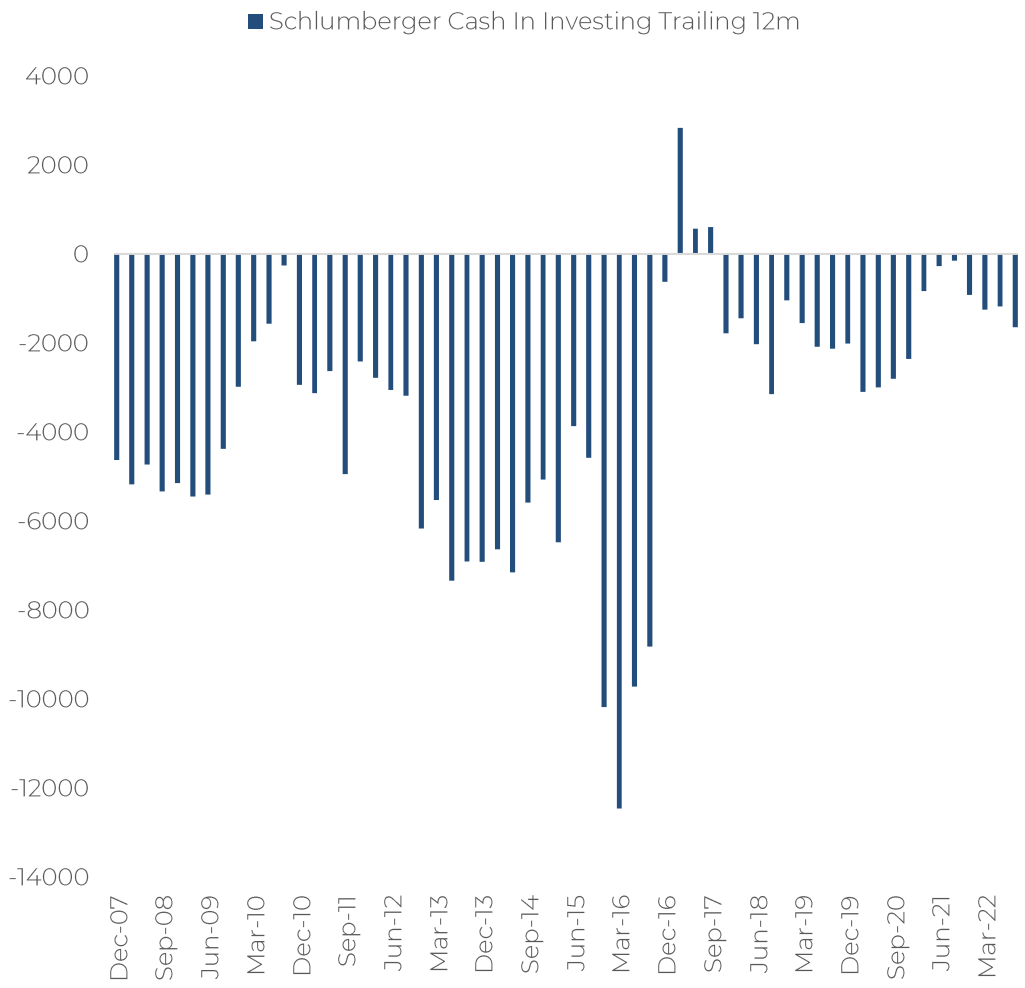
Sources: Exxon Mobil IR, Chevron IR, Blue Line Capital, Blue Line Futures

Oil Services Investment Activity

Halliburton's CAPEX Is 21% Of What It Was At Peak



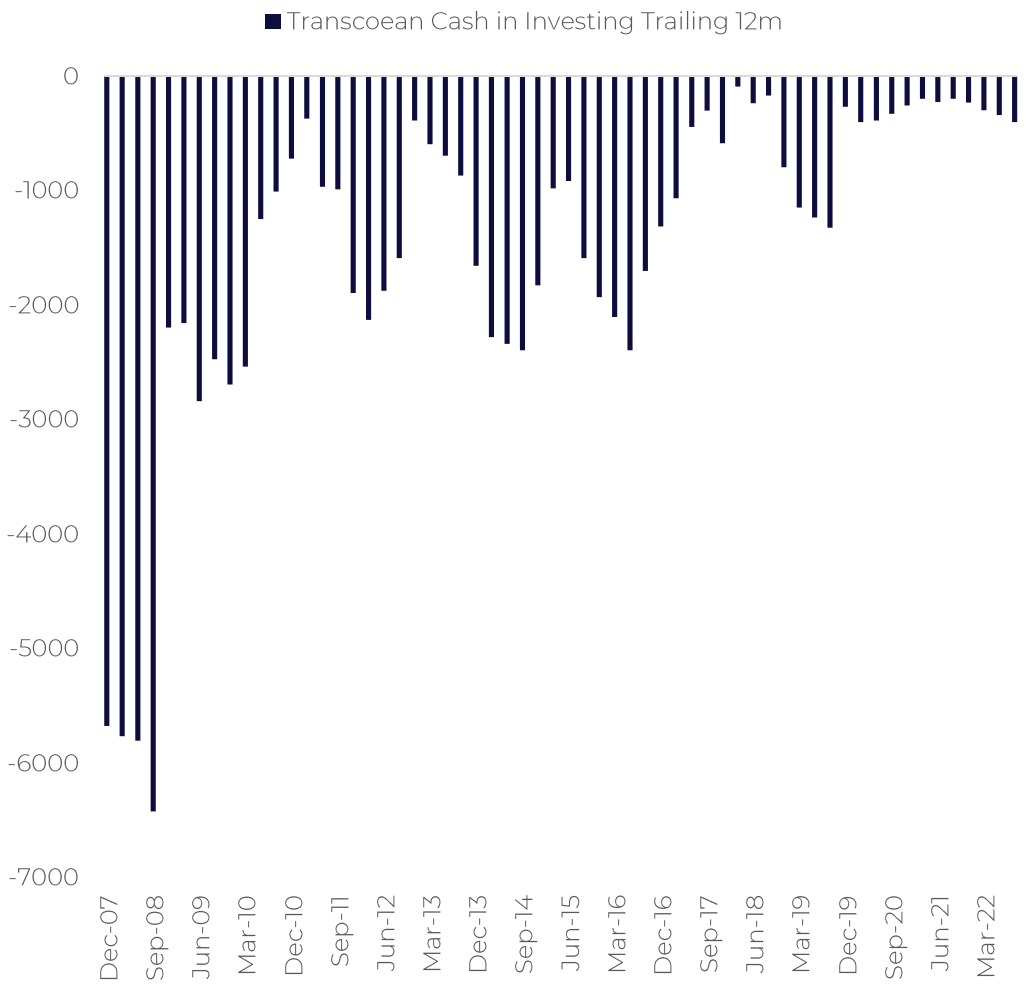
Schlumberger's CAPEX Is 13% Of What It Was At Peak



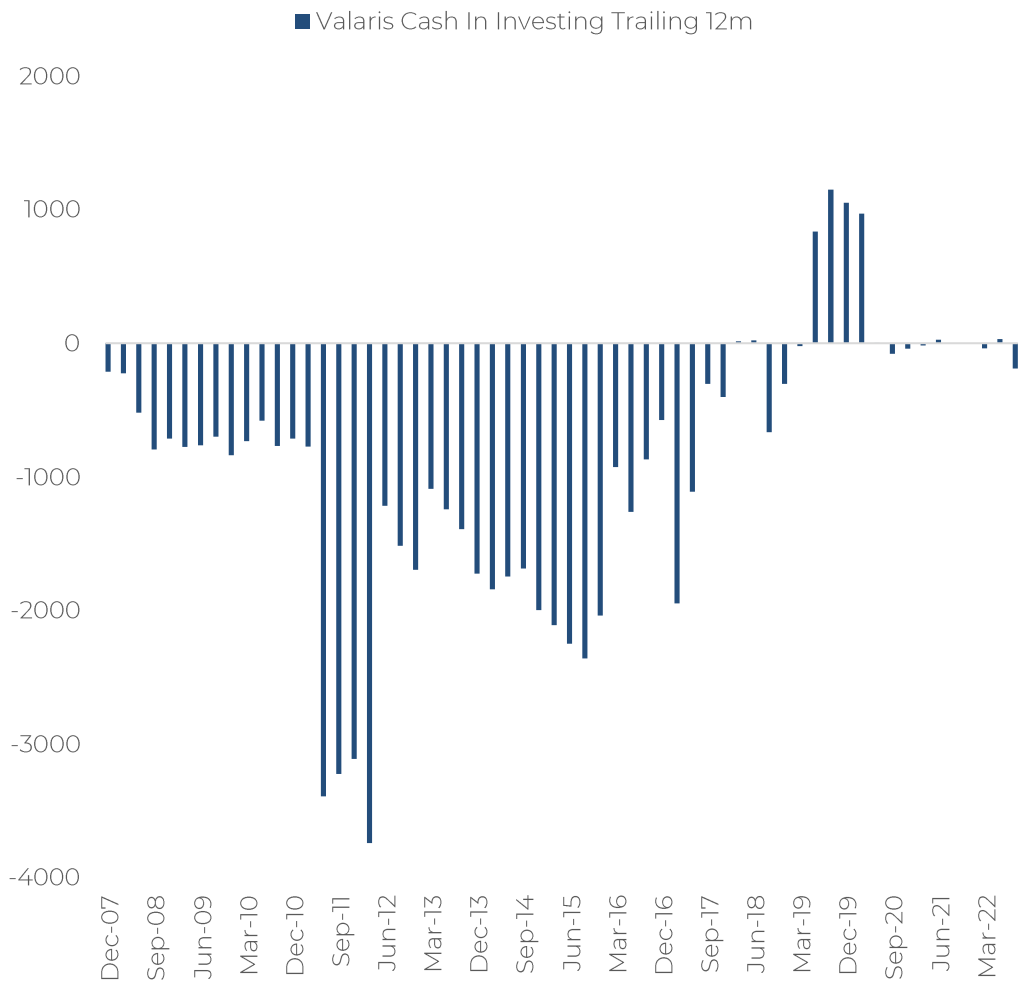
Sources: Halliburton IR, Schlumberger IR, Blue Line Capital, Blue Line Futures

Deepwater Drilling Investment Activity

Transocean CAPEX Is 15% Of What It Was During The Shale Boom In 2015



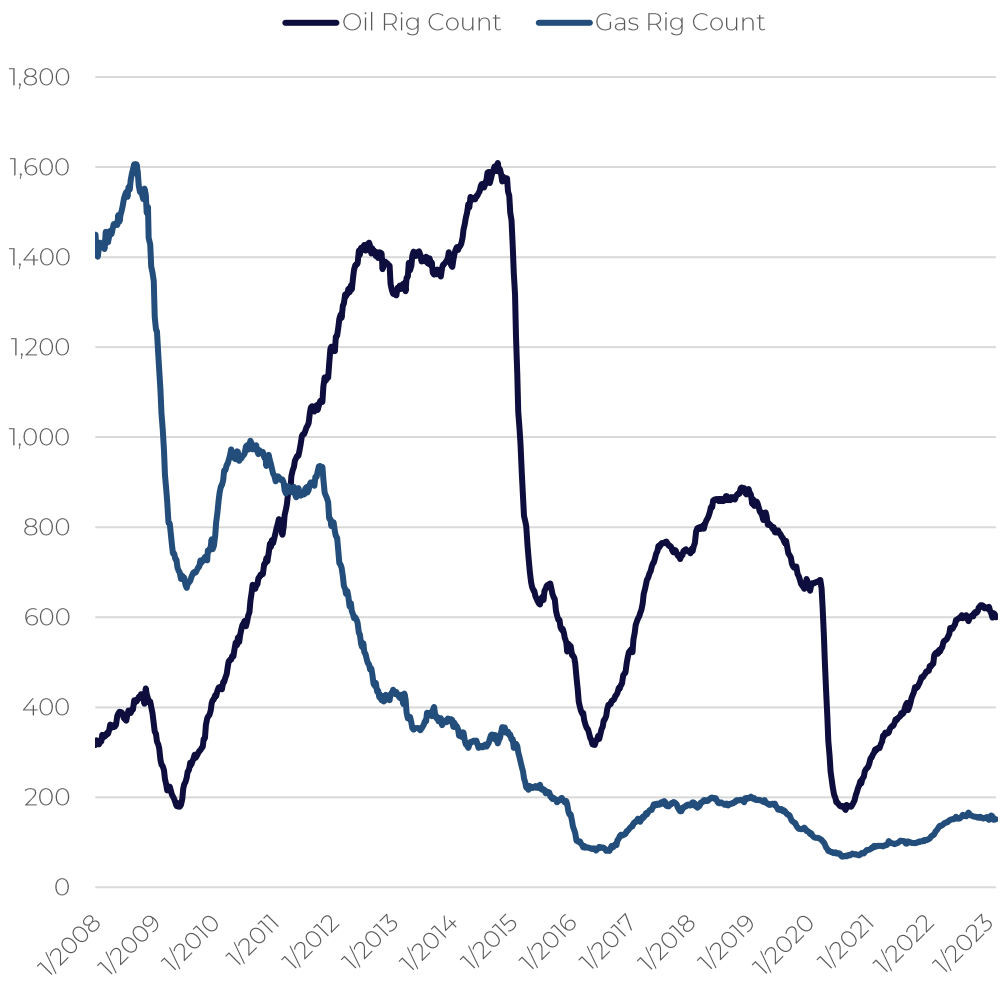
Valaris' CAPEX Is 9% Of What It Was During The Shale Boom In 2015



