

# Industrials Sector

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# Agenda

- Overview
- Business Analysis
- Economic Analysis
- Financial Analysis
- Valuation Analysis
- Recommendations

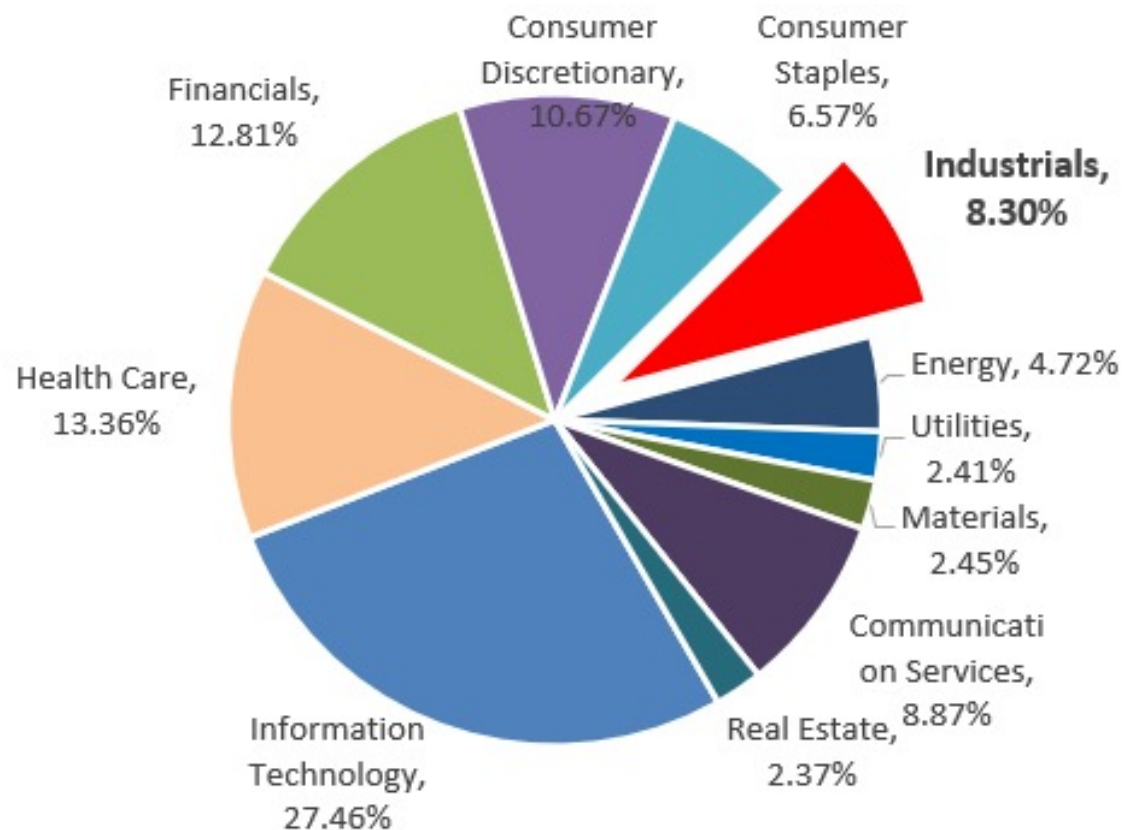


# Overview



# Overview

- Market Cap: 5.65T
- Market Weight: 8.30%
- Sector Performance: -0.57% (YTD)
- P/E (actual): 22.62
- Enterprise value: \$76.69B
- EPS (TTM): \$7.80
- EPS growth: 26.20%
- Revenue growth: 15.51%



## Sector performance

As of Oct-25-2023 | \*As of Oct-26-2023 1:26 PM ET

Sector	Today*	3-month	YTD	5-year	10-year
S&P 500	-1.43%	-8.08%	+9.04%	+57.63%	+138.96%
Industrials	-1.27%	-11.00%	-0.57%	+41.93%	+96.99%



# Overview – 14 Industries

- Aerospace & Defense



- Air Freight & Logistics



- Airlines



- Building Materials

- Commercial Services & Supplies

- Construction & Engineering

- Electrical Equipment

- Industrial Conglomerates

- Farm & Heavy Machinery



- Marine

- Professional Services

- Road & Rail

- Trading Companies & Distributors

- Transportation Infrastructure



# Overview – Top 10 Industrial Companies

Name	Last Price	Market Cap	YTD Return
<b>CAT</b> Caterpillar Inc.	241.58	124.739B	+0.84%
<b>UNP</b> Union Pacific Corporation	203.08	123.797B	-1.93%
<b>UPS</b> United Parcel Service, Inc.	140.00	119.627B	-19.46%
<b>GE</b> General Electric Company	109.00	118.635B	+66.64%
<b>HON</b> Honeywell International Inc.	177.29	117.717B	-17.27%
<b>RTX</b> RTX Corporation	79.21	115.292B	-21.51%
<b>LMT</b> Lockheed Martin Corporation	448.83	111.355B	-7.74%
<b>BA</b> The Boeing Company	181.30	109.361B	-4.82%
<b>DE</b> Deere & Company	371.72	107.056B	-13.30%
<b>EADSY</b> Airbus SE	33.12	104.55B	+11.67%

