

# Electronic Components Industry Trends Survey

December 12, 2023



# Survey Introduction/Mechanics

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- **Frequency/Reminders**

- Survey is conducted monthly, 1<sup>st</sup> notification is typically emailed the 1<sup>st</sup> of the month
- There will be 2 additional reminders set by the system
- Results of published for the ERA members on the ERA Website
- Survey delivered by [no-reply@mail.client.edgewaterresearch.com](mailto:no-reply@mail.client.edgewaterresearch.com)


# Survey Introduction/Mechanics

LAST CALL: The ERA Industry Trends Survey Closes Soon



no-reply@mail.client.edgewaterresearch.com

To ● Dennis Reed

 If there are problems with how this message is displayed, click here to view it in a web browser.



## ERA Electronic Components Industry Trends Survey

We've noticed the October, 2023 ERA Electronic Components Industry Trends Survey has not been started.

- The ERA Electronic Components Industry Trends Survey provides a summarized analysis of trends and insights garnered from the data of all participating ERA members.

[Access and complete the survey here.](#)

Results of the survey will be shared with participants via the ERA members' webpage.

[View the latest survey results HERE](#)

If you'd like to delegate the survey completion to another person please send the name and email of delegatee to: [support@EdgewaterRC.com](mailto:support@EdgewaterRC.com)

Please contact [Dennis Reed](#) if you have any questions about completing the survey.

Please contact [Erin Collins](#) if you have any questions about this important member benefit.

Thank you in advance for your participation.

[Survey Access](#)

# About Edgewater

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## Who is Edgewater Research?

- An **Independent Research Company** specializing in Technology, Internet & Consumer/Ecommerce
- We service many of the **largest money managers** in the world who invest in technology companies
- We provide **critical business insights** into complex and dynamic industries through **fundamental research**
- **Our reputation dates back two decades** of providing trusted, timely, and unbiased research to the clients we serve

# Why Edgewater?

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## What We Are

- **Deeply connected in the industry**, on a worldwide basis, from foundry to supplier to distributor to end customer; contacts across purchasing/strategy/business development
- A **trusted resource** for the investment community, who provides access to capital and **invests public & private growth opportunities**
- A **critical partner** with the largest global technology companies, assisting in **identifying key trends and assist in shaping a strategy** to address those opportunities

# Speaker Background & Contact Information



**Dennis Reed**

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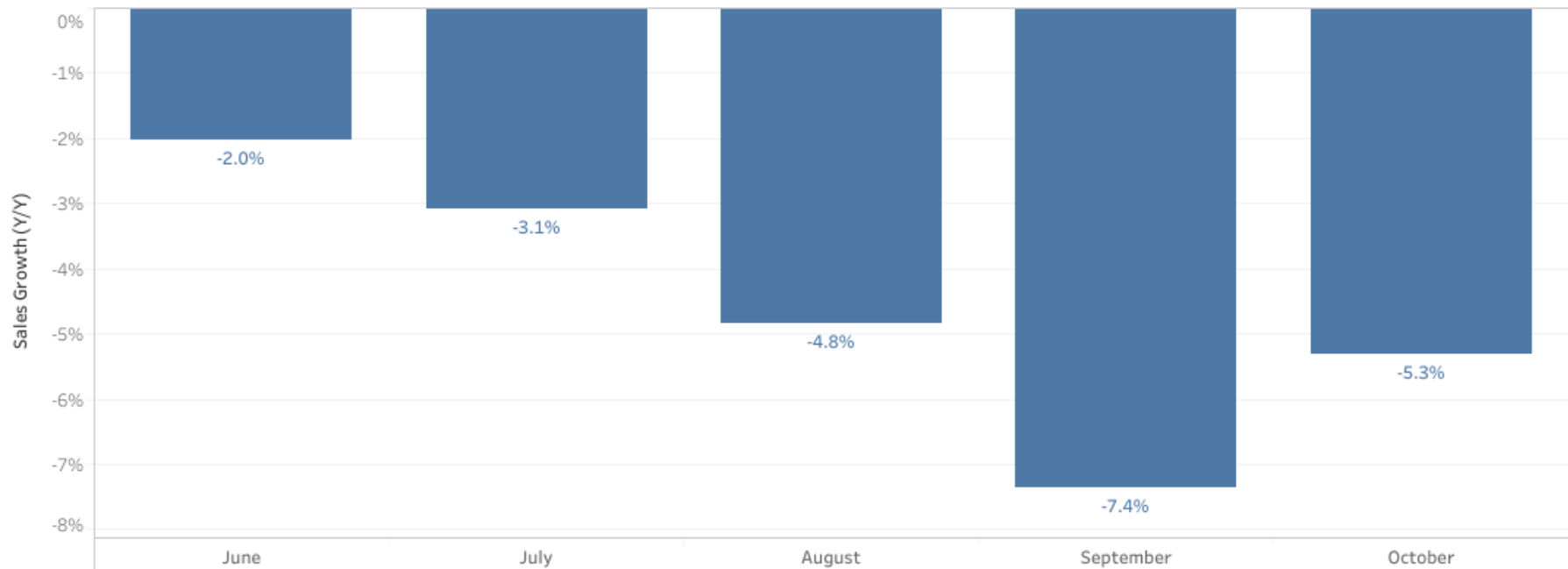


- Started as a Research Analyst in Technology in 2005 and **has over 10 years of experience** in semiconductors, memory, storage, and distribution with several respected firms including Edgewater Research.
- Developed an extensive network of technology industry professionals throughout the world and is a **trusted resource to his contacts and clients alike.**
- Worked in several roles of increasing responsibility in **strategy, product development, sales management & field sales at Travelers Insurance.**
- A 2002 graduate from Ohio University with a B.S. in Sports Administration

# ERA Survey Sales Growth

	August	September	October
Sales Growth (Y/Y)	-4.8%	-7.4%	-5.3%
Price Contribution (Y/Y)	0.8%	-0.6%	0.9%
Implied Volume Growth (Y/Y)	-5.6%	-6.7%	-6.2%
Sales vs Expectations (Net %)	16.1% Worse Than Expected	22.9% Worse Than Expected	13.8% Worse Than Expected

Average Sales Growth (Y/Y)