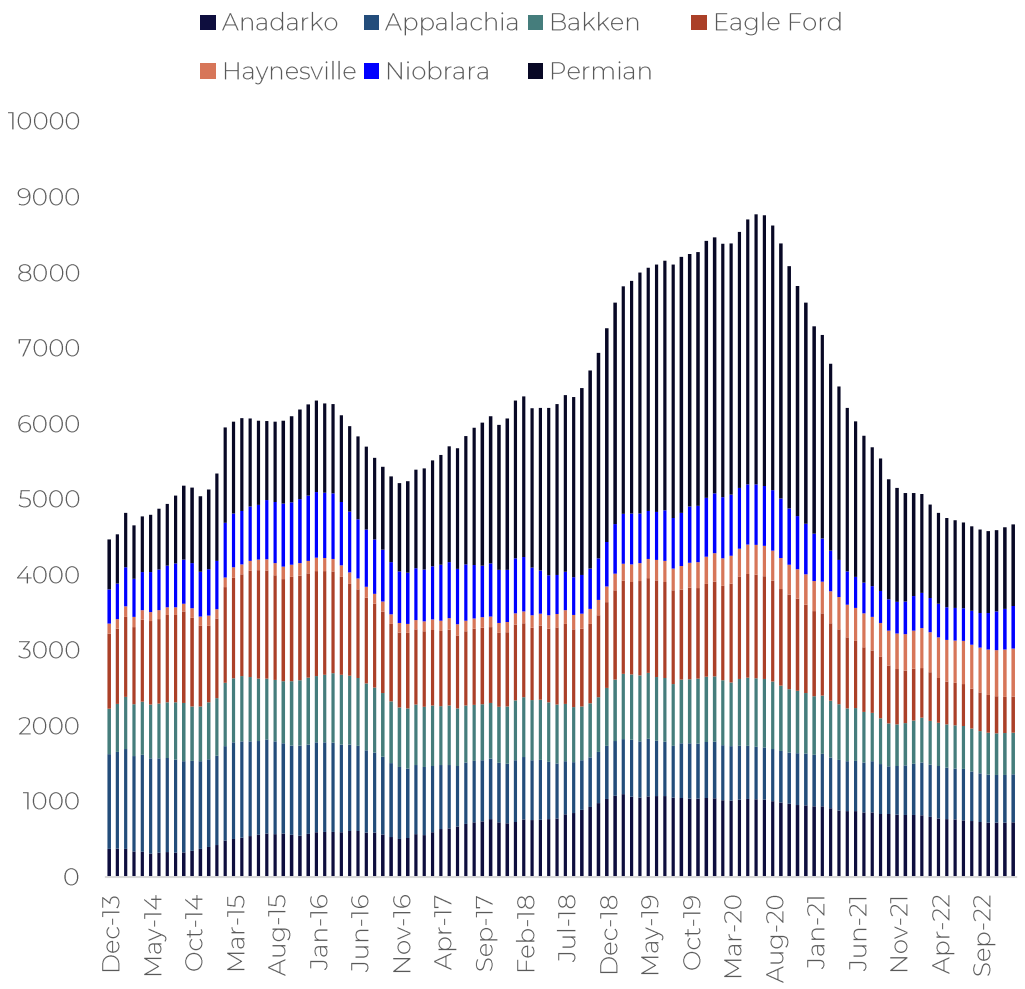
Sources: Transocean IR, ValarisIR, Blue Line Capital, Blue Line Futures

U.S. Rig Count & DUCs Imply Limited Production Volume

U.S. Oil & Gas Rig Count Plateauing



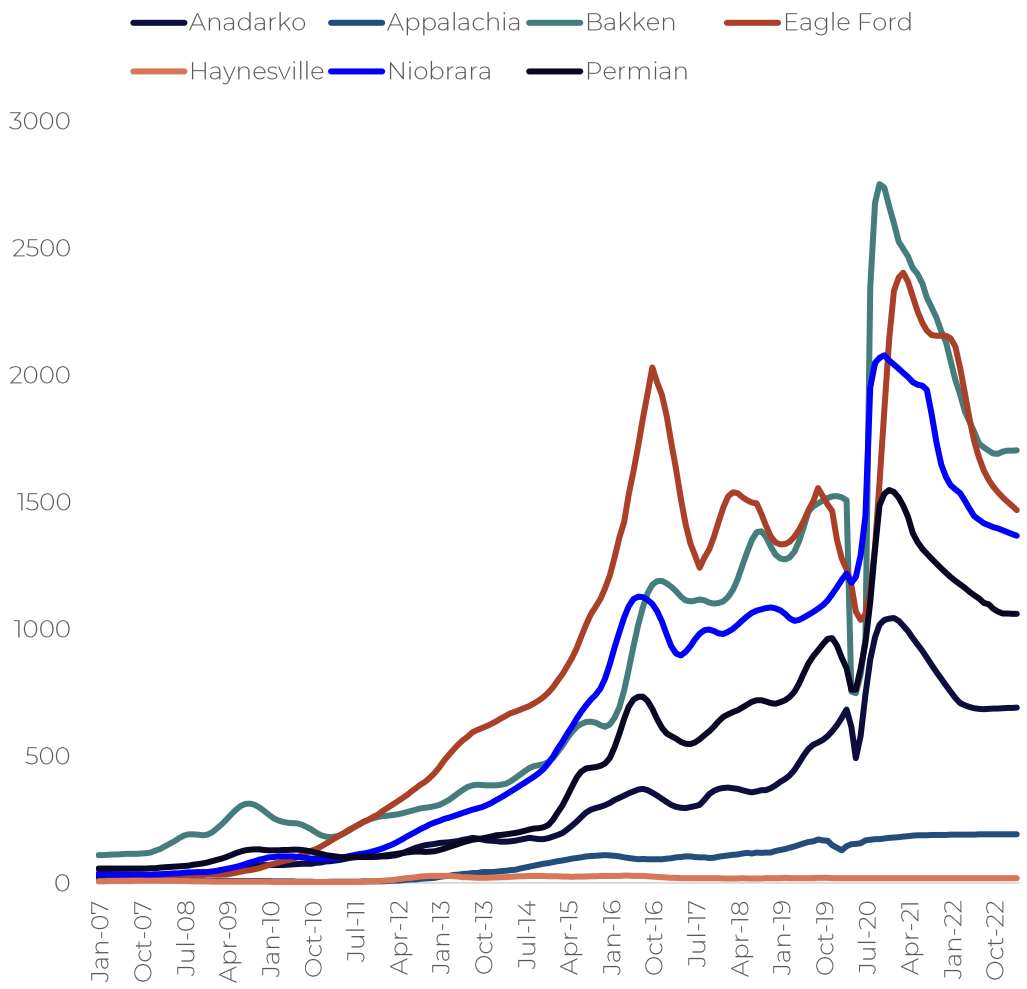
DUCs Have Bottomed Off Sugar High



Sources: Baker Hughes, EIA, Blue Line Capital, Blue Line Futures

Oil Well Productivity

Oil Well Productivity (bbl/d)



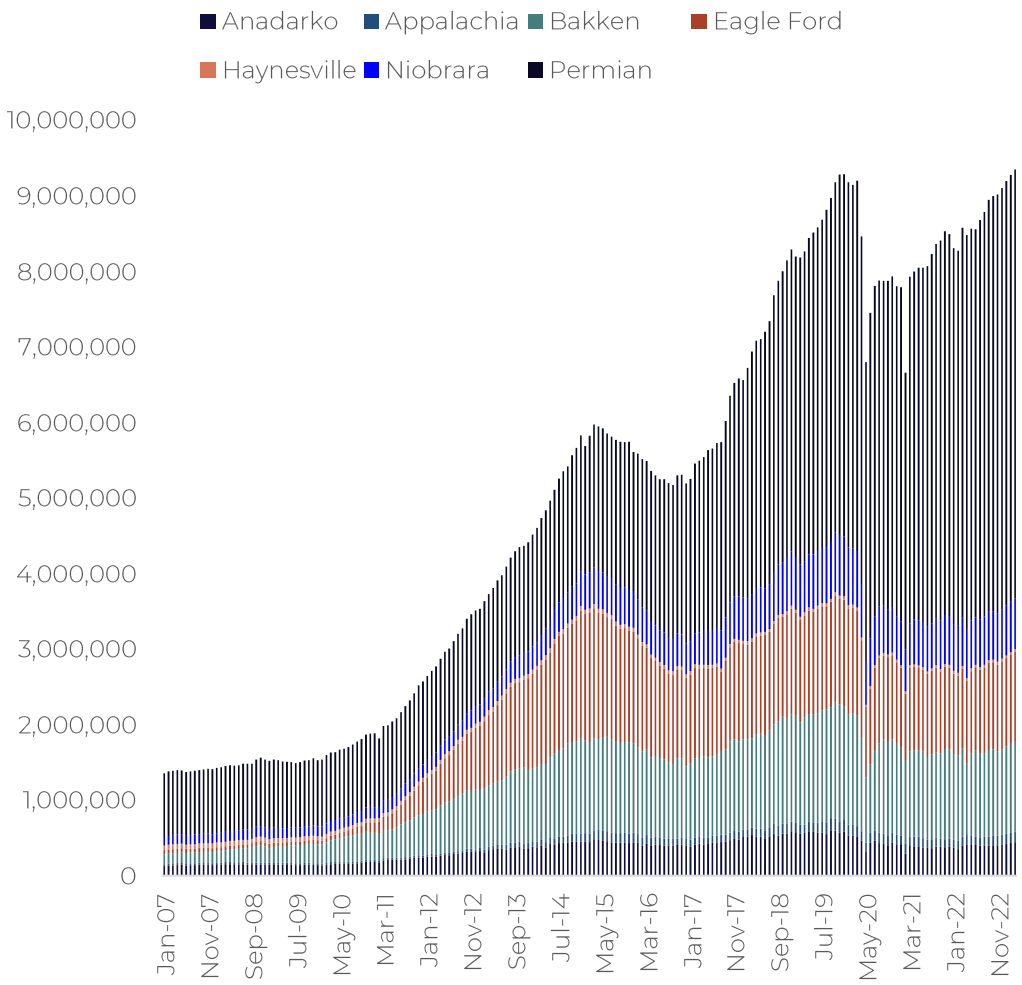
Sources: EIA, Blue Line Capital, Blue Line Futures

Y/Y Well Productivity %

	Anadarko	Appalachia	Bakken	Eagle Ford	Haynesville	Niobrara	Permian
Jan-22	-28%	6%	-21%	-8%	0%	-23%	-22%
Feb-22	-29%	6%	-22%	-11%	0%	-23%	-22%
Mar-22	-30%	4%	-23%	-16%	0%	-24%	-21%
Apr-22	-29%	3%	-25%	-19%	0%	-25%	-19%
May-22	-28%	2%	-25%	-21%	0%	-25%	-17%
Jun-22	-27%	1%	-26%	-23%	0%	-26%	-16%
Jul-22	-25%	2%	-27%	-24%	0%	-27%	-15%
Aug-22	-23%	2%	-26%	-25%	0%	-27%	-15%
Sep-22	-20%	1%	-25%	-26%	0%	-24%	-14%
Oct-22	-17%	1%	-24%	-28%	0%	-19%	-14%
Nov-22	-15%	1%	-22%	-29%	0%	-15%	-14%
Dec-22	-12%	1%	-20%	-30%	0%	-13%	-13%
Jan-23	-9%	1%	-17%	-30%	0%	-12%	-12%
Feb-23	-5%	1%	-14%	-30%	0%	-11%	-11%
Mar-23	-2%	1%	-11%	-28%	0%	-11%	-10%

Oil Production Data

U.S. Oil Production By Region (bbl/d)



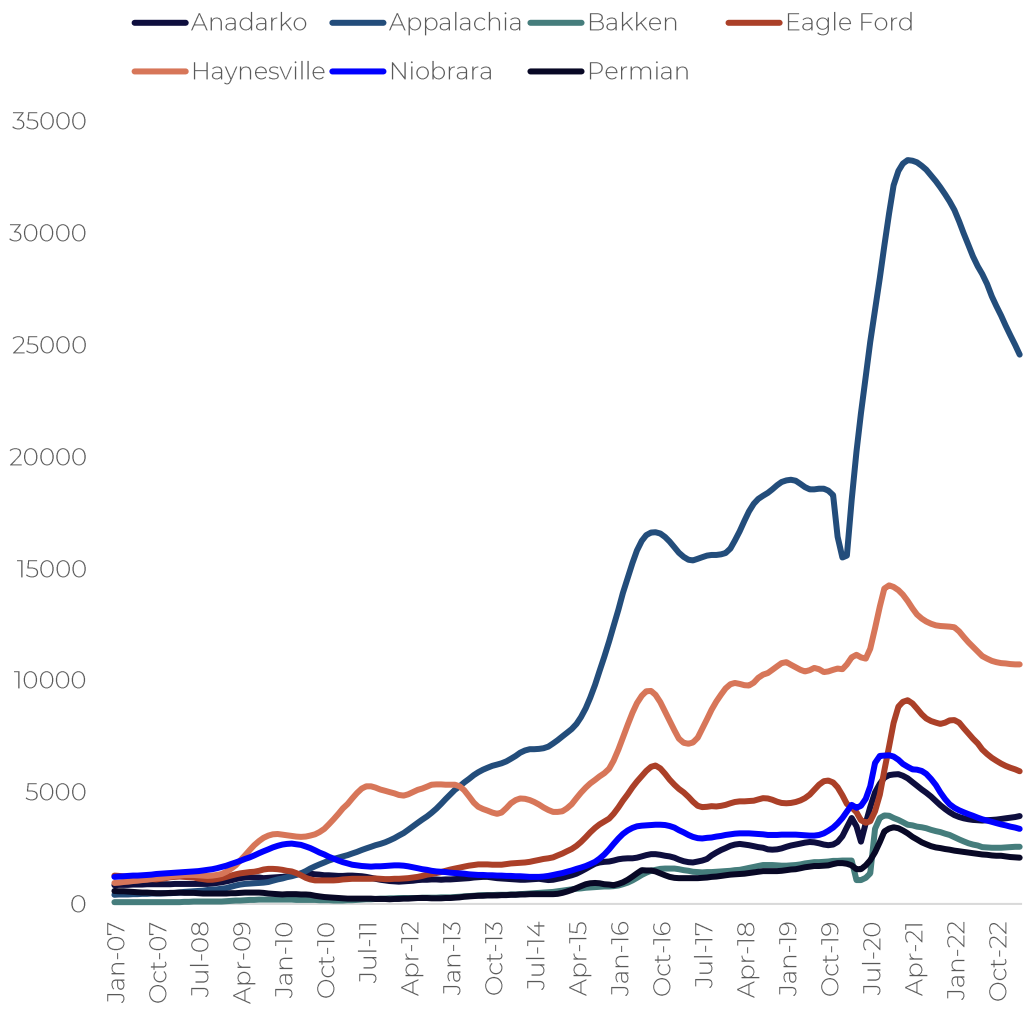
Sources: EIA, Blue Line Capital, Blue Line Futures

Y/Y Production Change By Region

	Anadarko	Appalachia	Bakken	Eagle Ford	Haynesville	Niobrara	Permian
Jan-22	-8%	-18%	-3%	1%	5%	7%	13%
Feb-22	20%	-12%	3%	19%	26%	12%	35%
Mar-22	2%	-10%	3%	-4%	11%	15%	13%
Apr-22	7%	-5%	-16%	-2%	11%	7%	14%
May-22	4%	-5%	-4%	0%	10%	7%	11%
Jun-22	9%	-8%	-1%	2%	8%	7%	9%
Jul-22	8%	1%	1%	1%	6%	6%	11%
Aug-22	10%	1%	-2%	3%	7%	7%	10%
Sep-22	4%	3%	1%	3%	5%	5%	10%
Oct-22	5%	22%	1%	7%	1%	-1%	9%
Nov-22	7%	21%	-7%	7%	-3%	-1%	9%
Dec-22	7%	24%	-4%	7%	-2%	2%	10%
Jan-23	12%	28%	2%	10%	1%	8%	13%
Feb-23	22%	27%	4%	11%	1%	7%	14%
Mar-23	11%	20%	3%	11%	-2%	6%	10%

Natural Gas Well Productivity

Natural Gas Well Productivity (Mcf/d)