Total Market Cap:  
1152.13B

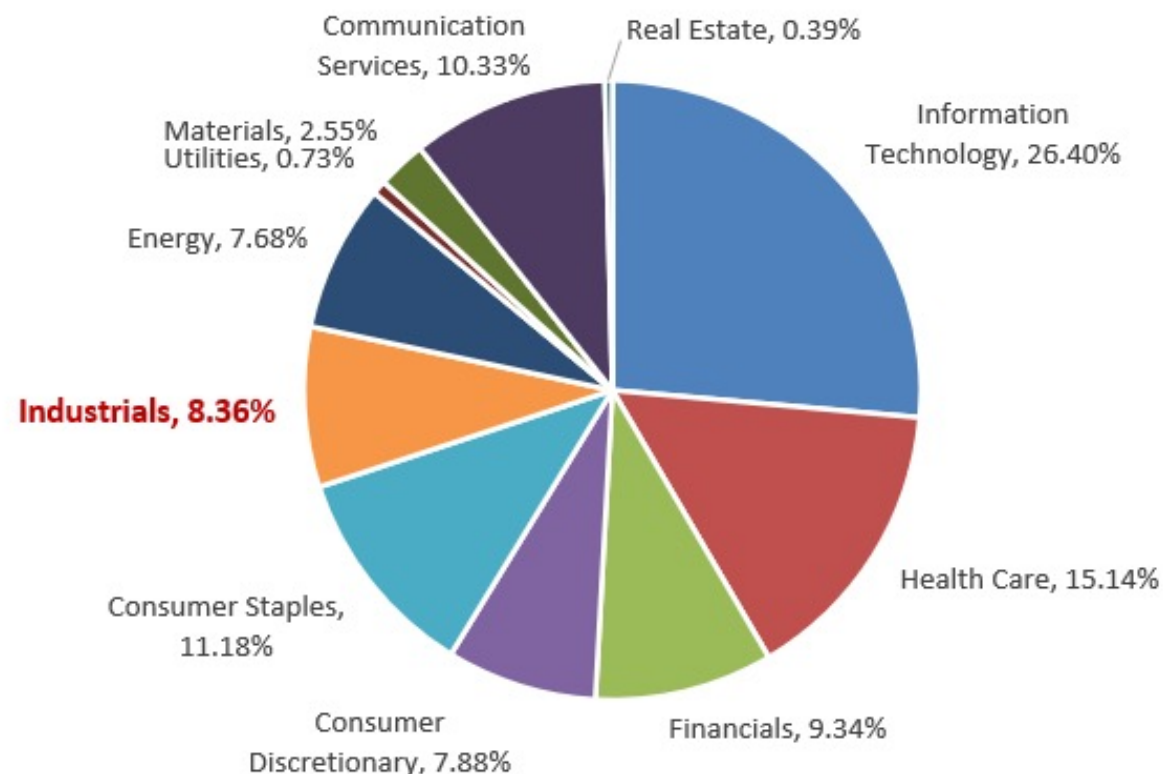
Total Market Weights:  
~ 20%



# Overview – SIM Industrials

- Weight: 8.36%
- Overweight by 0.06%

Securities Allocation			
Sector	S&P 500 Weight	SIM Weight	+/-
Information Technology	27.46%	26.40%	-1.06%
Health Care	13.36%	15.14%	1.78%
Financials	12.81%	9.34%	-3.47%
Consumer Discretionary	10.67%	7.88%	-2.79%
Consumer Staples	6.57%	11.18%	4.61%
Industrials	8.30%	8.36%	0.06%
Energy	4.72%	7.68%	2.96%
Utilities	2.41%	0.73%	-1.68%
Materials	2.45%	2.55%	0.10%
Communication Services	8.87%	10.33%	1.46%
Real Estate	2.37%	0.39%	-1.98%
Total	100.00%	100.00%	0.00%



Security	Ticker	GIC Sector	Quantity	Unit Cost	Total Cost	Market Price	Market Value	Unrealized Gain/(Loss)	Unit Income	Est. Ann. Income	%age Assets	Eq shares out	Market Cap (In Millions \$)	Beta
DEERE & CO	DE	Industrials	300	436.26	\$130,878.00	377.38	\$113,214.00	(\$17,664)	5.40	\$1,620.0	1.21%	288.001	108,685.7	0.99
FEDEX CORP	FDX	Industrials	1,400	159.97	\$223,953.58	264.92	\$370,888.00	\$146,934	5.04	\$7,056.0	3.96%	251.420	66,606.3	0.97
RTX CORP	RTX	Industrials	760	93.72	\$71,228.00	71.97	\$54,697.20	(\$16,531)	2.36	\$1,793.6	0.58%	1,455.515	104,753.4	0.77
TRANSDIGM GROUP INC	TDG	Industrials	90	648.06	\$58,325.40	843.13	\$75,881.70	\$17,556	-	\$0.0	0.81%	55.183	46,526.6	1.10
UNITED AIRLINES HOLDINGS INC	UAL	Industrials	3,970	42.49	\$168,669.13	42.30	\$167,931.00	(\$738)	-	\$0.0	1.79%	326.729	13,820.6	1.32
Total			6,520		\$653,054.11		\$782,611.90	\$129,557.79				2,376.848	340,392.584	
Average				\$276.10	\$130,610.82	319.94	\$156,522.38	\$25,911.56			1.67%	475.370	68,078.517	1.03



# Business Analysis





# Business Analysis

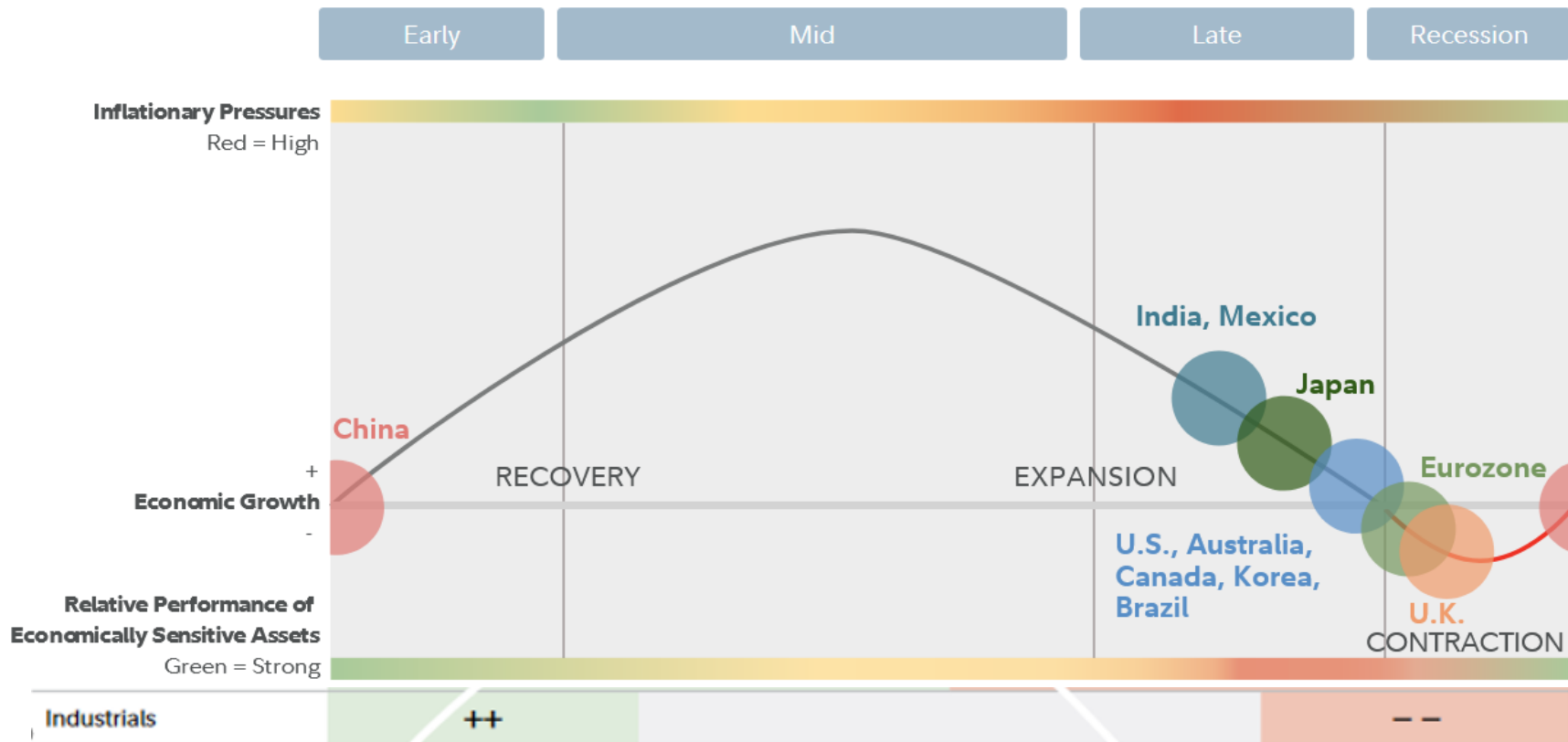
## Historical Performance

Depending on index launch date, all charts below may include back-tested data.