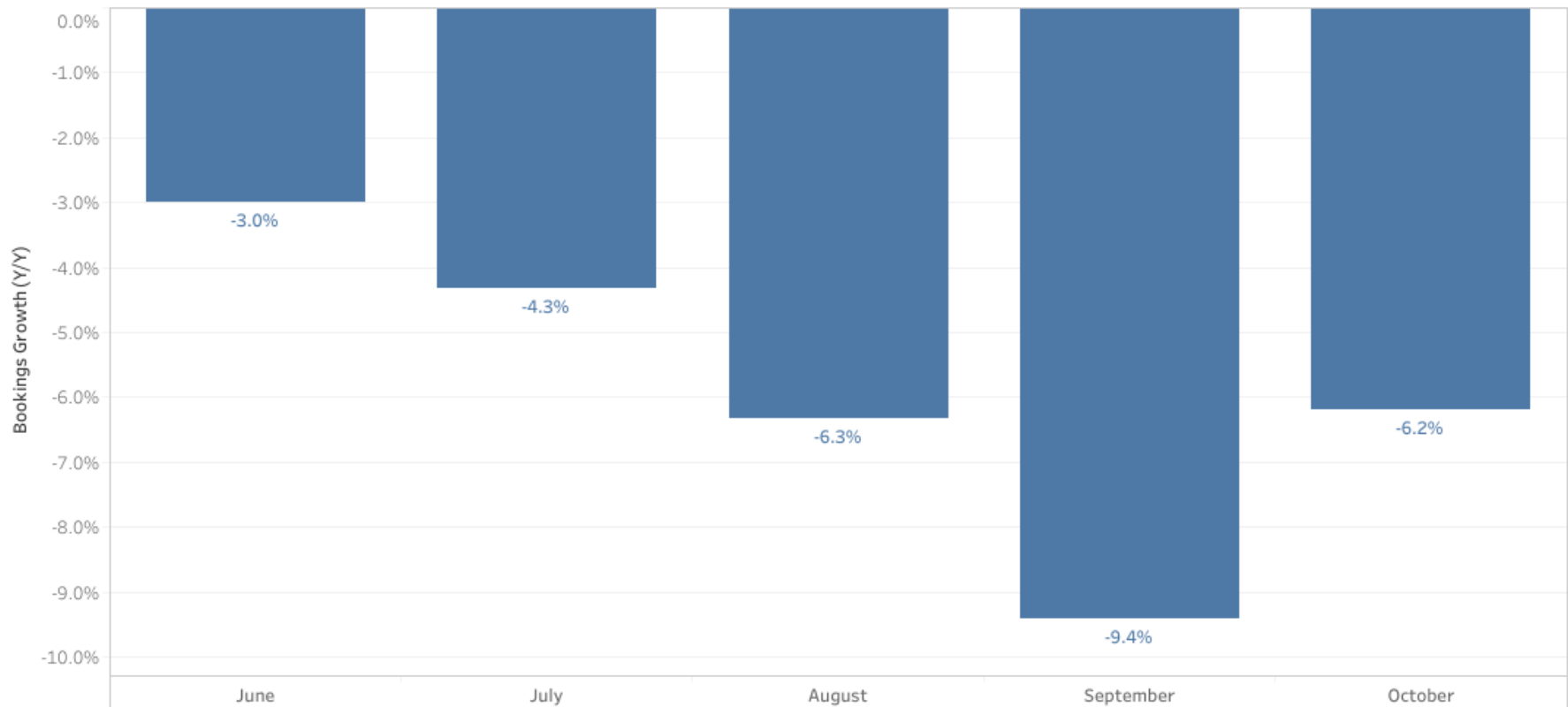


Source: Edgewater Research

# ERA Survey Bookings Trends

	August	September	October
Bookings Growth (Y/Y)	-6.3%	-9.4%	-6.2%
Book-To-Bill	0.84X	0.76X	0.87X

Average Bookings Growth (Y/Y)



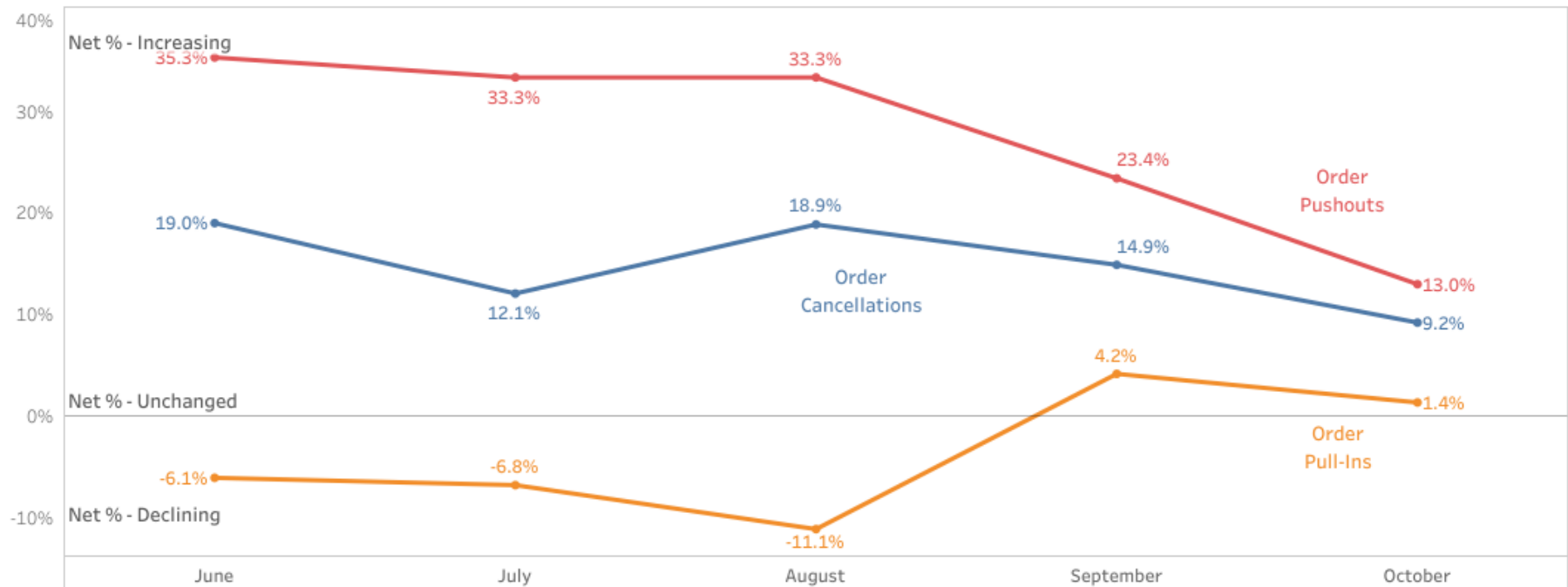
Source: Edgewater Research



# ERA Survey Backlog Trends

	August	September	October
Backlog - Growing %	10.2%	9.1%	17.3%
Backlog - Stable %	32.7%	31.8%	36.0%
Backlog - Shrinking %	57.1%	59.1%	46.7%
<b>Backlog Trend (Net %)</b>	<b>46.9% Shrinking</b>	<b>50.0% Shrinking</b>	<b>29.3% Shrinking</b>

