Supply Chains To Admire™ 2025

Supply Chain Insights™

A TEN-YEAR VIEW OF PROGRESS
ON SUPPLY CHAIN EXCELLENCE

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Disclosure

We value your trust and are open and transparent about our financial relationships and research processes. This research report is based on Supply Chain Insights' Supply Chains to Admire methodology, which was built over the last decade using purchased data from Y Charts, a syndicated public corporate reporting data feed.

From October 2023 to March 2025, we partnered with Georgia Tech IYSE to refine and validate the Supply Chains to Admire model and build linear regression models for each industry while testing the co-linearity of metrics. This testing used data from 1982 to 2024. A gift from Kinaxis to Georgia Tech funded the graduate student effort supporting this analysis. Some of this work is referenced in the report.

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Executive Summary

Business leaders are action-oriented and competitive. Executive teams strive to drive significant improvement in supply chain results. However, as shown in this report, only 5.3 percent of public companies succeeded in driving leadership through the COVID period to enter the Winners Circle for the Supply Chains to Admire for 2025.

The Supply Chains to Admire™ methodology evaluates the progress of public companies over ten years. The analysis includes over five hundred and thirty public companies within twenty-eight industry sectors. We designed this report to meet several goals:

1. **Understand Value.** Give a clear definition of supply chain excellence for the Supply Chain Insights research. (The analysis enables an explicit objective function for correlation to understand how the choices made by supply chain leaders tie to value.)
2. **Benchmarking.** Share industry benchmarks for industry peer groups to guide supply chain leaders in setting realistic goals.
3. **Drive Learning.** Reward companies that achieve higher levels of supply chain excellence. Use these insights to help others excel.
4. **Understand Industry Potential.** Understand what companies can achieve in executing multi-year roadmaps. Understand industry patterns and sector potential over time.

In the 2025 analysis, twenty-eight companies meet the Supply Chains to Admire Award criteria for improvement, control,

METHODOLOGY OVERVIEW

The Supply Chains to Admire™ report is an annual assessment of supply chain supply chain excellence. Now in its twelve year, the methodology measures industry sector performance for 2015-2024. In this report, we also unveil a new measure, the Supply Chain Fundamental Score to help companies judge if they are making progress agains their peer group.

Within each peer group, we track the year-over-year patterns for publicly-held companies in the areas of improvement, performance, and value.

Figure 1. Supply Chains to Admire Winners for 2025

Table 1. Year-over-Year Winner Analysis

Supply Chains to Admire Summary Award Winners by Year								
	2017	2018	2019	2020	2021	2022	2023	2025
RETAIL	4	9	5	3	3	2	4	4
PROCESS	4	11	6	5	4	5	8	7
DISCRETE	16	11	14	14	13	15	22	17

performance, and value. The winners include Air Products, Apple, Armstrong World Industries, BorgWarner, Beiersdorf, CF Industry, Church & Dwight, Intuitive Surgical, Home Depot, Hubble, Inditex, John Deere, Lockheed Martin Corporation, L'Oreal, Lenovo, LG, LyondellBasell, Monster Beverages, Nathans Famous, Inc, Nike Inc., Nitendo, Northrup Grumman, PACCAR Inc, Rockwell Automation, Ross Stores, Taiwan Semiconductor Manufacturing (TSMC) Company, Somnigroup International (Tempur-Pedic), and TJX.

Sixteen of these companies are year-over-year winners. (There was no report in 2024 due to COVID and the methodology's revamp.) No company met the criteria in nine of the twenty-eight sectors studied.

The results by year in Table 1 are relatively consistent. More companies win in discrete industries than in process and retail..

Recalibrating the Industry's View of Excellence

There is a stark difference between the conventional beliefs of companies believed to be industry top performers and their actual business results. While some companies like Apple, Nike, and L'Oreal are readily accepted supply chain leaders by the industry, more companies on the Supply Chains to Admire list are not recognized easily as leaders.

Supply chain economies of scale are elusive. Small regional players outperform global multi-nationals. For example, Monster Beverages has been a winner for five years, outperforming large beverage companies like Anheuser-Busch, Coca-Cola, and PepsiCo. Church & Dwight outperforms Colgate, Procter & Gamble, and Unilever.

We find industry leaders positively biased toward the performance of large brand companies in the process and retail sectors. While many of these companies were supply chain leaders outperforming their peer groups twenty years ago, today, many underperform against the industry averages. The story of shifts in the market carries lessons for all. Table 2 shares the list of multiple-year winners of the Supply Chains to Admire analysis.

The Supply Chains to Admire methodology is a data-driven analysis less subject to industry bias. The source is public reporting in global markets. We obtain the raw information for the report through a syndicated data provider, Y Charts. The methodology is shared openly. We aim for the Supply Chains to Admire methodology to be a valuable assessment tool for companies of all sizes and regions.

Table 2. Winners for Multiple Years

COMPANY	FREQUENCY	THIS YEAR
Apple	11	Y
L'Oréal	8	Y
TSMC	8	Y
Broadcom	8	N
Nike	8	Y
Lockheed Martin	7	Y
TJX	7	Y
Paccar	7	Y
Ross Stores	6	Y
Dollar General	5	N
Intuitive Surgical	5	Y
Monster Beverages	5	Y
Borg Warner	4	Y
Dollar Tree	4	N
Eastman	4	N
Sleep Number	4	N
AbbVie	3	N
Assa Abloy	3	N
Celanese	3	N
Clorox	3	N
Koninklijke Ahold Delhaize NV	3	N
ResMed	3	N
Toro	3	N

What Should Be Measured?

While the companies vary by year over the eleven years of the analysis, the win rate remains constant at 4-7%. The percentage for this time period is 5.3%.

The path to excellence for supply chain leaders takes four to five years, and the most critical factor is leadership. Our research finds no correlation to performance based on technology or consultant selection. We also see an adverse impact on results for IT standardization and outsourcing.

Supply chain excellence is easier said than explained. The Supply Chains to Admire methodology identifies companies within an industry peer group that drove higher levels of improvement, control, metrics performance, and superior value in public markets during 2015-2024. The analysis tracks year-over-year progress on the metrics: year-over-year growth, operating margin, inventory turns, and Return on Capital Employed (ROCE).

This work aims to move the definition of supply chain excellence from a cost-based focus to align the organization with a balanced scorecard to improve market capitalization. For supply chain leaders to be effective, they need to speak the language of the balance sheet.

WHY OPERATING MARGIN VERSUS TOTAL COST?

A focus on cost throws the supply chain out of balance, increasing inventories. In contrast, an organizational focus on margin helps organizations to better align on channel programs and new product launches.

Cost of Goods Sold is less correlated with market capitalization than operating margin.

Balanced Scorecard to Drive Value

The journey from a focus on functional cost to maximizing shareholder value is a major but needed transition. To understand what metrics, in combination, maximize shareholder value, we worked with the statistics department at Georgia Tech to develop linear regression models for each industry to predict market capitalization. We carefully analyzed collinearity and tested the models through backcasting to select the most important metrics. (The data set was from 1982 to 2019, and the backcasting attempted to predict 2019 using 2011-2018.)

The results show that supply chain matters. Table 3A shows that over 40% of market capitalization value is explainable through a focus on the core metrics of year-over-year revenue growth, operating margin, inventory turns, and Return on Capital Employed (ROCE). We aim to have companies adopt these metrics in a balanced scorecard and work to align supply chain planning to produce value for the firm. This journey requires the rethinking of the functional optimization present in traditional supply chain planning technologies.

Focusing on cost-of-goods versus operating margin reduces the market capitalization potential by 10-50%. As a result, focusing on functional costs sub-optimizes shareholder value. We share this analysis in Figure 3B.

A common mistake is assuming that supply chain excellence is at the center of a simple triangle that trades costs, customer service, and safety stock. While this is a valuable model for calculating safety stock levels, defining supply chain excellence to maximize market capitalization requires analyzing the trade-offs of growth, operating margin (not cost), inventory turns (total inventory turns), and the effectiveness of asset strategies (ROCE).

So, you might ask, why don't we use these linear regression models to determine the Supply Chains to Admire Award Winners? The answer is easy. The supply chain is not linear. The answer is more complex, requiring an analysis of improvement over time, performance against industry potential, control of outcomes, and value delivery. To help us understand these trends, we use orbit charts. This report uses these key metrics of growth, operating margin, inventory turns, and ROCE to analyze 530 companies in 28 industries.

The supply chain is a non-linear, complex system with many moving parts. Market influences define industry potential. Performance benchmarking should always be by peer group against industry potential.

Table 3B. Comparison of Operating Margin versus Cost of Goods Sold in Regression Analysis using Market Capitalization/Employee As An Objective Function

INDUSTRY	Number of Companies	Revenue	Operating Margin	Inventory Turns	ROCE	R^2	Jarque Bera Statistic	Testing (2019)
Apparel Manufacturing	26	X	X			0.45	3.4	0.31
Automotive	18	X	X			0.51	29.9	0.44
Automotive Aftermarket	33	X	X	X	X	0.45	0.4	0.43
Beverage Industry	20		X			0.71	4.6	0.62
B2B Technology	26	X		X		0.30	29.9	0.46
Chemical Industry	37	X	X	X	X	0.48	17.6	0.50
Containers and Packaging	19		X			0.42	0.4	0.38
Diversified Industries	28	X	X		X	0.44	9.4	0.16
Food Manufacturing	31	X	X		X	0.73	30.9	0.44
Medical Device	26	X	X	X		0.49	14.7	0.09
Pharmaceuticals	31	X	X	X		0.32	80.2	0.28
Semiconductor	28	X	X	X	X	0.40	25.8	0.17
Telecommunications	27		X	X		0.80	24.2	0.21

Table 3B. Comparison of Operating Margin versus Cost of Goods Sold in Regression Analysis using Market Capitalization/Employee As An Objective Function

INDUSTRY SEGMENT	R^2 Operating Margin	R^2 Cost of Goods Sold
	...and Inventory Turns Regression Analysis to Market Capitlization/Employee	
Food	0.464	0.170
Pharmaceuticals	0.532	0.361
Chemical	0.601	0.349

Companies Do Not Have Unlimited Potential to Drive Improvement

A common mistake is assuming supply chains have endless potential and that continuous improvement programs will drive substantial improvement. What may be surprising to many leaders is the realization that a continuous improvement program in an industry hammered by market factors may shelter the company from deleterious market impacts, helping the company to tread water. As a result, a strong, continuous improvement program may help a company to report consistent earnings in a declining market.

Programs must be aligned to a balanced scorecard to drive value and continuous improvement. Optimizing costs within a function may reduce the function's costs but increase total costs. Likewise, reductions in the cost of goods may not translate to margin improvements. Companies that drive improvement best take a holistic approach while aligning to what is possible based on industry potential.

Supply chains do not have endless potential. In this research, the boundaries or trade-offs between the metrics are termed the effective frontier. We are deliberate in not naming this the *efficient frontier*. The reason? Many misinformed business executives believe that the most effective supply chain is efficient, operating at the lowest cost per unit. As seen in this report, focusing solely on cost will throw the supply chain out of balance, sub-optimizing market capitalization. Our research shows that only 20% of volume can be managed effectively with a focus on cost.

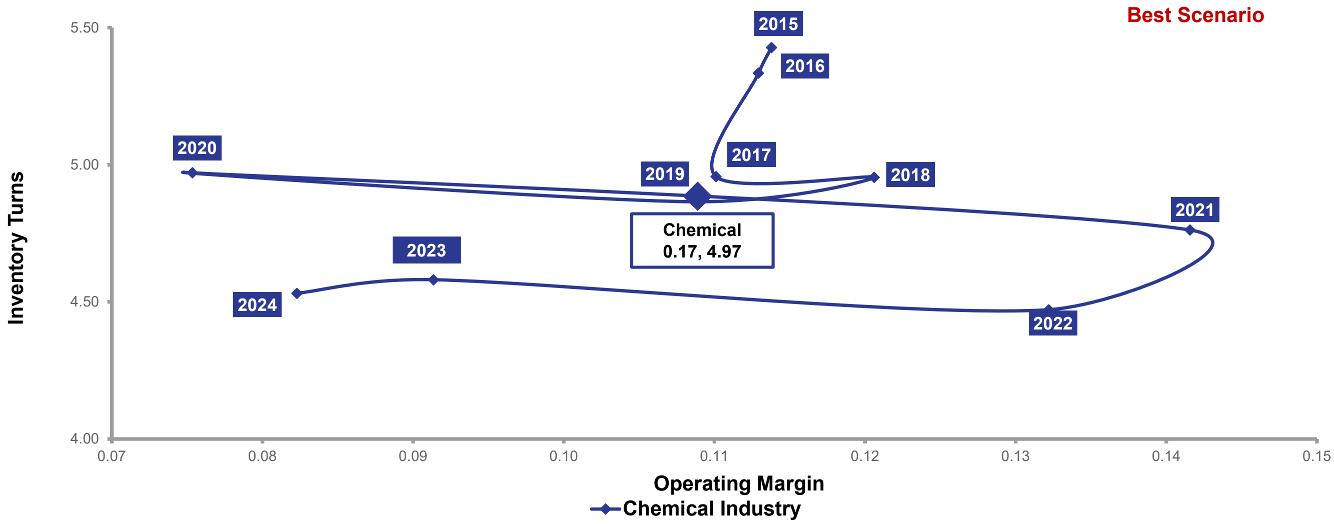
DEMAND SHAPING

The initiation of programs to increase baseline lift including price management, promotinos, distribution incentives, rebates, advertising, and new product launch.

Each industry has a unique pattern. For the period of this report, 54% of industries experienced a decline in operating margin, 82% saw a decrease in inventory turns, and ROCE declined. Industry growth potential declined in 40% of industries. So, a company trying to drive continuous improvement must first understand the market's headwinds to benchmark what is possible.

For example, in the chemical industry, as shown in Figure 2, margin and inventory turns have fallen. While the average is 17% operating margin and 4.97 inventory turns, it is important to understand the pattern. (We openly share industry patterns to help business leaders understand industry potential here.)

Figure 2. Shifts in Industry Potential for the Chemical Industry for the Period of 2015-2024



Many factors drive supply chain potential. Some include:

- Commodity prices.
- Lack of organizational alignment. Corporate politics.
- Unchecked complexity and the increase in the size of the product portfolio.
- Shifts in demand variability with an increase in items that are not forecastable by conventional means.
- A rise in demand shaping programs.
- Growth and complexity of nodes within the distribution network.
- Rise of supplier delivery and quality issues.
- Reliability of factories.
- Data latency and the organization's ability to use data at the speed of business.
- Slowing of transportation modes.
- Increase in governmental compliance legislation.

A common mistake is the belief that progress on supply chain improvement is unlimited rather than bounded by market reality. For this reason, the Supply Chains to Admire report compares each company within a peer group to industry potential.

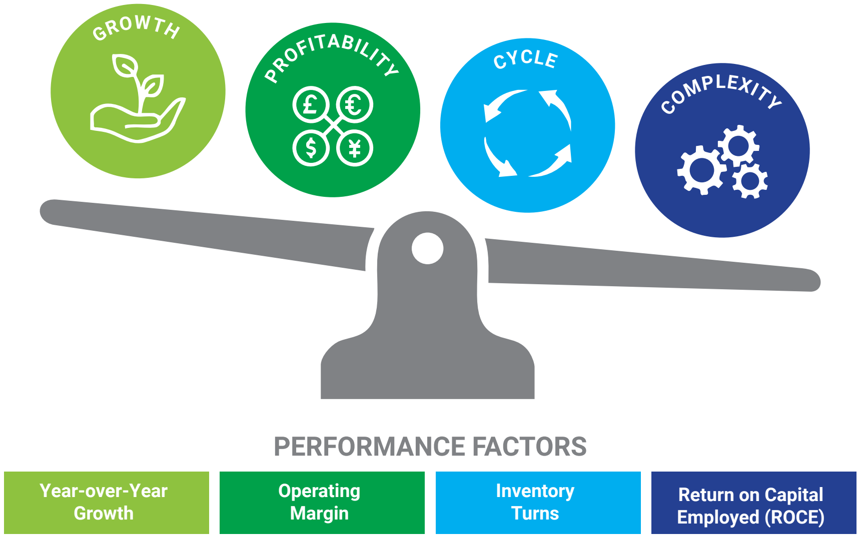
Driving Progress by Conquering the Effective Frontier

Globalization, channel complexity, war, and scarce resources all challenge business resilience: a company's ability to deliver consistent and reliable results despite demand and supply variability.

Globalization increased both complexity and non-linearity. In 2012, Supply Chain Insights worked with Arizona State University to determine the most appropriate metrics to correlate to Market Capitalization. Based on the correlation of data from over 150 metrics for the period of 2006-2012 for more than five hundred companies, we selected the parameters of growth, operating margin, inventory, and Return on Invested Capital (ROIC) for the balanced scorecard analysis. In this report, we replace ROIC with ROCE based on two years of work with the Georgia Tech Statistics Department. Both of these efforts support two facts: the supply chain can be modeled, and that the metrics on the effective frontier are essential to maximize market capitalization.

While we wish to include customer service in the Supply Chains to Admire analysis, no industry standard exists for comparison. Likewise, while we strongly believe in corporate sustainability, we do not feel that any of the current sustainability indexes, due to dependency on self-reported data, accurately reflect company performance.

Figure 3. The Approach: Balanced Scorecard Analysis



The Right Stuff

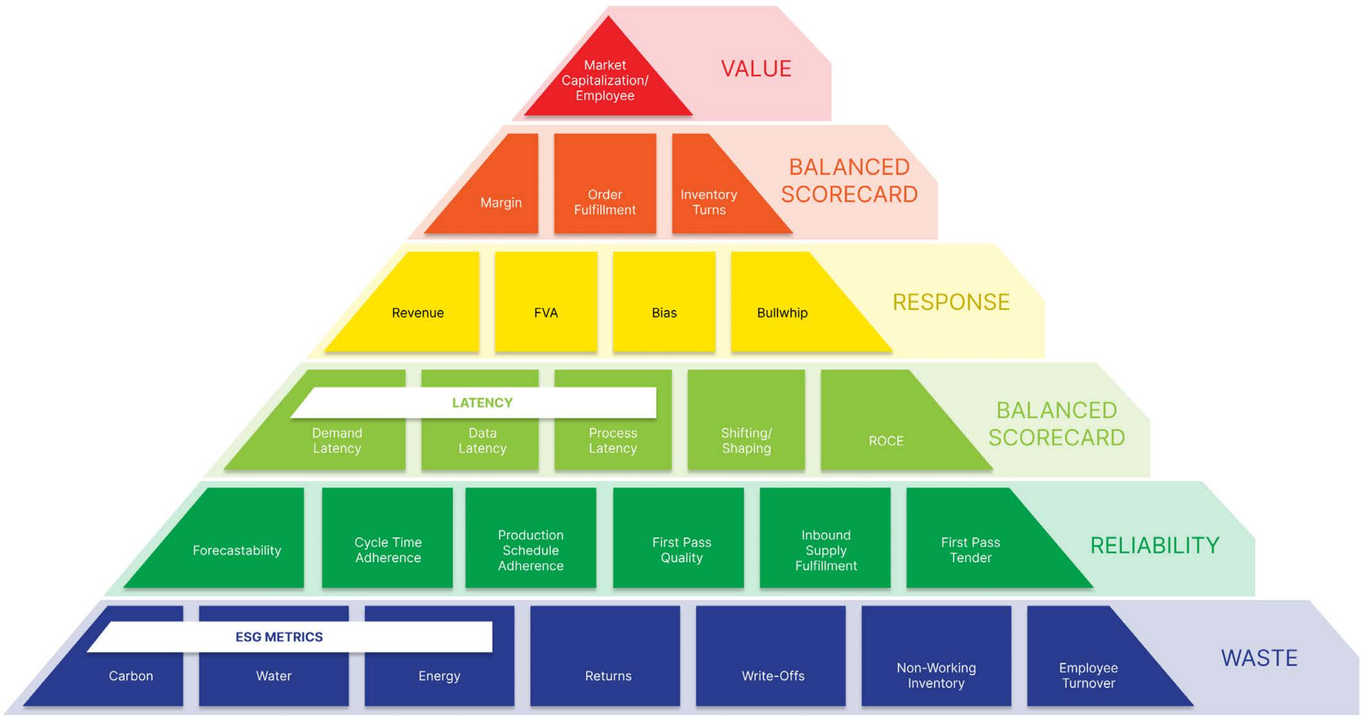
Winning is not magic. Leaders drive higher levels of improvement by focusing on cross-functional process development and organizational alignment. Defining metrics to align the organization to a balanced scorecard is essential. Shown in Figure 4 is an example of a metrics hierarchy to drive value. The organization is aligned with a balanced scorecard.