\* Data has been re-based at 100



# Business Analysis – Business Cycle



- Rising inflationary pressures
- Tighter monetary policy

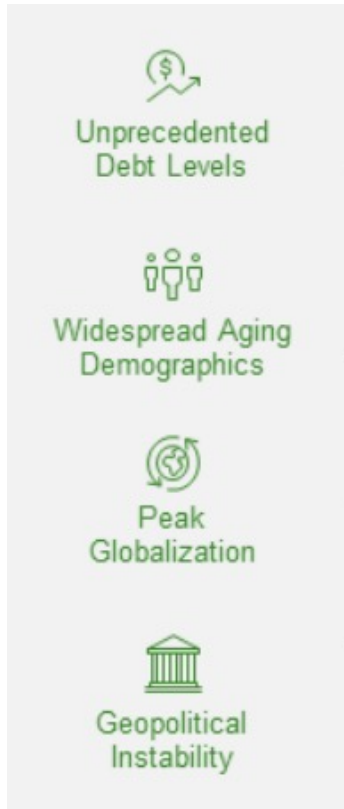
## Industrials Sector:

- Economically and interest rate sensitive
- Underperforming Sector

- Late-cycle stage of expansion



# Business Analysis



- Supply and demand in this sector depends on the cycles of inflation and economic recession
- Industrials sector is also strongly affected by market forces
- Recovery of economy – Production, Travel...
- Fed rate hikes & rising long-term Treasury-bond yields
- High risk of inflation and high inflation rate

## Possible Secular Impact on Inflation

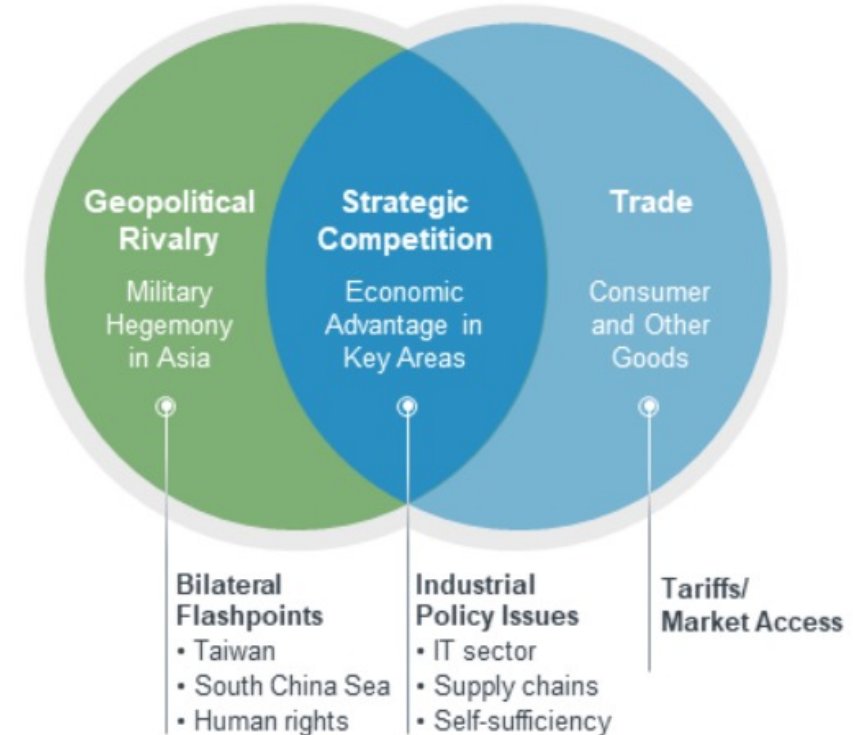
Secular Factors	Long-Term Trends	Risks to Inflation
Policy	Fed tolerates higher inflation More-accommodative fiscal policy	↑ ↑
Peak Globalization	<ul style="list-style-type: none"> <li>• More-expensive goods &amp; labor</li> <li>• Geopolitical friction</li> </ul>	↑ ↑
Aging Demographics	Older adults: <ul style="list-style-type: none"> <li>• Spend less (reducing demand)</li> <li>• Work less (reducing supply)</li> </ul>	↓ ↑
Technological Progress	Artificial intelligence, robots Declining long-term productivity	↓ ↑
Climate Change	More-volatile weather, supply damage Greater innovation/R&D in clean energy	↑ ↓



# Business Analysis – External Factors (risks)

- Uncertain global economic outlook
- Global relationships (economic tensions)
- Uncertain geopolitical environment
  - Wars
- Strikes - UAW
- Supply Chain and Transportation
- Climbing oil prices (raw materials)

## U.S.–China Relationship



# Business Analysis – Future Trends

- Supporting sustainability, digitization, and onshoring
  - Will likely reduce labor costs for those manufacturers
- Digital investments
  - Including artificial intelligence, cloud computing, and the so-called "internet of things"
- Lack of essential parts
  - Increasingly making plans to diversify and reinforce their supply bases, and to bring supply chains closer to home



# Economic Analysis



# Economic Analysis

- Overview

- Highly cyclical industry that tends to follow movements of the S&P 500
- Sensitive to increases in interest rates and economic contractions, restricting growth in the sector within these time periods
- Short-term headwinds due to potential recession, geopolitical tensions, and high interest rates
- Promising long-term upside because of a refocused effort on domestic production and government subsidies

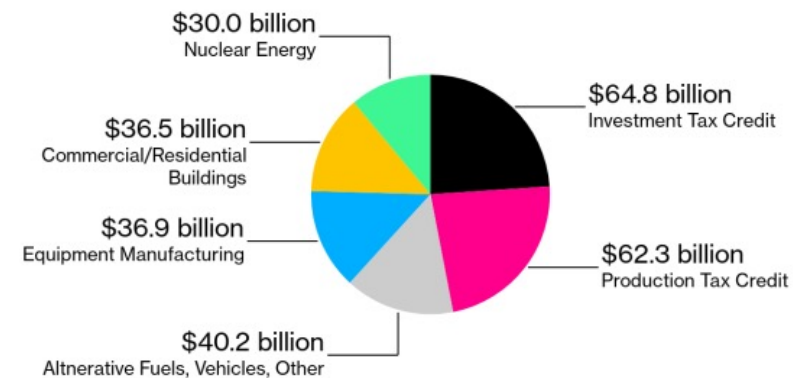


# Inflation Reduction Act

- Planned investment of roughly \$369 billion in domestic energy production and manufacturing
- First major legislation passed in more than 50 years that addresses offshoring and reinvesting in US manufacturing at large
- Estimated federal incentives from Goldman Sachs could encourage up to \$3 trillion in private investment over the next 10 years
- A lot focused on clean energy, but production should have spillover into the industrials space as US manufacturing is revamped

## Tackling Climate Change With Tax Breaks

The Inflation Reduction Act offers a variety of green tax credits.