## Existing Order Trends (Net %)

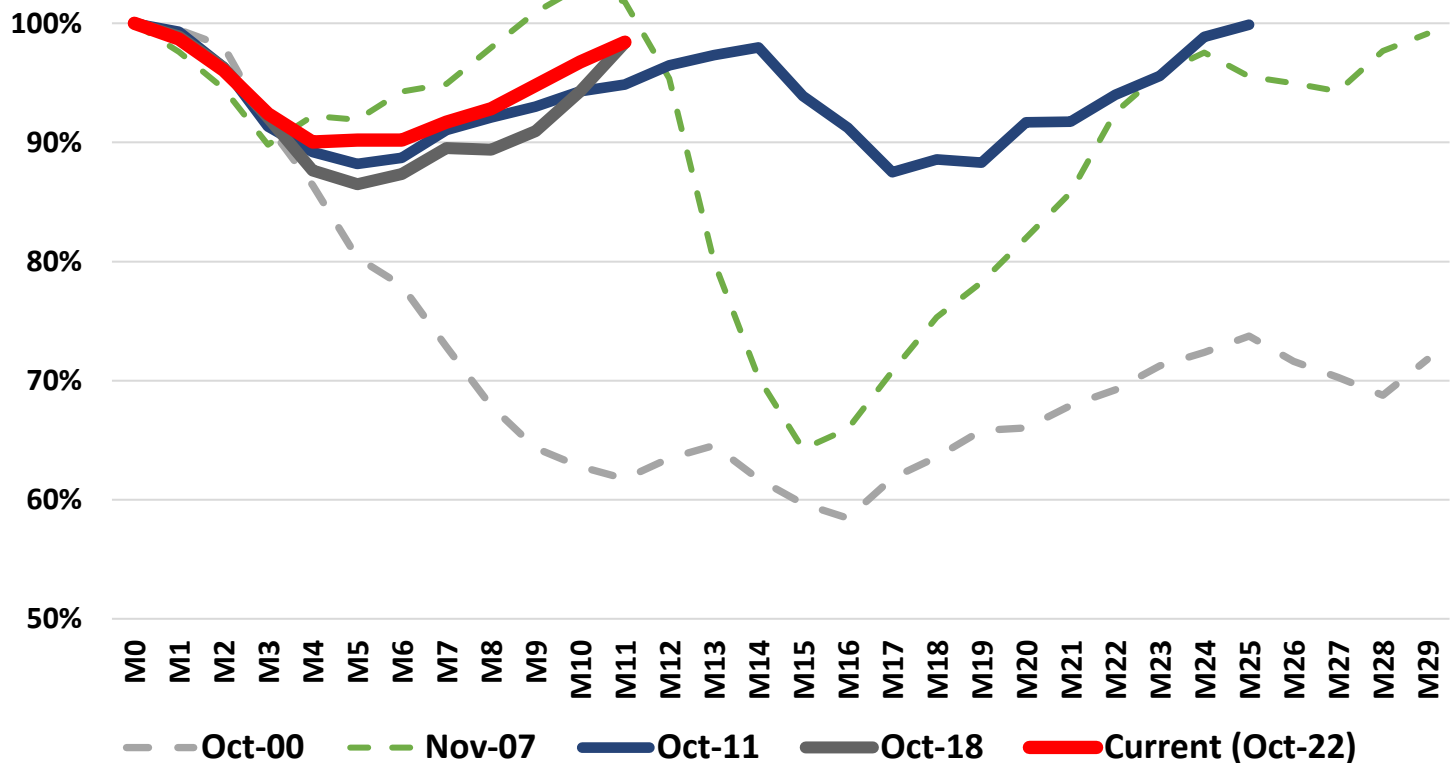


Source: Edgewater Research

# How Does the Current Down Cycle Compare?

*Downturn appears shallow and orderly; we believe recovery will likely be more muted*

## Semi Downcycles (ex-memory) (months post peak billings)



### Major Peak-to-Trough

Oct-00	-42%
Nov-07	-36%
Oct-11	-12%
Nov-14	-6%
Oct-18	-14%
Oct-22	-10%

### Median Cycle Timing

#### Data

Median peak to trough (M)	9
Median peak to trough (%)	-14%
Median months to new high	21