To optimize performance on the balanced scorecard, functional metrics are defined to drive reliability. In this journey, Forecast Value Added (FVA) replaces error as a goal, the form and function of inventory analysis replace safety stock analysis, schedule reliability replaces OEE, procurement reliability replaces Purchase Price variance, and no function is rewarded solely for functional costs. These shifts are outlined in Table 4.

Here are some guidelines:

- **The Efficient Supply Chain Does Not Create the Greatest Value.** Historically, the focus has been building efficient selling, delivering, making, and sourcing processes. When the organization emphasizes functional efficiency, the supply chain is thrown out of balance, decreasing value.
- **Economy of Scale Is Elusive.** Achieving economies of scale in the supply chain is a challenge. In our analysis, the smaller, regional player consistently outperforms the Global multinational. For example, Monster Beverages outperforms in the beverage sector, and Nathan's hot dogs drive better performance in the restaurant sector.
- **It is easier to Drive Improvement in Growth Markets.** Supply chains perform better in periods of growth than decline. In the words of one of our clients, "We pedal uphill better together than navigating the downward decline."
- **Driving Improvement is Easier than Sustaining Market Leadership.** Supply chain leaders quickly find it easier to drive improvement than sustain performance. Progress requires patience and building capabilities to manage the supply chain as a complex nonlinear system based on a multi-year roadmap. Companies can drive improvement and achieve peer group performance through an infusion of leadership, but performance can quickly shift when management teams change.

Figure 4. Alignment of Functional Metrics to a Balanced Scorecard



- **For Top Performers, the Budget is Never Tightly Integrated to the Operating Plan.** The close coupling of the supply chain to the budget is a barrier to improving the balance sheet. (In contrast, the budget is input but not a constraint for winners.) A worst-case scenario is defining the supply chain as another function within a rigid set of silos. The definition of supply chain finance is more problematic in Europe than in the Americas.

- **Alignment with R&D Innovation is Key to Results.** Smaller, innovative, newer companies focusing on customer value tend to win the Supply Chains to Admire award. Examples of smaller innovative companies winning the award include Intuitive Surgical, Paccar, and TSMC. The retail winners drove excellence through business model innovation.

A characteristic of a true supply chain leader is the ability to drive higher performance levels within a peer group and sustain this competitive advantage over time.

Amazon and Alibaba, the giant e-commerce providers, are conspicuously absent from the list. While we recognize them as supply chain leaders, the Supply Chains to Admire methodology requires a peer group comparison. This is just not possible within this industry: there are too few companies to drive a good peer group for comparison, thus eliminating their inclusion in the analysis.

Table 4. Shifts in Functional Metric Definition

Shifts in Functional Metric Definition	Conventional Thinking	Shifts to Optimize Market Potential
Forecasting	Error and Bias	Forecast Value Added and Bias
Inventory Management	Safety Stock	Targets for Form & Function of Inventory Inventory Value Added
Manufacturing	Operational Equipment Efficiency (OEE)	Schedule Adherence First-Pass Yield
Transportation	Transportation Costs	On-time Delivery Reliability in First-Pass Tender
Procurement	Purchase Price Variance	Reliability and Quality of Supply Minimal Bullwhip

Comparison of Methodologies

Client discussions sparked the development of the Supply Chains to Admire methodology. The industry was frustrated with the Gartner Top 25 approach. Companies wanted a more data-driven approach that reflected industry trends. The concern was that the Gartner Top 25, based 50% on the opinion of analysts and industry leaders, was a popularity contest.

The request was for a data-driven analysis based on corporate financials, allowing a comparison of large and small companies across currencies. The goal was to understand the relative positions of companies within industry peer groups. In Table 5, we share a comparison of the two methodologies.

The Gartner analysis lacks a peer group comparison. As shown in this report, each industry's market drivers and inherent potential differ.

The Gartner methodology biases large branded companies. The analysis shows that 67% of the Gartner Top 25 companies underperform their peer group on growth, 44% on operating margin, and 41% on inventory turns. The blue highlights underperformance, while the yellow highlights mark the companies meeting the criteria for both analyses. In the 2025 analysis, Apple, Lenovo, and L'Oreal are common in these two very different techniques to assess supply chain excellence.

Table 5. Comparison of the Gartner Top 25 to the Supply Chains to Admire

Comparison of Methodologies		
Comparison	**Gartner Top 25**	**Supply Chains to Admire ™**
Focus	Public Manufacturing and Retail Companies from Fortune Global 500 and Forbes 2000 lists. 12$B minimum annual revenue. (roughly 300 companies)	All public companies analyzed by industry peer groups. 530 companies by 28 peer groups. No revenue minimum. There is no limit on the number of winners by peer group. Likewise, there may be no winner by industry.
Analysis	2021-2023	2015-2024
Calculation	**50% Opinion:** (Equally split between analyst and peer voting) **50% Quantitative Analysis:** • **10% of score is Revenue Growth:** (Change in revenue 2022-2021)*50%+(Change in Revenue 2021-2020)*50% • **5% of score is Inventory Turns:** 2022 cost of goods sold / 2022 quarterly average inventory • **15% of the Score is a Weighted Return on Physical Assets (ROPA).** Three-year weighted average. (50% 2022 ROPA, 30% 2021 ROPA and 20% 2020 ROPA). • 20% is Environmental, Social, and Governmental responsibility (3rd party indexes) - 20%	**Improvement:** Top 2/3 ranking on the Supply Chain Index. **Performance**: At or above the industry mean for: • Year-over-year revenue growth. • Operating margin. • Inventory turns. • Return on Invested Capital (ROIC). **Value:** At or above the mean for Price-to-Tangible Book or Market Capitalization. Index Calculations: https://www.slideshare.net/loracecere/sci-summit-2014-math-behind-sc-index?qid=27326733-0325-4ee7-aacd-e2827bd216de&v=&b=&from_search=11
History	20th Year	12th Year

The Role of Complexity

Complexity throws the supply chain out of balance. In business, there is both good and bad complexity. It is analogous to cholesterol. Good complexity increases market share and drives growth with a minimal impact on margin, while bad complexity does not improve share but has a significant detrimental effect on margin.

Leaders actively manage complexity through robust horizontal processes, focusing on revenue management, Sales and Operations Planning (S&OP), new product launch/ innovation (NPI), Corporate Social Responsibility, and Supplier Development. These cross-functional programs align strategy with execution. Through the processes, there is a conscious choice to manage and actively reduce bad complexity through cross-functional processes.

The issue? The reality is sadly out of step with what drives value. Only 1/3 of companies have a supplier development program, and more S&OP processes are out of alignment (65%) than aligned organizationally. New product launches and Corporate Social Responsibility programs usually have grand aspirations but operate in silos.

Due to complexity issues, the gap in performance between process-based and discrete industries has widened over the last decade. We feel this is one of the reasons many process-based companies are regressing on the Supply Chain Metrics That Matter.

A Closer Look at Supply Chains to Admire Results by Industry

This analysis starts by mapping industry trends. Supply chain practices grew in importance as the margins of 85% of the industry sectors regressed over the last decade. Companies cannot drive progress based on traditional process paradigms without redesigning the supply chain.

In many organizations, inventory is a sticky wicket—a political hot potato. At the end of 2022, inventory levels were significantly higher across industries than pre-recession levels in 2007. Today, many companies have burgeoning inventories but lack the right products to ship orders reliably. They are drowning in inventory, decreasing cash-to-cash performance, but have the wrong products to ship orders. The lack of performance in inventory optimization is a significant factor in determining the winners in the Supply Chains to Admire Award process.

Table 7. Inventory Levels by Industry Sector Across Time Periods

Days of Inventory by Industry: Comparison across Years							
Industries	Years						Diffeence (2023 - 2024 vs 2004 - 2006)
	2004 - 2006	2007 - 2008	2009 - 2013	2014 - 2019	2020 - 2022	2023 - 2034	
Semiconductor	61	68	80	91	80	138	77
Pharmaceuticals	155	144	170	195	200	216	61
Beverage	115	119	138	191	164	169	54
Medical Device	110	113	131	143	159	162	52
Automotive Parts	49	55	64	69	83	83	34
Beauty	89	108	116	125	124	121	32
Chemical	62	58	64	80	86	93	31
Household Products	50	51	57	73	67	74	24
Apparel Retail	62	65	66	69	76	82	20
Aerospace & Defense	94	89	97	103	118	113	19
Automotive	35	39	41	45	49	51	16
Food	50	51	56	58	56	60	10
Broadline Retail	65	62	63	66	47	48	-17

Improving The Value of the Firm Through Supply Chain

When I wrote the book Bricks Matter, one of the reviewers asked, "*How do you define value?*" I struggled to answer.

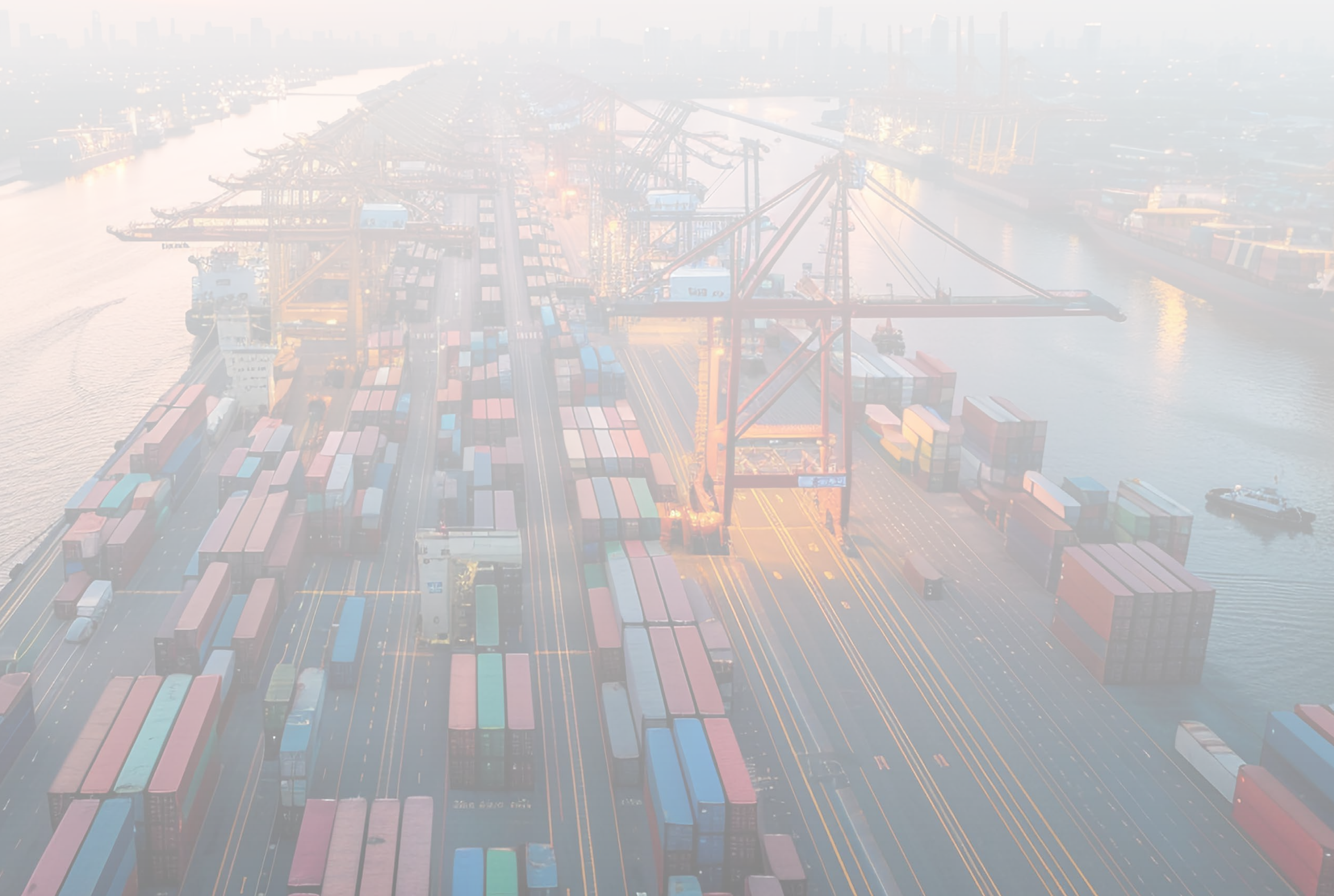
The focus of the traditional supply chain organization is cost management. Saving money does not drive value, and improving cost does not necessarily improve margin. So, as part of this analysis, our goal was to answer the questions, "*What drives value?*" and "*What steps should companies take to improve Price to Book Value?*"

The definition is:

$$\text{Price to Book Value} = \frac{\text{Market Share Price}}{\text{Book Value/Share Outstanding}}$$

Our research finds that companies with strong organizational alignment between supply chain and R&D, operate an effective S&OP process, and drive supplier development programs to improve supplier reliability are more likely to enhance value. These processes have become even more critical to managing the supply chain during the pandemic.

Winning companies have longer tenures of their leadership teams and focus on driving long-term outcomes. They avoid supply chain fads and multiple consulting-based projects and constantly emphasize supply chain excellence.



Recommendations

When benchmarking a supply chain, companies must look at performance and improvement (together) within a peer group over time. There are trade-offs. Companies operating with higher performance levels will struggle with improvement. In contrast, companies with a lower level of performance will drive faster progress rates, but improvement processes do not always drive value. Why? The average global multinational has more than a thousand improvement initiatives . Many are overlapping and conflicting. As a result, there is a need to define a multi-year plan reinforced by cross-functional metrics to drive progress against a strategy.

As supply chain leaders develop strategies and focus on driving balance sheet improvement, we recommend that supply chain teams consider these seven recommendations:

1. **Build a Guiding Coalition to Drive Improvement Based on Industry-Specific Data.** Organizations should benchmark against companies within their industry sector to maximize potential and set goals. Each industry has unique rhythms and cycles, so supply chain excellence analysis needs to be an industry-specific comparison.
2. **Understand the Supply Chain Potential and Orchestrate Trade-offs.** Balanced metrics portfolios drive higher levels of value for the Company. The metrics are nonlinear and tightly coupled. Managing them as a group in a balanced portfolio requires systems thinking. Higher-performance companies use advanced analytics to plan outcomes and design the supply chain.
3. **Drive Horizontal Alignment.** We find that those with the best performance on the Effective Frontier align teams to focus on supply chain finance and translate supply chain processes and strategies into balance sheet results. Holistic organizational thinking is a marked departure from traditional functional thinking, shifting the need for new forms of analytics and reporting. For example, today, while most organizations can easily access functional costs, only 24% of companies can quickly access total costs across the source, make, and deliver together. As a result, it is tough for operational teams to make trade-offs.
4. **Make the Supply Chain an Engine for Growth.** There is a pushback when we present this data to many supply chain teams. Many do not understand how their work can drive growth. Unfortunately, companies in a cost-focused paradigm struggle with significant horizontal organizational alignment gaps between operations and commercial teams. To break the cycle, use this report to highlight the opportunity and take steps to drive growth.
5. **Effectively Manage Complexity.** When we interviewed the leaders in past reports, we heard a consistent theme: Increasing product and customer complexity degrades value. In an organization, there is good complexity and bad complexity. Good complexity drives growth with minimal impact on the performance factors on the Effective Frontier, while bad complexity degrades performance. Maximize the growth opportunity with good complexity and eliminate bad complexity.
6. **Focus on Building Value Networks.** While many of the companies in this report could leverage power in the network to be a powerbroker in the industry to redefine outside-in processes and build effective value chains, 95% of companies accept the limitations of the inside-out supply chain. Over the last decade, only TSMC and Walmart successfully executed value network strategies. In this decade, only Maersk successfully built a value network. The efforts are few and far between. The next frontier of supply chain effectiveness lies in the bi-directional orchestration of process flows with trading partners.
7. **Learn from Other Industries.** Use a Steady Hand and Focused Leadership to Drive Improvement. Over the years, when we have interviewed the Supply Chain to Admire winners and asked, "What do you think drove improvement?" They responded, "The avoidance of fads and a steady focus on supply chain strategy."

The Story of Supply Chains to Admire award winners is not a story of consultants driving a project for change transformation or technology implementation. Instead, it is a story of supply chain leadership driven by a focused internal team over many years.

[1] https://www.slideshare.net/loracecere/driving-supply-chain-excellence18june2015final

Conclusion

Supply chain excellence does not just "*happen*." Progress requires moving past "end-to-end" supply chain excellence buzzwords to drive cross-functional programs focused on balance sheet improvements. Success requires teams to focus over many years based on a multi-year roadmap with a clear definition of supply chain strategy. Higher levels of performance require leadership, patience, and organizational alignment.

This report aims to provide feedback to leadership teams to help them better align supply chain programs with corporate finance efforts to drive improved shareholder value. It recognizes 5.3% of companies creating value while improving and outperforming on the Supply Chain Metrics That Matter against their industry peer group. Please join us in celebrating the achievements of twenty-eight winners.

Appendix

Analysis by Industry

Here, we share the individual analyses by industry peer groups to help the reader understand the data behind this report.

Companies are listed in alpha order within an industry peer group. Each chart enables a quick assessment of revenue, control, improvement, performance, and value.

In Figures 7A-7C, we share the improvement index cut-off information to understand improvement. As outlined in the methodology, the Supply Chain Index measures improvement. Based on performance, companies are stack ranked on orbit charts at the intersection of operating margin and inventory turns. The performance criteria establishes which companies are driving improvement over 2/3 of the industry sector on the orbit charts at this metrics intersection. The Supply Chain Index cut-off in Tables 7A-7C allows quick reference to determine who met this criterion.