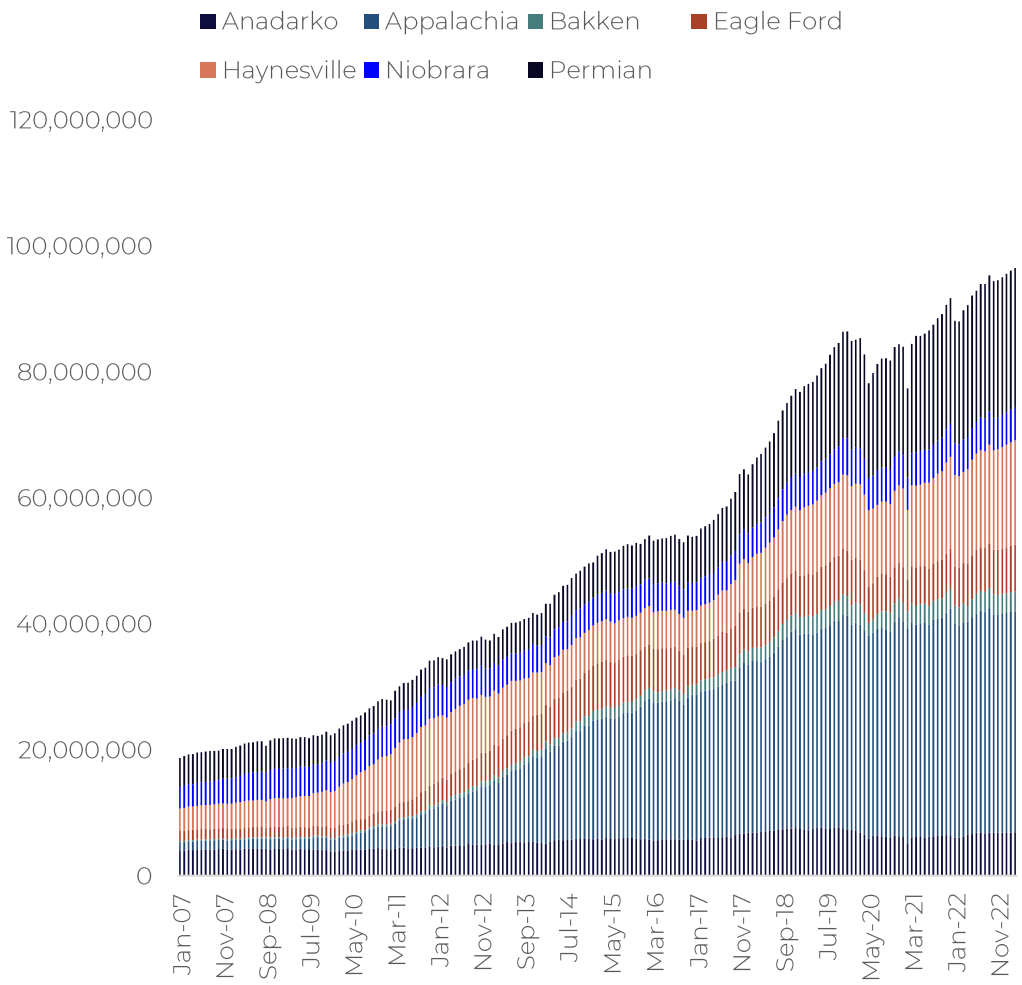
Sources: EIA, Blue Line Capital, Blue Line Futures

Y/Y Well Productivity %

	Anadarko	Appalachia	Bakken	Eagle Ford	Haynesville	Niobrara	Permian
Jan-22	-32%	-5%	-21%	-7%	-12%	-33%	-30%
Feb-22	-32%	-8%	-21%	-10%	-12%	-33%	-28%
Mar-22	-32%	-10%	-21%	-14%	-12%	-33%	-26%
Apr-22	-31%	-11%	-23%	-15%	-11%	-33%	-23%
May-22	-29%	-13%	-23%	-15%	-11%	-34%	-21%
Jun-22	-27%	-14%	-24%	-15%	-11%	-35%	-19%
Jul-22	-25%	-14%	-25%	-17%	-12%	-35%	-17%
Aug-22	-22%	-15%	-24%	-18%	-12%	-33%	-15%
Sep-22	-18%	-16%	-23%	-19%	-13%	-31%	-14%
Oct-22	-15%	-17%	-22%	-21%	-13%	-28%	-14%
Nov-22	-10%	-17%	-20%	-23%	-13%	-24%	-12%
Dec-22	-7%	-18%	-18%	-25%	-13%	-21%	-12%
Jan-23	-3%	-18%	-15%	-26%	-13%	-20%	-12%
Feb-23	0%	-18%	-11%	-26%	-12%	-19%	-12%
Mar-23	3%	-18%	-9%	-24%	-10%	-18%	-11%

Natural Gas Production Data

Natural Gas Production By Region (Mcf/d)



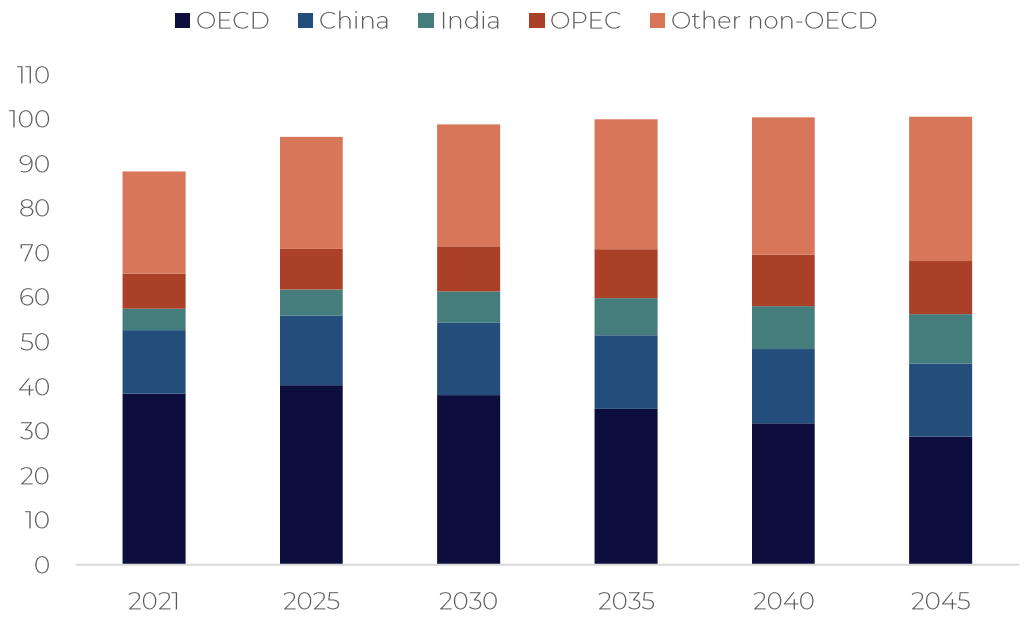
Y/Y Production Change By Region

	Anadarko	Appalachi	Bakken	Eagle Ford	Haynesvill	Niobrara	Permian
Jan-22	-1%	-1%	0%	10%	16%	-4%	12%
Feb-22	21%	-2%	7%	25%	31%	-2%	38%
Mar-22	2%	-1%	5%	8%	13%	1%	18%
Apr-22	6%	0%	-16%	10%	15%	-2%	13%
May-22	7%	2%	-6%	13%	18%	-6%	15%
Jun-22	12%	2%	3%	18%	16%	-4%	13%
Jul-22	10%	5%	8%	15%	13%	-3%	12%
Aug-22	9%	2%	4%	17%	13%	-1%	12%
Sep-22	9%	3%	5%	17%	13%	0%	11%
Oct-22	8%	0%	5%	16%	12%	-3%	11%
Nov-22	5%	-2%	-2%	16%	10%	-4%	10%
Dec-22	8%	-4%	1%	14%	10%	-2%	9%
Jan-23	12%	3%	8%	17%	12%	2%	13%
Feb-23	13%	4%	8%	17%	13%	2%	13%
Mar-23	10%	4%	4%	15%	15%	0%	8%

Sources: EIA, Blue Line Capital, Blue Line Futures

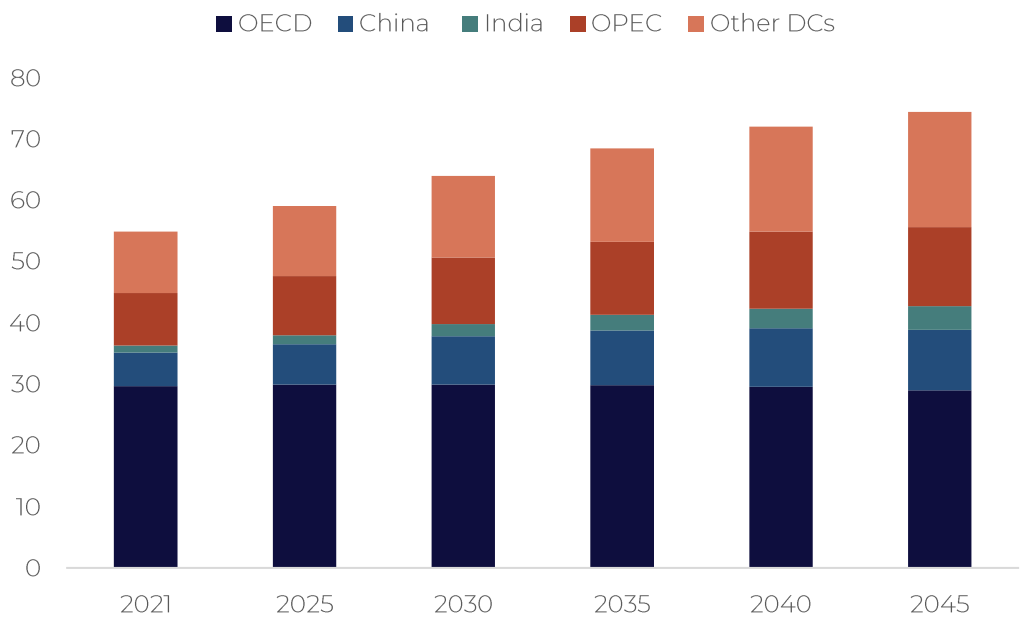
Oil & Gas Consumption Outlook By Region

Oil Consumption By Region Estimate (mboe/d)



	2021 To 2035	2021 To 2040	2021 To 2045
OECD CAGR	-0.7%	-1.0%	-1.2%
China CAGR	1.1%	0.8%	0.6%
India CAGR	4.0%	3.7%	3.5%
OPEC CAGR	2.3%	2.0%	1.7%
Other non-OECD CAGR	1.8%	1.6%	1.5%
Total CAGR	0.9%	0.7%	0.5%

Natural Gas Consumption By Region Estimate (mboe/d)



	2021 To 2035	2021 To 2040	2021 To 2045
OECD CAGR	0.0%	0.0%	-0.1%
China CAGR	3.5%	3.0%	2.5%
India CAGR	6.0%	5.7%	5.2%
OPEC CAGR	2.4%	2.0%	1.7%
Other DCs CAGR	3.0%	2.9%	2.7%
Total CAGR	-0.3%	-0.2%	-0.3%

Sources: OPEC, Blue Line Capital, Blue Line Futures

Earnings Data & Corporate Trends

John Deere, Raytheon, Marvell Tech

John Deere

Can The Industrials Boom Last?

Deere Earnings Highlights & Stock Performance

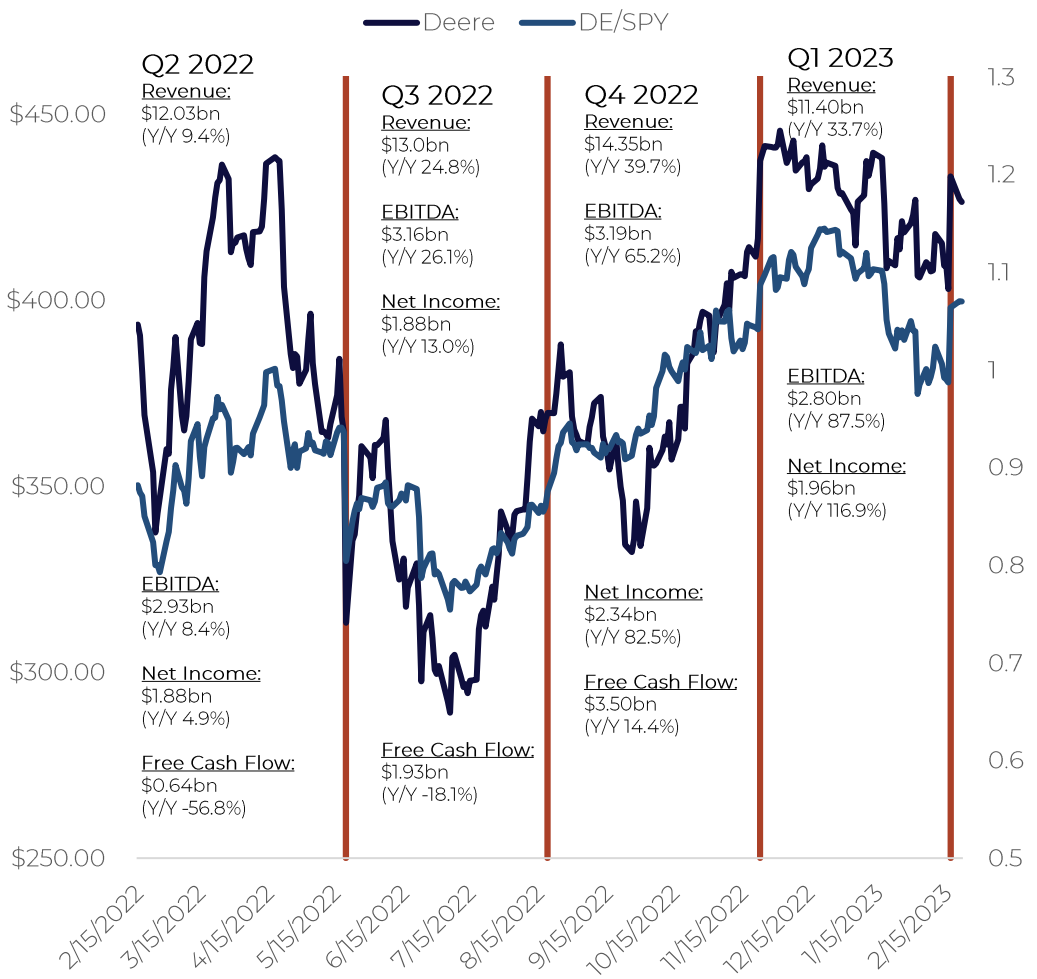
Management Commentary From Q1 2023 Earnings Call

- Fundamental Dynamics: The dynamics of strong ag fundamentals, advanced fleet age and low field inventory all remain.
- Smaller Tractors: Demand for consumer-oriented products such as compact tractors under 40-horsepower has softened considerably since last year.
- Construction & Industry: End markets for earthmoving and compact equipment is expected to remain strong. While housing has softened, infrastructure, the oil and gas sector, and robust CapEx programs from the independent rental companies have continued to support demand.
- Grain Prices: While grain prices have come off peak levels, input costs have also declined, keeping margin at supportive levels there.
- Segments: If we dissect the segment, around 2/3 of our sales are linked to products tied to ag production systems like dairy and livestock, hay and forage and high-value crops. The remainder is tied more to consumer-oriented products.