### Current Cycle Timing

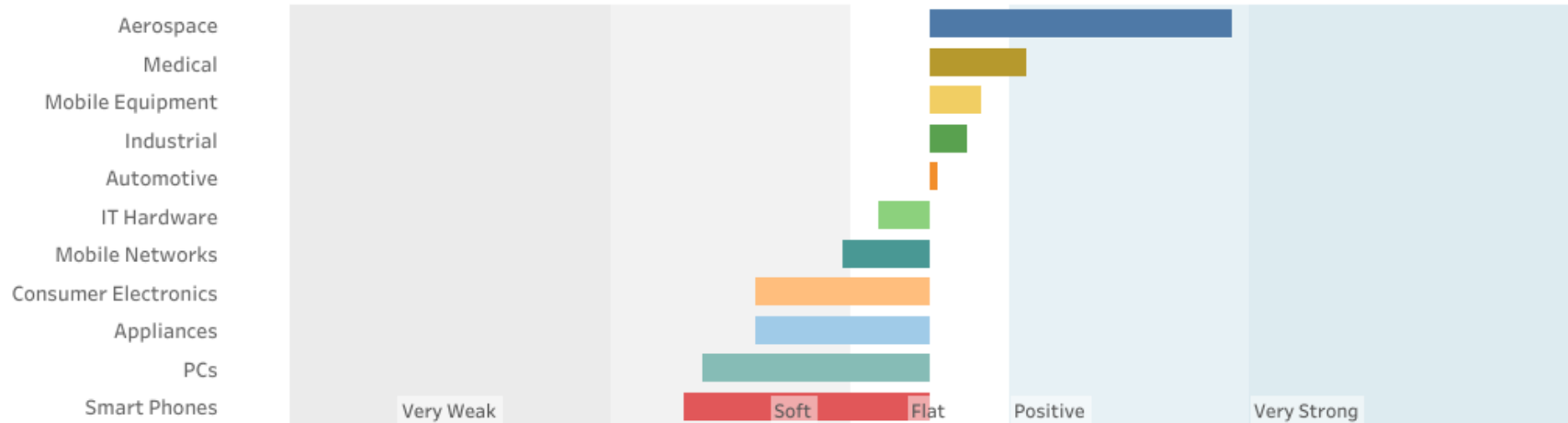
#### Data

Peak to trough (M)	4
Peak to trough (%)	-10%

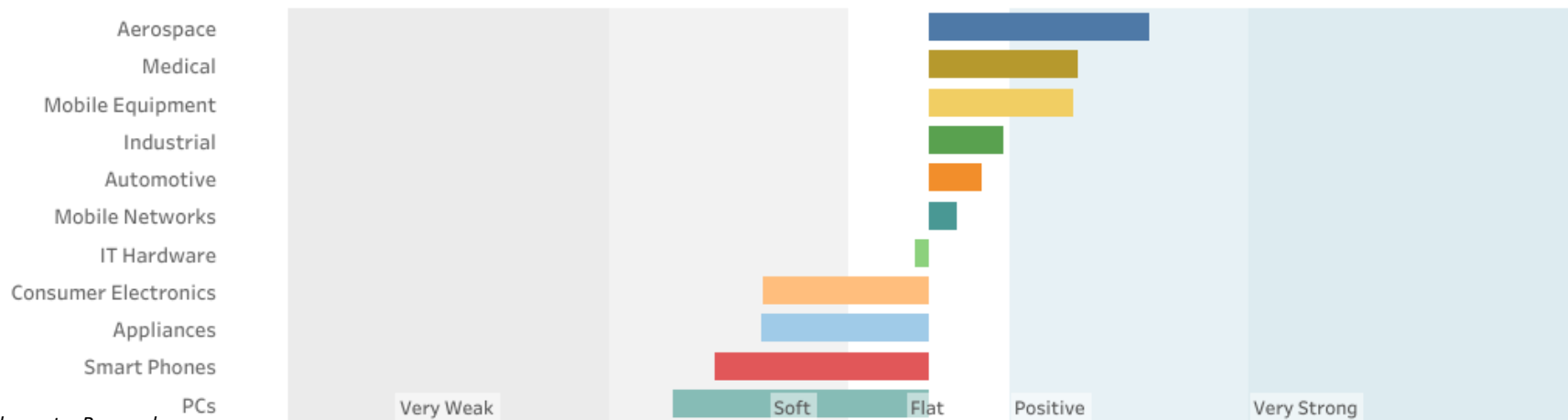
Source: SIA, Edgewater Research

# ERA Survey End Market Trends

End Market Ranking: October, 2023



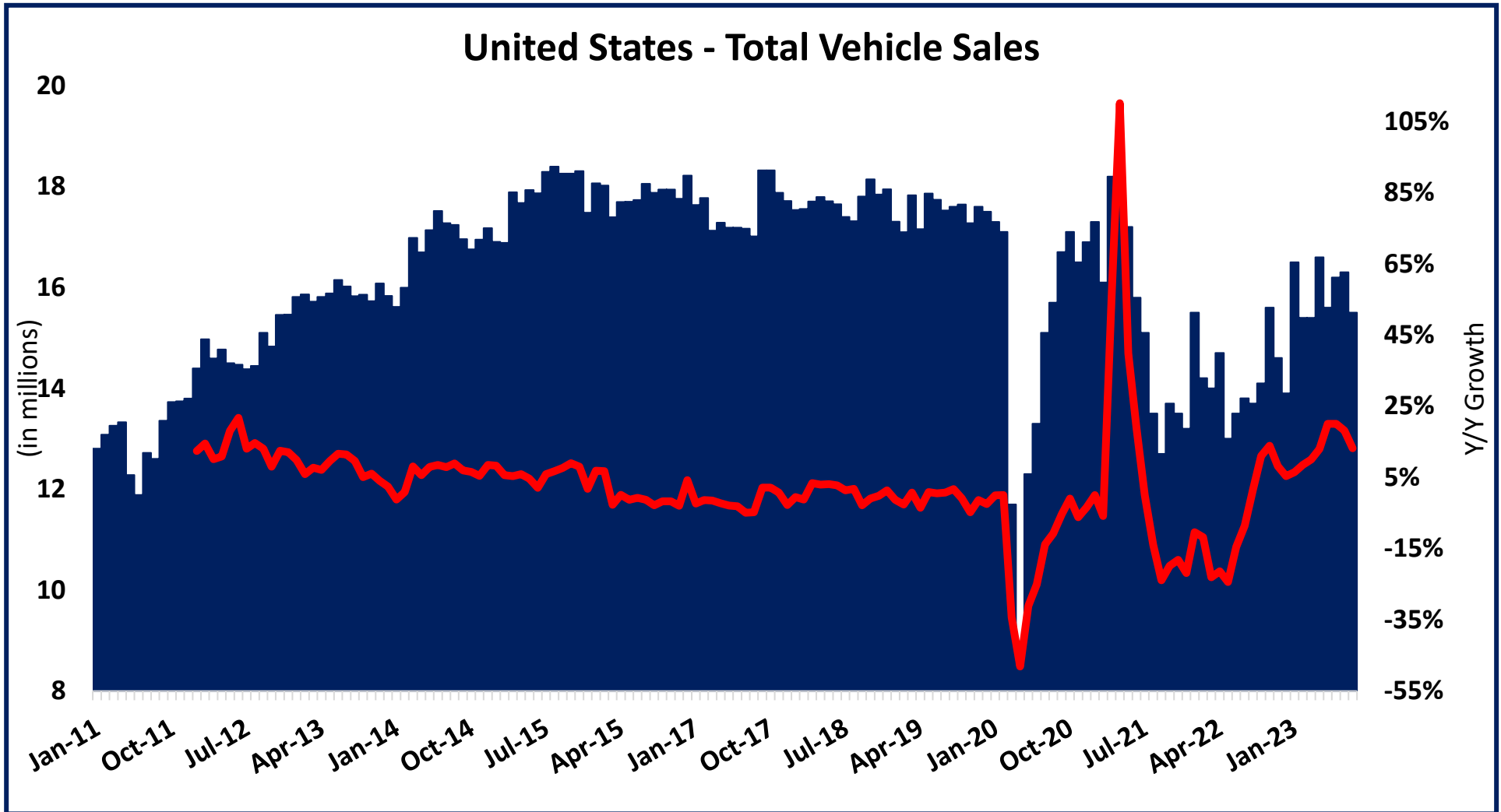
End Market Ranking: September, 2023



Source: Edgewater Research

# 2023 & 2024 Auto Outlook

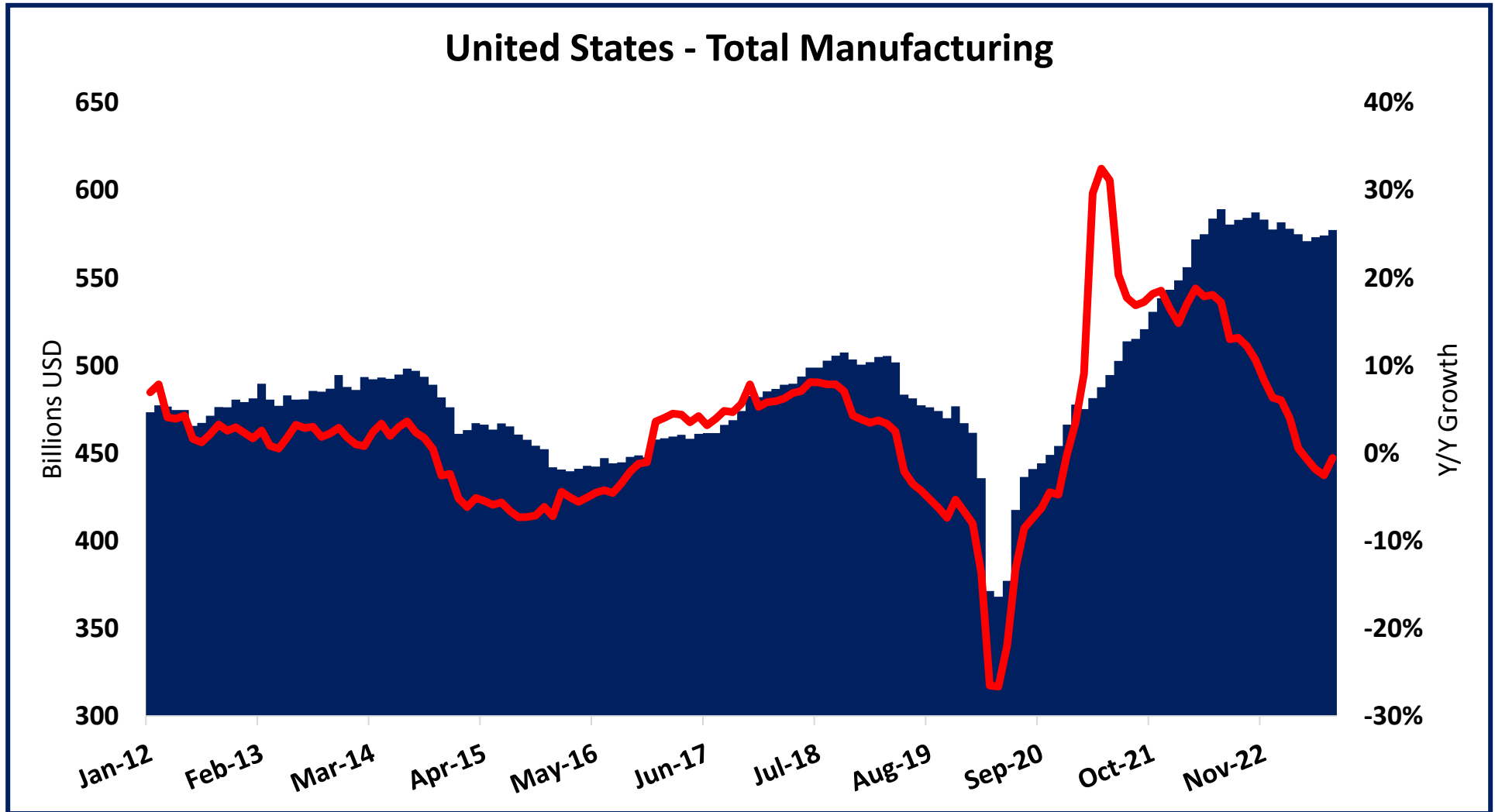
2023 SAAR tracking up 8% Y/Y on backs of fleet sales, macros/UAW strike still a risk