Table 7A. Retail Industry Improvement Cut-off Information

RETAIL	Total	Supply Chain Index Cut-off	Winners	Winners by Name
Broadline Retail	15	10	2	Ross Stores, TJX
Drug Retail	6	4	0	
Food Retail	12	8	0	
Home Improvement Retail	5	3	1	
Restaurants	19	13	1	Nathans Famous Inc
Retail Apparel	18	12	0	Home Depot
SUMMARY	**75**		**4**	

Table 7B. Discrete Industry Improvement Cut-off Information

PROCESS	Total	Supply Chain Index Cut-off	Winners	Winners by Name
Beverages	20	15	1	Monster Beverages
Chemical	38	29	3	LyondellBassell, Air Products, and CF Industries
Consumer Nondurables	11	7	1	Church & Dwight
Containers and Packaging	17	13	0	
Food	32	21	0	
Personal Products	11	7	2	L'Oreal, Biersdorf
Pharmaceuticals	32	21	0	
SUMMARY	**161**		**7**	

Table 7C. Process Industry Improvement Cut-off Information

PROCESS	Total	Supply Chain Index Cut-off	Winners	Winners by Name
Aerospace and Defense	25	17	2	Lockheed Martin, Northrup Grumman
Apparel	28	19	2	Inditex and Nike
Automotive	18	12	0	
Automotive Aftermarket	33	22	1	BorgWarner
B2B Technology	26	17	4	Apple, Lenovo, LG, and Nintendo
Contract Manufacturing	8	5		
Consumer Durables	18	12	1	Armstrong World Industries
Diversified Industries	28	19	2	Hubell and Rockwell Automation
Furniture	14	9	1	Somnigroup International Inc (used to be Tempur Sealy)
Medical Device	27	18	1	Intuitive Surgical
Semiconductor	29	19	1	TSMC
Tires	4	3	0	
Telecommunications	18	12	0	
Trucks and Heavy Equipment	18	12	2	Paccar and John Deere
SUMMARY	**294**		**17**	

Retail Overview

In this analysis, we evaluate 78 companies in seven retail sectors. In the report, four companies—Koninklijke Ahold Delhaize NV (Ahold), Ross Stores, TJX, and Urban Outfitters—qualify for the Winner's Circle. There are no winners in the other retail sectors. Shift from restaurants to food retail, less spending in do-it-yourself stores, Broadline retail shift to e-commerce, 30 percent growth in drug

Table 8. Retail Overview

RETAIL	NUMBER OF COMPANIES	AVERAGE REVENUE (M$)	YEAR-OVER-YEAR GROWTH	INVENTORY TURNS	OPERATING MARGIN	RETURN ON INVESTED CAPITAL	FUNDAMENTAL SCORE	PRICE TO BOOK VALUE
		AVERAGE FOR 2015-2024						
Apparel	18	$ 10,728	5.9%	4.46	8.5%	17.6%	4	4.64
Broadline	15	$ 81,329	4.7%	5.39	6.0%	6.0%	4	4.19
Drug	6	$ 90,735	8.0%	7.57	7.1%	18.1%	4	4.50
Home Improvement	5	$ 48,393	5.2%	3.36	8.5%	22.4%	4	4.66
Grocery	12	$ 51,938	3.7%	12.51	3.0%	10.4%	4	2.41
Restaurants	19	$ 7,332	5.9%	85.42	14.5%	7.7%	4	5.78
AVERAGES		**$ 48,409**	**5.6%**	**19.78**	**7.9%**	**13.7%**	**4**	**4.36**

Apparel Retail

The Apparel Retail sector has two Supply Chain to Admire Award winners for 2023: Ross Stores for the seventh year, and TJX for the eighth year. Prior winner Urban Outfitters falls out of the winner's circle for a less effective job of managing capital.

Table 9. Retail Sector Averages for Apparel Retail for the Period of 2015-2024

INDUSTRY: Retail-Apparel									
COMPANY INFORMATION			IMPROVEMENT	PERFORMANCE				VALUE	
NAME	2024 REVENUE	SUPPLY CHAIN FUNDAMENTAL SCORE	SUPPLY CHAIN INDEX	GROWTH (Year Over Year Revenue)	INVENTORY TURNS	OPERATING MARGIN	RETURN ON CAPITAL EMPLOYED	PRICE TO BOOK	MARKET CAPITALIZIATION PER EMPLOYEE
2015 - 2024									
Abercrombie & Fitch Co	$ 4,281	5	5	0.9%	3.17	4.1%	7.5%	2.20	50,583
American Eagle Outfitters	$ 5,262	3	12	5.3%	6.20	7.4%	17.3%	2.45	80,795
ASOS PLC	$ 3,665	3	18	9.8%	2.85	1.0%	11.4%	7.30	1,151,417
Carter`s, Inc	$ 2,844	5	13	0.2%	3.16	11.7%	18.9%	4.60	223,900
Designer Brands Inc	$ 3,075	2	17	4.4%	3.68	3.2%	7.8%	1.73	117,046
Dick's Sporting Goods Inc	$ 12,984	5	10	7.9%	3.23	8.2%	21.0%	3.30	136,461
Foot Locker	$ 8,168	4	14	2.5%	4.25	9.1%	17.8%	1.90	119,075
Gap Inc	$ 14,889	3	15	-0.4%	4.65	5.3%	15.5%	2.93	74,344
Guess?	$ 2,777	4	2	2.1%	3.71	6.0%	8.6%	2.10	102,048
J.Jill Inc	$ 605	4	1	4.9%	1.73	5.4%	3.0%	1.68	42,757
L Brands Inc	$ 7,429	3	4	-0.2%	5.81	18.0%	27.7%	0.00	160,322
Lululemon Athletica inc	$ 9,619	6	3	20.1%	3.39	20.5%	37.6%	13.49	1,277,889
Marks and Spencer Group PLC	$ 16,390	5	8	-1.2%	8.24	5.2%	7.1%	1.67	81,485
Nordstrom	$ 14,693	4	15	2.9%	4.80	4.1%	11.4%	8.13	97,053
Ross Stores Inc	$ 20,377	4	6	8.4%	6.27	11.8%	38.3%	10.59	379,336
Tapestry Fashion Co	$ 6,671	3	8	4.2%	2.53	14.0%	13.5%	4.09	568,741
TJX Companies Inc	$ 54,217	4	10	8.3%	6.12	10.1%	36.7%	13.37	248,580
Urban Outfitters	$ 5,153	5	7	5.8%	6.42	7.5%	15.3%	2.07	132,182
MEAN WITH OUTLIERS	**$ 10,728**			**4.8%**	**4.46**	**8.5%**	**17.6%**	**4.64**	**280,223**
MEAN WITHOUT OUTLIERS				**4.8%**	**4.46**	**8.5%**	**17.6%**	**4.64**	**163,419**

Broadline Retail

While previous winners Dollar General placed for five years and Dollar General for four years in the Winners Circle, there has been no Supply Chains to Admire winner for the past three years for the Broadline Retail Sector. Managing inventory in volatile times is a challenge.

Of note is that Walmart and Target, winners in 2016 and 2015, no longer lead this peer group. Each fails due to the focus on singular metrics. When comparing 2024 to 2015, margins declined by 1% while inventory turns decreased by 10%.

Table 10. Broadline Retail Sector Averages for 2015-2024

INDUSTRY: Retail Broadline									
COMPANY INFORMATION			IMPROVEMENT	PERFORMANCE				VALUE	
NAME	2024 REVENUE	SUPPLY CHAIN FUNDAMENTAL SCORE	SUPPLY CHAIN INDEX	GROWTH (Year Over Year Revenue)	INVENTORY TURNS	OPERATING MARGIN	RETURN ON CAPITAL EMPLOYED	PRICE TO BOOK	MARKET CAPITALIZIATION PER EMPLOYEE
2015 - 2024									
Best Buy Co	$ 43,452	3	10	0.9%	6.42	4.6%	29.0%	5.21	164,373
Big Lots	$ 4,722	5	2	-0.5%	3.45	1.9%	15.2%	1.85	43,267
Burlinton Stores Inc	$ 9,727	2	11	9.7%	3.86	5.5%	15.7%	23.41	215,068
Costco Wholesale	$ 254,453	5	7	8.6%	11.67	3.3%	23.5%	9.69	595,483
Dillard's Inc	$ 6,874	4	4	1.8%	3.13	7.6%	20.1%	2.03	101,520
Dollar General Corp	$ 38,692	5	1	8.4%	4.32	8.8%	18.2%	5.47	238,114
Dollar Tree Stores	$ 30,604	2	14	16.4%	4.53	7.3%	11.5%	3.58	133,142
Kohl's	$ 17,476	3	6	-0.4%	3.47	5.7%	9.3%	1.33	62,651
Macy's	$ 23,866	4	3	-0.4%	3.13	5.6%	7.1%	1.82	69,602
Office Depot Inc	$ 6,990	4	9	-5.7%	7.34	3.6%	8.8%	1.17	54,732
Pricesmart Inc	$ 4,914	5	12	7.0%	8.13	4.4%	15.8%	2.88	258,395
Target	$ 107,412	3	15	4.4%	6.01	6.1%	18.2%	4.94	155,515
Tractor Supply Co	$ 14,883	5	4	10.3%	3.43	9.8%	28.5%	9.37	440,936
WalMart	$ 648,125	6	8	3.2%	8.48	4.4%	14.9%	4.63	144,960
Williams-Sonoma Inc	$ 7,751	4	13	6.2%	3.43	11.8%	35.1%	4.72	312,268
MEAN WITH OUTLIERS	**$ 81,329**	**4**		**4.7%**	**5.39**	**6.0%**	**18.1%**	**5.47**	**199,335**
MEAN WITHOUT OUTLIERS				**4.7%**	**5.39**	**6.0%**	**18.1%**	**4.19**	**199,335**

Drug Retail

For the past six years, there have been no drug retail supply chains to Admire Winners. Prior award winners included CVS and Sun Drug.

Companies subconsciously traded margin for cash. Over the last decade, the overall industry performance declined. When we compare 2015 to 2024, we find that the operating margins are flat while inventory turns declined by 12%.

Table 11. Drug Retail Sector Averages for the Period of 2015-2024

INDUSTRY: Retail-Drug									
COMPANY INFORMATION			IMPROVEMENT	PERFORMANCE				VALUE	
NAME	2024 REVENUE	SUPPLY CHAIN FUNDAMENTAL SCORE	SUPPLY CHAIN INDEX	GROWTH (Year Over Year Revenue)	INVENTORY TURNS	OPERATING MARGIN	RETURN ON CAPITAL EMPLOYED	PRICE TO BOOK	MARKET CAPITALIZIATION PER EMPLOYEE
2015 - 2024									
CVS Pharmacy	$ 372,809	5	1	10.6%	12.53	4.9%	8.9%	1.73	338,207
PetMed Express	$ 281	3	6	2.1%	7.76	10.6%	27.0%	3.96	2,308,064
Raia Drogasil	$ 7,244	3	3	9.7%	3.58	5.7%	16.9%	7.54	243,617
Sundrug Company Ltd	$ 5,210	5	3	1.8%	6.51	5.9%	20.1%	2.09	422,108
Ulta Beauty Inc	$ 11,207	4	2	16.3%	3.58	13.2%	33.8%	9.64	446,103
Walgreens Boots Alliance	$ 147,658	4	3	7.3%	11.45	2.0%	4.7%	2.05	148,929
MEAN WITH OUTLIERS	**$ 90,735**	**4**		**8.0%**	**7.57**	**7.1%**	**18.6%**	**4.50**	**651,172**
MEAN WITHOUT OUTLIERS				**8.0%**	**7.57**	**7.1%**	**18.6%**	**4.50**	**319,793**

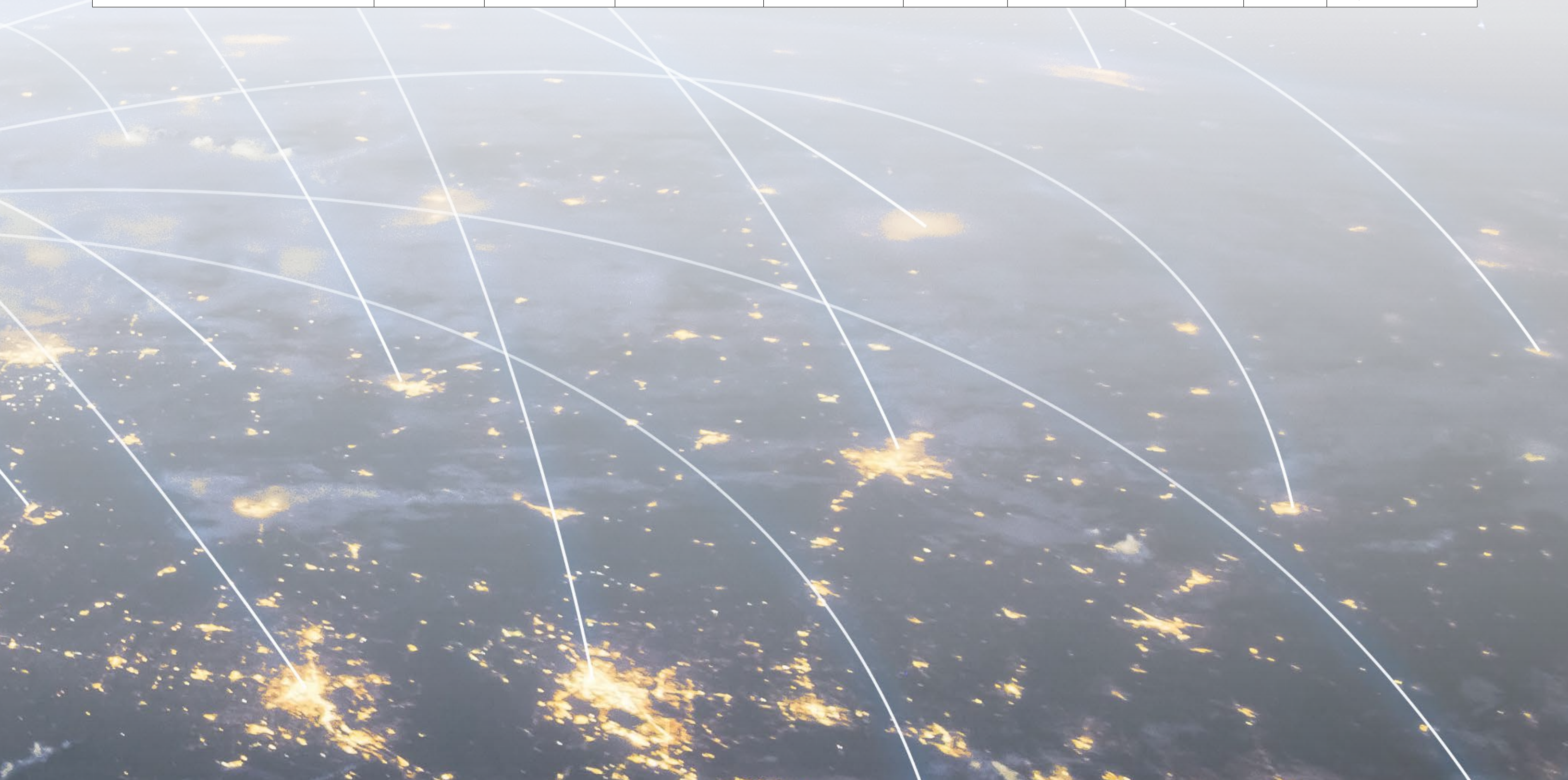
Grocery Retail

In 2023, Ahold placed in the Winner's Circle for the fourth year. Today, no grocery retail company is a winner. The problem is rising above the pack in capital management.

When we compare 2014 to 2025, margins are flat, and inventory has improved by 1%.

Table 12. Grocery Retail Sector Averages for the Period of 2015-2024

INDUSTRY: Retail-Food									
COMPANY INFORMATION			IMPROVEMENT	PERFORMANCE				VALUE	
NAME	2024 REVENUE	SUPPLY CHAIN FUNDAMENTAL SCORE	SUPPLY CHAIN INDEX	GROWTH (Year Over Year Revenue)	INVENTORY TURNS	OPERATING MARGIN	RETURN ON CAPITAL EMPLOYED	PRICE TO BOOK	MARKET CAPITALIZIATION PER EMPLOYEE
2015 - 2024									
Alberston Companies Inc	$ 79,238	2	9	18.3%	10.03	1.3%	5.7%	3.43	15,421
Carrefour	$ 94,457	5	10	-0.6%	9.03	2.7%	5.2%	1.29	41,708
Dairy Farm International	$ 8,869	3	12	-2.0%	8.20	3.4%	11.5%	5.64	32,524
Empire Co Ltd	$ 22,757	4	3	1.6%	13.93	2.7%	5.7%	1.82	91,250
Koninklijke Ahold Delhaize NV	$ 96,715	4	6	8.8%	14.43	3.3%	9.5%	1.91	78,669
Metro AG	$ 21,220	5	5	6.3%	11.71	6.4%	15.6%	2.71	159,622
Pick N Pay	$ 5,998	4	4	-0.2%	10.96	1.3%	20.5%	0.00	870
Sainsbury	$ 40,945	3	2	0.7%	17.00	2.0%	4.4%	0.80	51,684
Shoprite Supermarkets	$ 12,847	5	6	3.0%	6.52	5.1%	22.5%	4.52	47,922
Tesco PLC	$ 85,380	3	11	-1.2%	23.37	2.2%	2.9%	1.78	61,564
The Kroger Co	$ 150,039	5	6	4.4%	14.66	2.5%	12.8%	3.62	68,338
Weis Markets Inc	$ 4,792	5	3	5.7%	10.32	3.0%	8.5%	1.37	67,378
MEAN WITH OUTLIERS	**$ 51,938**	**4**		**3.7%**	**12.51**	**3.0%**	**10.4%**	**2.41**	**59,746**
MEAN WITHOUT OUTLIERS				**3.7%**	**12.51**	**3.0%**	**10.4%**	**2.41**	**55,477**



Home Improvement Retail

For the period, Home Depot is the Supply Chain to Admire Winner. This is the first time in the history of the analysis that we place someone from Home Improvement Retail in the Winner's Circle.

When 2015 is compared to 2024, margins fell by 1% while growth fell by 13%. Inventory turns decreased slightly.

Table 13. Home Improvement Retail Sector Averages for the Period of 2015-2024

INDUSTRY: Retail-Home Improvement									
COMPANY INFORMATION			IMPROVEMENT	PERFORMANCE				VALUE	
NAME	2024 REVENUE	SUPPLY CHAIN FUNDAMENTAL SCORE	SUPPLY CHAIN INDEX	GROWTH (Year Over Year Revenue)	INVENTORY TURNS	OPERATING MARGIN	RETURN ON CAPITAL EMPLOYED	PRICE TO BOOK	MARKET CAPITALIZIATION PER EMPLOYEE
2015 - 2024									
American Woodmark Corporation	$ 1,848	3	3	10.3%	12.41	7%	13.2%	2.66	154,067
Haverty	$ 723	2	5	0.3%	3.61	6%	13.0%	1.65	154,351
Lowe's Companies Inc	$ 86,377	5	4	5.2%	3.82	10%	31.2%	11.11	315,381
The Home Depot Inc	$ 152,669	5	1	7.0%	4.90	14%	47.2%	144.61	565,416
Tile Shop Holdings, Inc.	$ 347	5	1	3.3%	1.11	5%	7.7%	3.21	289,066
MEAN WITH OUTLIERS	**$ 48,393**	**4**		**5.2%**	**5.17**	**9%**	**22.4%**	**32.65**	**295,656**
MEAN WITHOUT OUTLIERS				**5.2%**	**3.36**	**9%**	**22.4%**	**4.66**	**295,656**

Restaurants

In this period, Nathan's Famous Inc. is the Supply Chains to Admire Award Winner. Growth declines post COVID, but the sector has matured with a slight increase in margin and inventory turns.