Source: Joint Committee on Taxation revenue estimate

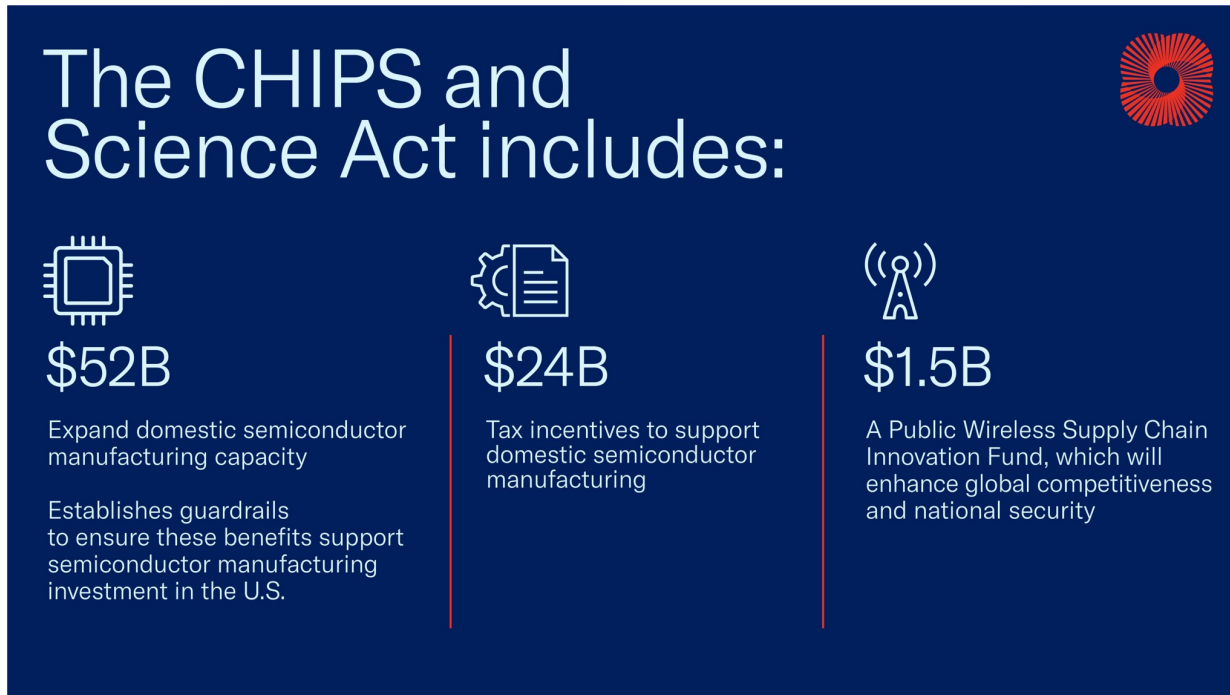
Bloomberg Tax








# CHIPS and Science Act

- \$280 billion investment for semiconductor manufacturing domestically
- Estimated \$2 billion for the DOD to invest in different technologies, such as microelectronics research
- Hopefully will help to reduce supply chain congestion, boost the US manufacturing base, and enhance defense capabilities



## The CHIPS and Science Act includes:

 <b>\$52B</b> Expand domestic semiconductor manufacturing capacity  Establishes guardrails to ensure these benefits support semiconductor manufacturing investment in the U.S.	 <b>\$24B</b> Tax incentives to support domestic semiconductor manufacturing	 <b>\$1.5B</b> A Public Wireless Supply Chain Innovation Fund, which will enhance global competitiveness and national security
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As of Oct 30, 2023