	P/E	P/S	Market Cap/FCF	EV/EBITDA	P/B
NTM	13.77	2.27	10.68	13.84	NA
TTM	15.49	2.22	50.48	14.52	5.82
*Levered FCF					

Sources: Deere IR, TIKR, Blue Line Capital

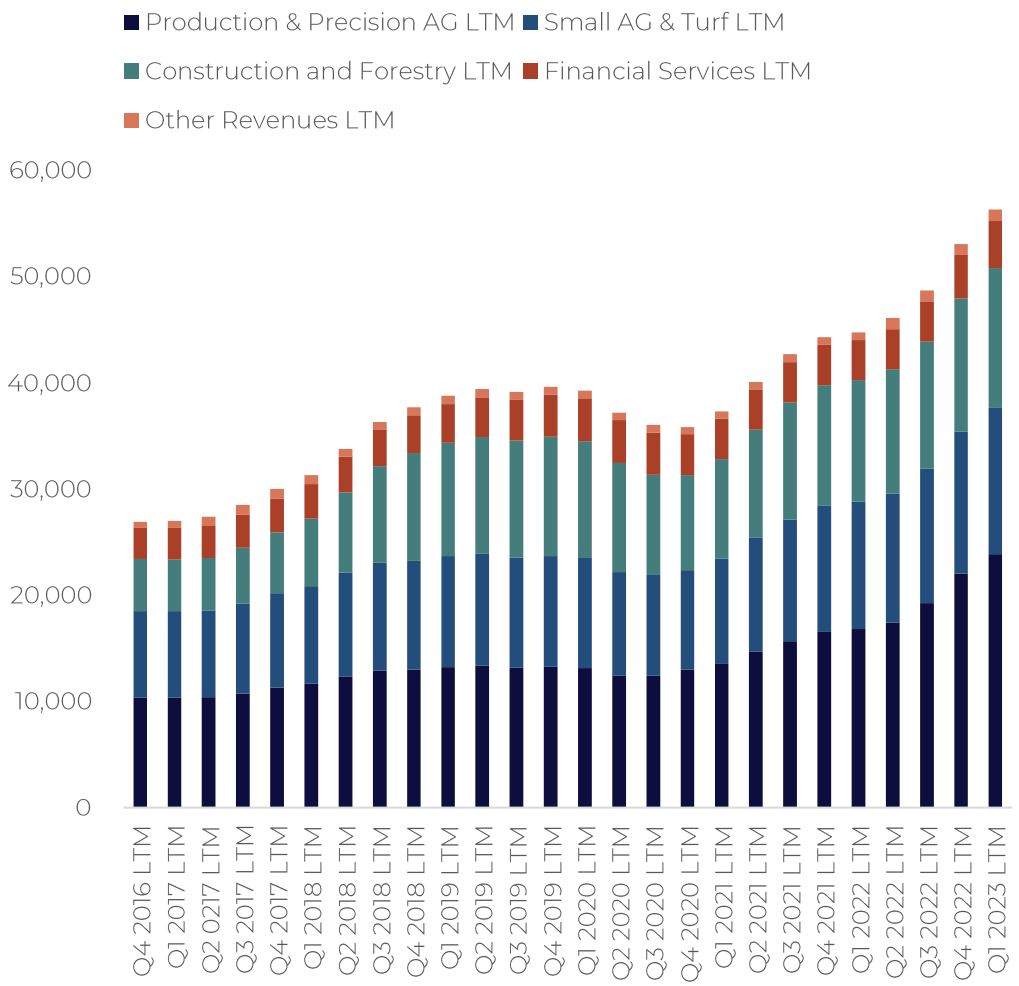
Quarterly Data



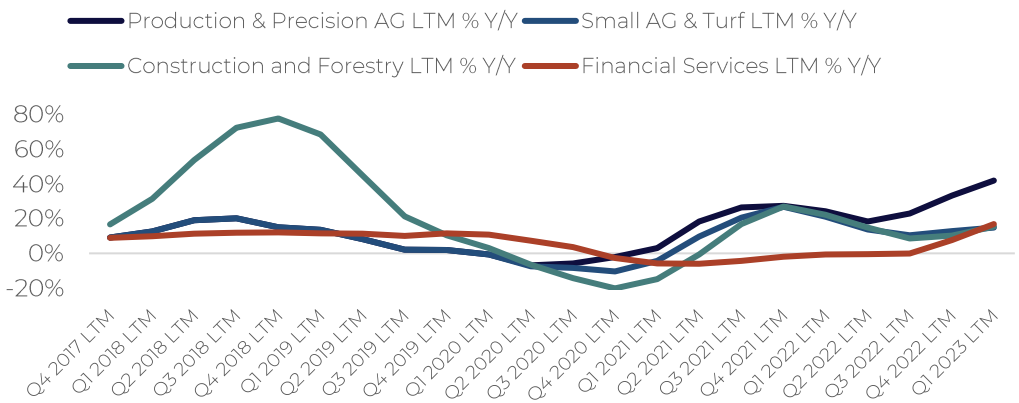
BLUE LINE CAPITAL

John Deere Revenue Trends

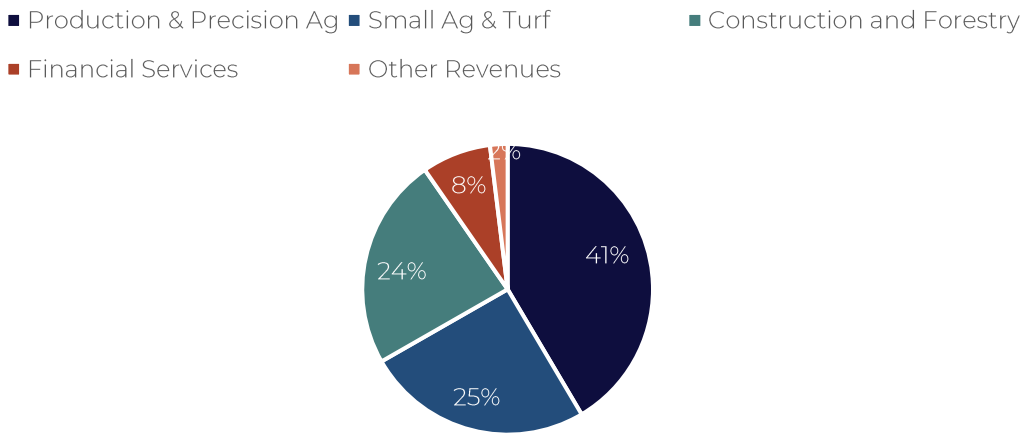
Cumulative 12-Month Revenues By Fiscal Quarter



Y/Y Change Of 12-Month Cumulative Revenues



Revenue Composition Fiscal Q1 2023



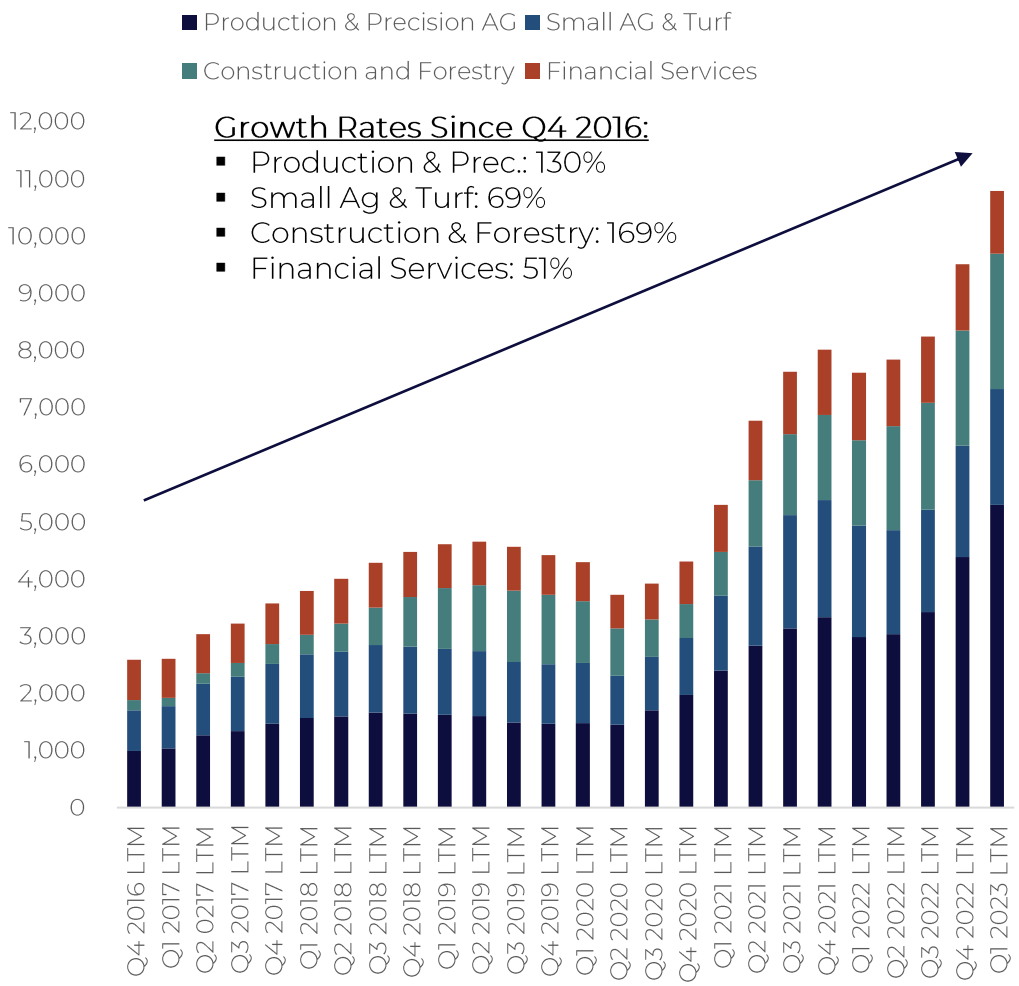
Sources: Deere IR, TIKR, Blue Line Capital

Blue Line Capital maintains no position in Deere.

BLUE LINE CAPITAL

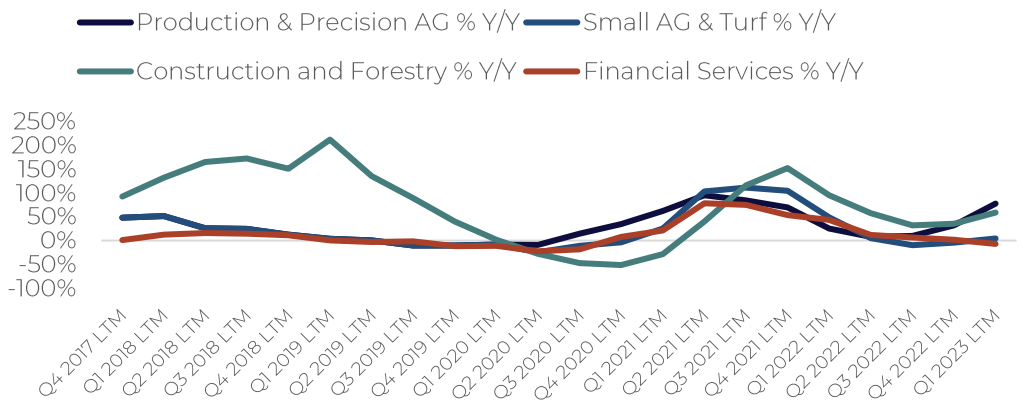
John Deere Operating Profit Trends

12-Month Operating Profit By Fiscal Quarter

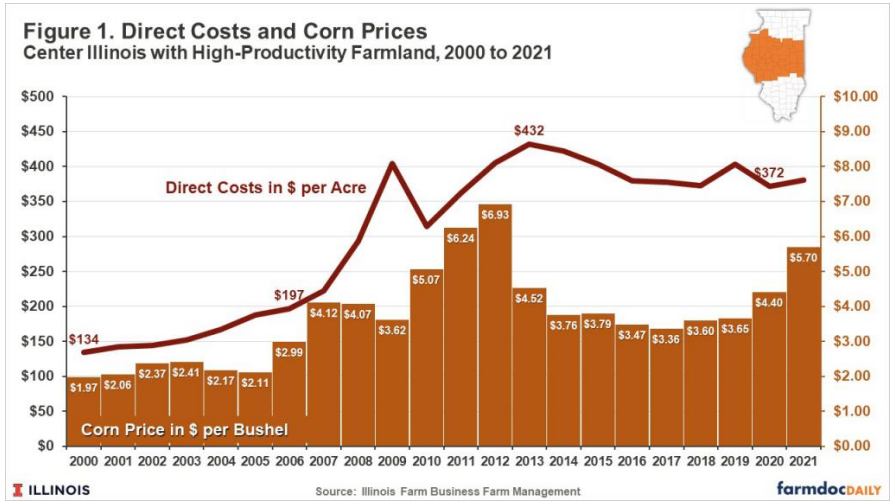


Sources: Deere IR, TIKR, Blue Line Capital

Y/Y Change Of 12-Month Cumulative Operating Profits



Direct Costs (40% Fertilizer, 30% Seed, 19% Pesticides 11% Rest)

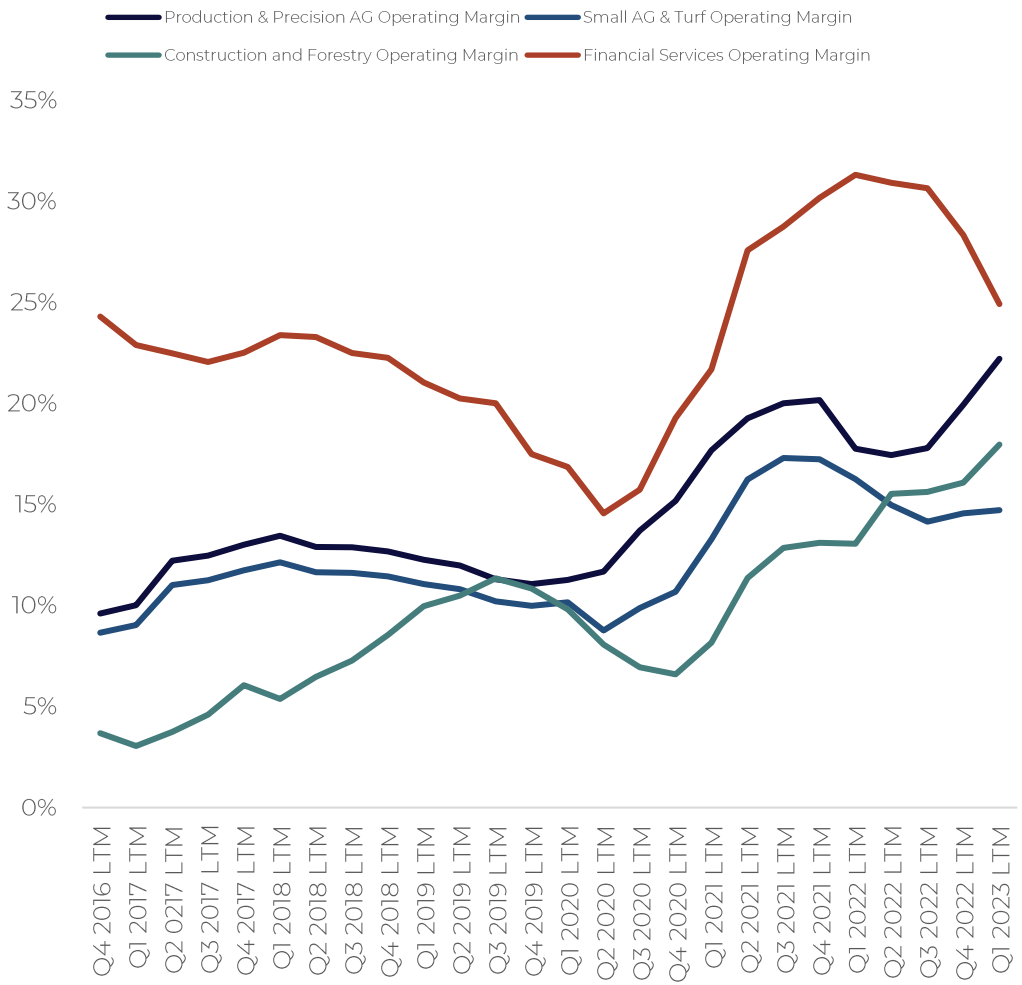


Blue Line Capital maintains no position in Deere.