Table 14. Restaurant Sector Averages for the Period of 2015-2024

INDUSTRY: Restaurants									
COMPANY INFORMATION			IMPROVEMENT	PERFORMANCE				VALUE	
NAME	2024 REVENUE	SUPPLY CHAIN FUNDAMENTAL SCORE	SUPPLY CHAIN INDEX	GROWTH (Year Over Year Revenue)	INVENTORY TURNS	OPERATING MARGIN	RETURN ON CAPITAL EMPLOYED	PRICE TO BOOK	MARKET CAPITALIZIATION PER EMPLOYEE
2015 - 2024									
BJ's Restaurants Inc	$ 1,357	4	16	6.3%	84.88	2.2%	7.1%	2.70	40,707
Brinker International Inc	$ 4,415	6	14	4.4%	37.25	7.1%	3.9%	4.47	35,385
Cheesecake Factory Inc	$ 3,582	3	10	7.2%	34.39	5.1%	7.3%	4.70	48,859
Chipotle's Mexican Grill Inc	$ 11,314	5	7	11.1%	189.30	10.7%	12.4%	14.37	345,441
Cracker Barrel Old Country Store Inc	$ 3,471	4	17	3.0%	12.44	6.6%	3.0%	5.33	42,120
Darden Restaurants Inc	$ 11,390	5	2	6.7%	30.68	9.4%	6.4%	6.87	76,772
Denny's Corp	$ 452	2	0	2.2%	138.19	11.6%	2.6%	0.00	167,463
Domino's Pizza Enterprises Ltd	$ 4,706	3	10	9.2%	40.61	17.8%	9.7%	0.00	945,603
Jack in the Box Inc	$ 1,571	3	12	1.8%	252.11	19.3%	2.5%	16.72	253,084
McDonald's Corp	$ 25,920	5	7	-0.2%	198.99	39.6%	-0.6%	1.51	836,402
Nathan's Famous Inc	$ 139	4	1	7.4%	114.69	26.1%	8.0%	0.00	1,653,700
Papa John's International	$ 2,059	4	14	2.8%	48.89	6.2%	4.2%	7.36	155,917
Post Holdings inc	$ 7,923	4	3	15.4%	7.14	9.8%	27.4%	1.40	414,382
Red Robin Gourmet Burgers Inc	$ 1,249	2	18	2.2%	30.76	-0.2%	3.9%	1.58	15,099
Restaurant Brands International	$ 8,406	4	6	31.8%	28.73	34.3%	30.2%	7.63	2,543,680
Starbucks Corp	$ 36,176	4	13	8.6%	12.21	14.9%	9.6%	11.09	304,650
Texas Roadhouse Inc	$ 5,373	5	3	13.7%	100.68	7.5%	13.3%	5.59	77,047
Wendy's Co	$ 2,246	5	5	2.1%	241.43	17.5%	0.1%	8.92	281,010
Yum Brands Inc	$ 7,549	4	19	1.6%	19.64	29.8%	-4.1%	2.42	741,412
MEAN WITH OUTLIERS	**$ 7,332**	**4**		**7.2%**	**85.42**	**14.5%**	**7.7%**	**5.40**	**472,565**
MEAN WITHOUT OUTLIERS				**5.9%**	**85.42**	**14.5%**	**7.7%**	**5.78**	**357,503**

Discrete Industry Overview

Peer groups within the discrete industry are configure-to-order, make-to-order, or assemble-to-order manufacturing-centric businesses. The focus is on assembly and material management, while discussions focus on work-in-process inventories and backorder management. These industries have a strong dependency on outsourced manufacturing, buoying ROIC.

In these industries, historically, supply chain leadership focused on sourcing excellence. Table 15 shows the cut-off for each sector for the Supply Chain Index and details of progress in the discrete industries.

Table 15. Overview of the Discrete Industry for the Period of 2015-2024

DISCRETE	NUMBER OF COMPANIES	AVERAGE REVENUE (M$)	YEAR-OVER-YEAR GROWTH	INVENTORY TURNS	OPERATING MARGIN	RETURN ON INVESTED CAPITAL	FUNDAMENTAL SCORE	PRICE TO BOOK VALUE
		AVERAGE FOR 2015-2024						
Aerospace & Defense	25	$ 21,499	4.2%	4.03	8.0%	9.7%	4	2.37
Apparel	28	$ 11,876	4.7%	2.65	9.8%	14.3%	4	4.26
Automotive Aftermarket	33	$ 12,498	3.8%	6.82	9.7%	10.9%	4	2.11
Automotive	18	$ 111,838	2.3%	6.66	5.9%	9.2%	4	1.08
B2B Technologies	26	$ 44,781	0.4%	5.43	0.0%	7.5%	4	2.00
Consumer Durables	18	$ 13,959	1.6%	4.24	15.9%	10.1%	4	2.57
Contract Manufacturing	8	$ 9,618	3.9%	4.86	4.4%	8.2%	4	1.60
Diversified Industries	28	$ 14,887	1.8%	4.36	13.4%	12.1%	4	3.67
Furniture	14	$ 1,982	3.0%	5.98	6.2%	9%	4	2.11
Medical Device	26	$ 9,067	6.5%	2.36	18.2%	12.4%	4	4.16
Semiconductor	29	$ 17,800	8.9%	4.09	16.7%	13.6%	4	4.32
Telecommunications	18	$ 23,213	4.7%	9.26	11.6%	9.9%	4	2.17
Tires	4	$ 20,081	0.2%	6.95	7.7%	7.4%	4	1.30
Trucks and Heavy Equipment	18	$ 25,566	4.2%	3.35	8.8%	11.3%	4	1.90
Averages		**$ 24,190**	**3.6%**	**5.07**	**9.7%**	**10.4%**	**4**	**2.54**

Aerospace and Defense Industry

For 2025, Lockheed Martin and Northrup Grumman place in the winner circle for three consecutive years. With investment in war, growth increased 12% while operating margin declined by 3% and inventory turns and ROCE showed a slight decline.

Table 16. Industry Averages for the Aerospace Sector for the Period of 2015-2024

INDUSTRY: Aerospace & Defense									
COMPANY INFORMATION			IMPROVEMENT	PERFORMANCE				VALUE	
NAME	2024 REVENUE	SUPPLY CHAIN FUNDAMENTAL SCORE	SUPPLY CHAIN INDEX	GROWTH (Year Over Year Revenue)	INVENTORY TURNS	OPERATING MARGIN	RETURN ON CAPITAL EMPLOYED	PRICE TO BOOK	MARKET CAPITALIZIATION PER EMPLOYEE
2015 - 2024									
AAR Corp	$ 2,319	3	25	3.7%	2.92	4.3%	5.5%	1.51	273,764
AIRBUS Group	$ 74,931	3	16	0.1%	1.95	4.6%	6.6%	9.35	652,538
Astronics	$ 795	4	14	3.8%	3.40	3.0%	4.4%	2.38	289,326
BAE Systems	$ 33,628	6	15	3.1%	8.12	9.3%	11.4%	3.79	312,653
BOEING	$ 66,517	2	23	-2.1%	1.11	-1.7%	3.6%	76.30	895,709
Bombadier	$ 8,665	2	5	-5.6%	2.28	3.9%	-0.1%	0.00	132,396
BWX Technologies	$ 2,704	4	24	6.5%	0.00	14.5%	21.2%	13.66	813,409
Ducommun	$ 787	4	8	1.2%	3.88	6.1%	5.9%	1.42	215,487
Embraer	$ 6,395	2	11	7.3%	1.72	3.0%	2.4%	1.16	182,216
General Dynamics	$ 47,716	6	7	4.6%	4.79	11.6%	15.3%	3.81	536,703
Heico	$ 3,858	5	12	13.8%	2.54	20.9%	14.5%	6.31	1,920,896
Hexcel Corp	$ 1,903	5	9	1.6%	4.65	12.6%	10.5%	3.54	866,637
Huntington Ingalls Industries	$ 11,535	5	2	5.3%	43.96	8.4%	14.5%	4.08	206,806
L3 Technologies	$ 21,325	3	3	18.5%	8.37	12.5%	7.8%	3.01	881,441
Lear Corp	$ 23,306	4	13	3.1%	13.96	5.3%	14.8%	2.20	53,556
Leonardo SPA	$ 19,226	5	18	1.7%	3.02	6.3%	7.3%	1.16	143,337
Lockheed Martin	$ 71,043	6	1	6.0%	15.28	12.5%	20.5%	25.04	849,299
Magellan Aerospace Corp	$ 942	4	18	1.9%	3.72	6.9%	7.9%	1.09	201,081
National Presto Industries	$ 388	6	16	1.4%	2.08	14.0%	13.3%	1.81	639,554
Northrop Grumman	$ 41,033	4	10	5.7%	32.06	11.1%	16.0%	5.76	653,721
Raytheon	$ 80,738	2	21	5.5%	4.65	9.2%	6.9%	1.90	500,138
Spirit AeroSystems Holdings	$ 6,317	2	21	2.6%	3.97	-1.6%	1.5%	3.83	356,234
TAT Technologies	$ 152	4	4	8.0%	1.84	1.2%	2.5%	0.95	152,437
TransDigm Group	$ 7,940	4	20	13.4%	1.92	40.4%	14.5%	0.00	2,219,258
Woodward	$ 3,324	5	6	5.9%	3.73	11.4%	10.6%	3.48	723,114
MEAN WITH OUTLIERS	**$ 21,499**	**4**		**4.7%**	**7.04**	**9.2%**	**9.6%**	**7.10**	**586,868**
MEAN WITHOUT OUTLIERS				**4.2%**	**4.03**	**8.0%**	**9.7%**	**2.37**	**605,349**

Apparel

Nike places in the winner's circle for the eight consecutive year while Inditex (parent company of ZARA) enters the winner's circle for the second consecutive year.

With the many ups and downs through the pandemic, margins and growth declined by 1%, while inventory turns declined by 29 % over the ten-year period and ROCE declined by 5%.

Table 17. Apparel Sector Evaluation for the Period 2015-2024

INDUSTRY: Apperal Manufacturers									
COMPANY INFORMATION			IMPROVEMENT	PERFORMANCE				VALUE	
NAME	2024 REVENUE	SUPPLY CHAIN FUNDAMENTAL SCORE	SUPPLY CHAIN INDEX	GROWTH (Year Over Year Revenue)	INVENTORY TURNS	OPERATING MARGIN	RETURN ON CAPITAL EMPLOYED	PRICE TO BOOK	MARKET CAPITALIZIATION PER EMPLOYEE
2015 - 2024									
Adidas	$ 25,633	3	22	3.5%	2.56	7.1%	15.6%	6.11	717,524
Bosideng International	$ 3,247	3	8	10.7%	2.40	13.1%	14.6%	1.55	270,186
Capri Holdings Ltd	$ 5,170	3	15	6.1%	2.55	16.9%	26.3%	3.28	556,457
Colombia Sportswear	$ 3,369	5	18	5.4%	2.45	10.8%	15.8%	2.98	678,735
Crocs	$ 4,102	2	26	15.2%	3.95	13.5%	23.1%	60.67	645,658
Deckers Outdoors	$ 4,288	6	4	11.0%	3.53	14.2%	26.0%	5.38	1,726,931
Fossil Group	$ 1,145	4	17	-10.0%	2.61	1.4%	-3.9%	0.95	52,104
Gildan Activewear	$ 3,271	3	9	4.9%	2.18	14.7%	14.7%	3.42	133,230
Hanes Brands	$ 3,507	4	14	-2.7%	2.24	9.3%	10.5%	13.96	90,073
Hennes & Mauritz AB	$ 22,374	5	12	0.3%	2.51	7.8%	21.5%	5.48	264,211
Hugo Boss	$ 4,662	2	28	5.0%	1.58	8.8%	18.7%	3.89	280,327
Inditex	$ 38,959	4	3	6.9%	4.36	16.3%	25.9%	6.94	5,238,075
Interface Inc	$ 1,316	4	25	3.2%	3.20	9.6%	10.3%	2.75	269,825
Levi Strauss	$ 6,355	5	1	3.7%	2.33	9.1%	12.6%	2.69	257,488
Moet Louis Vuitton	$ 91,657	4	19	9.5%	1.25	22.1%	16.6%	5.37	1,689,419
Moncler	$ 3,365	5	9	14.6%	1.43	28.9%	27.7%	6.64	2,831,879
Nike	$ 51,362	5	23	6.5%	3.56	12.8%	25.1%	12.38	1,808,633
Puma	$ 9,543	4	19	9.7%	2.53	6.1%	13.5%	4.07	641,387
PVH	$ 9,218	5	6	2.1%	2.69	7.2%	6.0%	1.37	217,676
Ralph Lauren	$ 6,631	2	21	0.1%	2.80	10.0%	10.3%	3.07	373,008
Skechers	$ 8,969	3	26	14.9%	2.48	9.0%	16.1%	2.46	469,655
Steve Madden	$ 2,283	4	5	7.5%	6.78	10.8%	21.8%	4.01	836,685
Under Armour	$ 5,702	3	11	7.2%	2.58	4.7%	7.1%	2.99	347,316
Unifirst	$ 2,427	6	12	5.8%	3.97	10.2%	10.3%	1.94	234,377
Vera Bradley	$ 471	5	23	-0.8%	1.93	4.7%	7.1%	1.13	135,792
VF Corp	$ 10,455	4	7	-0.2%	3.05	9.7%	10.0%	6.23	375,069
Wacoal Holdings Corp	$ 1,297	5	15	-3.7%	0.99	3.2%	2.9%	0.86	70,606
Wolverine World Wide	$ 1,755	4	2	-3.2%	3.91	6.6%	3.0%	3.10	521,401
MEAN WITH OUTLIERS	**$ 11,876**	**4**		**4.8%**	**2.80**	**10.7%**	**14.6%**	**6.27**	**776,205**
MEAN WITHOUT OUTLIERS				**4.7%**	**2.65**	**9.8%**	**14.3%**	**4.26**	**525,530**

Automotive

For this period, no automotive company makes it to the winner's circle. Inventory management was a formidable barrier for BMW, Suburu, and Toyota becoming sequential Supply Chains to Admire Award Winner(s). With a religious vigor for lean manufacturing and plant automation, the automotive industry largely squandered the opportunities for supply chain excellence. Over the decade, margins improved by 7%, inventory performance declined by 2%, and ROCE improved by 1%.

Table 18. Automotive Sector Evaluation for the Period 2015-2024

INDUSTRY: Automotive									
COMPANY INFORMATION			IMPROVEMENT	PERFORMANCE				VALUE	
NAME	2024 REVENUE	SUPPLY CHAIN FUNDAMENTAL SCORE	SUPPLY CHAIN INDEX	GROWTH (Year Over Year Revenue)	INVENTORY TURNS	OPERATING MARGIN	RETURN ON CAPITAL EMPLOYED	PRICE TO BOOK	MARKET CAPITALIZIATION PER EMPLOYEE
2015 - 2024									
Bayerische Motoren Werke AG	$ 154,105	5	11	4.0%	5.86	9.3%	8.7%	0.90	491,133
BYD - Build Your Dream	$ 108,301	4	4	29.8%	4.58	6.3%	12.8%	3.97	193,558
Ferrari NV	$ 7,226	3	5	7.6%	4.03	23.2%	21.4%	21.11	7,990,516
Ford Motor Co	$ 184,992	4	5	2.9%	12.27	2.4%	4.2%	1.30	255,882
General Motors Co	$ 187,442	4	3	2.4%	10.61	5.4%	7.2%	1.13	318,303
Honda Motor Co Ltd	$ 141,569	4	16	1.5%	7.36	5.1%	6.7%	0.67	247,822
Isuzu Motors Ltd	$ 23,469	4	11	3.3%	5.56	7.8%	12.4%	1.15	216,359
Mazda Motor Corp	$ 33,455	6	7	2.5%	6.07	3.8%	8.3%	0.68	149,369
Mitsubishi Motors Corp	$ 19,332	3	1	0.7%	7.42	3.4%	4.5%	1.11	194,100
Nissan Motor Co Ltd	$ 87,910	3	18	-1.4%	6.63	3.4%	3.9%	0.61	183,216
Renault SA	$ 60,863	2	13	1.7%	6.73	4.8%	5.3%	0.52	125,898
Stellantis	$ 169,797	4	2	16.1%	7.75	7.1%	10.7%	0.80	141,640
Subaru	$ 32,591	5	9	3.6%	6.57	9.2%	17.2%	1.38	525,439
Suzuki Motor Corp	$ 37,243	5	13	2.7%	7.31	7.3%	13.7%	0.41	52,132
Tesla Inc	$ 97,690	2	8	43.5%	5.09	1.1%	4.5%	18.52	4,730,551
Toyota Motor Corp	$ 312,505	4	10	2.2%	8.96	8.9%	8.7%	1.10	555,169
Volkswagen AG	$ 351,390	5	15	3.1%	4.63	5.3%	5.3%	0.62	133,196
Yamaha Motors	$ 3,208	5	17	-2.3%	2.48	9.9%	10.9%	0.99	107,268
MEAN WITH OUTLIERS	**$ 111,838**	**4**		**6.9%**	**6.66**	**6.9%**	**9.2%**	**3.17**	**922,864**
MEAN WITHOUT OUTLIERS				**2.3%**	**6.66**	**5.9%**	**9.2%**	**1.08**	**243,155**

Automotive Parts

Tethered to large brand owners with a diligent focus on cost-cutting and inadequate supplier development programs, only the tough survive in the Automotive Parts industry.