825.79

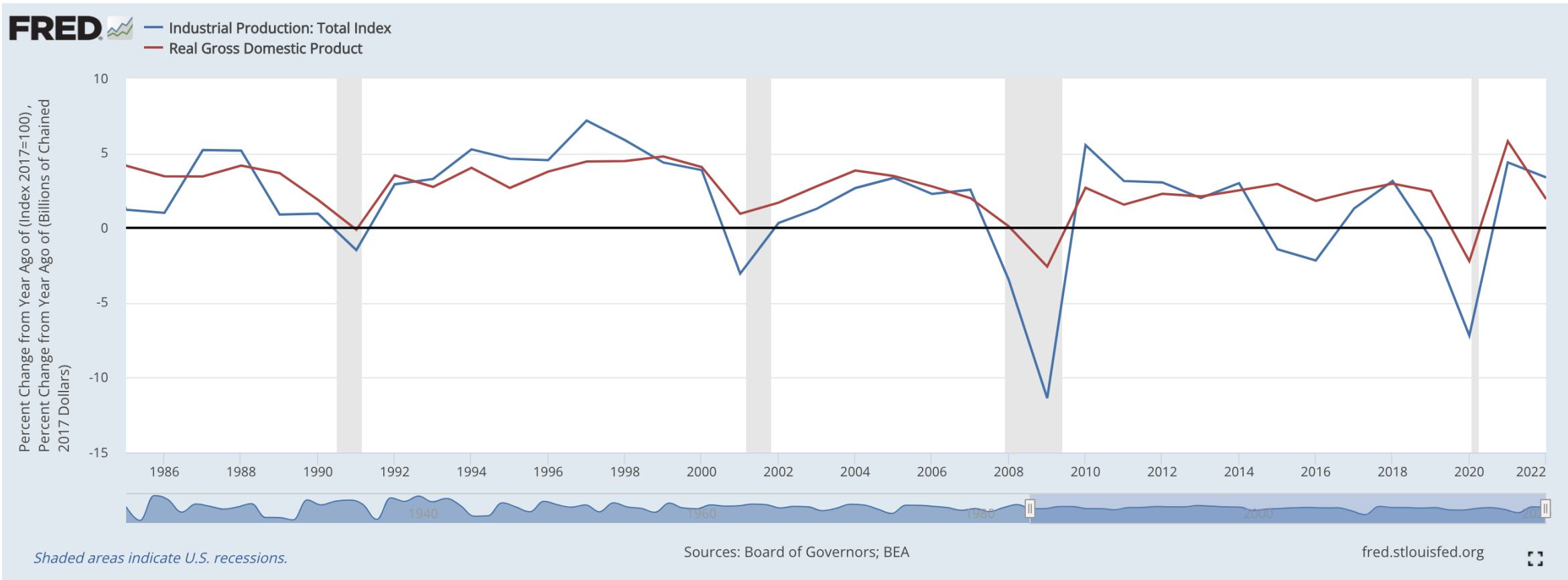
8.81%

3 YR RETURN  
Annualized



# S&P 500 vs. S&P 500 Industrials

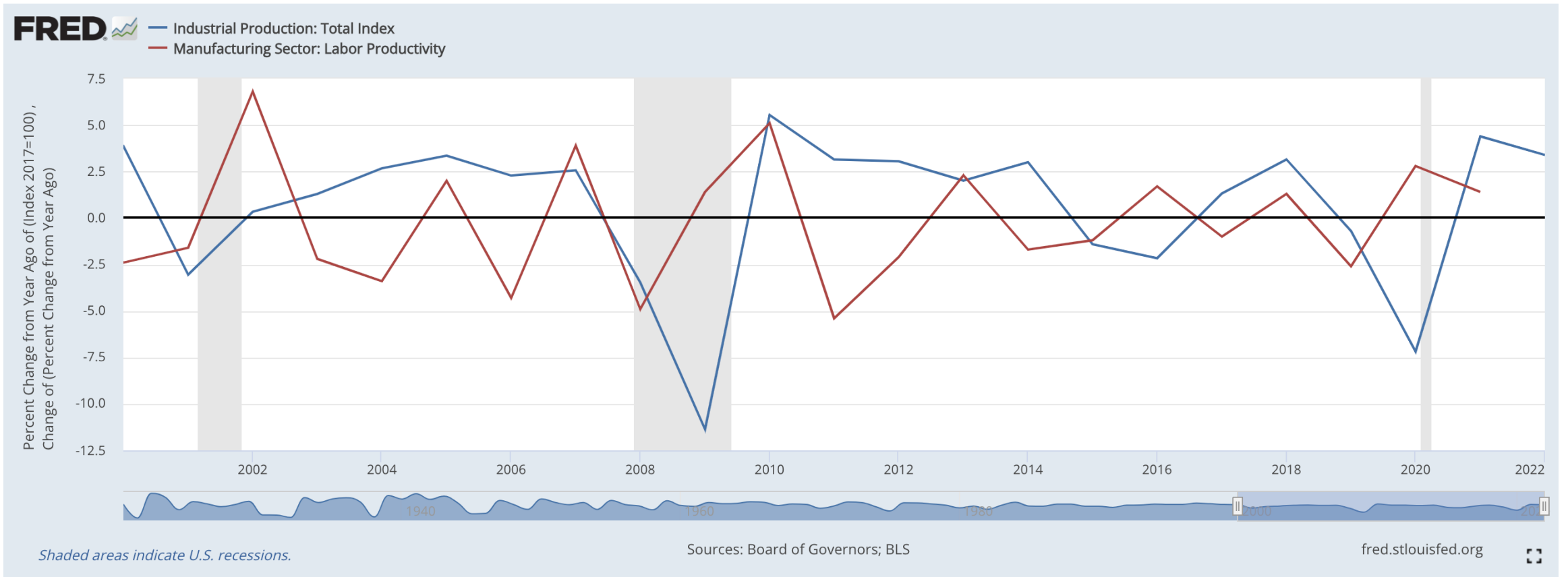
- Current YTD return on Industrials: -0.68% as compared to 8.53% for the S&P 500
- Current 3-year return on Industrials: 8.81% as compared to 8.41% for the S&P 500



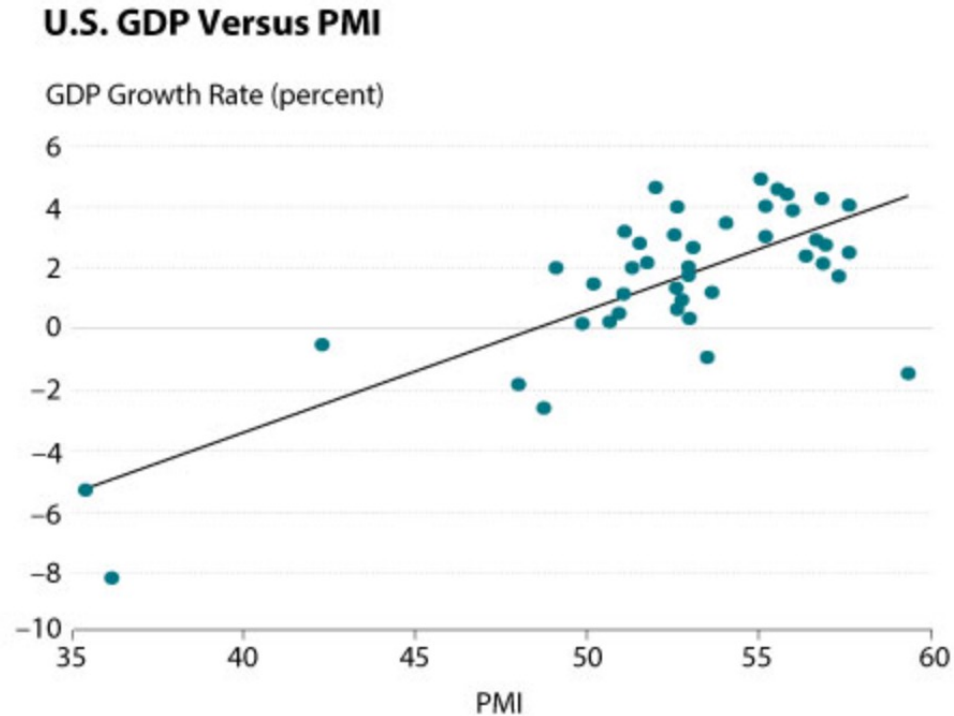
## IPI vs. Real GDP

- High correlation between both metrics as IPI tends to follow GDP in periods of decline or improvement

# IPI vs. Manufacturing Sector: Labor Productivity



# Regression Analysis - PMI vs. GDP



NOTE: The blue dots indicate quarterly values.  
SOURCE: PMI: ISM and Haver Analytics. GDP: Bureau of Economic Analysis and Haver Analytics.

- Strong positive correlation between PMI and GDP
- $R^2 = 0.75$
- PMI level greater than 50%: manufacturing sector expanded compared to the previous month

# Financial Analysis: Sector Key Metrics

Year	Operating Margins	Net Margins	ROE	Turnover	Diluted EPS	EPS Growth	Total Revenue	Revenue Growth
2018	7.40%	7.40%	19.58%	0.70x	26.62	1.80%	366.90	10.10%
2019	8.10%	8.00%	21.52%	0.67x	29.21	9.70%	365.90	-0.30%
2020	3.30%	3.20%	7.44%	0.55x	10.37	-64.50%	322.10	-12.00%
2021	8.60%	8.40%	20.35%	0.60x	31.67	205.50%	370.40	15.00%
2022	8.50%	8.60%	21.43%	0.68x	36.30	14.50%	431.00	16.20%
2023	8.80%	9.30%	23.03%	0.69x	38.13	19.60%	438.50	5.60%

All values expressed as per share items

<https://www-capitaliq-com.proxy.lib.ohio-state.edu/CIQDotNet/Financial/KeyStats.aspx?CompanyId=2671441&mode=aggregate>



# Financial Analysis: Aerospace and Defense

## Key Metrics

Year	Operating Margins	Net Margins	ROE	Turnover	Diluted EPS	EPS Growth	Total Revenue	Revenue Growth
2018	9.60%	9.60%	39.78%	0.79x	67.20	41.50%	704.80	13.30%
2019	6.60%	6.50%	25.04%	0.73x	46.00	-31.50%	719.90	2.10%
2020	0.10%	-0.10%	0.21%	0.58x	0.10	-99.80%	638.80	-11.30%
2021	6.40%	6.30%	15.47%	0.57x	42.50	55,459.40%	671.70	5.20%
2022	5.50%	5.50%	12.99%	0.60x	38.70	-9.10%	710.60	5.80%
2023	5.50%	5.50%	14.08%	0.62x	40.20	32.60%	737.70	8.10%

All values expressed as per share items

<https://www-capitaliq-com.proxy.lib.ohio-state.edu/CIQDotNet/Financial/Ratios.aspx?companyId=2671584&mode=aggregate&statekey=29ae5b991cbf4b26adb07e0e5cfa8d6d>

# Financial Analysis: Passenger Airlines Key Metrics

Year	Operating Margins	Net Margins	ROE	Turnover	Diluted EPS	EPS Growth	Total Revenue	Revenue Growth
2018	6.49%	6.49%	28.48%	0.81x	29.40	-9.80%	435.50	12.90%
2019	7.51%	7.51%	31.12%	0.77x	37.60	27.70%	500.40	10.30%
2020	-52.22%	-52.22%	-135.59%	0.30x	-99.60	-364.89%	190.60	-61.90%
2021	-2.15%	-2.15%	-16.11%	0.42x	-6.20	93.75%	288.70	51.40%
2022	1.56%	1.56%	14.37%	0.69x	7.40	219.35%	474.50	64.40%
2023	4.40%	4.40%	37.83%	0.73x	22.80	208.10%	515.80	16.90%