Source: Factset, Company Reports Edgewater Research estimates

# 2023 Industrial Demand Outlook

*U.S. manufacturing turns negative in May, macro pressures likely keep muted*

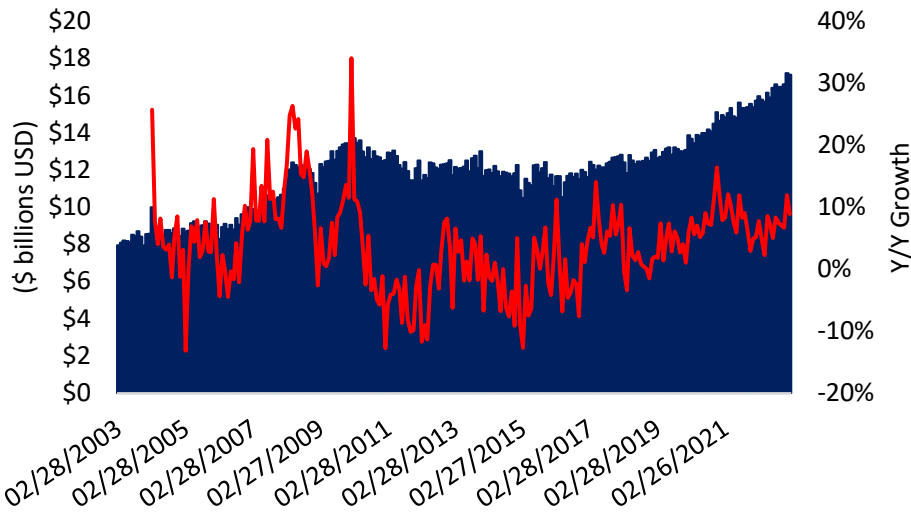


Source: Factset, Company Reports Edgewater Research estimates

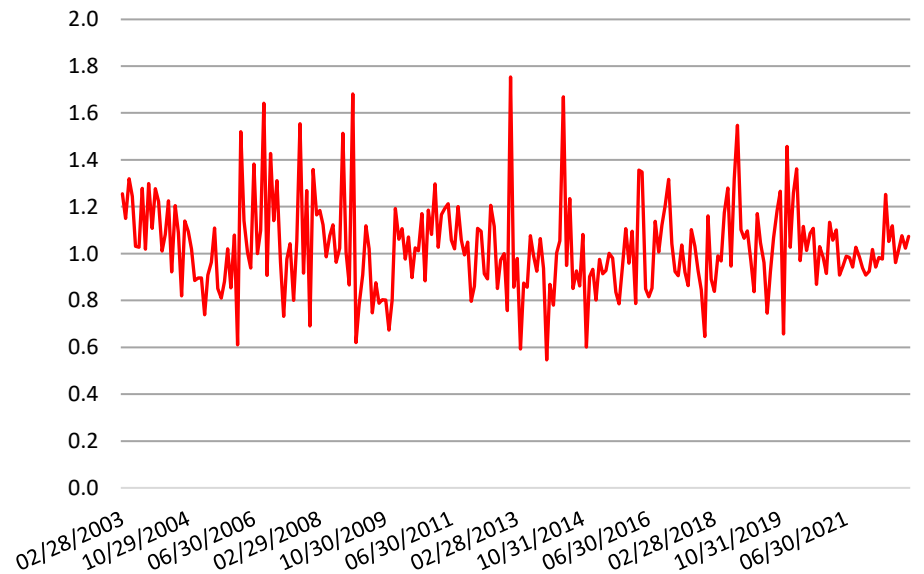
# 2023 Military Demand Outlook

Total military spending at record levels, B2B 1.1x above 20-year average of 1x

## Total Defense Manufacturing - Shipments



## Defense B2B

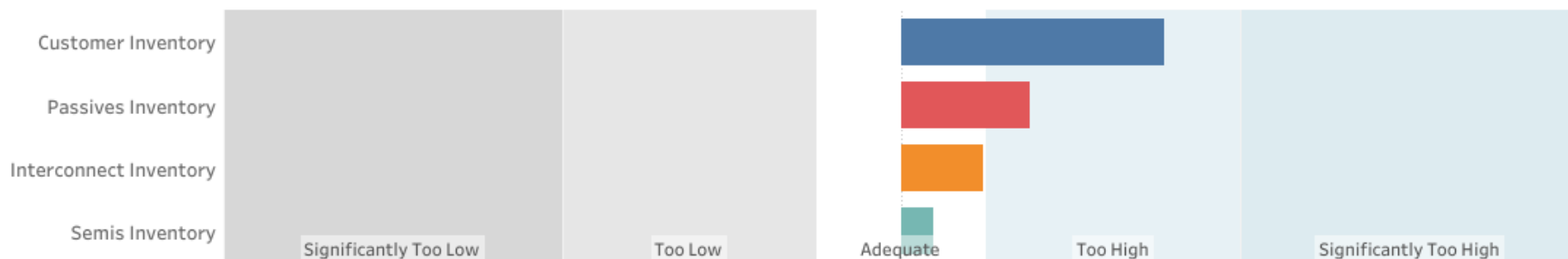


Source: Factset, Company Reports Edgewater Research estimates

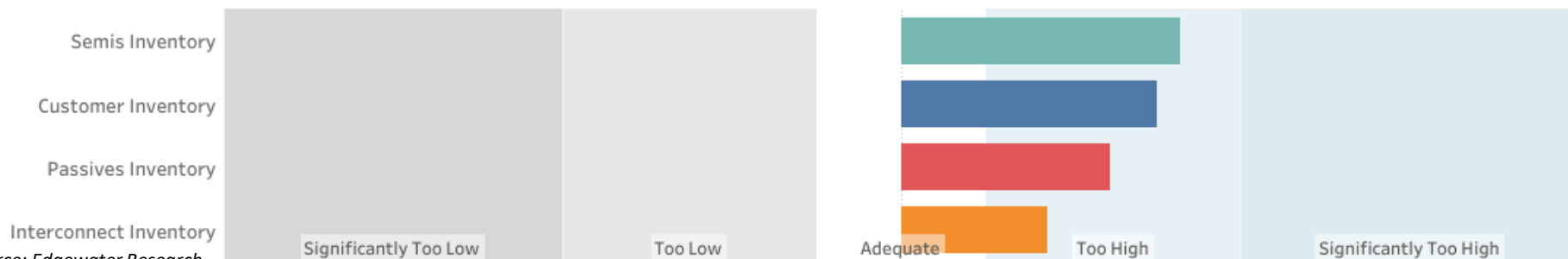
# ERA Survey Inventory Trends

	August	September	October
Inventory vs Last Month - Higher %	17.4%	16.7%	8.5%
Inventory vs Last Month - Same %	43.5%	47.6%	56.3%
Inventory vs Last Month - Lower %	39.1%	35.7%	35.2%
<b>Inventory vs Last Month (Net %)</b>	<b>21.7%</b> Lower	<b>19.0%</b> Lower	<b>26.8%</b> Lower

Inventory Sentiment: October, 2023



Inventory Sentiment: September, 2023



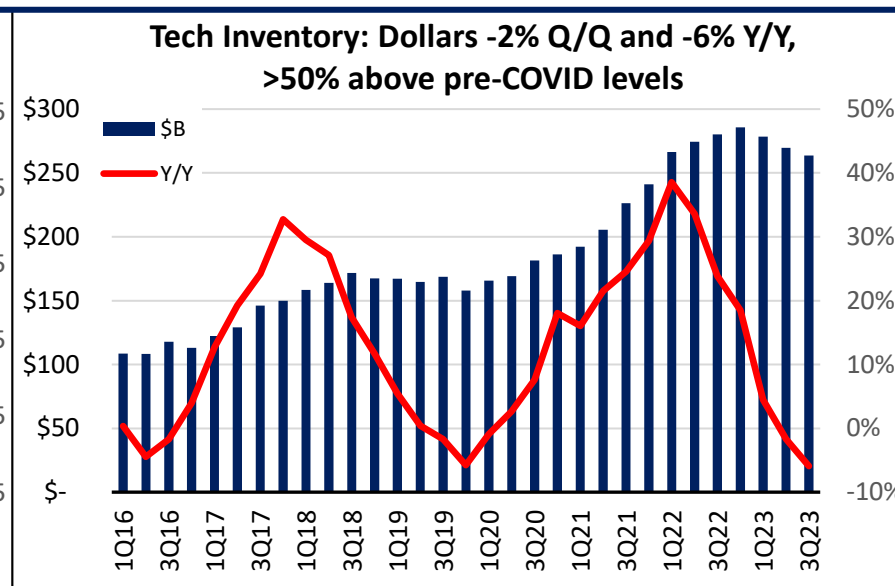
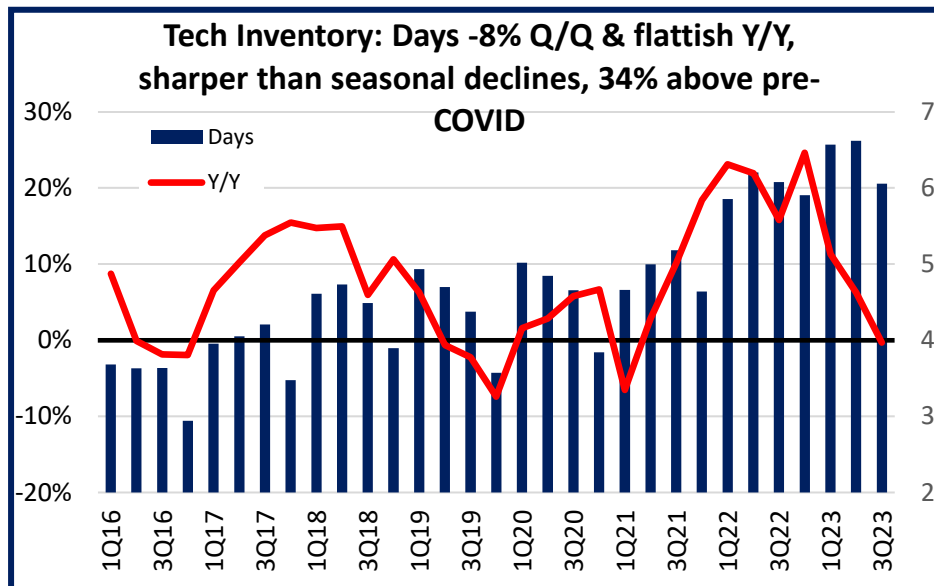
Source: Edgewater Research