BorgWarner wins the Supply Chains to Admire Award winner for its third consective years. In this industry, over the past ten years, there was flat growth accompanies with a 2% decline in operating margin, a 1% decline in inventory turns, and an 8% decline in ROCE

Table 19. Automotive Parts Sector Evaluation for the Period 2015-2024

INDUSTRY: Auto Parts									
COMPANY INFORMATION			IMPROVEMENT	PERFORMANCE				VALUE	
NAME	2024 REVENUE	SUPPLY CHAIN FUNDAMENTAL SCORE	SUPPLY CHAIN INDEX	GROWTH (Year Over Year Revenue)	INVENTORY TURNS	OPERATING MARGIN	RETURN ON CAPITAL EMPLOYED	PRICE TO BOOK	MARKET CAPITALIZIATION PER EMPLOYEE
2015 - 2024									
Advance Auto Parts	$ 9,094	5	33	-0.6%	1.27	4.9%	9.2%	3.11	135,646
Aisin Seiki Co Ltd	$ 34,023	3	25	2.2%	9.46	4.4%	7.5%	0.84	82,683
Allison Transmission Holdings Inc	$ 3,225	4	8	5.2%	6.64	29.0%	17.6%	6.26	1,676,319
American Axle & Manufacturing	$ 6,125	3	13	7.1%	13.14	6.7%	5.0%	2.06	65,302
Autoliv Inc	$ 10,390	5	4	1.6%	8.80	8.2%	15.2%	2.93	114,552
BorgWarner Inc	$ 14,086	4	11	5.6%	8.97	10.7%	12.0%	1.66	226,286
Commercial Vehicle Group	$ 723	4	5	0.1%	7.14	3.8%	9.0%	1.95	25,951
Continental AG	$ 42,990	4	13	0.0%	6.52	6.2%	10.6%	1.66	118,451
Cooper-Standard Holdings Inc	$ 2,731	3	23	-1.2%	17.07	2.3%	1.5%	1.25	30,259
Dana Inc	$ 10,284	3	27	5.3%	6.41	5.1%	7.7%	2.04	78,994
Danaher Corp	$ 23,875	4	10	6.9%	4.14	19.9%	7.4%	3.09	1,672,161
Denso Corp	$ 49,512	4	28	2.1%	6.64	5.8%	7.6%	1.28	217,161
Dorman Products Inc	$ 2,009	5	18	10.6%	2.20	14.6%	20.1%	3.31	989,705
Douglas Dynamics	$ 569	3	29	7.2%	3.94	12.7%	10.3%	3.41	496,458
Gentex Corp	$ 2,313	5	25	5.6%	4.45	25.2%	22.3%	3.29	1,222,919
Gentherm Inc	$ 1,456	3	31	6.4%	5.52	9.6%	13.3%	3.13	139,695
Hella KGaA Hueck & Co	$ 8,686	2	22	6.0%	5.45	5.3%	10.4%	1.67	260,996
Johnson Controls	$ 22,952	3	3	-2.2%	7.02	8.8%	5.0%	2.16	339,318
JTEKT Corp	$ 13,108	4	32	0.6%	6.49	3.8%	7.0%	0.73	52,634
Koito Manufacturing Co Ltd	$ 6,585	4	15	1.2%	9.62	9.1%	15.9%	0.88	125,698
LKQ Corp	$ 14,355	5	16	8.2%	2.73	9.5%	12.1%	2.38	256,524
Mabuchi Motor Co Ltd	$ 1,297	6	20	1.3%	2.41	12.6%	7.2%	0.44	46,275
Magan International	$ 42,836	2	16	2.7%	9.21	5.9%	14.2%	1.63	108,747
Motorcar Parts of America	$ 718	4	23	11.0%	2.25	7.9%	10.3%	1.37	115,224
Nexteer Automotive Group Ltd	$ 4,276	3	21	4.1%	12.15	6.2%	11.8%	2.02	221,487
NGK Spark Plug Co Ltd	$ 4,258	4	30	2.7%	2.54	14.9%	11.7%	0.88	189,731
O'Reilly Automotive	$ 16,708	6	12	8.8%	1.52	19.9%	45.9%	44.96	464,015
PT Astra International Tbk	$ 20,850	4	5	3.6%	7.66	11.1%	15.6%	1.87	101,891
Stanley Electric Co Ltd	$ 3,274	6	2	0.1%	9.34	9.5%	10.1%	0.51	80,331
The Timken Co	$ 4,573	5	5	4.5%	3.02	12.4%	12.3%	2.23	250,443
Toyoda Gosei Co Ltd	$ 7,423	4	9	0.9%	9.74	4.7%	7.8%	0.20	10,238
Valeo SA	$ 23,262	4	18	3.6%	8.43	4.7%	8.7%	2.01	92,305
Visteon Corp	$ 3,866	4	1	5.0%	13.23	5.7%	10.9%	5.21	307,749
MEAN WITH OUTLIERS	**$ 12,498**	**4**		**3.8%**	**6.82**	**9.7%**	**11.9%**	**3.41**	**312,611**
MEAN WITHOUT OUTLIERS				**3.8%**	**6.82**	**9.7%**	**10.9%**	**2.11**	**147,967**

B2B Technology

For 2025, Apple places in the Winner's Circle for the thirteenth year. New to the Winner's Circle are Lenovo, LG, and Nintendo.

Sourcing and contract manufacturing relationships tied to new product launch programs drove supply chain success in this industry. However, margins fell as companies struggled to stabilize revenues in a turbulent market

Table 20. B2B Technology Sector Evaluation for the Period of 2015-2024

INDUSTRY: B2B Technology									
COMPANY INFORMATION			IMPROVEMENT	PERFORMANCE				VALUE	
NAME	2024 REVENUE	SUPPLY CHAIN FUNDAMENTAL SCORE	SUPPLY CHAIN INDEX	GROWTH (Year Over Year Revenue)	INVENTORY TURNS	OPERATING MARGIN	RETURN ON CAPITAL EMPLOYED	PRICE TO BOOK	MARKET CAPITALIZIATION PER EMPLOYEE
2015 - 2024									
Alps Electric Co Ltd	$ 6,681	4	25	0.1%	6.34	4.9%	8.6%	1.35	79,769
Ambarella	$ 226	2	26	6.9%	4.10	-8.8%	-0.2%	5.73	3,054,269
Apple Inc	$ 391,035	4	6	8.6%	41.31	28.2%	40.6%	25.59	11,252,969
Bang & Olufsen A/S	$ 376	4	16	1.3%	3.25	-5.9%	-7.5%	3.28	306,206
Eastman Kodak Co	$ 1,043	5	20	-6.2%	4.58	-1.7%	-1.1%	2.51	77,198
EnerSys manufactures	$ 3,582	4	22	4.0%	4.40	9.7%	10.7%	2.41	293,211
GoPro Inc	$ 801	2	10	-3.9%	4.75	-5.9%	-12.8%	2.65	978,551
Hewlett Packard Enterprise Co	$ 30,127	5	3	-4.6%	4.72	7.8%	5.7%	0.94	269,224
JVC Kenwood Corp	$ 2,491	6	12	-2.1%	4.77	2.7%	5.5%	0.37	10,512
Lenovo Group	$ 56,864	4	7	4.6%	10.30	2.6%	14.6%	2.54	170,245
LG Display Co Ltd	$ 19,515	2	9	-1.3%	8.20	0.0%	-0.4%	0.68	120,541
LG Electronics	$ 64,324	4	4	2.0%	7.21	4.2%	8.3%	NA	NA
Logitech International	$ 4,298	4	19	10.0%	5.48	11.4%	24.7%	5.69	1,087,146
LSI Industries	$ 470	4	14	5.4%	5.17	3.5%	4.8%	1.68	167,092
NCR Voyix Corp	$ 191,593	4	7	-7.1%	4.58	3.7%	3.0%	2.81	87,750
Nintendo Co Ltd	$ 11,586	4	2	12.0%	5.70	21.6%	18.9%	3.23	6,760,928
Samsung	$ 220,604	4	13	2.0%	2.99	14.8%	14.6%	0.00	0
Seagate	$ 6,551	3	23	-6.1%	7.04	10.8%	19.6%	10.04	367,180
Seiko Epson Corp	$ 9,106	6	10	-0.9%	2.84	6.8%	10.9%	0.84	45,686
Sharp Corp	$ 16,091	3	14	-5.2%	8.04	0.9%	-12.3%	2.81	163,655
Sony Corp	$ 90,232	6	1	1.8%	7.79	8.3%	4.5%	2.09	673,940
Super Micro Computer Inc	$ 14,989	4	5	29.4%	3.41	5.2%	17.4%	2.32	1,444,043
Truly International Holdings Limited	$ 2,094	4	18	-2.0%	5.97	5.5%	9.3%	0.42	42,841
Universal Electronics Inc	$ 395	4	17	-3.6%	3.16	1.2%	2.8%	1.68	126,190
Western Digital Corp.	$ 13,003	2	21	0.5%	4.29	6.5%	4.6%	1.59	279,949
Xerox	$ 6,221	4	24	-6.6%	6.75	7.6%	0.9%	0.92	147,193
MEAN WITH OUTLIERS	**$ 44,781**	**4**		**1.5%**	**6.81**	**5.6%**	**7.5%**	**3.37**	**1,120,251**
MEAN WITHOUT OUTLIERS				**0.4%**	**5.43**	**0.0%**	**7.5%**	**2.00**	**301,657**

Consumer Durables

Armstrong World Industries is the Supply Chain to Admire Award Winner for 2025. With an ever-changing product portfolio, effective supply chain management is essential for this industry. Over the last decade, this sector experienced flat growth while increasing margin by 1% and facing a 20% decline in inventory turns

Table 21. Consumer Durable Technology Sector Evaluation for the Period of 2015-2024

INDUSTRY: Household Durables									
COMPANY INFORMATION			IMPROVEMENT	PERFORMANCE				VALUE	
NAME	2024 REVENUE	SUPPLY CHAIN FUNDAMENTAL SCORE	SUPPLY CHAIN INDEX	GROWTH (Year Over Year Revenue)	INVENTORY TURNS	OPERATING MARGIN	RETURN ON CAPITAL EMPLOYED	PRICE TO BOOK	MARKET CAPITALIZIATION PER EMPLOYEE
2015 - 2024									
Armstrong World Industries	$ 1,446	4	1	2.5%	8.47	17.7%	15.5%	8.55	1,087,214
Assa Abloy AB	$ 14,242	4	14	5.7%	4.67	15.1%	14.7%	3.83	508,498
Breville Group	$ 1,003	4	12	8.1%	3.31	12.2%	24.9%	1.24	1,060,227
Canon	$ 29,808	5	8	-1.4%	3.21	7.7%	7.8%	1.20	152,162
Compagnie de Saint-Gobain SA	$ 50,406	5	1	0.3%	5.08	8.4%	8.5%	1.27	170,598
Electrolux AB	$ 12,913	3	17	-2.1%	6.07	2.9%	8.5%	3.00	11,743
Hamilton Beach Brands Holding Co	$ 655	4	6	-1.3%	2.10	5.6%	17.6%	3.35	237,053
Husqvarna AB	$ 4,586	4	11	-0.1%	2.64	7.8%	11.7%	2.53	665,146
iRobot Corp	$ 682	2	18	4.1%	4.56	-0.5%	-3.2%	3.38	1,591,269
Koninkijke Philips	$ 19,505	3	7	-2.9%	3.15	5.0%	4.0%	2.17	372,907
Panasonic Corp	$ 58,879	6	5	-2.5%	5.98	4.2%	9.1%	0.08	NA
Ryobi Ltd	$ 1,939	2	15	0.2%	4.15	3.3%	5.2%	0.25	35,668
SKF AB	$ 9,363	4	3	-0.6%	3.33	10.6%	12.3%	2.27	208,268
Snap-on Inc	$ 4,707	5	3	3.8%	2.70	19.7%	21.2%	3.10	896,430
Stanley Black and Decker Inc	$ 15,366	5	9	3.4%	3.36	11.0%	7.7%	2.50	364,610
The Timken Co	$ 4,573	5	9	4.5%	3.02	12.4%	12.3%	2.23	250,443
Toro Co	$ 4,584	5	13	8.0%	3.77	12.8%	29.9%	8.84	839,015
Whirlpool Corp	$ 16,607	2	16	-1.5%	6.82	7.1%	9.1%	2.68	131,475
MEAN WITH OUTLIERS	**$ 13,959**	**4**		**1.6%**	**4.24**	**9.0%**	**12.1%**	**2.91**	**504,866**
MEAN WITHOUT OUTLIERS				**1.6%**	**4.24**	**9.0%**	**10.1%**	**2.57**	**504,866**

Contract Manufacturers

This analysis does not include a Supply Chain to Admire Award Winner in the contract manufacturing sector, although Celestica and Jabil were top performers in prior years.

With flat margins and declining inventory turns, supply chain management in contract manufacturing is challenging.

Table 22. Contract Manufacturing Sector Evaluation for the Period of 2015-2024

INDUSTRY: Contract Manufacturers									
COMPANY INFORMATION			IMPROVEMENT	PERFORMANCE				VALUE	
NAME	2024 REVENUE	SUPPLY CHAIN FUNDAMENTAL SCORE	SUPPLY CHAIN INDEX	GROWTH (Year Over Year Revenue)	INVENTORY TURNS	OPERATING MARGIN	RETURN ON CAPITAL EMPLOYED	PRICE TO BOOK	MARKET CAPITALIZIATION PER EMPLOYEE
2015 - 2024									
Benchmark Electronics Inc	$ 2,656.11	5	4	0.1%	5.50	3.3%	5.2%	1.02	106,001
Celestica Inc	$ 9,646.00	5	1	6.1%	5.20	3.3%	10.1%	1.58	94,750
Flex Ltd	$ 26,415.00	4	7	0.3%	5.59	2.7%	10.1%	1.89	36,023
Ibiden Co Ltd	$ 2,567.60	4	3	-1.3%	5.11	9.4%	4.6%	0.52	127,901
Jabil Circuit Inc	$ 28,883.00	4	5	6.7%	6.44	3.5%	16.5%	3.91	37,644
Plexus Corp	$ 3,960.83	5	8	5.5%	3.37	4.7%	11.8%	2.26	118,823
Sigmatron International	$ 373.88	2	6	5.9%	2.79	2.1%	6.3%	0.39	8,013
TTM Technologies Inc	$ 2,442.75	3	2	7.9%	11.33	5.9%	5.3%	1.20	74,529
MEAN WITH OUTLIERS	**$ 9,618.15**	**4**		**3.9%**	**5.67**	**4.4%**	**8.7%**	**1.60**	**75,460**
MEAN WITHOUT OUTLIERS				**3.9%**	**4.86**	**4.4%**	**8.7%**	**1.60**	**75,460**

Diversified Industries

Diversified industries are discrete conglomerates. In the 2025 analysis, Hubbell and Rockwell Automation make the Winner's Circle in the diversified industrial sector. Prior winners include Ametek and Honeywell. Schneider Electric misses the mark on ROCE.

Chasing lower labor costs, dependent on outsourced manufacturing, and building global sourcing relationships, the diversified industry is challenged by short supply and the bullwhip effect of downstream markets. Over the past ten years, the industry has seen a decline in growth and experienced declining margins and inventory turns. .

Table 23. Diversified Sector Evaluation for the Period of 2015-2024

INDUSTRY: Diversified Industries									
COMPANY INFORMATION			IMPROVEMENT	PERFORMANCE				VALUE	
NAME	2024 REVENUE	SUPPLY CHAIN FUNDAMENTAL SCORE	SUPPLY CHAIN INDEX	GROWTH (Year Over Year Revenue)	INVENTORY TURNS	OPERATING MARGIN	RETURN ON CAPITAL EMPLOYED	PRICE TO BOOK	MARKET CAPITALIZIATION PER EMPLOYEE
2015 - 2024									
3M Co	$ 24,575	3	21	-2.1%	3.91	13.3%	16.8%	8.67	113,244
ABB LTD	$ 32,850	5	6	-1.1%	4.13	9.9%	13.3%	4.32	522,161
AMETEK Inc	$ 6,941	4	23	6.0%	4.81	23.2%	14.3%	4.28	1,350,432
Avery Dennison Corp	$ 8,756	4	12	3.6%	7.45	11.4%	19.1%	7.75	372,011
Dover Corp	$ 7,746	5	11	0.4%	4.89	14.1%	14.5%	4.13	670,117
Eaton	$ 24,878	5	9	1.4%	4.94	13.5%	11.0%	3.34	601,772
Emerson Electric	$ 17,492	3	16	0.6%	5.12	17.2%	15.8%	4.63	538,817
Enerpack Tool Co	$ 590	4	2	-6.5%	4.28	10.9%	4.5%	3.67	495,544
Fanuc Corp	$ 5,511	3	24	4.3%	2.35	26.4%	12.0%	2.77	4,254,177
Flowserve Corp	$ 4,558	5	19	-0.3%	3.53	7.4%	8.3%	3.09	323,630
Fortive Corp	$ 6,232	2	22	1.0%	4.70	16.8%	10.4%	3.09	1,020,683
Generac Holdings	$ 4,296	3	26	12.6%	2.49	15.4%	15.6%	5.74	1,056,826
General Electric Co	$ 38,702	2	15	-8.3%	3.32	8.0%	1.9%	2.69	719,737
Hillenbrand Inc	$ 3,183	2	17	7.5%	5.21	11.2%	9.5%	2.82	299,651
Honeywell	$ 38,498	4	28	-0.3%	5.14	17.6%	18.3%	6.61	1,126,824
Hubbell Inc	$ 5,629	6	7	5.8%	4.48	14.7%	16.0%	4.70	593,441
Ingersoll-Rand PLC	$ 7,235	4	3	14.8%	3.29	12.6%	4.9%	2.58	1,027,483
Legrand SA	$ 9,361	5	19	4.9%	3.32	18.5%	13.4%	2.86	473,165
MDU Resources Group Inc	$ 1,758	5	1	-5.5%	17.12	10.4%	6.1%	0.80	342,760
Morgan Advanced Materials	$ 1,407	4	24	-0.5%	1.59	11.4%	15.2%	1.99	77,145
MSC Industrial Direct Co Inc	$ 3,821	4	27	3.4%	3.33	12.2%	21.9%	3.61	656,176
Parker Hannifin	$ 19,930	3	8	4.6%	5.74	14.5%	14.4%	4.48	534,826
Rockwell Automation Inc	$ 8,264	5	9	2.6%	5.65	17.9%	22.8%	13.64	986,048
Schneider Electric	$ 41,295	4	18	2.6%	4.56	13.4%	9.2%	2.76	453,039
Siemens AG	$ 82,366	4	5	-0.6%	4.16	9.6%	9.8%	2.27	310,840
Toshiba	$ 3,799	4	14	-2.5%	6.35	2.9%	2.2%	0.38	5,738
Trinity Industries Inc	$ 3,079	4	12	-2.1%	4.01	12.1%	5.2%	1.75	299,900
Valmont Industries Inc	$ 4,075	6	4	3.3%	4.85	9.3%	12.0%	3.33	387,212
MEAN WITH OUTLIERS	**$ 14,887**	**4**		**1.8%**	**4.81**	**13%**	**12.1%**	**4.03**	**700,479**
MEAN WITHOUT OUTLIERS				**1.8%**	**4.36**	**13%**	**12.1%**	**3.67**	**568,860**

Furniture

Somnigroup International (Tempur Sealy) is the third consecutive year's Supply Chains to Admire award winner. Leggett & Platt and Sleep Number, prior winners, fall out of the Winner's Circle due to failure to drive improvement at the rate of the industry. Chasing the lower labor cost, furniture manufacturers outsourced manufacturing and secured global sourcing relationships. As labor prices shifted, margins flattened, and inventory turnover declined.

Table 24. Furniture Sector Evaluation for the Period of 2015-2024

INDUSTRY: Furniture									
COMPANY INFORMATION			IMPROVEMENT	PERFORMANCE				VALUE	
NAME	2024 REVENUE	SUPPLY CHAIN FUNDAMENTAL SCORE	SUPPLY CHAIN INDEX	GROWTH (Year Over Year Revenue)	INVENTORY TURNS	OPERATING MARGIN	RETURN ON CAPITAL EMPLOYED	PRICE TO BOOK	MARKET CAPITALIZIATION PER EMPLOYEE
2015 - 2024									
Bassett Furniture Industry	$ 330	4	11	1.1%	2.97	3.3%	5.5%	1.21	103,265
Ethan Allen Interiors Inc	$ 646	3	5	-0.7%	2.09	10.0%	15.5%	1.74	151,511
Flexsteel Industries	$ 413	4	4	0.6%	3.55	3.3%	6.2%	1.27	183,987
HNI Corp	$ 2,526	6	2	1.5%	9.04	6.2%	12.6%	2.99	205,879
Hooker Furniture	$ 433	2	14	13.0%	5.37	5.4%	9.7%	1.41	295,110
Howden Joinery Group	$ 2,968	5	1	5.9%	2.50	16.4%	33.7%	4.18	323,582
MillerKnoll Inc	$ 2,047	5	6	4.8%	5.10	8.1%	15.8%	2.07	139,932
La-Z-Boy	$ 4,384	4	13	1.9%	5.13	9.9%	12.0%	3.99	240,986
Leggett & Platt	$ 3,628	4	12	8.1%	7.84	7.2%	13.1%	2.48	227,412
NACCO Industry	$ 238	2	6	-1.5%	2.57	-22.7%	6.3%	0.76	115,246
Natuzzi	$ 356	4	9	-4.2%	2.56	-2.1%	-0.4%	0.83	18,403
Sleep Number	$ 1,682	3	10	4.2%	7.15	5.8%	118.2%	2.50	266,145
Steelcase	$ 3,160	5	2	1.4%	10.38	4.5%	10.7%	1.95	128,900
Somnigroup International Inc	$ 4,931	5	8	5.8%	7.10	12.2%	18.3%	20.56	590,918
MEAN WITH OUTLIERS	**$ 1,982**	**4**		**3.0%**	**5.24**	**4.8%**	**19.8%**	**3.42**	**213,663**
MEAN WITHOUT OUTLIERS				**3.0%**	**5.24**	**6.2%**	**9.2%**	**2.11**	**213,663**

Medical Device

For 2025, Intuitive Surgical places in the Winner's Circle for the seventh time. With high margins, the Medical Device industry shows marked improvement post-COVID. Compared to 2015, margins fell 2% with a slight decline in inventory.