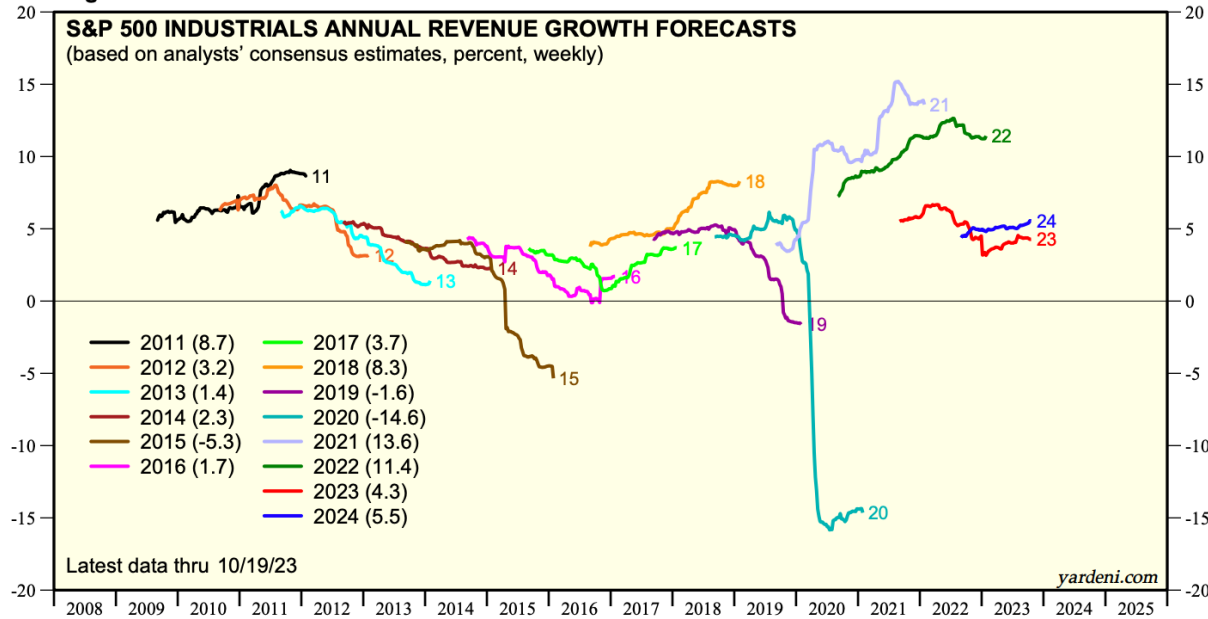
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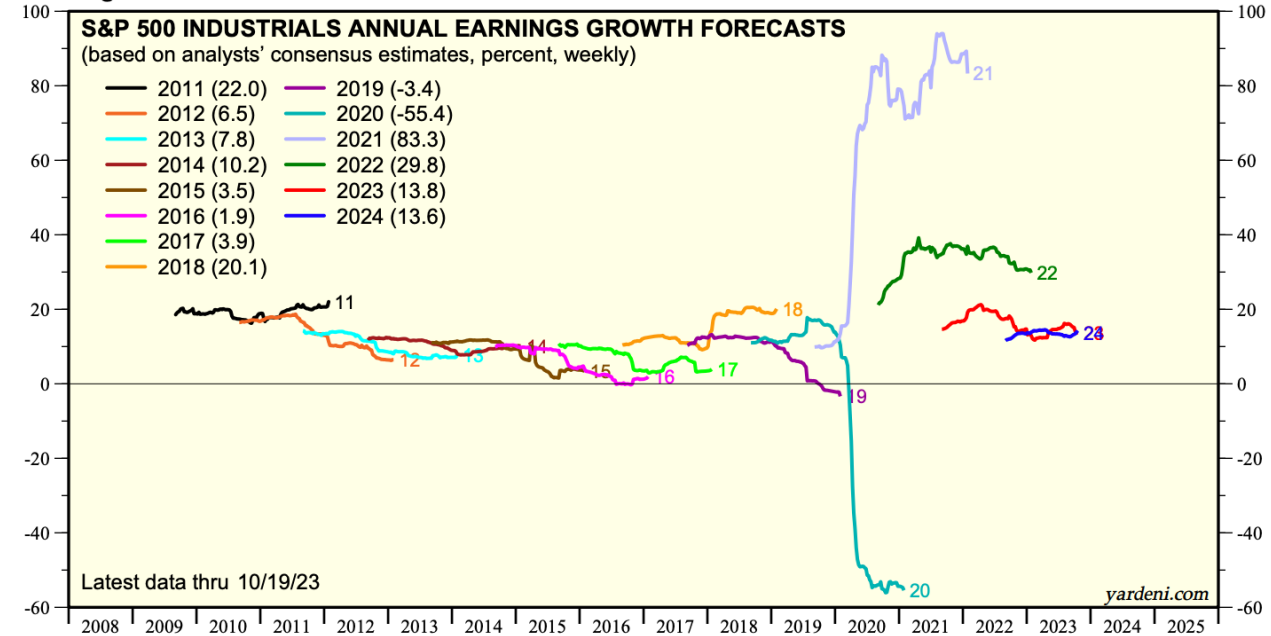
# S&P 500 Industrials - Growth Forecasts

Figure 5.



Source: I/B/E/S data by Refinitiv.

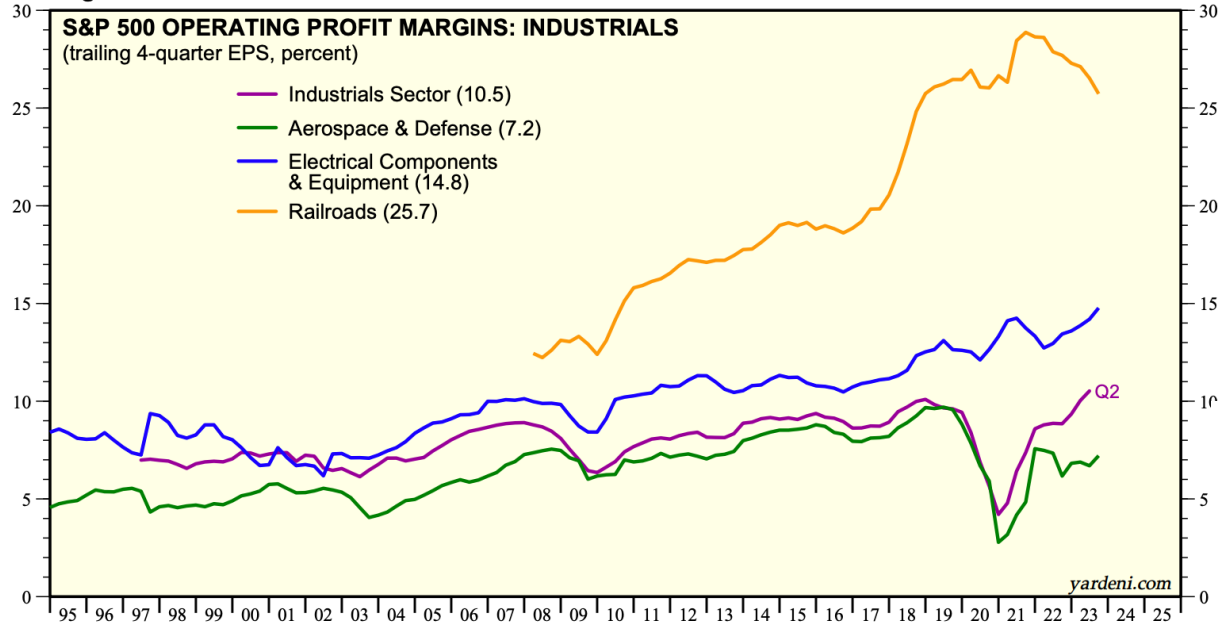
Figure 6.