# Tech Supply Chain Inventory Levels Replenished

Progress made in 3Q, inventory remains stubbornly high and a headwind into 2024

Inventory - Dollars down (normally up seasonally), days down much more than seasonal

	Dollars (\$B)				Days				Dollars Change			Days Change		
	3Q21	3Q22	2Q23	3Q23	3Q21	3Q22	2Q23	3Q23	vs. 3Q19	Q/Q	Y/Y	vs. 3Q19	Q/Q	Y/Y
<b>Total</b>	<b>\$226.2</b>	<b>\$280.2</b>	<b>\$269.7</b>	<b>\$263.7</b>	<b>57</b>	<b>66</b>	<b>71</b>	<b>66</b>	<b>56%</b>	<b>-2%</b>	<b>-6%</b>	<b>34%</b>	<b>-8%</b>	<b>-0%</b>
Analog/Passive	\$26.1	\$30.2	\$35.0	\$35.5	83	86	109	106	90%	1%	18%	37%	-3%	22%
Compute Suppliers	\$60.9	\$83.1	\$88.5	\$85.7	83	116	129	115	68%	-3%	3%	43%	-10%	-0%
Comms Suppliers	\$7.8	\$12.7	\$11.8	\$11.5	84	121	144	130	201%	-3%	-10%	75%	-10%	7%
Distributors	\$16.5	\$27.9	\$25.7	\$26.0	46	57	59	58	56%	1%	-7%	36%	-3%	1%
ODM/EMS	\$64.6	\$76.5	\$63.5	\$61.3	55	59	63	56	22%	-3%	-20%	15%	-11%	-6%
OEMs	\$50.2	\$49.8	\$45.3	\$43.8	38	38	36	34	53%	-3%	-12%	30%	-7%	-12%



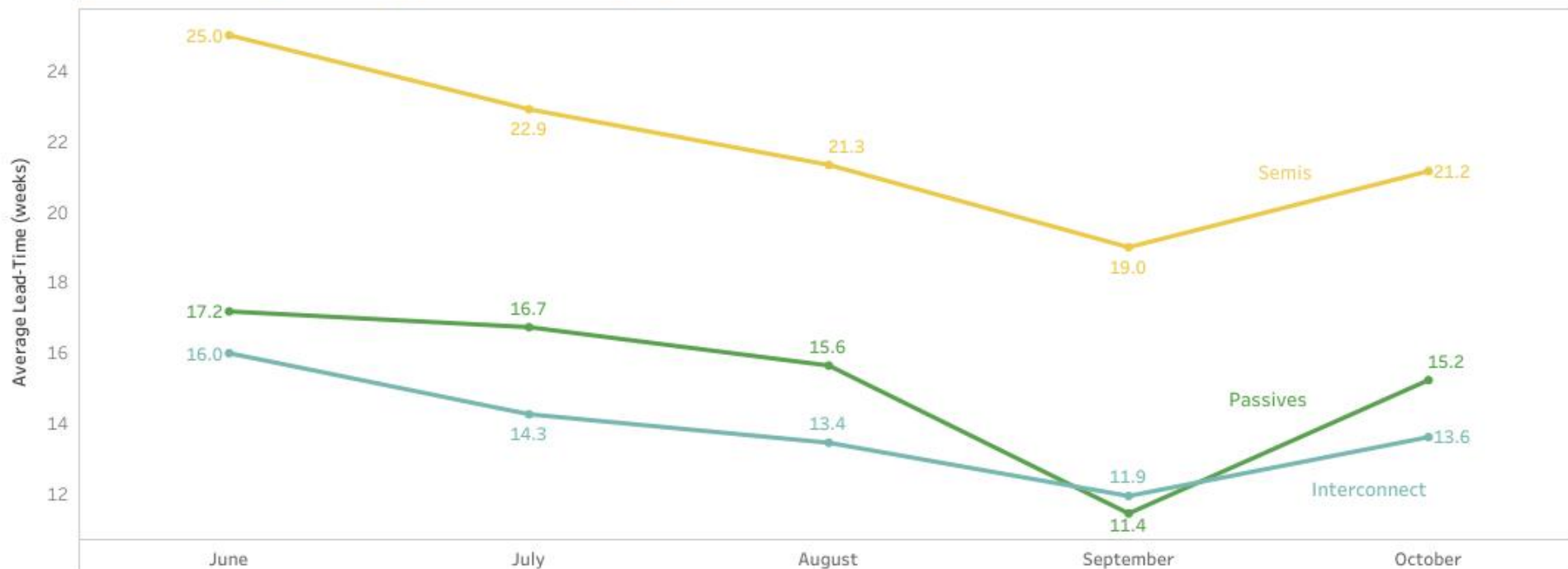
Source: FactSet, Company Reports



# ERA Survey Lead Time Trends

Lead-Times vs Last Month - Expanding %	6.4%	4.8%	5.5%
Lead-Times vs Last Month - Same %	51.1%	45.2%	43.8%
Lead-Times vs Last Month - Lower %	42.6%	50.0%	50.7%
<b>Lead-Times vs Last Month (Net %)</b>	<b>36.2% Contracting</b>	<b>45.2% Contracting</b>	<b>45.2% Contracting</b>