Table 25. Medical Device Sector Evaluation for the Period of 2015-2024

INDUSTRY:Medical Device									
COMPANY INFORMATION			IMPROVEMENT	PERFORMANCE				VALUE	
NAME	2024 REVENUE	SUPPLY CHAIN FUNDAMENTAL SCORE	SUPPLY CHAIN INDEX	GROWTH (Year Over Year Revenue)	INVENTORY TURNS	OPERATING MARGIN	RETURN ON CAPITAL EMPLOYED	PRICE TO BOOK	MARKET CAPITALIZIATION PER EMPLOYEE
2015 - 2024									
Ansell Ltd	$ 1,619	3	22	0.8%	2.51	10.1%	9.8%	1.91	180,774
Becton Dickinson and Co	$ 20,178	5	9	9.8%	3.38	13.4%	4.9%	3.29	878,496
Bio-Rad Laboratories Inc	$ 2,567	2	20	1.9%	1.79	11.2%	8.8%	1.72	1,314,808
Boston Scientific	$ 16,747	5	3	8.8%	2.24	15.2%	5.3%	4.44	1,508,115
Bruker Corp	$ 3,366	4	21	6.8%	1.78	14.3%	14.6%	7.61	966,004
Charles River Laboratories International Inc	$ 4,050	3	12	12.3%	9.88	14.7%	10.8%	4.71	519,490
Coloplast	$ 3,930	4	23	5.8%	2.73	31.0%	52.0%	23.97	1,873,604
ConvaTec Group PLC	$ 2,289	4	18	2.9%	2.00	11.6%	5.9%	2.67	429,720
Dentsply	$ 3,793	3	25	3.8%	3.25	10.5%	-3.0%	2.22	664,126
Edwards Lifesciences	$ 5,440	4	12	9.4%	1.47	29.1%	20.2%	8.87	2,812,273
Hologic Inc	$ 4,030	5	4	6.0%	3.87	21.8%	12.9%	4.62	2,267,158
Intuitive Surgical Inc	$ 8,352	4	8	14.9%	2.97	29.7%	16.3%	8.36	9,471,328
Koninklijke Philips NV	$ 19,505	5	10	-2.9%	3.15	5.0%	4.0%	2.17	372,907
Medtronic	$ 32,364	3	16	7.4%	2.32	19.4%	6.9%	2.37	1,349,933
Mettler-Toledo International Inc	$ 3,872	5	5	4.7%	4.37	25.1%	41.6%	45.88	1,310,553
MicroPort Scientific Corp	$ 951	3	26	12.4%	0.97	-14.5%	-2.8%	3.41	434,599
ResMed Inc	$ 4,685	5	1	11.7%	2.88	25.9%	20.9%	7.81	2,808,202
Revvity Inc	$ 2,755	3	14	4.2%	0.00	17.7%	7.3%	2.98	1,025,791
Smith and Nephew	$ 5,810	4	14	2.5%	0.85	15.0%	9.8%	3.13	865,210
Stryker	$ 22,595	6	17	9.0%	1.73	18.8%	12.5%	5.80	1,893,115
Teleflex Inc	$ 3,047	4	24	5.3%	2.45	18.3%	7.4%	3.87	843,230
Terumo Corp	$ 6,388	3	19	3.3%	2.02	16.2%	10.4%	4.40	907,483
The Cooper Companies Inc	$ 3,895	5	7	8.8%	1.74	16.5%	7.2%	3.18	1,109,073
Thermo Fisher Scientific Inc	$ 42,879	5	1	10.2%	4.43	18.0%	9.4%	4.12	1,561,000
Waters Corp	$ 2,958	3	11	4.2%	3.08	29.0%	25.1%	36.92	2,208,907
Zimmer Biomet Holdings	$ 7,679	4	6	6.0%	0.94	16.5%	3.5%	2.11	1,310,401
MEAN WITH OUTLIERS	**$ 9,067**	**4**		**6.5%**	**2.65**	**16.9%**	**12.4%**	**7.79**	**1,572,550**
MEAN WITHOUT OUTLIERS				**6.5%**	**2.36**	**18.2%**	**12.4%**	**4.16**	**1,256,599**

Telecommunications

For the fifth consecutive year, the Supply Chains to Admire analysis has not named winners in the telecommunications sector for 2025.

With intense market pressure, short lifecycles, and sourcing cost increases, the industry used supply chain practices to improve resilience; margins were flat while inventory turns declined.

Table 26. Telecommunications Sector Evaluation for the Period of 2015-2024

INDUSTRY: Telecommunications									
COMPANY INFORMATION			IMPROVEMENT	PERFORMANCE				VALUE	
NAME	2024 REVENUE	SUPPLY CHAIN FUNDAMENTAL SCORE	SUPPLY CHAIN INDEX	GROWTH (Year Over Year Revenue)	INVENTORY TURNS	OPERATING MARGIN	RETURN ON CAPITAL EMPLOYED	PRICE TO BOOK	MARKET CAPITALIZIATION PER EMPLOYEE
2015 - 2024									
Adtran	$ 923	2	18	6.7%	2.72	-4.2%	-5.0%	2.08	412,385
Avnet	$ 23,757	5	7	-0.1%	5.24	3.2%	8.3%	1.00	282,276
Belden	$ 2,461	3	6	1.4%	5.23	10.5%	8.8%	2.52	369,240
Cisco Systems Inc	$ 53,803	5	8	1.4%	10.63	26.4%	17.9%	4.38	2,436,708
DELL	$ 88,425	5	1	5.8%	12.77	1.4%	4.4%	2.63	131,701
EchoStar Group	$ 15,826	3	12	88.7%	24.32	8.0%	8.6%	0.72	1,013,745
Ericsson	$ 23,510	4	16	-3.2%	4.79	5.0%	4.1%	2.45	269,353
Fabrinet	$ 2,883	5	15	16.2%	4.68	7.9%	14.7%	2.95	231,483
Juniper Networks	$ 5,074	4	5	1.1%	11.03	12.4%	8.2%	2.18	1,197,681
Motorola Solutions	$ 10,817	4	11	6.5%	8.20	20.5%	21.8%	20.99	1,795,570
Nokia Oyj	$ 20,803	2	17	5.5%	5.32	5.6%	4.3%	1.47	301,553
Rogers Communications Inc	$ 15,031	4	10	3.0%	20.28	23.1%	10.2%	2.28	762,447
Skyworth Digital Holdings Ltd	$ 9,061	4	3	7.1%	3.57	3.9%	11.2%	0.15	5,779
TELUS Corp	$ 20,139	6	9	5.4%	15.06	16.5%	8.5%	2.65	423,969
T-Mobile US Inc	$ 81,400	5	2	11.5%	15.50	12.3%	6.7%	2.59	1,803,734
Ubiquiti Networks	$ 1,928	3	14	13.9%	4.09	32.5%	62.1%	48.46	9,210,559
Vodafone Group PLC	$ 39,857	3	4	-4.2%	46.40	13.2%	4.0%	0.68	556,924
Vtech	$ 2,146	5	13	1.4%	4.01	9.8%	31.4%	3.97	93,872
MEAN WITH OUTLIERS	**$ 23,213**	**4**		**9.3%**	**11.33**	**11.6%**	**12.8%**	**5.79**	**1,183,277**
MEAN WITHOUT OUTLIERS				**4.7%**	**9.26**	**11.6%**	**9.9%**	**2.17**	**711,084**

Semiconductor Industry

Solid supply chain practices are a baseline requirement for a semiconductor company sitting three to four levels back in the supply chain. The semiconductor industry met and exceeded this challenge. Taiwan Semiconductor (TSMC) returns to the Winner's Circle for the tenth time in this industry.

Table 27. Semiconductor Sector Evaluation for the Period of 2015-2024

INDUSTRY: Semiconductors									
COMPANY INFORMATION			IMPROVEMENT	PERFORMANCE				VALUE	
NAME	2024 REVENUE	SUPPLY CHAIN FUNDAMENTAL SCORE	SUPPLY CHAIN INDEX	GROWTH (Year Over Year Revenue)	INVENTORY TURNS	OPERATING MARGIN	RETURN ON CAPITAL EMPLOYED	PRICE TO BOOK	MARKET CAPITALIZIATION PER EMPLOYEE
2015 - 2024									
Advanced Semiconductor	18,557	5	2	9.0%	6.51	8.6%	12.3%	1.91	161,859
Advanded Micro Devices	25,785	2	18	19.6%	3.92	5.3%	8.4%	13.19	4,955,895
Analog Devices	9,427	2	6	15.5%	3.06	27.5%	8.9%	3.26	2,766,934
Applied Materials Inc	27,176	5	1	12.4%	2.65	25.8%	29.8%	6.55	2,658,770
Applied Optoelectronics	249	2	25	10.1%	2.04	-10.9%	-8.6%	2.16	174,415
AXT	99	2	21	5.0%	1.19	1.8%	2.3%	1.15	217,709
Broadcom Inc	51,574	5	12	30.7%	7.93	25.7%	11.6%	9.30	9,750,327
ChipMOS Technologies	707	5	24	1.2%	6.01	11.9%	9.4%	1.23	134,702
Cirrus Logic	1,789	5	5	11.0%	4.42	16.6%	16.9%	2.88	2,509,917
DAQO New Energy	1,029	4	18	39.2%	7.45	28.0%	21.8%	1.34	590,214
Diodes	1,311	5	11	5.4%	3.00	11.0%	11.1%	2.25	313,009
Infineon Technologies AG	16,223	5	12	11.3%	2.97	14.8%	11.7%	3.31	676,253
Intel	53,101	6	16	0.0%	3.46	19.8%	13.6%	2.33	1,642,189
Lam Research Corp	14,905	5	14	14.2%	2.87	26.0%	28.6%	8.07	3,810,678
Marvell Technology Products	5,508	2	20	7.1%	4.89	2.9%	1.2%	3.04	4,169,716
Microchip Technology Inc	7,634	3	6	16.2%	3.00	21.5%	10.4%	5.73	1,524,138
Micron Technology Inc	25,111	2	28	11.0%	3.13	17.0%	13.1%	1.76	1,411,294
NVIDIA Corp	60,922	4	3	35.3%	3.76	29.3%	29.3%	21.02	15,292,993
NXP Semiconductor	12,614	4	8	9.8%	3.42	14.2%	10.9%	4.73	1,273,332
ON Semiconductor Corp	7,082	4	4	9.6%	2.68	17.4%	14.2%	3.76	540,197
Qualcomm	38,962	3	23	5.3%	4.63	23.6%	23.3%	11.22	2,818,900
Ricoh	16,278	5	9	-2.8%	5.86	2.8%	3.2%	0.77	68,931
Semtech	869	3	26	4.5%	3.01	8.9%	1.0%	4.02	1,841,730
Silicon Laboratories Inc	584	2	29	3.2%	3.97	-2.9%	0.6%	3.62	2,722,322
Skyworks Solutions Inc	4,178	4	27	8.1%	3.37	29.3%	24.0%	3.85	2,007,684
Taiwan Semiconductor	90,206	6	16	14.5%	5.58	41.1%	26.6%	5.46	6,507,020
Texas Instruments	15,641	6	14	2.4%	2.50	42.3%	36.9%	10.46	3,950,940
Tower	1,436	5	21	6.4%	5.45	12.0%	12.9%	2.33	551,691
United Microelectronics	7,240	5	10	5.7%	5.84	14.5%	10.0%	1.43	650,860
MEAN WITH OUTLIERS	**17,800**	**4**		**11.1%**	**4.09**	**16.7%**	**13.6%**	**4.90**	**2,610,159**
MEAN WITHOUT OUTLIERS				**8.9%**	**4.09**	**16.7%**	**13.6%**	**4.32**	**2,229,034**

Tires

Over the last decade, the tire industry has chased cost and supply chain excellence, which has been elusive. For the period, in this analysis, there are no Supply Chains to Admire winners for the tire industry. Cooper Tires was a winner in 2016 and Bridgestone in 2017. Each Company has a unique definition of supply chain strategy; each has pursued technology and process excellence projects over the last decade, attempting to drive differentiation.

Table 28. Tire Sector Evaluation for the Period of 2015-2024

INDUSTRY: Tires									
COMPANY INFORMATION			IMPROVEMENT	PERFORMANCE				VALUE	
NAME	2024 REVENUE	SUPPLY CHAIN FUNDAMENTAL SCORE	SUPPLY CHAIN INDEX	GROWTH (Year Over Year Revenue)	INVENTORY TURNS	OPERATING MARGIN	RETURN ON CAPITAL EMPLOYED	PRICE TO BOOK	MARKET CAPITALIZIATION PER EMPLOYEE
2015 - 2024									
Bridgestone	$ 29,281	4	1	-1.2%	3.42	10.5%	12.1%	1.29	199,471
Cooper-Standard Holdings Co	$ 2,731	3	3	-1.2%	17.07	2.3%	1.5%	1.25	30,259
Goodyear Tire & Rubber	$ 18,878	4	2	1.5%	4.26	6.3%	5.7%	1.14	76,106
Michelin	$ 29,432	5	3	1.7%	3.06	11.8%	10.1%	1.54	184,836
MEAN WITH OUTLIERS	**$ 20,081**	**4**		**0.2%**	**6.95**	**7.7%**	**7.4%**	**1.30**	**122,668**
MEAN WITHOUT OUTLIERS				**0.2%**	**6.95**	**7.7%**	**7.4%**	**1.30**	**122,668**

Trucks and Heavy Equipment

For 2025, John Deere and Paccar are Supply Chains to Admire Award winners in the Trucks and Heavy Equipment sector. As a clear industry leader, Paccar has won for nine consecutive years. Cummins drops out due to the lack of improvement on the Supply Chain Index, while United Tractors fails to make the cut based on value on price-to-book or market capitalization. From 2015 to 2024, Operating Margins growth declined 13% while margins improved 4%.

Table 29. Trucks and Heavy Equipment Sector Evaluation for the Period of 2015-2024

INDUSTRY: Trucks and Heavy Equipment									
COMPANY INFORMATION			IMPROVEMENT	PERFORMANCE				VALUE	
NAME	2024 REVENUE	SUPPLY CHAIN FUNDAMENTAL SCORE	SUPPLY CHAIN INDEX	GROWTH (Year Over Year Revenue)	INVENTORY TURNS	OPERATING MARGIN	RETURN ON CAPITAL EMPLOYED	PRICE TO BOOK	MARKET CAPITALIZIATION PER EMPLOYEE
2015 - 2024									
Agco Corp	$ 11,662	4	16	3%	3.50	7.2%	10.1%	2.03	293,221
Caterpillar	$ 64,809	2	4	3%	2.95	13.2%	14.5%	6.04	1,012,993
Cummins	$ 34,102	5	14	7%	4.62	9.9%	19.1%	3.56	467,085
Daimler Tzruck Holding AG	$ 58,530	6	2	2%	2.32	4.2%	5.2%	0.55	106,466
Deere & Company	$ 50,518	4	4	5%	4.68	14.8%	13.6%	5.17	943,918
Hitachi Construction	$ 9,743	4	8	2%	2.55	7.4%	9.7%	0.31	74,357
Hyster-Yale Materials Handling Inc	$ 4,308	4	3	5%	4.24	2.0%	9.4%	2.29	127,657
Komatsu	$ 26,785	3	17	4%	2.23	11.9%	12.3%	1.41	353,623
Konecranes Oyj	$ 4,570	5	4	7%	2.36	7.1%	11.3%	1.25	83,426
Kubota	$ 19,937	3	15	5%	3.25	10.7%	10.0%	1.57	452,044
Manitowoc	$ 2,178	2	13	0%	2.95	2.8%	0.2%	0.96	123,269
Oshkosh Truck	$ 10,730	1	11	5%	4.45	7.6%	14.3%	2.11	356,592
PACCAR Inc	$ 33,664	6	12	7%	14.43	12.0%	14.6%	2.84	1,114,295
Terex Corp	$ 5,127	3	10	1%	3.77	7.3%	12.1%	2.26	272,777
Textron Inc	$ 13,702	3	18	0%	2.81	7.2%	9.0%	2.19	381,906
Traton SE	$ 51,381	5	1	6%	2.00	4.4%	3.9%	0.37	62,701
United Tractors	$ 8,470	3	7	9%	5.52	18.8%	20.9%	1.46	178,898
Volvo AB	$ 49,966	1	8	3%	5.02	10.0%	13.1%	1.97	321,056
MEAN WITH OUTLIERS	**$ 25,566**	**4**		**4.1%**	**4.09**	**8.8%**	**11.3%**	**2.13**	**373,683**
MEAN WITHOUT OUTLIERS				**4.2%**	**3.35**	**8.8%**	**11.3%**	**1.90**	**373,683**

Process Industry Overview

Peer groups within the process industry manage flows and make-to-stock supply chains. They are heavily dependent on oil prices and agricultural commodities. From 2015 to 2024, 4.3% of companies in the process industries met the Supply Chains to Admire criteria. In the history of this report series, this is the lowest percentage in the process sector qualifying to make the Winners Circle.

Process industries tend to be large and focus on manufacturing excellence. With a historic bias toward marketing and sales-driven processes, ironically, no company in the industry uses channel data well. The gaps between operations and commercial teams grew 3- 5X over the decade. In Table 30, we show the process industry averages.

Table 30. Overview of the Process Industry

PROCESS	NUMBER OF COMPANIES	AVERAGE REVENUE (M$)	YEAR-OVER-YEAR GROWTH	INVENTORY TURNS	OPERATING MARGIN	RETURN ON INVESTED CAPITAL	FUNDAMENTAL SCORE	PRICE TO BOOK VALUE
		AVERAGE FOR 2015-2024						
Beverages	20	$ 17,800	4.4%	4.84	18.1%	14%	4	4.89
Chemical	38	$ 11,692	0.7%	4.20	10.6%	9.0%	4	2.80
Consumer Nondurables	11	$ 23,461	2.1%	4.97	15.9%	16.3%	4	37.63
Containers and Packaging	17	$ 9,097	0.0%	6.15	10.8%	11.2%	4	3.37
Food Manufacturing	32	$ 18,934	3.3%	5.98	9.6%	3.1%	4	2.69
Pharmaceuticals	32	$ 41,768	5.7%	2.19	21.9%	15.3%	4	6.51
Personal Products	11	$ 9,642	1.9%	2.49	10.8%	14.8%	4	4.94
Averages		**$ 18,913**	**2.6%**	**4.40**	**14.0%**	**11.9%**	**4**	**8.97**

Beverages

Beverage companies compete intensely for a "share of the throat." For this period, Monster Beverages returns to the Winners Circle for the seventh consecutive year. Prior winners include Boston Beer and Coca-Cola. In general, smaller regional companies outperform giant, global multinational companies.

The beverage industry's overall profitability experienced a 4% rise in growth, flat margins, and a slight decline in inventory turns and ROCE.