BLUE LINE CAPITAL

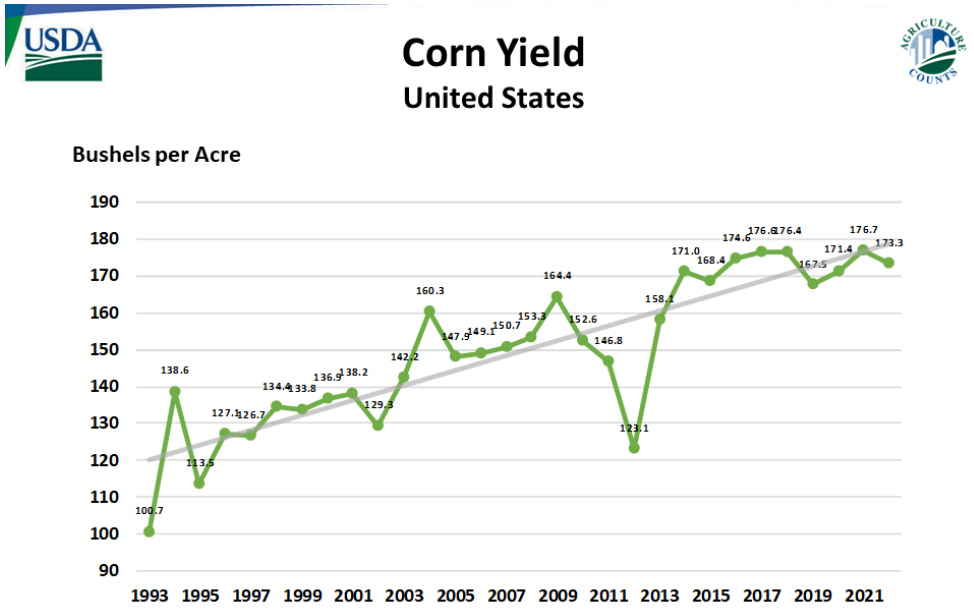
John Deere Margin Profile

12-Month Cumulative Operating Margin By Segment



Sources: Deere IR, USDA, Harvard, , Blue Line Capital

United States Corn Yield



Data In Farming

Blue Line Capital maintains no position in Deere.

BLUE LINE CAPITAL

Deere Expectations & Returns

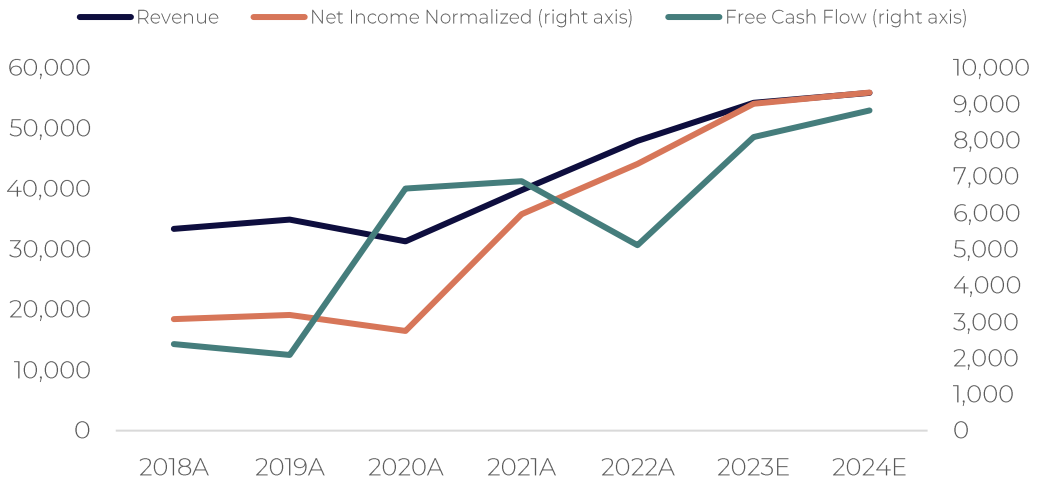
Return Ratios Compared To 2019

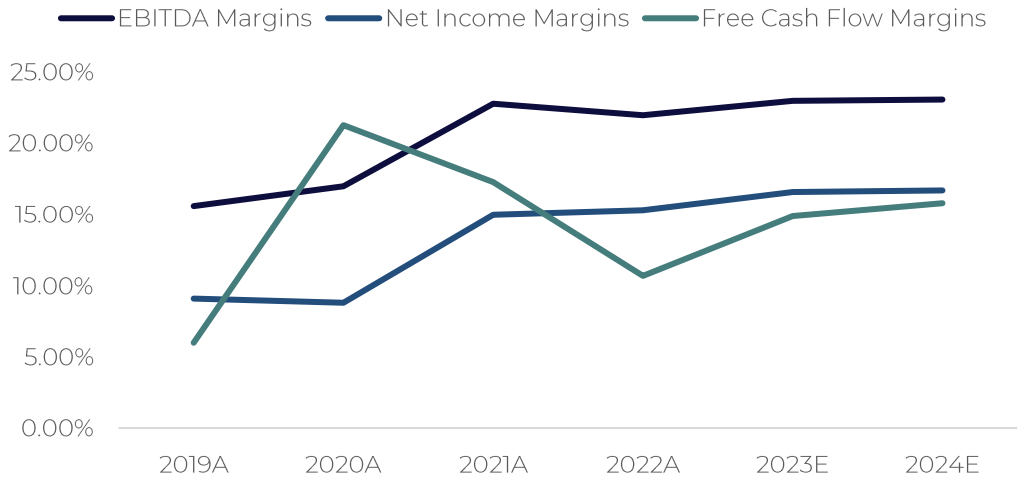
Return and profit ratios have improved across the board compared to 2019 levels.

		LTM	2019
Return Ratios	RoA	8.10%	3.80%
	RoC	14.70%	7.50%
	RoE	41.70%	28.70%
Margins	Gross Profit Margin	28.70%	23.40%
	EBITDA Margin	21.80%	13.20%
	Net Income Margin	14.70%	8.30%
	Levered Free Cash Flow Margin	4.40%	-1.50%
Asset Turnover	Asset Turnover	0.61	0.54
	Fixed Asset Turnover	9.21	6.68
	Receivables Turnover	8.05	6.59
	Working Capital Turnover	1.62	1.5
Solvency	Total Debt/Equity	252.20%	397.50%
	Total Debt/Capital	71.10%	79.20%
	EBITDA/Interest Expense	52.93	26.63
	(EBITDA/Capex)/Interest Expense	35.39	11.77

Sources: Deere IR, TIKR, Blue Line Capital

Revenue and Net Income Estimates





Deere Valuation Vs. Peers

	EV/EBITDA	NTM P/E	Past 3M Return	Past 6m Return	Past 12m Return
Deere (DE)	13.84	13.77	-5%	10%	17%
Caterpiller (CAT)	13.15	14.87	0%	23%	9%
AGCO Corp (AGCO)	6.42	10.28	5%	26%	9%
Illinois Tool Works (ITW)	17.47	24.44	2%	17%	12%
Paccar (PCAR)	10.64	11.26	3%	21%	25%
Terex (TEX)	8.35	11.96	28%	67%	65%
Lindsay Corp (LNN)	13.26	21.62	-16%	-8%	19%
Median	13.15	13.77	2%	21%	17%
Mean	11.88	15.46	2%	22%	22%

Sources: TIKR, Google Finance, Blue Line Capital

John Deere Chart

Sources: Trading View, Blue Line Capital

Blue Line Capital maintains no position in Deere.

Raytheon

Defense Spending Amidst Geopolitical Turmoil

Raytheon Earnings Highlights & Stock Performance

Management Commentary From Q4 2022 Earnings Call

- Backlog: *In 2022, we captured $86bn in new backlog, resulting in backlog growth of 12%, a book-to-bill of 1.28 and a near record backlog at the end of the year of $175bn.*
- Ukraine War: *From the Stinger, Javelin and Excalibur to NASAMS and now Patriot air and missile defense system, we remain in lockstep with the US Government.*
- Hybrid Engine: *We also completed the first engine test run for our regional hybrid electric flight demonstrator. This system integrates 1-megawatt electric motor, which was developed by Collins with a highly efficient Pratt & Whitney fuel burning engine, specifically adapted for hybrid electric.*
- Defense Spending: *US Adoption of the defense authorization bill and the Omnibus Appropriations bill with a budget of $858bn, which is up 10% from 2022. The EU is targeting a EUR70bn increase in defense spending over the next 3 years and Japan will increase their defense budget by 26% this year.*

	P/E	P/S	Market Cap/FCF	EV/EBITDA	P/B
NTM	19.83	2.01	30.02	13.46	NA
TTM	28.38	2.17	22.27	15.3	2.01
*Levered FCF					

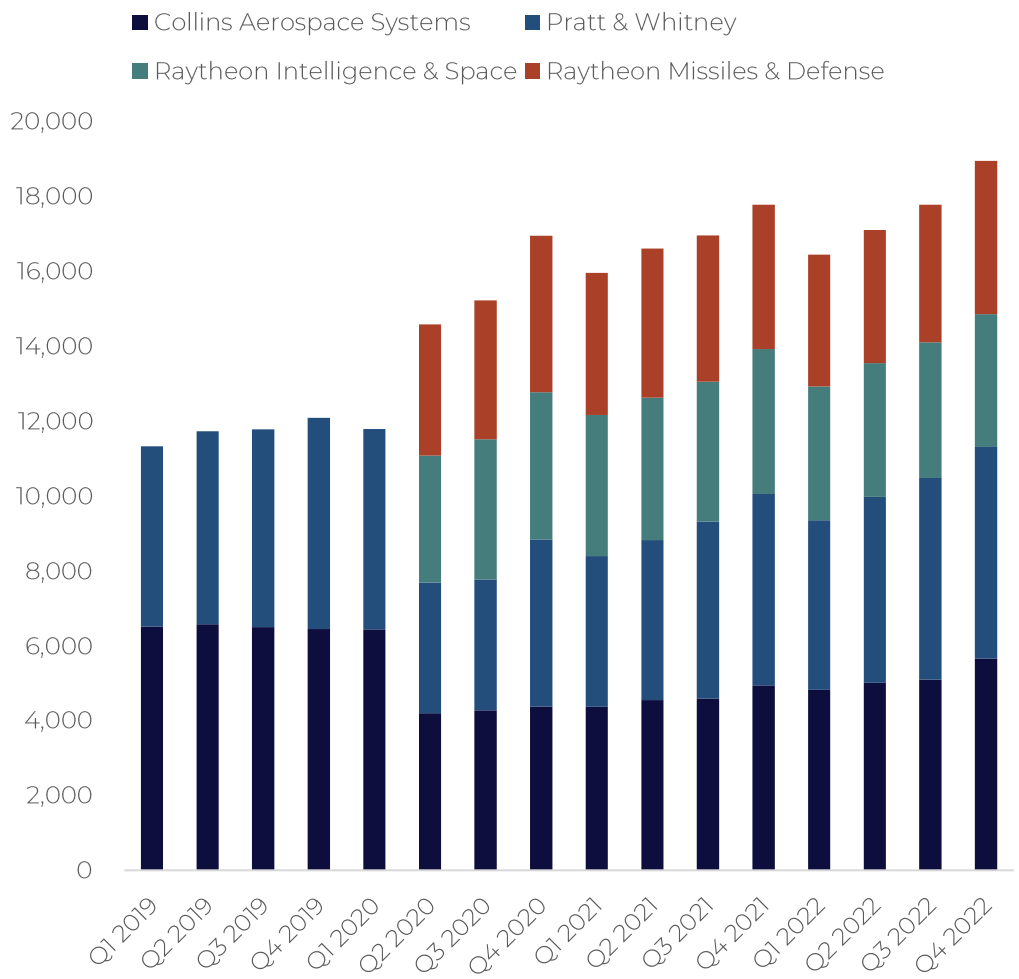
Sources: Raytheon IR, TIKR, Blue Line Capital