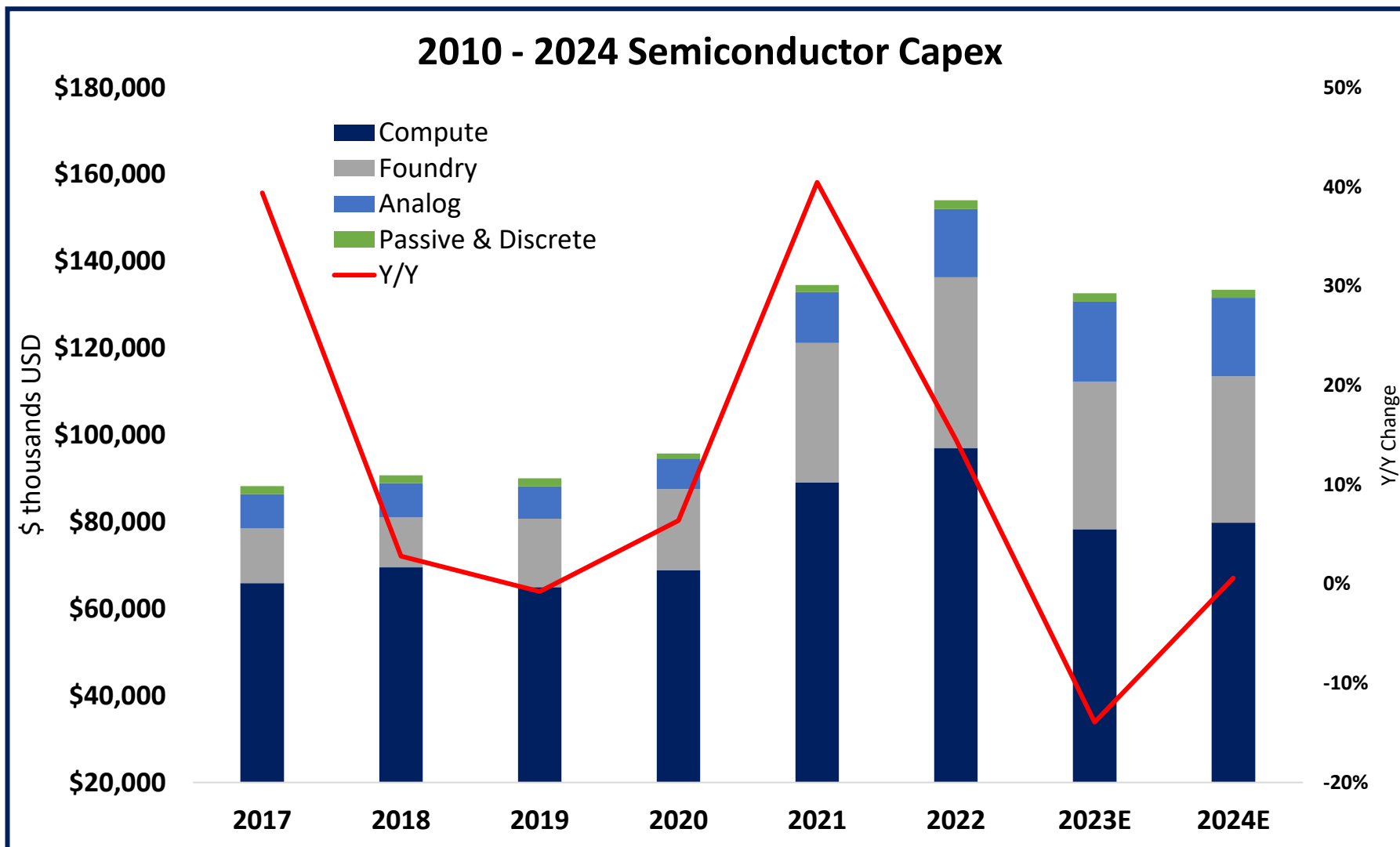
## Average Lead-Time (Weeks) by Product Category



Source: Edgewater Research

# Capacity Additions are a Step Function, Keeping the industry Cyclical

*Following the dramatic overspend in 2021/2022 industry finding discipline in 2023*



Source: Factset, Edgewater Research estimates



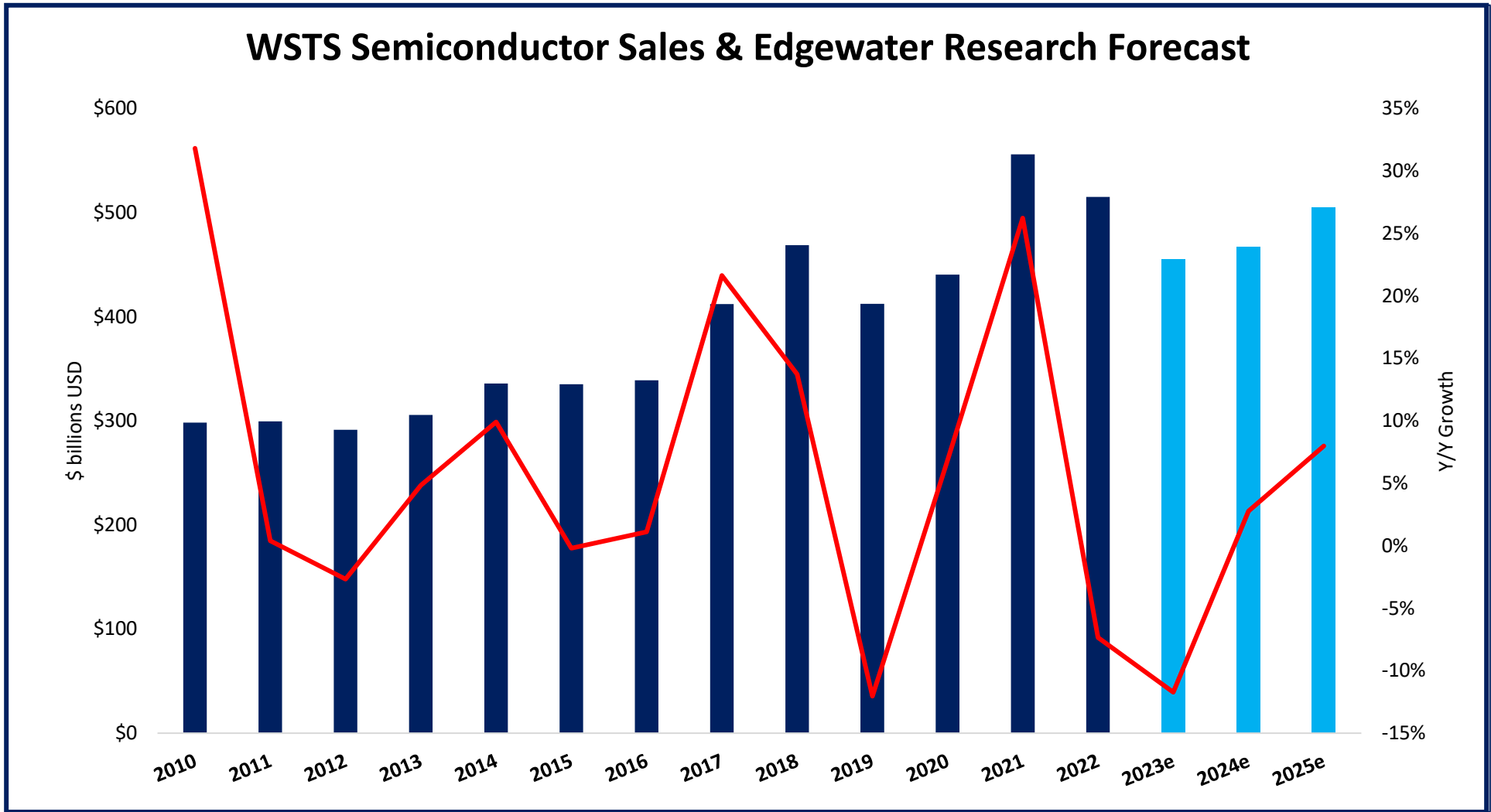
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# Edgewater Research Industry Sales Estimates