Table 31. Beverage Industry Performance and Sector Evaluation for the Period of 2015-2024

INDUSTRY: Beverages									
COMPANY INFORMATION			IMPROVEMENT	PERFORMANCE				VALUE	
NAME	2024 REVENUE	SUPPLY CHAIN FUNDAMENTAL SCORE	SUPPLY CHAIN INDEX	GROWTH (Year Over Year Revenue)	INVENTORY TURNS	OPERATING MARGIN	RETURN ON CAPITAL EMPLOYED	PRICE TO BOOK	MARKET CAPITALIZIATION PER EMPLOYEE
2015 - 2024									
Anheuser-Busch InBev	$ 59,768	3	17	2.8%	4.89	27.8%	7.5%	2.62	895,781
Boston Beer Co	$ 2,013	2	16	9.2%	8.10	10.5%	19.0%	5.81	2,052,204
Brown-Forman	$ 4,178	3	19	3.5%	0.79	31.4%	26.5%	12.51	5,161,301
Carlsberg	$ 10,883	4	12	-0.3%	7.16	14.5%	10.9%	3.06	455,351
Coca-Cola	$ 47,061	3	12	0.7%	4.69	26.9%	17.3%	10.32	2,898,787
Constellation Brands	$ 9,962	4	4	7.6%	2.32	29.9%	10.4%	4.24	3,775,589
Davide Campari-Milano	$ 3,323	3	20	5.2%	1.19	19.8%	9.1%	4.47	2,817,843
Diageo	$ 20,269	3	12	2.1%	0.90	28.9%	17.3%	8.36	2,936,029
Heineken International	$ 32,277	4	10	2.8%	6.54	12.4%	9.9%	3.14	655,472
Keurig Dr Pepper	$ 15,351	4	4	10.3%	7.92	20.9%	9.3%	3.71	1,408,647
Kirin Holdings	$ 15,456	6	4	-2.8%	4.66	7.0%	9.2%	2.09	422,869
Lassonde Industries Inc	$ 2,601	4	11	8.5%	4.68	6.8%	11.7%	1.83	498,877
Molson Coors Brewing	$ 11,627	4	2	15.5%	9.33	12.7%	5.9%	1.20	882,478
Monster Beverage	$ 7,493	6	4	11.8%	4.99	31.1%	27.6%	8.00	11,546,439
PepsiCo	$ 91,854	5	9	3.4%	8.88	14.8%	17.8%	12.79	671,693
Remy Cointreau	$ 1,296	4	8	0.2%	0.28	21.1%	12.7%	3.99	3,474,425
Thai Beverage	$ 9,525	3	11	8.1%	3.82	13.1%	14.4%	3.07	368,472
Tsingtao Brewery	$ 4,479	6	1	-0.3%	6.00	9.5%	14.0%	2.92	266,674
United Breweries	$ 3,089	3	18	2.3%	3.82	11.2%	14.2%	2.07	399,428
Yakult Honsha Co	$ 3,486	6	3	0.0%	5.79	11.3%	11.6%	1.61	196,075
MEAN WITH OUTLIERS	**$ 17,800**	**4**		**4.5%**	**4.84**	**18.1%**	**13.8%**	**4.89**	**2,089,222**
MEAN WITHOUT OUTLIERS				**4.4%**	**4.84**	**18.1%**	**13.8%**	**4.89**	**1,765,399**

Chemical

Supply chain management is essential to a chemical company's success when it sits three or four levels back in the value chain. Air Products, CF Industries, and Lyondell Basell have won the Supply Chains to Admire award for three consecutive years.

After many years of negative sector growth, chemical companies' growth fell 1%, with falling industry potential for inventory and ROCE.

Table 32. Chemical Industry Performance and Sector Evaluation for the Period 2015-2024

INDUSTRY: Chemical									
COMPANY INFORMATION			IMPROVEMENT	PERFORMANCE				VALUE	
NAME	2024 REVENUE	SUPPLY CHAIN FUNDAMENTAL SCORE	SUPPLY CHAIN INDEX	GROWTH (Year Over Year Revenue)	INVENTORY TURNS	OPERATING MARGIN	RETURN ON CAPITAL EMPLOYED	PRICE TO BOOK	MARKET CAPITALIZIATION PER EMPLOYEE
2015 - 2024									
Air Products and Chemicals Inc	$ 12,101	6	1	2.3%	14.97	22.0%	12.2%	4.22	2,418,981
Akzo Nobel	$ 11,593	4	20	-3.8%	4.23	9.2%	9.5%	2.55	455,293
Albemarle Corp	$ 5,378	2	36	14.2%	3.29	15.0%	6.7%	2.81	2,189,585
Arkema SA	$ 10,330	4	17	3.3%	6.04	9.7%	9.3%	1.27	378,351
Asahi Kasei Corp	$ 19,299	6	27	0.4%	3.51	7.9%	8.1%	1.06	330,185
Ashland Global Holdings	$ 2,113	5	6	-8.4%	2.89	4.5%	0.7%	1.44	899,845
Axalta Coating Systems Ltd	$ 5,276	6	10	2.3%	4.68	10.3%	7.6%	4.99	540,008
BASF	$ 70,634	4	28	-2.1%	4.10	8.5%	7.2%	1.67	581,724
Cabot	$ 3,994	2	26	2.6%	5.32	11.5%	11.3%	3.06	762,781
Celanese Corporation	$ 10,280	3	21	5.8%	4.44	15.0%	14.8%	3.82	1,512,481
CF Industries Holdings	$ 5,936	4	3	6.8%	11.05	24.9%	12.7%	3.10	4,025,167
Chemours Co	$ 5,782	3	15	-0.2%	4.25	8.4%	9.4%	6.30	645,487
Covestro	$ 15,347	3	37	1.7%	4.82	8.4%	14.1%	1.69	626,892
Dow Inc	$ 42,964	4	4	0.1%	4.30	7.8%	5.2%	1.42	623,212
DuPont de Nemours Inc	$ 12,386	3	15	-5.8%	3.81	10.2%	4.1%	1.23	1,042,636
Eastman Chemical	$ 9,382	4	14	-1.4%	4.64	14.1%	10.5%	2.06	795,726
Ecolab	$ 15,741	5	7	1.2%	5.50	14.3%	11.6%	6.70	1,049,625
Evonik Industries	$ 16,405	4	33	0.3%	4.80	7.5%	6.2%	1.19	330,297
FMC	$ 4,246	2	38	5.1%	2.20	15.7%	8.1%	3.67	1,571,922
Givaudan	$ 8,421	4	33	5.8%	3.04	16.8%	12.8%	7.49	2,057,913
H.B. Fuller	$ 3,569	3	24	6.0%	5.77	8.7%	8.2%	2.28	521,452
Huntsman Corp	$ 6,036	2	22	-5.0%	5.67	7.4%	8.7%	1.93	564,828
International Flavors & Fragrances	$ 11,484	2	35	18.4%	2.81	12.0%	6.8%	3.10	1,200,704
Johnson Matthey PLC	$ 16,142	5	5	-0.1%	10.27	3.9%	12.4%	1.99	499,565
K+S	$ 3,954	3	8	1.3%	4.15	9.0%	6.3%	0.67	258,622
Kansai Paint Co., Ltd	$ 3,897	4	29	2.4%	4.17	8.6%	11.4%	0.70	98,091
Lanxess	$ 6,890	3	30	-3.7%	3.78	5.8%	4.3%	1.45	303,188
LyondellBasell	$ 40,302	3	19	1.6%	7.02	12.7%	20.5%	3.74	1,944,554
Mitsui Chemicals Inc	$ 12,126	5	9	-1.7%	3.79	5.8%	8.5%	0.65	172,299
Nippon Kayaku	$ 1,398	5	30	-1.1%	2.30	10.9%	8.4%	0.24	0
Nitto Denko	$ 6,342	4	25	-1.4%	5.42	13.2%	14.4%	1.21	285,072
PPG	$ 15,845	6	17	1.0%	4.82	12.1%	12.7%	5.24	632,999
RPM International Inc	$ 7,335	6	10	5.4%	3.97	10.7%	13.8%	5.94	600,286
Sensient Technologies	$ 1,557	4	30	0.8%	2.02	12.2%	10.9%	3.33	767,297
Solvay	$ 5,552	4	2	-7.3%	5.11	10.6%	4.5%	0.80	282,207
Stepan Company	$ 2,180	4	13	1.9%	7.39	6.8%	11.0%	2.23	873,097
Symrise AG	$ 5,877	6	23	6.7%	2.40	13.3%	9.9%	4.95	1,308,185
Wacker Chemie	$ 6,193	5	10	0.4%	4.19	10.6%	10.4%	2.71	550,690
MEAN WITH OUTLIERS	**$ 11,692**	**4**		**1.5%**	**4.92**	**10.9%**	**9.6%**	**2.76**	**886,875**
MEAN WITHOUT OUTLIERS				**0.7%**	**4.20**	**10.6%**	**9.0%**	**2.80**	**671,344**

Consumer Non-Durables

In the last decade, the acquisition strategies of consumer non-durables companies failed to yield scale. The large multi-national brand owners of Kimberly-Clark, P&G, and Unilever struggled to drive growth as smaller and more agile companies like Church & Dwight and Clorox made progress. Church & Dwight is the period's Supply Chain to Admire Award Winner.

Cross-functional alignment issues grew over the decade, driving a schism between operations and commercial teams. Historically, these companies have been marketing-driven, with a large gap between operating and commercial teams. The opportunity is to become more market-driven using outside-in practices and market data.

In the last decade, operating margins and growth have been flat, while inventory turns have decreased slightly. Growth has been less than GDP. The sector has lost market share to retailers selling generic house brands

Table 33. Consumer Non-Durables Industry Performance for the Period of 2015-2024

INDUSTRY: Household Non-Durables									
COMPANY INFORMATION			IMPROVEMENT	PERFORMANCE				VALUE	
NAME	2024 REVENUE	SUPPLY CHAIN FUNDAMENTAL SCORE	SUPPLY CHAIN INDEX	GROWTH (Year Over Year Revenue)	INVENTORY TURNS	OPERATING MARGIN	RETURN ON CAPITAL EMPLOYED	PRICE TO BOOK	MARKET CAPITALIZIATION PER EMPLOYEE
2015 - 2024									
Church & Dwight Co	6,107	6	3	6.4%	5.86	19.6%	16.4%	6.21	3,613,137
Clorox	7,093	3	9	2.6%	6.86	15.8%	26.7%	70.60	2,218,540
Colgate-Palmolive	20,101	4	6	1.6%	4.54	23.0%	35.1%	141.02	1,846,711
Energizer Holdings Inc	2,887	3	2	5.3%	1.36	13.3%	10.2%	14.04	509,743
Henkel AG & Co	23,364	4	10	0.8%	4.77	12.7%	12.1%	2.30	842,199
Kimberly-Clark	20,058	5	4	0.2%	6.63	14.8%	28.7%	155.42	1,042,574
Newell Rubbermaid	7,582	2	11	4.5%	3.79	8.0%	-1.5%	2.13	297,325
Procter & Gamble	84,039	6	5	1.3%	6.62	21.4%	16.9%	6.27	2,781,261
Reckitt Benckiser Group	18,109	3	7	2.5%	4.01	24.6%	11.1%	5.17	1,632,611
Spectrum Brands Holdings	2,964	4	1	-2.4%	3.44	5.0%	0.9%	2.96	346,319
Unilever PLC	65,765	4	8	0.3%	6.77	17.1%	22.5%	7.77	928,005
MEAN WITH OUTLIERS	**23,461**	**4**		**2.1%**	**4.97**	**15.9%**	**16.3%**	**37.63**	**1,459,857**
MEAN WITHOUT OUTLIERS				**2.1%**	**4.97**	**15.9%**	**16.3%**	**37.63**	**1,459,857**

Containers and Packaging

Starting the decade with maturing processes, the gradual sophistication in supply chain processes helped the industry. For this period, CCL secures a spot in the winner's circle as a seven-time award winner.

Over the last decade, margin growth and margins were flat, with a slight improvement in inventory turns.

Table 34. Containers and Packaging Industry Performance and Sector Evaluation for the Period of 2015-2024

INDUSTRY: Containers and Packaging									
COMPANY INFORMATION			IMPROVEMENT	PERFORMANCE				VALUE	
NAME	2024 REVENUE	SUPPLY CHAIN FUNDAMENTAL SCORE	SUPPLY CHAIN INDEX	GROWTH (Year Over Year Revenue)	INVENTORY TURNS	OPERATING MARGIN	RETURN ON CAPITAL EMPLOYED	PRICE TO BOOK	MARKET CAPITALIZIATION PER EMPLOYEE
2015 - 2024									
Amcor	$ 13,640	4	10	3.5%	5.34	9.4%	13.3%	1.49	175,531
AptarGroup	$ 3,583	6	15	3.4%	4.76	13.0%	13.4%	4.11	525,584
Ball Corp	$ 11,795	3	7	3.7%	5.71	9.7%	7.1%	5.69	945,670
Berry Plastics Group	$ 12,258	3	2	10.3%	6.86	9.6%	8.5%	5.69	203,962
CCL Industries	$ 7,245	5	12	11.2%	7.08	14.2%	14.5%	3.52	610,249
Crown Holdings	$ 11,801	3	8	3.4%	5.49	11.4%	10.7%	13.95	357,955
Graphic Packaging Holding	$ 8,807	4	5	8.4%	4.95	10.0%	9.9%	3.22	290,328
GREIF	$ 5,448	2	1	3.4%	10.74	9.4%	10.4%	2.34	224,765
International Paper	$ 23,483	5	5	0.3%	6.70	9.8%	6.5%	3.14	18,905
Orora Ltd	$ 2,887	4	13	2.6%	4.52	2.7%	10.9%	2.01	228,881
Owens-Illinois	$ 6,531	3	10	-0.2%	5.67	8.7%	7.5%	4.89	96,332
Packaging Corporation of America	$ 8,383	5	16	3.9%	6.45	14.8%	16.5%	3.93	777,502
Sealed Air	$ 5,393	3	2	-2.2%	5.37	15.0%	15.0%	17.93	412,760
Silgan Holdings	$ 5,855	5	8	4.4%	5.64	9.3%	10.9%	3.55	296,844
Smurfit Westrock PLC	$ 21,109	4	17	10.0%	7.00	10.6%	9.9%	2.08	226,505
Sonoco Products	$ 5,305	4	2	0.7%	7.94	9.3%	9.7%	2.93	246,025
Winpak	$ 1,131	5	14	4.0%	4.34	17.0%	15.9%	1.95	761,338
MEAN WITH OUTLIERS	**$ 9,097**	**4**		**4.2%**	**6.15**	**10%**	**11.2%**	**4.85**	**376,420**
MEAN WITHOUT OUTLIERS				**0.0%**	**6.15**	**11%**	**11.2%**	**3.37**	**376,420**

Food

In the Supply Chains to Admire 2025 analysis, there are no winners in the food industry. While there were prior winners in the Food Industry—Ingredion in 2018, Hershey in 2017, and General Mills in 2014, today, there is no consistent performer. The issue? Significant shifts in M&A in the food industry created weaker players. Changes included the growth of generic products by retailers, a pushback by consumers on buying packaged goods, a rise in commodity prices, and shifts to natural and organic food products. The industry experienced a 1% decrease in margin and a slight decrease in inventory turns.

Table 35. Food Manufacturing Sector Evaluation for the Period of 2015-2024

INDUSTRY: Food									
COMPANY INFORMATION			IMPROVEMENT	PERFORMANCE				VALUE	
NAME	2024 REVENUE	SUPPLY CHAIN FUNDAMENTAL SCORE	SUPPLY CHAIN INDEX	GROWTH (Year Over Year Revenue)	INVENTORY TURNS	OPERATING MARGIN	RETURN ON CAPITAL EMPLOYED	PRICE TO BOOK	MARKET CAPITALIZIATION PER EMPLOYEE
2015 - 2024									
Archer Daniel Midland	$ 85,530	4	10	1.4%	6.51	3.1%	1.3%	1.44	790,382
B&G Foods	$ 1,932	2	31	9.4%	2.42	13.0%	11.7%	2.15	722,761
Bunge Ltd	$ 53,108	4	5	0.6%	7.66	2.5%	1.0%	1.54	425,573
Campbell Soup	$ 9,636	2	18	2.3%	5.27	15.1%	2.3%	7.18	864,434
Charoen Pokaphan Foods PLC	$ 16,468	5	7	2.7%	4.55	4.1%	3.3%	0.82	176,212
ConAgra Foods	$ 12,051	4	16	0.9%	4.93	10.7%	-0.7%	2.49	887,793
Danone SA	$ 29,630	4	9	0.8%	6.85	13.6%	0.8%	2.54	438,419
Ebro Foods SA	$ 3,399	5	25	2.0%	2.24	9.3%	2.7%	0.38	150,246
Flowers Foods Inc	$ 5,103	5	14	3.2%	10.92	6.6%	3.2%	3.57	485,720
Fresh Del Monte Produce Inc	$ 4,280	6	12	1.0%	7.05	3.4%	1.7%	0.94	42,010
Freshpet	$ 975	3	25	27.6%	7.54	-2.5%	28.6%	7.18	4,014,208
General Mills	$ 19,857	6	8	1.1%	6.96	16.8%	1.3%	5.25	1,005,299
Glanbia	$ 3,840	2	29	4.8%	6.18	6.3%	6.6%	2.00	543,856
Golden Agri-Resources	$ 10,910	4	1	4.9%	5.72	4.7%	5.3%	0.60	17,921
Grupo Nutresa SA	$ 4,412	2	21	4.9%	4.84	8.1%	-0.6%	0.92	37,586
Hershey	$ 11,202	5	23	4.3%	5.11	21.6%	4.7%	16.76	1,677,935
Hormel Foods	$ 11,921	5	10	2.7%	7.04	11.1%	3.5%	3.69	1,048,406
Ingredion Incorporated	$ 7,430	6	4	2.4%	5.31	11.9%	2.3%	2.54	635,557
Kellogg Co	$ 12,749	5	6	-1.1%	6.79	11.4%	-1.0%	7.84	744,698
Maple Leaf Foods	$ 3,571	5	3	2.5%	7.03	4.3%	2.5%	1.78	202,402
McCormick	$ 6,724	5	17	4.8%	3.53	16.2%	5.0%	5.59	1,476,374
Mondelez	$ 36,441	5	23	1.0%	6.21	14.9%	0.6%	2.87	911,663
Nestle	$ 104,208	5	12	0.4%	4.48	16.6%	0.5%	5.45	963,178
Orkla ASA	$ 6,557	4	27	3.6%	3.45	11.5%	3.3%	2.17	473,588
Pilgrim's Pride Corporation	$ 17,878	4	18	7.8%	8.35	6.4%	7.8%	3.06	120,195
Post Holdings Inc	$ 7,923	4	2	15.4%	7.14	9.8%	27.4%	1.40	414,382
Smucker's	$ 8,179	2	27	4.4%	5.02	16.1%	4.3%	1.77	1,970,356

Continued on Next Page

INDUSTRY: Food									
COMPANY INFORMATION		IMPROVE-MENT	PERFORMANCE				VALUE		
NAME	2022 REVENUE (MS)	SUPPLY CHAIN INDEX	GROWTH (Year Over Year Revenue)	INVENTORY TURNS	OPERATING MARGIN	RETURN ON INVESTED CAPITAL	FUNDAMENTAL AVERAGE SCORE	PRICE TO BOOK	MARKET CAP
Sodexo	$ 25,731	4	14	0.7%	61.81	4.5%	0.2%	3.18	25,111
The Hain Celestial Group Inc	$ 1,736	3	32	-1.6%	5.10	6.6%	0.9%	1.90	641,958
The Kraft Heinz Co	$ 25,846	2	22	4.3%	5.75	20.2%	4.6%	1.12	1,741,262
Tree House Food Inc	$ 3,354	2	30	5.3%	5.28	4.4%	8.4%	1.38	286,941
Tyson Foods Inc	$ 53,309	4	18	3.8%	10.10	6.2%	4.6%	1.74	181,858
MEAN WITH OUTLIERS	**$ 18,934**	**4**		**4.0%**	**7.72**	**9.6%**	**4.6%**	**3.23**	**753,696**
MEAN WITHOUT OUTLIERS				**3.3%**	**5.98**	**9.6%**	**3.1%**	**2.69**	**648,519**

Personal Products

L'Oréal is the Supply Chain to Admire Award Winner for 2023. The Company has made the winner's circle for nine out of the twelve Supply Chain to Admire reports. This year, Beiersdorf joins L'Oreal in the winner's circle. Both wins are a testament to the focus on customer-centric innovation that drives results.