Source: I/B/E/S data by Refinitiv.

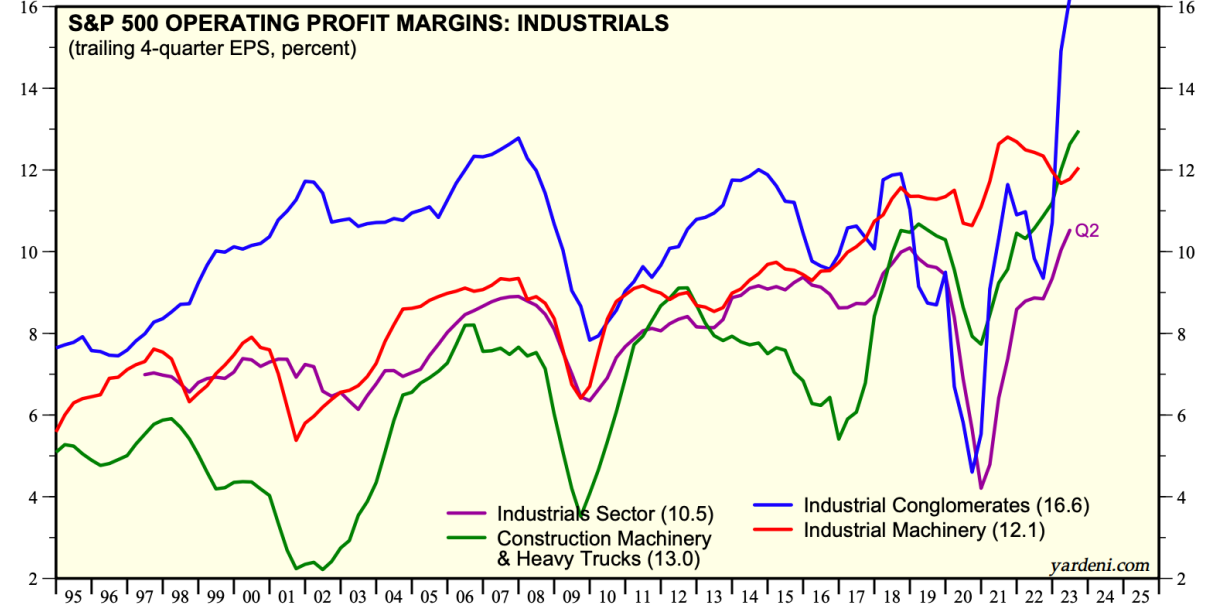
# S&P 500 Industrials - Operating Profit Margins

Figure 25.



Note: Sector data from S&P. Industry-level data uses I/B/E/S data from Refinitiv for EPS through Q4-2007, and S&P's EPS thereafter.  
Source: Standard & Poor's, I/B/E/S data by Refinitiv, and Haver Analytics.

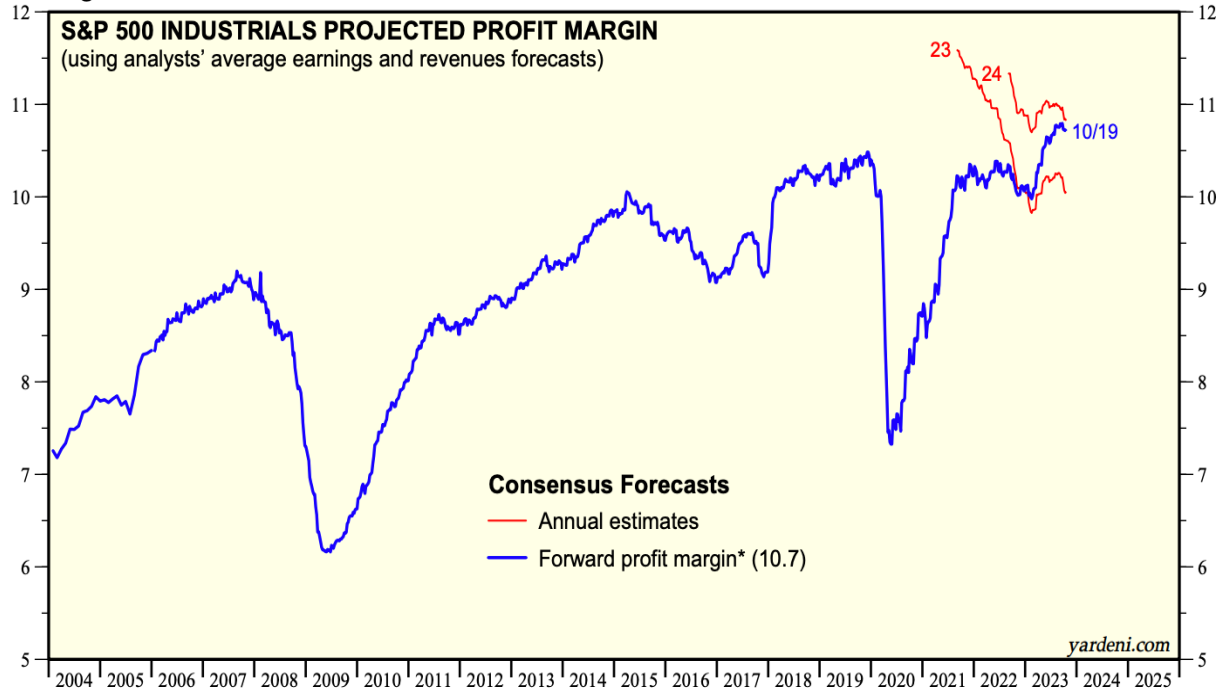
Figure 24.



Note: Sector data from S&P. Industry-level data uses I/B/E/S data from Refinitiv for EPS through Q4-2007, and S&P's EPS thereafter.  
Source: Standard & Poor's, I/B/E/S data by Refinitiv, and Haver Analytics.