2023 semi revs now seen down 12% Y/Y on weaker memory, ex-memory down 5%



Source: WSTS, Edgewater Research estimates



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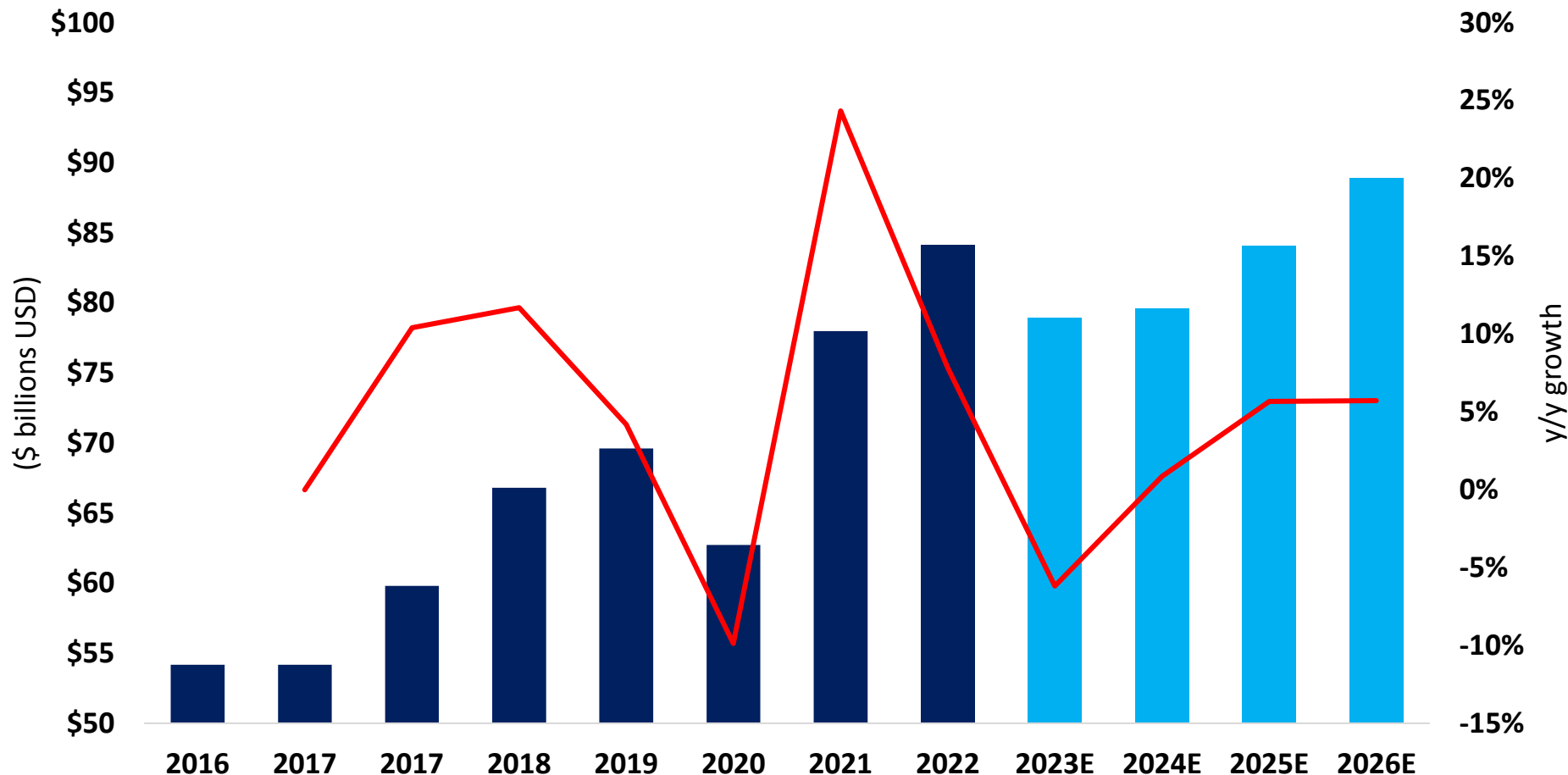


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# Edgewater Research Industry Sales Estimates

*Weaker than expected China/APAC driving Interconnect sales lower Y/Y*

## Interconnect Industry Sales & Outlook



Source: Bishop Report, Edgewater Research estimates



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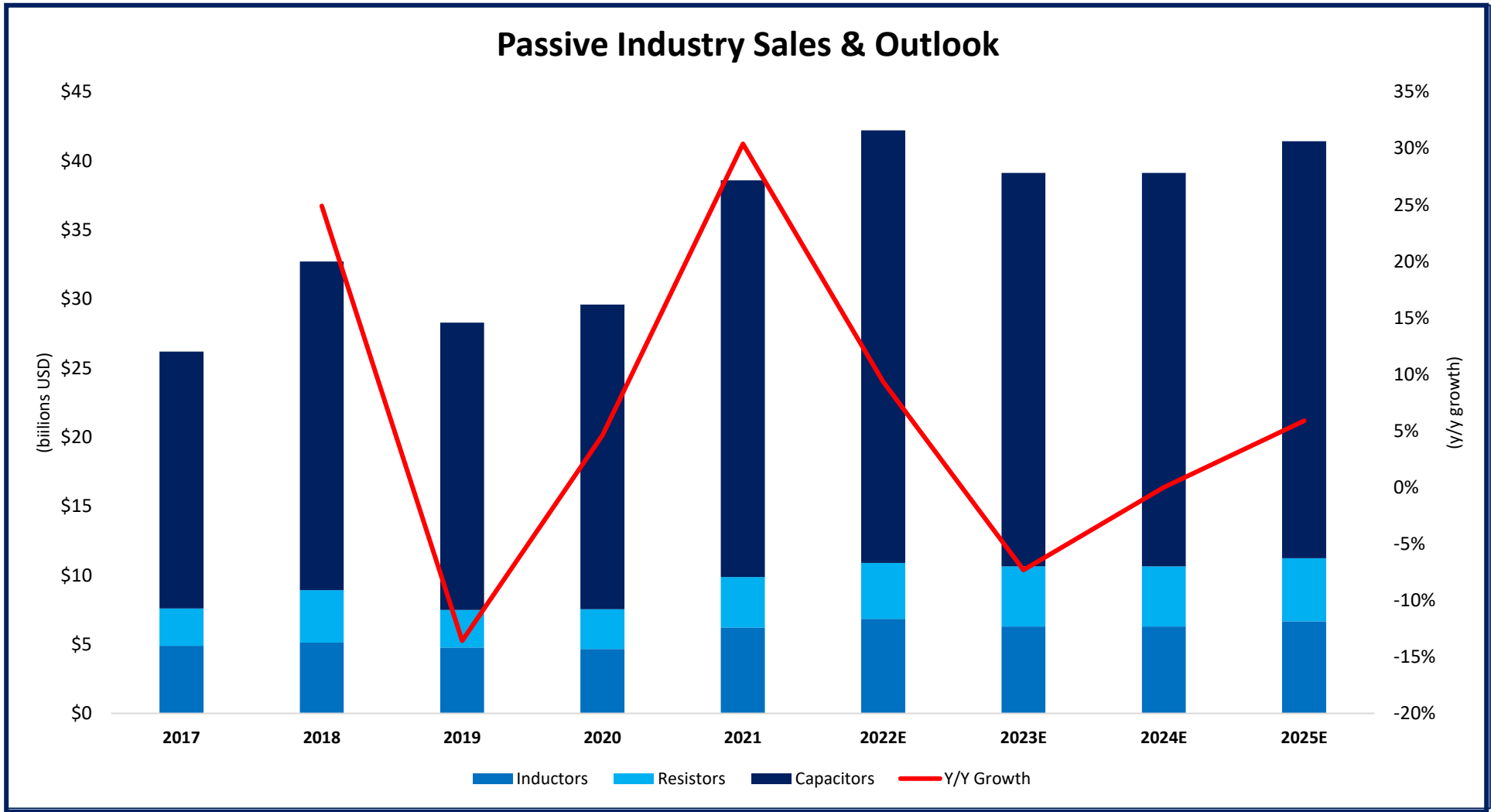


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# Edgewater Research Industry Sales Estimates

PC/Smartphone/Cons weakness driving passive sales -8% in 2023, price still a risk for 2H

## Passive Industry Sales & Outlook



Source: WSTS, Edgewater Research estimates



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# What Can You Do as ERA Members to Help?

- **Please Participate!**

- The broader the participation, the more impactful and helpful this will be for the membership
- ERA has 600+ organizations or “boots on the ground,” the membership can unlock tremendous value overtime to identify inflection points in the industry and better position your business
- Creates and opportunity for benchmarking – can look at your company’s results vs. your peer group monthly

- **Regional Differentiation**

- The survey’s demographic questions (only completed on 1<sup>st</sup> survey) allows the results to be segmented by region and tied to the ERA regions
- This differentiation, with proper participation at the regional levels allows Edgewater and ERA to provide insights at the regional level and conduct various regional events/webinars with real local data



# Questions?

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## What Questions do you have?

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## APPENDIX

*I, Dennis Reed, hereby certify that the views expressed in this research report accurately reflect our personal views about any or all of the subject securities referred to in this research report. We certify that no part of our compensation was, is or will be directly or indirectly related to the specific recommendations or views expressed in this research report. The analyst(s) responsible for the preparation of this report have no ownership stake in this company. Edgewater Research Company provides no investment banking services on this or any company.*

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