Quarterly Data

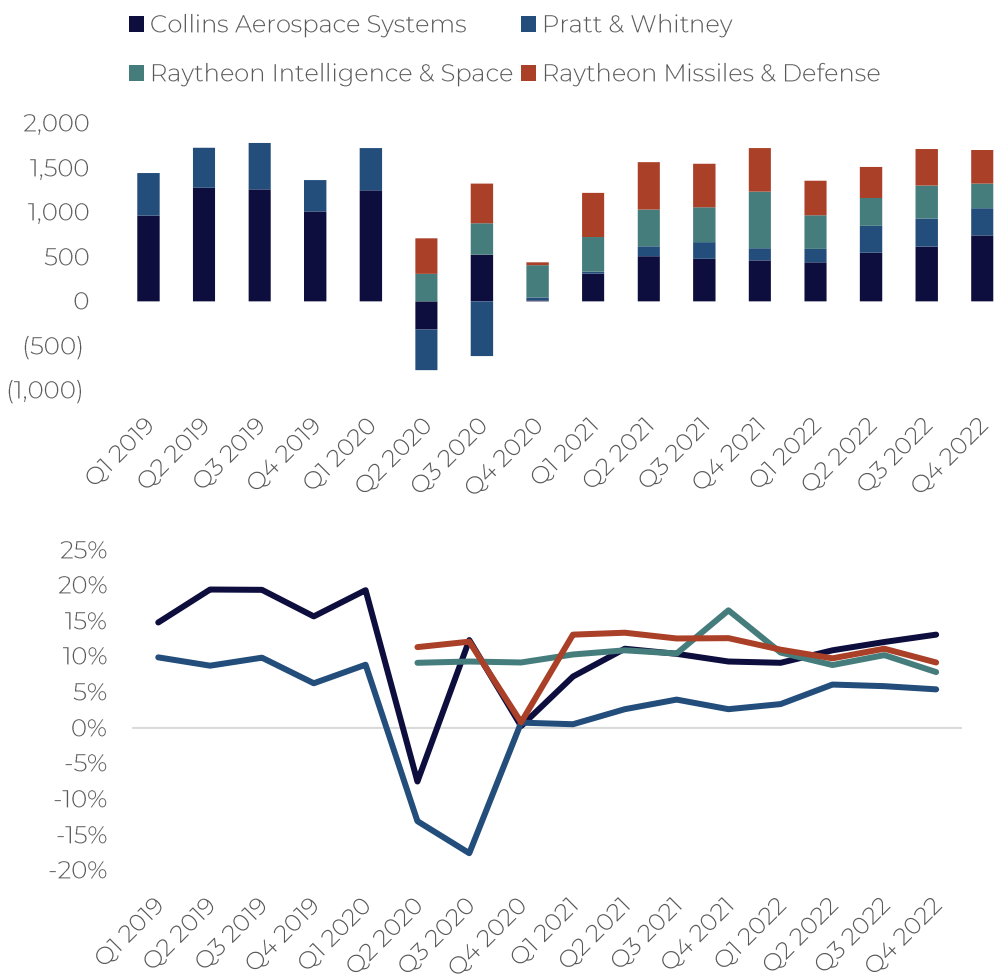
BLUE LINE CAPITAL

Raytheon Revenue & Operating Income

Quarterly Revenues By Segment



Quarterly Operating Income & Margins By Segment

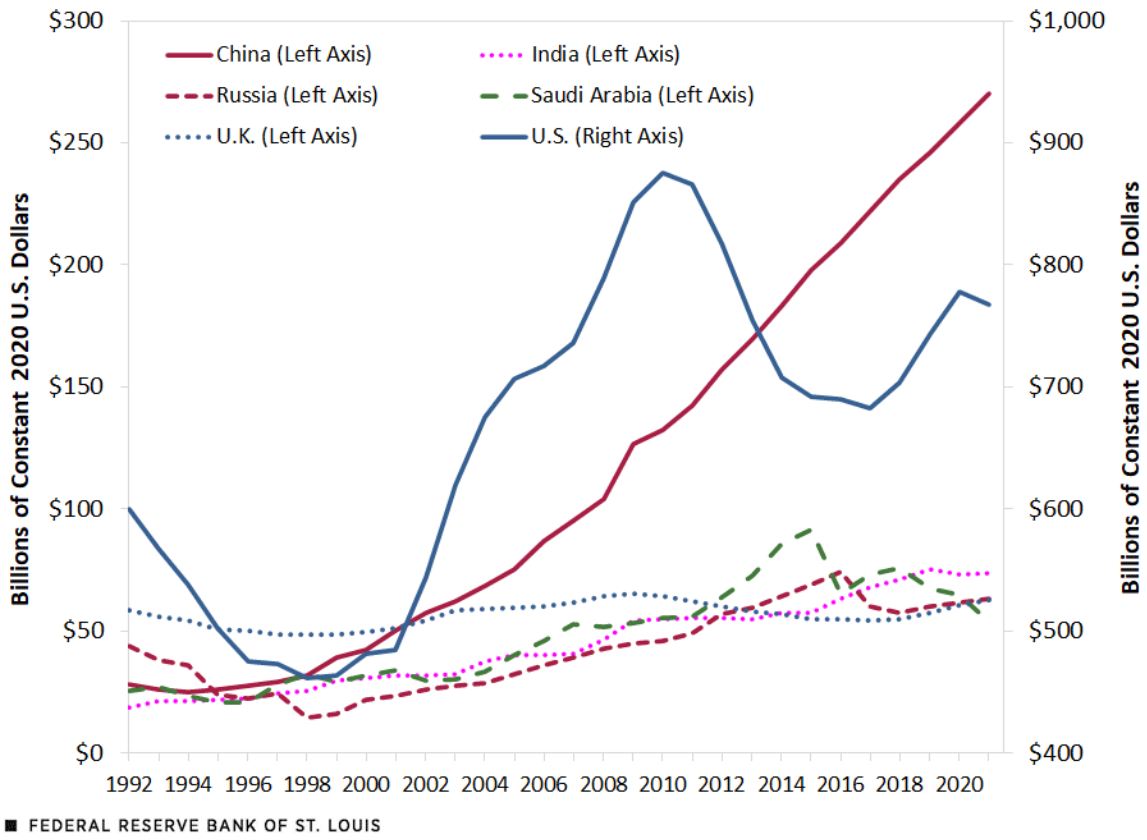


Sources: Raytheon IR, TIKR, Blue Line Capital

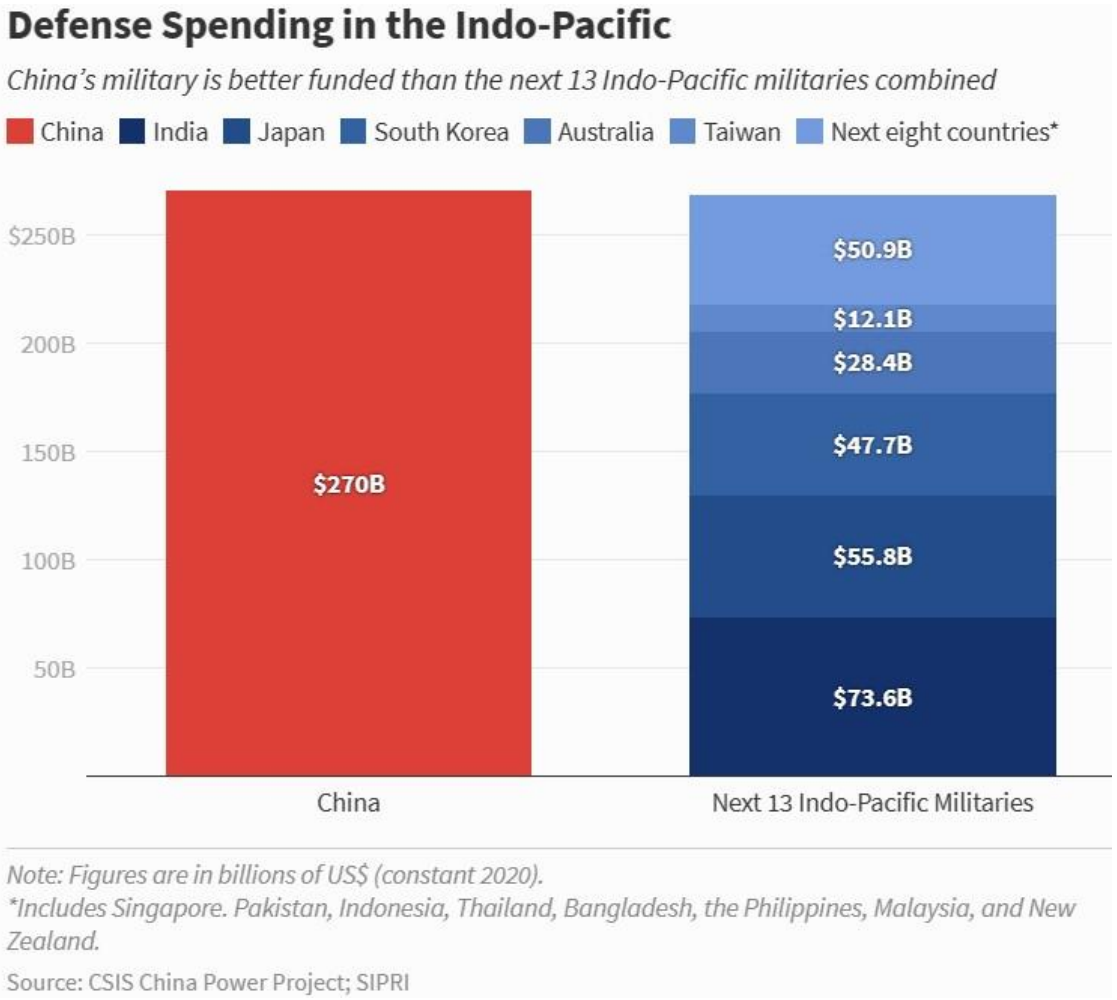
Blue Line Capital maintains a long position in Raytheon.

Global Defense Spending Trends

Quarterly Revenues By Segment



Quarterly Operating Income & Margins By Segment

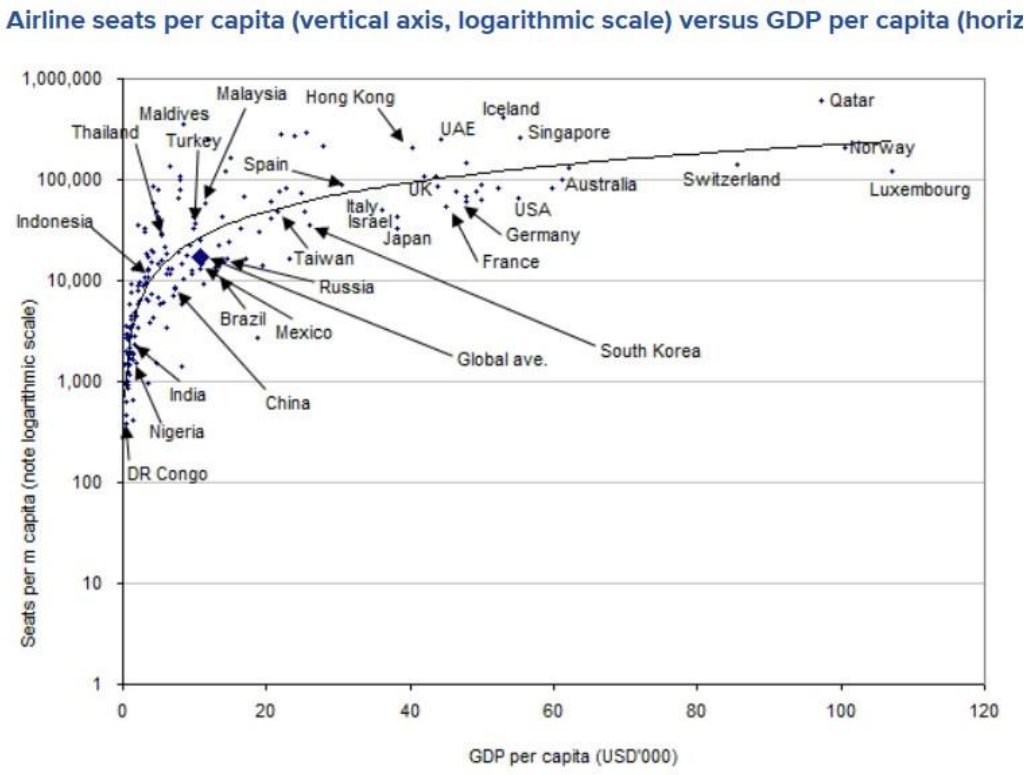


Sources: St. Louis Fed, CSIS, Blue Line Capital

BLUE LINE CAPITAL

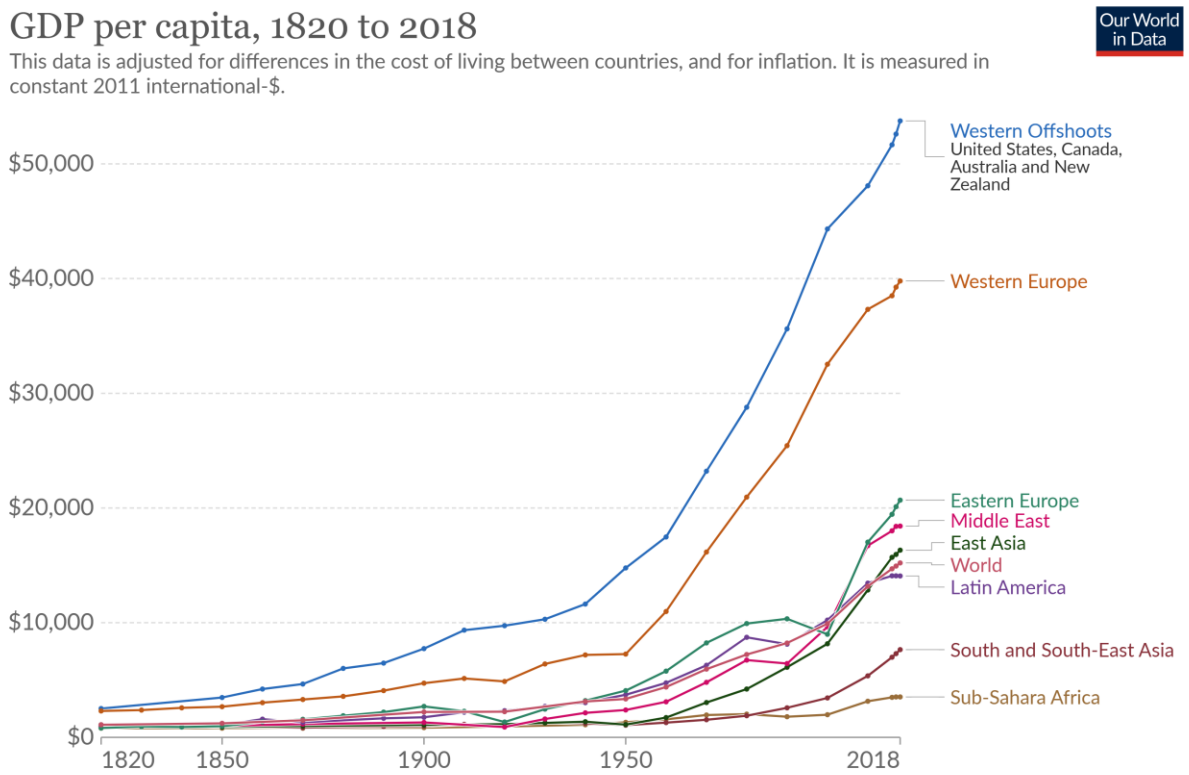
Global Commercial Travel Drivers

Airline Seats Per Capita



Source: CAPA – Centre for Aviation, OAG (seat data for week of 9-Jun-2014), International Monetary Fund

Global GDP Per Capita By Region



Sources: CAPA, Our World In Data, Blue Line Capital

BLUE LINE CAPITAL

Raytheon Expectations & Returns

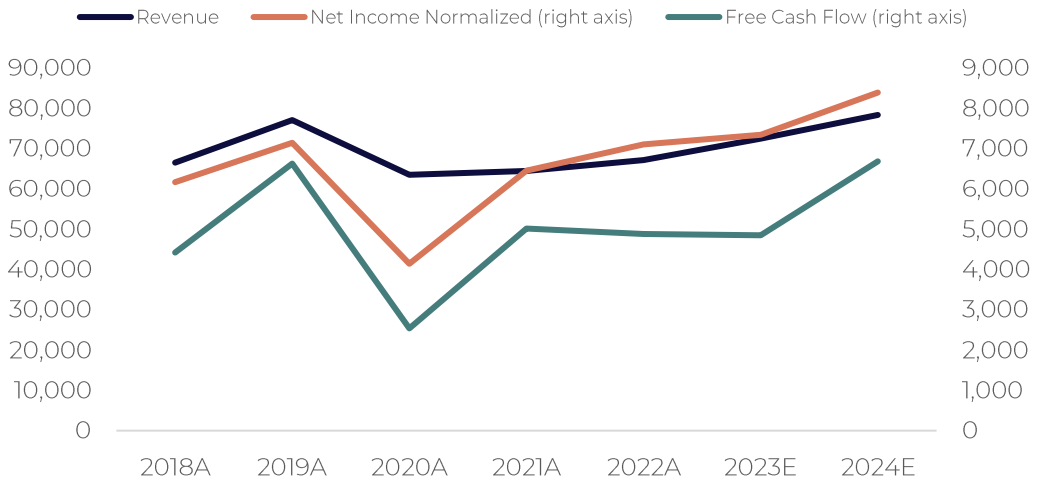
Return Ratios Compared To 2019

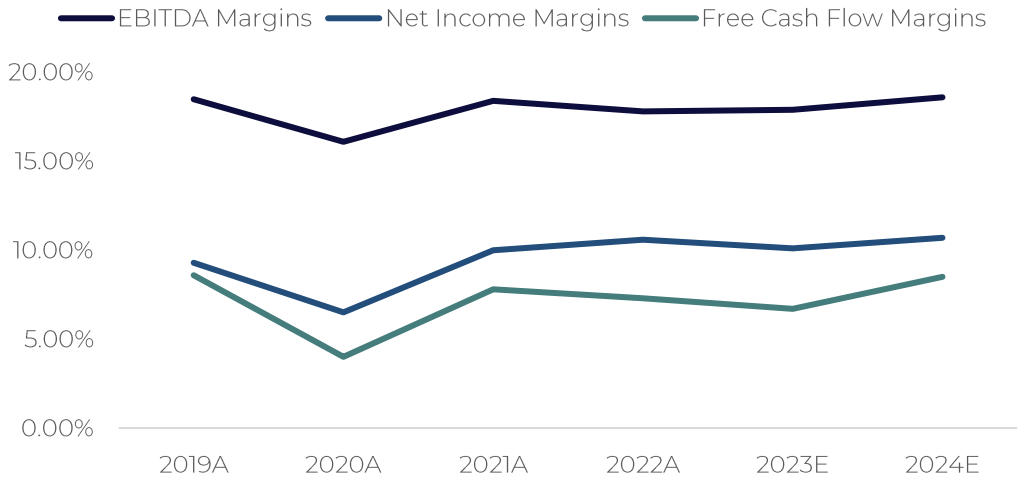
Raytheon's margins are experiencing some pressure while solvency and asset turnover ratios are improving.