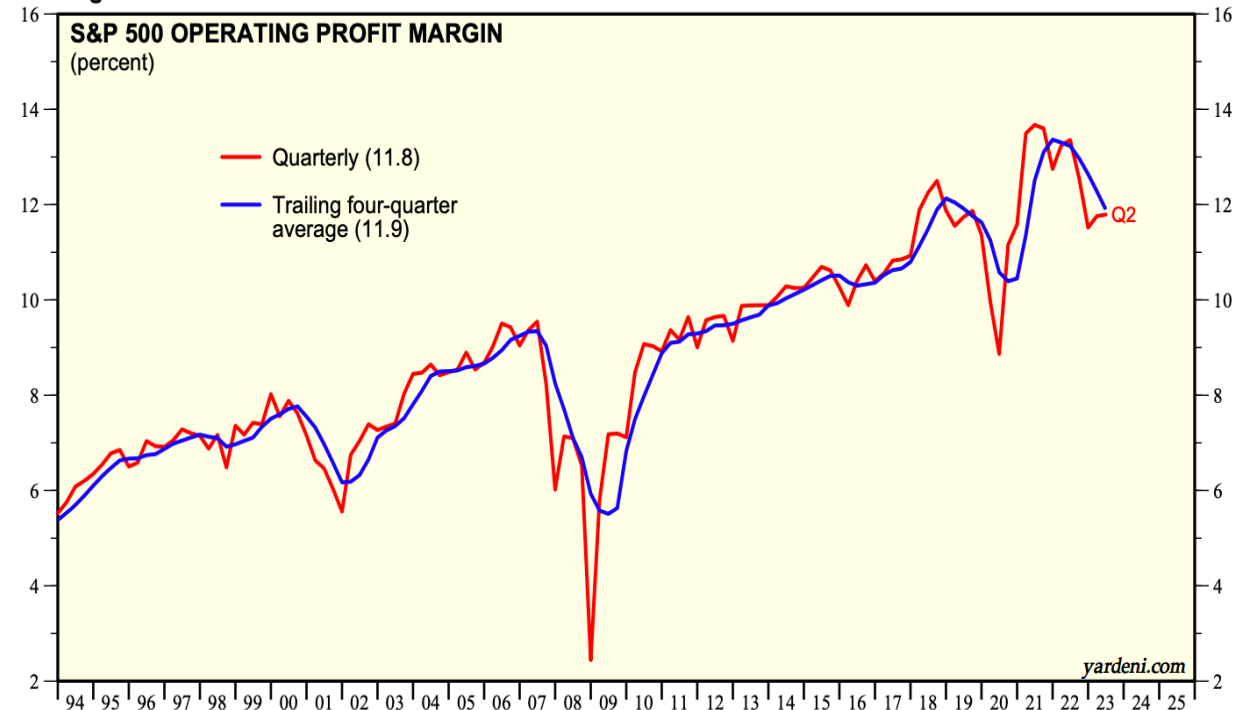
# S&P 500 vs. Industrials - Profit Margins

Figure 10.



\* Time-weighted average of the consensus estimates for current year and next year. Monthly through December 2005, weekly thereafter.  
Source: I/B/E/S data by Refinitiv.

Figure 3.



Source: Standard & Poor's Corporation (revenues) and I/B/E/S data by Refinitiv (operating EPS).

# SIM Holdings Analysis

Holdings	YTD Return	3 Year Return
Deere & Co	-14.22%	48.52%
RTX Corp	-22.15%	34.17%
United Airlines Holding Inc	-7.69%	0.35%
Transdigm Group Inc	30.18%	57.49%
FedEx Corp	36.73%	-15.35%

# Valuation & Analysis



# Industrials Absolute Sector Valuation



Absolute Basis	High	Low	Average	Current
P/B	6.13	2.85	4.43	4.82
P/EBITDA	21.12	7.72	11.44	11.57
P/E	53.18	13.97	21.55	18.56
P/S	2.76	1.36	1.84	1.89



# S&P Absolute Basis Valuation

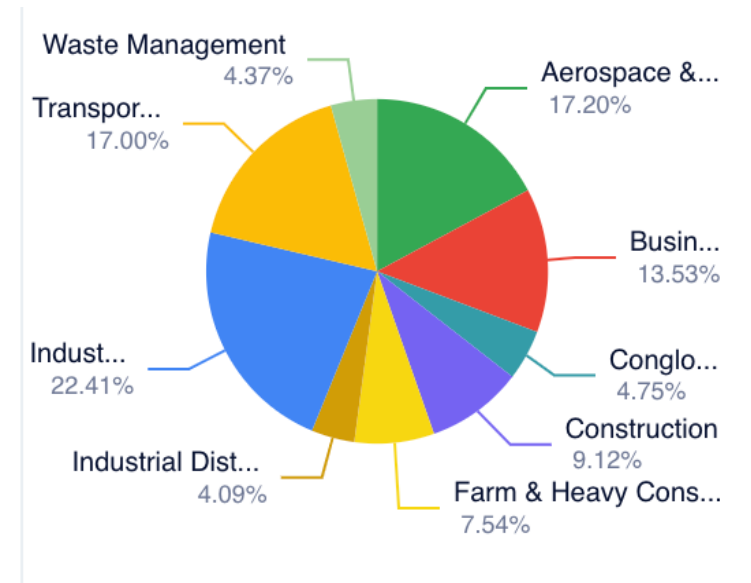


	SP500	High	Low	Average	Current
P/B		4.92	2.56	3.43	3.98
P/EBITDA		17.95	9.01	11.65	11.98
P/E		29.9	15.68	19.27	19.04
P/S		3.24	1.59	2.21	2.35



# Sector Valuation

Industries	Last % change ↕	5-day* ↕	1-month* ↕	3-month* ↕	YTD* ↕	1-year* ↕	5-year* ↕
Industrials	+0.72%	-0.66%	-3.71%	-11.38%	-0.67%	+3.17%	+44.56%
Aerospace & Defense	+1.58%	+1.24%	+3.38%	-7.77%	-9.06%	-4.50%	+15.18%
Air Freight & Logistics	+1.34%	-4.32%	-10.12%	-20.96%	-5.74%	-1.65%	+24.04%
Building Products	+0.98%	+0.11%	-8.59%	-17.25%	+0.81%	+5.79%	+96.57%
Commercial Services & Supplies	+1.03%	+1.41%	+1.48%	-3.72%	+10.94%	+11.46%	+124.00%
Construction & Engineering	+1.07%	-0.43%	-11.93%	-17.82%	+15.62%	+16.70%	+232.02%
Electrical Equipment	+1.48%	-0.39%	-7.71%	-9.08%	+6.26%	+11.74%	+76.04%
Ground Transportation	+1.12%	-2.08%	-2.74%	-13.71%	-3.20%	+1.90%	+52.74%
Industrial Conglomerates	+0.95%	+1.78%	-2.16%	-8.73%	+3.55%	+6.58%	+14.06%
Machinery	-1.18%	-0.46%	-5.60%	-11.27%	+0.09%	+5.24%	+88.83%
Marine Transportation	--	--	--	--	--	--	--
Passenger Airlines	-0.73%	-3.33%	-15.88%	-33.29%	-16.44%	-22.96%	-51.84%
Professional Services	+1.55%	-6.26%	-6.95%	-11.18%	+0.42%	+0.70%	+74.38%
Trading Companies & Distributors	+0.48%	+2.63%	+1.38%	-2.84%	+23.13%	+25.62%	+178.27%
Transportation Infrastructure	+0.99%	-3.02%	-7.03%	-18.95%	-5.76%	-2.75%	+20.88%





# Valuation Analysis

- Current valuation of the sector is relatively attractive, with valuation ratios running low compared to the 3-year averages
- There are several factors that could support its valuation:
  - Increased government spending on infrastructure
  - Shift to clean energy
  - Continued digitization
- Risks include potential recession and rising interest rates, which are both relevant to other sectors



# Recommendations



# SIM Recommendation

Sector	S&P Weight	SIM Weight	% Diff
Industrials	8.30%	8.36%	0.06%

***We recommend that we underweight the Industrials sector by .21% to reach 8.15%. The short-term prospects show a possible decrease in growth potential, but there is still opportunity to find value for investors in the long-term***



Questions?