		LTM	2019
Return Ratios	RoA	2.80%	2.60%
	RoC	6.70%	6.40%
	RoE	7.20%	8.80%
Margins	Gross Profit Margin	20.40%	24.10%
	EBITDA Margin	16.90%	18.60%
	Net Income Margin	7.70%	12.20%
	Levered Free Cash Flow Margin	9.10%	-22.60%
Asset Turnover	Asset Turnover	0.42	0.32
	Fixed Asset Turnover	3.95	3.8
	Receivables Turnover	3.22	2.93
	Inventory Turnover	5.4	3.6
Solvency	Total Debt/Equity	45.60%	100.60%
	Total Debt/Capital	31.30%	50.10%
	EBITDA/Interest Expense	9.08	5.12
	(EBITDA-Capex)/Interest Expense	7.32	4.03

Sources: Raytheon IR, TIKR, Blue Line Capital

Revenue, Net Income, and FCF Estimates





BLUE LINE CAPITAL

Raytheon Valuation Vs. Peers

	EV/EBITDA	NTM P/E	Past 3M Return	Past 6m Return	Past 12m Return
Raytheon (RTX)	13.46	19.83	2%	7%	5%
General Dynamics (GD)	13.83	18.17	-9%	0%	3%
Lockheed Martin (LMT)	13.93	17.95	-1%	11%	9%
Northrop Grumman	15.79	21.34	-11%	-3%	1%
L3Harris (LHX)	13.15	17.11	-8%	-10%	-13%
TransDigm (TDG)	17.99	31.65	17%	18%	23%
Howmet (HWM)	14.84	25.68	10%	14%	17%
Median	13.93	19.83	-1%	7%	5%
Mean	14.71	21.68	0%	5%	6%

Sources: TIKR, Google Finance, Blue Line Capital

Raytheon Chart

Sources: Trading View, Blue Line Capital

BLUE LINE CAPITAL

Marvell Technology

The Semiconductor Demand & Supply Cycle

Marvell Earnings Highlights & Stock Performance

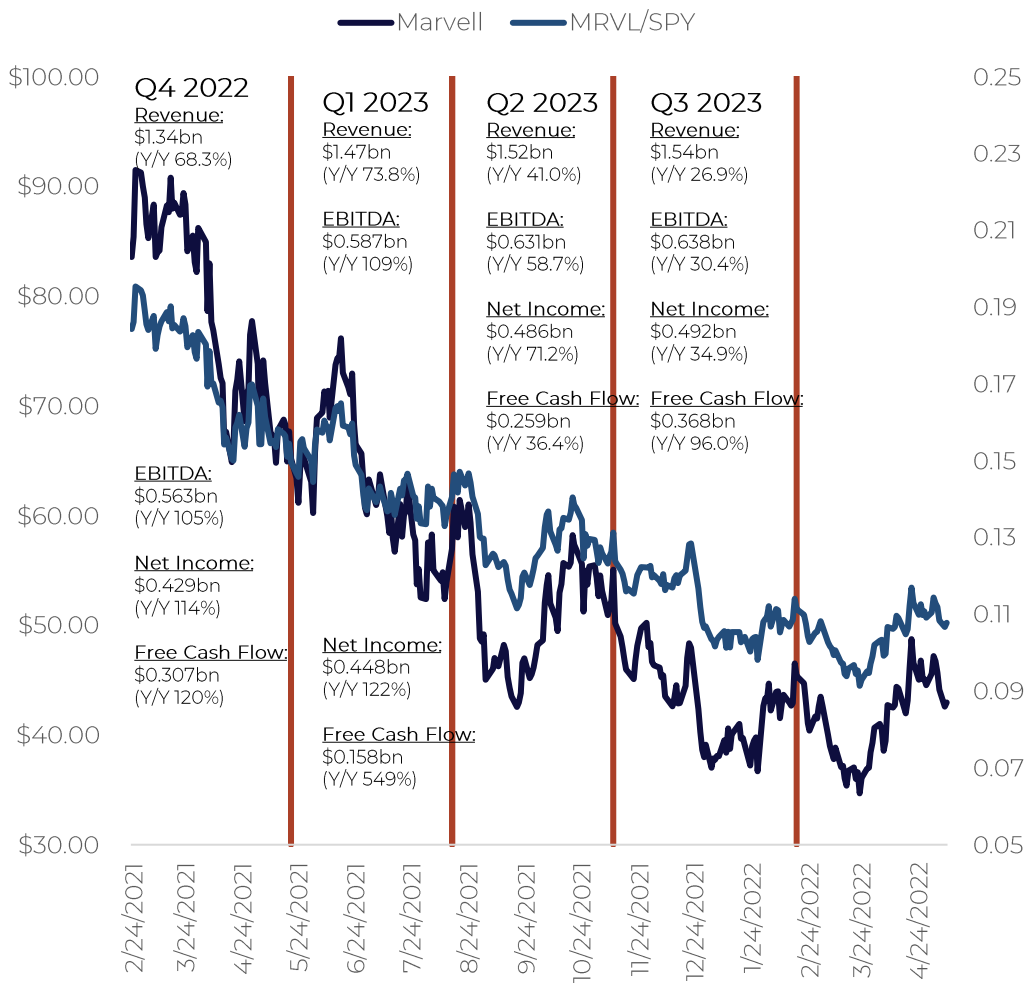
Management Commentary From Q3 2023 Earnings Call

- Customer Inventory: Customers started requesting to push out shipments and reschedule orders to manage their inventory in a changing demand environment. In the third quarter, these inventory reductions started to manifest. We are projecting very large reduction in shipments of our HDD controllers and preamps, as HDD OEMs deal with a broad-based inventory correction.
- China: Our Chinese customers deal with a changing macroeconomic situation, their demand for our products has come down significantly.
- Security Solution: Launched our next-generation cloud security solution, Marvell's LiquidSecurity HSM adapter, the industry's most advanced solution for enabling encryption, key management and authentication in the cloud. Powered by Marvell's cloud optimized OCTEON DPU, LS2 is a converged security platform for payment, privacy compliance and general-purpose applications.
- Security Solution: Extension of collaboration with Nokia to advance 5G chipset portfolio.

	P/E	P/S	Market Cap/FCF	EV/EBITDA	P/B
NTM	23.46	6.48	16.72	19.61	NA
TTM	-262.29	6.4	19.75	22.9	2.4
*Levered FCF					

Sources: Mavell IR, TIKR, Blue Line Capital

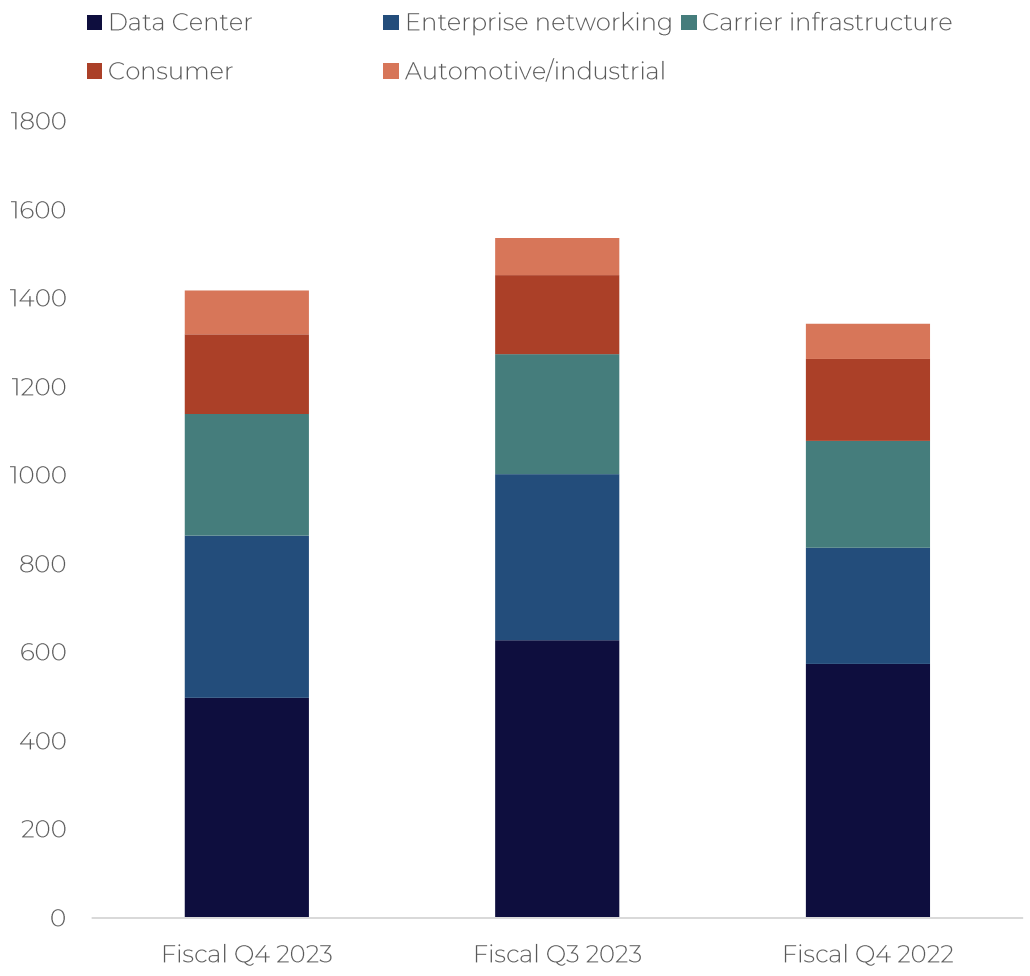
Quarterly Data



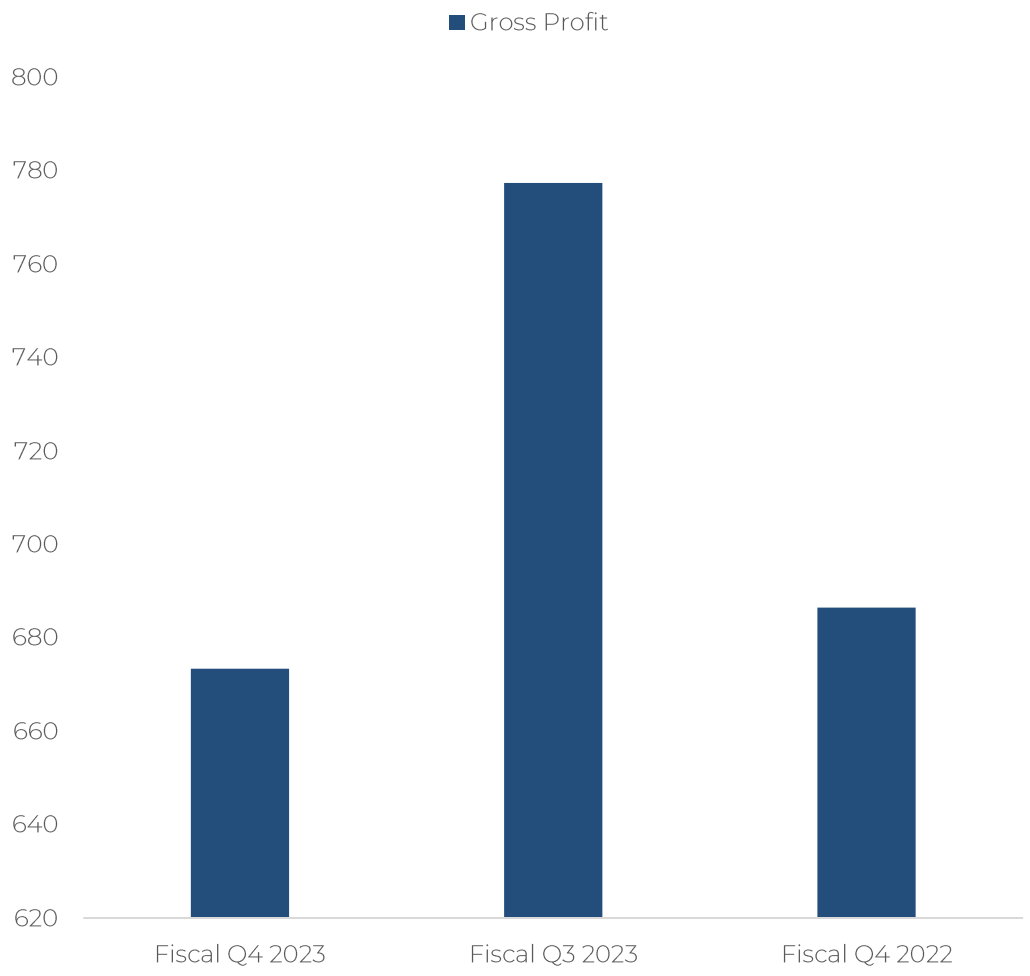
BLUE LINE CAPITAL

Marvell Fiscal Q4 2023 Report

Segment Revenues



Gross Profit (Down 13% Q/Q; Down 2% Y/Y)

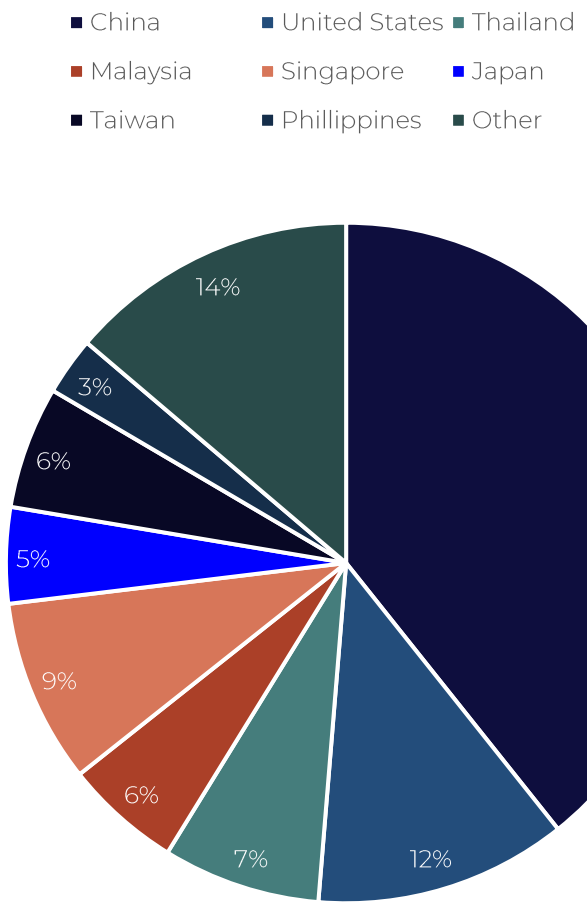


Sources: Mavell IR, TIKR, Blue Line Capital

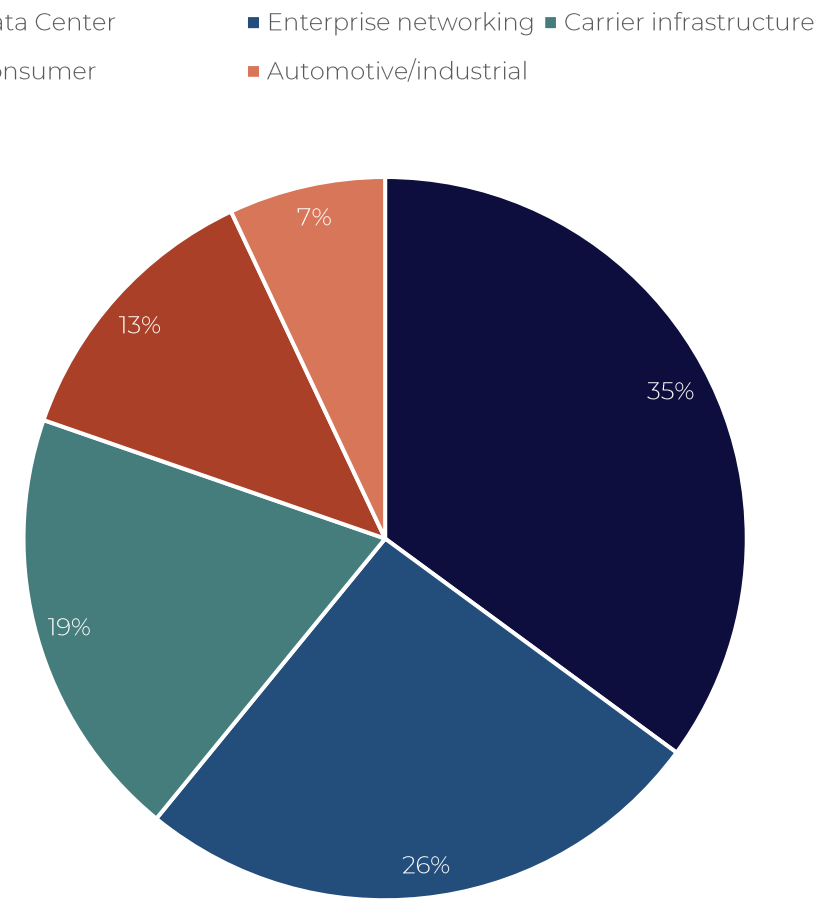
Blue Line Capital maintains no position in Mavell.

Marvell Geographic & Segment Exposure

Revenue By Geography



Revenue By Segment

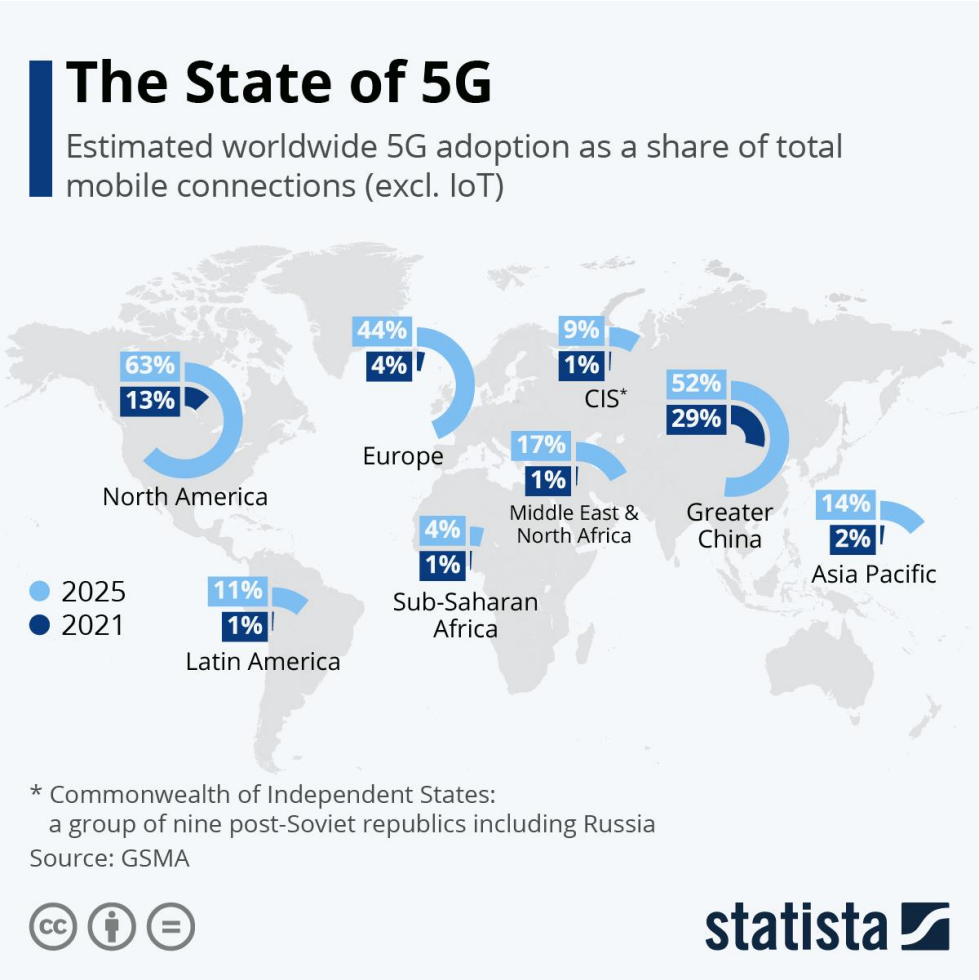


Sources: Mavell IR, TIKR, Blue Line Capital

Blue Line Capital maintains no position in Mavell.

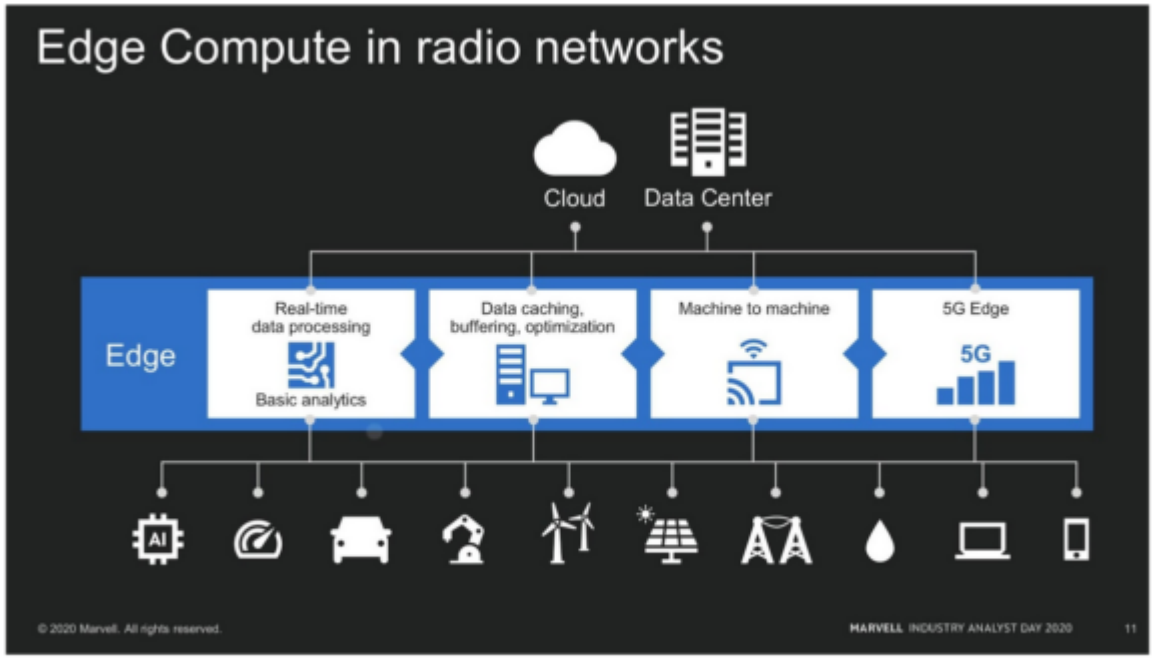
5G Adoption & Edge Computing

Global 5G Adoption RAtes



Sources: Mavell IR, TIKR, Blue Line Capital

Edge Computing Explained



Source: Marvell Analyst Day presentation (12/8/2020); The Impact of 5G on Data Networks by Raj Singh EVP, Processors Business Group.

Marvell Expectations & Returns

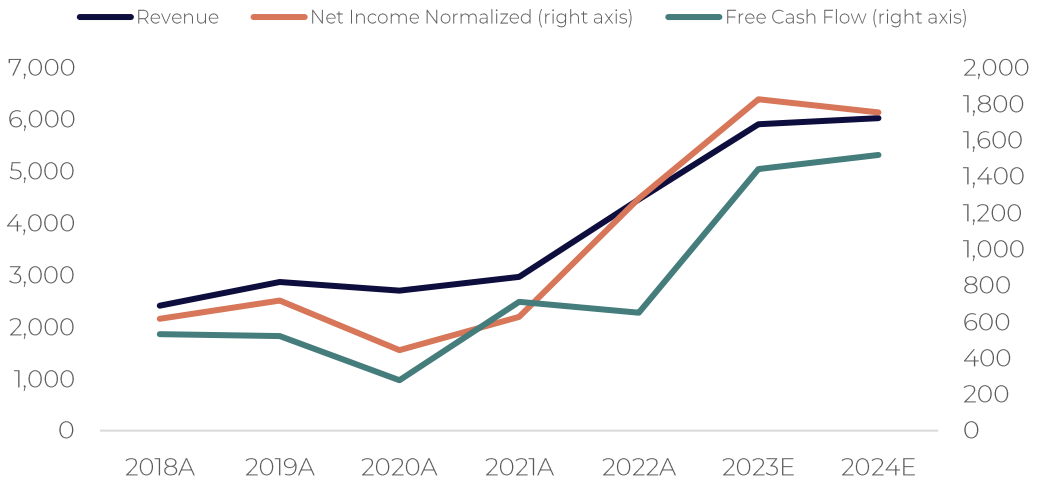
Return Ratios Compared To 2019

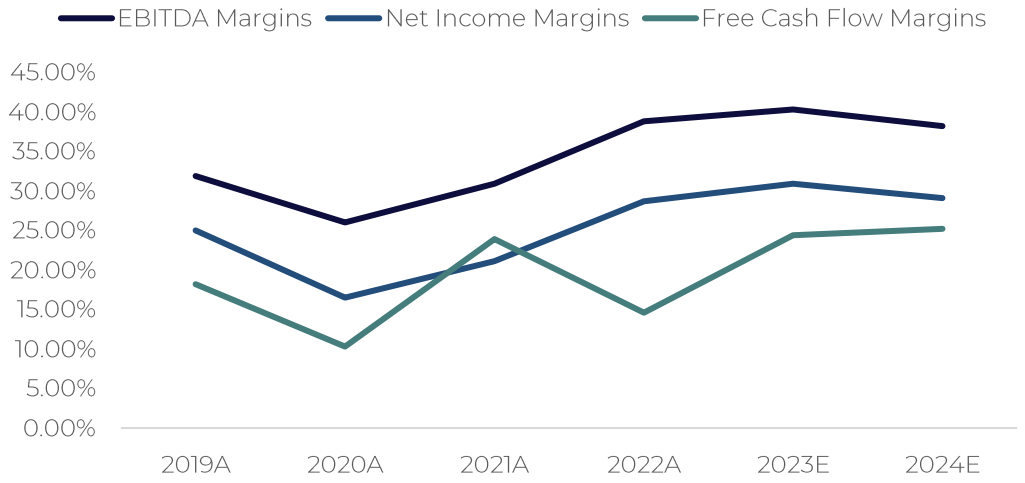
Return and Margin Ratios have compressed since 2019 while solvency ratios have improved.

		LTM	2019
Return Ratios	RoA	1.10%	3.40%
	RoC	2.00%	4.30%
	RoE	-0.90%	-3.10%
Margins	Gross Profit Margin	51.80%	58.70%
	EBITDA Margin	31.00%	24.60%
	Net Income Margin	-2.40%	-6.20%
	Levered Free Cash Flow Margin	32.40%	19.70%
Asset Turnover	Asset Turnover	0.26	0.29
	Fixed Asset Turnover	8.85	11
	Receivables Turnover	4.93	7.41
	Inventory Turnover	3.55	5.31
Solvency	Total Debt/Equity	30.50%	23.70%
	Total Debt/Capital	23.30%	18.70%
	EBITDA/Interest Expense	12.04	11.67
	(EBITDA/Capex)/Interest Expense	10.81	10.41

Sources: Mavell IR, TIKR, Blue Line Capital

Revenue, Net Income, and FCF Estimates





Blue Line Capital maintains no position in Mavell.

Marvell Vs. Peers

	EV/EBITDA	NTM P/E	Past 3M Return	Past 6m Return	Past 12m Return
Marvell Tech (MRVL)	19.61	23.46	2%	-13%	-26%
Nvidia (NVDA)	55.95	52.27	43%	43%	25%
Broadcom (AVGO)	12.08	14.17	9%	11%	0%
Texas Instruments (TXN)	16.13	22.19	-4%	0%	-4%
Qualcomm (QCOM)	9.64	12.34	1%	-10%	-13%
Applied Materials (AMAT)	13.94	17.47	5%	13%	-5%
Analog Devices (ADI)	15.01	17.39	9%	15%	9%
Median	15.01	17.47	5%	11%	-4%
Mean	20.34	22.76	9%	8%	-2%

Sources: TIKR, Google Finance, Blue Line Capital

Marvell Chart

Sources: Trading View, Blue Line Capital

Blue Line Capital maintains no position in Marvell.

Data Disclosures

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