Estee Lauder was a winner in 2015 but lost ground in the industry despite extensive investment in digital innovation.

Table 36. Personal Products Sector Evaluation for the Period of 2015-2024

INDUSTRY: Personal Products									
COMPANY INFORMATION			IMPROVEMENT	PERFORMANCE				VALUE	
NAME	2024 REVENUE	SUPPLY CHAIN FUNDAMENTAL SCORE	SUPPLY CHAIN INDEX	GROWTH (Year Over Year Revenue)	INVENTORY TURNS	OPERATING MARGIN	RETURN ON CAPITAL EMPLOYED	PRICE TO BOOK	MARKET CAPITALIZIATION PER EMPLOYEE
2015 - 2024									
Beiersdorf	$ 10,661	4	5	2.7%	3.08	13.9%	15.4%	3.78	2,212,289
Coty	$ 6,118	2	11	5.5%	2.55	4.4%	-0.4%	9.11	707,337
Estee Lauder	$ 15,608	5	4	3.9%	1.68	15.5%	19.9%	12.53	1,121,524
Herbalife Ltd	$ 4,993	5	10	0.3%	2.31	11.2%	33.9%	6.18	482,052
Inter Parfums	$ 1,452	3	3	13.2%	1.55	15.5%	17.4%	4.45	6,503,441
Kao Corporation	$ 10,764	5	5	-1.9%	4.04	10.9%	15.6%	3.35	556,089
L'Oreal	$ 47,068	5	5	4.9%	2.67	18.8%	19.6%	5.58	1,960,201
Natures Sunshine Products	$ 454	5	2	2.4%	2.03	3.9%	9.5%	1.70	283,031
Nu Skin Enterprises	$ 1,732	2	5	-3.3%	2.08	9.0%	15.2%	2.76	88,348
PZ Cussons PLC	$ 664	5	1	-6.7%	3.61	9.6%	8.7%	0.52	18,961
Shiseido Co Ltd	$ 6,547	3	9	0.1%	1.78	5.7%	7.7%	4.34	422,856
MEAN WITH OUTLIERS	**$ 9,642**	**4**		**1.9%**	**2.49**	**10.8%**	**14.8%**	**4.94**	**1,305,103**
MEAN WITHOUT OUTLIERS				**1.9%**	**2.49**	**10.8%**	**14.8%**	**4.94**	**589,249**

Pharmaceuticals

No pharmaceutical company made it to the winner's circle during this period. Prior winners of Gilead Sciences and Regeneron failed to rise above the peer group. This industry has the highest margin of any industry. Growth was up 6% for the period, operating margins were flat, and inventory turns increased 20%.

Table 37. Pharmaceuticals Sector Evaluation for the Period of 2015-2024

INDUSTRY: Pharmaceuticals									
COMPANY INFORMATION			IMPROVEMENT	PERFORMANCE				VALUE	
NAME	2024 REVENUE	SUPPLY CHAIN FUNDAMENTAL SCORE	SUPPLY CHAIN INDEX	GROWTH (Year Over Year Revenue)	INVENTORY TURNS	OPERATING MARGIN	RETURN ON CAPITAL EMPLOYED	PRICE TO BOOK	MARKET CAPITALIZIATION PER EMPLOYEE
2015 - 2024									
Abbott Laboratories	$ 41,950	5	9	8.1%	3.24	14.7%	9.8%	4.54	1,434,466
AbbVie Inc	$ 56,334	4	7	11.5%	4.41	29.7%	13.9%	22.78	4,722,706
Amgen	$ 33,424	6	13	5.4%	1.45	36.7%	16.5%	15.15	5,729,062
Aspen Pharmacare Holdings Ltd	$ 2,386	4	24	-0.8%	1.36	23.1%	8.7%	1.67	713,511
Astellas Pharma Inc	$ 11,113	4	31	-0.2%	1.80	13.8%	13.3%	2.27	1,753,795
AstraZeneca plc	$ 54,073	3	12	8.2%	1.74	10.9%	8.6%	6.36	1,822,531
Baxter International Inc.	$ 10,636	3	14	0.2%	3.54	8.9%	7.6%	3.71	585,743
Bayer	$ 50,444	4	29	-0.3%	1.64	11.2%	3.3%	1.81	610,044
Biogen Idec Inc.	$ 9,676	5	18	0.4%	1.59	36.3%	22.0%	3.87	6,006,404
Biomarin Pharmaceutical Inc	$ 2,854	4	32	14.5%	0.57	-5.9%	-1.8%	4.58	5,681,957
Bristol-Myers Squibb Co.	$ 48,300	3	1	12.9%	4.39	16.9%	11.0%	5.25	4,053,433
Cencora Inc	$ 293,959	4	27	9.5%	0.00	1.1%	8.5%	43.10	853,589
Daiichi Sankyo Co Ltd	$ 11,099	4	15	2.3%	1.85	9.8%	6.6%	3.47	2,262,571
Eli Lilly and Company	$ 45,043	5	4	9.1%	1.42	27.1%	18.1%	26.92	6,503,239
Gilead Sciences	$ 28,754	3	5	2.2%	3.91	45.3%	21.1%	4.84	8,218,281
GlaxoSmithKline	$ 40,100	3	22	1.2%	1.74	19.8%	14.6%	52.87	885,307
Ipsen SA	$ 3,869	3	22	8.4%	2.35	23.3%	16.4%	3.61	1,527,621
Johnson & Johnson	$ 88,821	5	21	1.9%	2.67	26.1%	15.1%	5.46	2,789,110
Merck and Company	$ 64,168	5	7	4.6%	2.58	19.9%	13.2%	5.74	2,904,715
Novartis AG	$ 51,722	4	10	-0.1%	2.19	20.2%	12.6%	3.25	1,862,469
Novo Nordisk A/S	$ 42,134	5	16	10.7%	1.16	43.3%	79.5%	20.87	4,249,777
Perrigo Co PLC	$ 4,373	4	6	4.7%	2.82	9.1%	-1.2%	1.24	724,887
Pfizer, Inc.	$ 63,627	2	11	7.1%	1.93	23.3%	9.6%	3.02	2,500,490
Regeneron Pharmaceuticals Inc	$ 14,202	3	16	21.0%	0.77	37.6%	27.0%	5.77	6,882,784
Roche Holding	$ 70,890	4	26	3.3%	2.32	27.0%	26.5%	9.31	2,660,871
Sanofi S.A.	$ 47,933	5	24	5.9%	2.03	20.6%	15.5%	10.32	3,084,915
Santen Pharmaceutical Co Ltd	$ 2,093	5	18	3.9%	2.80	16.0%	11.8%	2.17	1,635,283
Teva Pharmaceutical Industries Limited	$ 16,544	2	30	-1.7%	2.18	19.3%	-3.3%	1.55	486,587
United Therapeutics Corp	$ 2,877	4	1	8.9%	1.41	43.5%	27.9%	2.55	8,667,480
Vertex Pharmaceuticals inc	$ 111,020	3	18	35.9%	2.44	23.7%	14.3%	12.18	16,095,552
West Pharmaceutical Services	$ 2,893	6	3	7.8%	4.81	18.9%	18.4%	7.87	1,677,879
Zoetis Inc	$ 9,256	4	27	6.9%	1.20	32.7%	22.4%	19.27	5,255,473
MEAN WITH OUTLIERS	**$ 41,768**	**4**		**6.7%**	**2.20**	**22.0%**	**15.2%**	**9.92**	**3,588,829**
MEAN WITHOUT OUTLIERS				**5.7%**	**2.19**	**21.9%**	**15.3%**	**6.51**	**3,185,386**

Research Methodology

Year after year, the Supply Chains to Admire methodology evolves. Each year, we review and refine the process based on feedback from supply chain business leaders. This year, there were intense discussions on which period to use. We decided to focus on 2015-2024 to help companies see the pattern of the entire decade.

Calculations

The methodology used to define the 2025 winners outlined in this report is as follows:

- **Determine Industry Peer Groups.** We started by placing companies into industry peer groups (based on prior work, we found NAICS and SIC codes inadequate). After much debate, we defined 28 peer groups, assigned companies to their respective industry sectors, and analyzed 530 public companies. There is no such thing as a perfect peer group.

- **Define Timeframe.** The next step was to determine the appropriate period. Since it takes at least three years for supply chain leaders to translate strategy to balance sheet results, and project outputs are often hard to sustain, we selected 2014-2025. Our goal was to understand post-recessionary trends.

- **Identify the Metrics for Comparison.** The third step was to identify the metrics to be collected and analyzed. In this analysis, we selected two value metrics (Market Capitalization/Employee and Price to Book Value (PTBV)) and four performance metrics (Growth, Operating Margin, Inventory Turns, and Return on Capital Employed)). We aim to move supply chain leaders from a cost to a value focus. Based on prior research, we know that the performance metrics selected have the highest correlation to market capitalization from our work with Arizona State University and Georgia Tech.

- **Start the Analysis.** To complete the analysis, we collected publicly available data from balance sheets and income statements. We used YCharts, a syndicated data provider of balance sheet and income statement data. We only included companies that had at least one data point across all of the metrics in the period selected.

- **Defining Improvement.** The base principle of this analysis is that supply chain winners drive improvement while outperforming their peer group. As will be seen, this is hard to do. Our first calculation defined improvement in balance sheet performance compared to the peer group. To accomplish this goal, we calculated each Company's Supply Chain Index Ranking, a measurement of supply chain improvement based on balance, strength, and resiliency. Companies are then stacked and ranked within a peer group and assigned an overall ranking based on the relative level of improvement. The lower the rank number, the higher the level of maturity. When companies tie, each Company receives the same ranking.

- **Analyzing Performance.** For each metric chosen, we calculated the mean, adjusted for outliers, and then analyzed the pattern over the period. We then compared each Company's statistical mean to the industry peer group.

- **Define Winners.** Our final step was determining winners based on the improvement, value, and performance criteria, as explained in detail in this report.

To understand the methodology completely, it is essential to note what the analysis does not include:

- This analysis does not include private companies or companies trading only on Chinese and Korean stock exchanges.

- We exclude companies with issues on reporting during the period (M&A) or public offerings.

- The research focuses on retail, distribution, and manufacturing companies. The work does not include financial, insurance, or service sectors.

- Within each industry, there are metrics we consider essential, but feel that there is no good data source. An example is customer service. While we firmly believe that the analysis should include customer service in the performance metrics, we cannot find a reliable data source.

[2] Supply Chain Index, published by Supply Chain Insights, http://supplychaininsights.com/research-2, July 12, 2017

The Criteria

Connecting supply chain performance to balance sheet information can be challenging and confusing. Figures A and B detail the steps to help the reader understand the process.

Figure 5. The Supply Chains to Admire Analysis Criteria

Figure 6. Calculation Example

COMPANY INFORMATION	IMPROVEMENT	VALUE		PERFORMANCE				RESULTS
NAME	SUPPLY CHAIN INDEX RANK	MARKET CAP	PRICE TO TANGIBLE BOOK VALUE	GROWTH	OPERATING MARGIN	INVENTORY TURNS	ROIC	
Co A	7 (max=18)	$5,267	6.5	16.7%	0.12	6.9	11.3%	WINNER
Co B	13	$3,960	0.2	4.3%	0.08	9.8	8.8%	
Co C	6	$2,658	2.5	6.7%	0.06	6.2	1.5%	
... and so on								
MEAN	**5.9%**	**$4,227**	**3.4**	**5.9%**	**0.09**	**6.7**	**7.0%**	
Allowable % from mean *(within the margin of error)*	*NA*	*-12.6%*	*-26.5%*	*-13.0%*	*-7.3%*	*-18.6%*	*-8.7%*	
GREEN - meeting requirement to qualify as a winner								

As with most comparisons, the devil is in the details:

- **Winner Analysis:** The methodology is not limited to the best Company in the peer group. Within a sector, there can be multiple winners. There is also a possibility of the peer group having no winners. This year's analysis shows no winners for 9 of the 28 industries.

- **Peer Group Analysis:** The analysis is only within single industry peer groups. There is no stacked ranking across multiple peer groups. We believe that comparison across industries is "fool's play" because the sectors are so different. Industry Peer Group Means: We removed outliers by calculating the industry peer group mean for the value metrics (Market Capitalization and Price to Book Value). [3]

- **Margin of Error:** To determine the allowable distances from the industry peer group mean for the value and performance metrics (Market Capitalization, Price to Book Value, Growth, Inventory Turns, Operating Margin, and Return on Invested Capital), we calculated the margin of error (at a 95% level of confidence, excluding outliers) for each metric among all companies in the analysis. We then allowed "winners" to be within the equivalent of one margin of error of the mean. [4]

- **Supply Chain Index:** The Supply Chain Index is a ranking within an industry peer group across three measurements:

    1. *Balance* - vector analysis of the rate of change at the intersection of Return on Capital Employed (ROCE) & Revenue Growth for the period

    2. *Strength* - vector analysis of the rate of change at the intersection of Inventory Turns & Operating Margin

    3. *Resiliency* - the tightness of the pattern at the intersection of Inventory Turns & Operating Margin as measured by the mean distance of years on an orbit chart.

[3] Major outliers were calculated according to this formula: http://www.wikihow.com/Calculate-Outliers

[4] Margin of error formula: http://www.dummies.com/education/math/statistics/how-to-calculate-the-margin-of-error-for-asample-mean/

Fundamental Score

This year, we released the Supply Chain Fundamental Score to help companies visualize their company's performance on consistency of results on orbit charts when compared to their peer group. We do not use this measure to calculate the Supply Chain to Admire winners.

The Fundamental Score is a compound measure that analyzes improvement and the size of the company's pattern on two orbit charts:

1. Orbit Chart A. Intersection of Operating Margin and Inventory Turns for 2015-2024.
2. Orbit Chart B. Intersection of Annual Growth and ROCE for 2015-2024.

The calculation is:

Fundamental Score = (Score of Relative Improvement on Orbit Chart A as Compared to Peer Group) + (Score of Relative Improvement on Orbit Chart B as Compared to Peer Group) +(Score of Size of Pattern of Company on Orbit Chart A as Compared to Peer Group) + .(Score of Size of Pattern of Company on Orbit Chart B as Compared to Peer Group).

The larger the pattern on the orbit chart, the less control the company has on the Metrics That Matter.

The companies are then stacked and ranked in a peer group in each of the four measurements, and given a score of 0-3. If the company is below the peer group on each of the four metrics, the score is a 0. If the company is at peer group potential, the score is a 1. If the company is above the industry average, the score is a 2. As a result, the maximum value a company can receive on the Fundamental Score is an 8. Most Supply Chains to Admire winners score a 6.

All industries score an average of four on the Supply Chain Fundamental Score. However, a solid performance on the Fundamental Score does not necessarily land a company in the Supply Chains to Admire winner's circle. For example, Anheuser-Busch and Coca-Cola score three out of eight in the beverage industry. The issue is control at the intersection of growth and ROCE. Take Boston Beer as an example. The company has historically been a strong performer in the beer industry. With the launch of vodka-based seltzers, the company lost control and could not adapt its model.

Table A. Closer Look at the Fundamental Score in the Beverage Industry

INDUSTRY: Beverages									
COMPANY INFORMATION			IMPROVEMENT	PERFORMANCE				VALUE	
NAME	2024 REVENUE	SUPPLY CHAIN FUNDAMENTAL SCORE	SUPPLY CHAIN INDEX	GROWTH (Year Over Year Revenue)	INVENTORY TURNS	OPERATING MARGIN	RETURN ON CAPITAL EMPLOYED	PRICE TO BOOK	MARKET CAPITALIZIATION PER EMPLOYEE
2015 - 2024									
Anheuser-Busch InBev	$ 59,768	3	17	2.8%	4.89	27.8%	7.5%	2.62	895,781
Boston Beer Co	$ 2,013	2	16	9.2%	8.10	10.5%	19.0%	5.81	2,052,204
Brown-Forman	$ 4,178	3	19	3.5%	0.79	31.4%	26.5%	12.51	5,161,301
Carlsberg	$ 10,883	4	12	-0.3%	7.16	14.5%	10.9%	3.06	455,351
Coca-Cola	$ 47,061	3	12	0.7%	4.69	26.9%	17.3%	10.32	2,898,787
Constellation Brands	$ 9,962	4	4	7.6%	2.32	29.9%	10.4%	4.24	3,775,589
Davide Campari-Milano	$ 3,323	3	20	5.2%	1.19	19.8%	9.1%	4.47	2,817,843
Diageo	$ 20,269	3	12	2.1%	0.90	28.9%	17.3%	8.36	2,936,029
Heineken International	$ 32,277	4	10	2.8%	6.54	12.4%	9.9%	3.14	655,472
Keurig Dr Pepper	$ 15,351	4	4	10.3%	7.92	20.9%	9.3%	3.71	1,408,647
Kirin Holdings	$ 15,456	6	4	-2.8%	4.66	7.0%	9.2%	2.09	422,869
Lassonde Industries Inc	$ 2,601	4	11	8.5%	4.68	6.8%	11.7%	1.83	498,877
Molson Coors Brewing	$ 11,627	4	2	15.5%	9.33	12.7%	5.9%	1.20	882,478
Monster Beverage	$ 7,493	6	4	11.8%	4.99	31.1%	27.6%	8.00	11,546,439
PepsiCo	$ 91,854	5	9	3.4%	8.88	14.8%	17.8%	12.79	671,693
Remy Cointreau	$ 1,296	4	8	0.2%	0.28	21.1%	12.7%	3.99	3,474,425
Thai Beverage	$ 9,525	3	11	8.1%	3.82	13.1%	14.4%	3.07	368,472
Tsingtao Brewery	$ 4,479	6	1	-0.3%	6.00	9.5%	14.0%	2.92	266,674
United Breweries	$ 3,089	3	18	2.3%	3.82	11.2%	14.2%	2.07	399,428
Yakult Honsha Co	$ 3,486	6	3	0.0%	5.79	11.3%	11.6%	1.61	196,075
MEAN WITH OUTLIERS	**$ 17,800**	**4**		**4.5%**	**4.84**	**18.1%**	**13.8%**	**4.89**	**2,089,222**
MEAN WITHOUT OUTLIERS				**4.4%**	**4.84**	**18.1%**	**13.8%**	**4.89**	**1,765,399**

Prior Reports in this Series

As we learn, we improve our methodology. You can track our progress on our website and find industry-specific information published by Supply Chain Insights.

About Supply Chain Insights LLC

Founded in February 2012, Supply Chain Insights LLC delivers independent, actionable, and objective advice for supply chain leaders. The company provides research to help companies gain a first-mover advantage.

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About Lora Cecere

Lora Cecere (Twitter ID @lcecere) is the Founder of Supply Chain Insights LLC and is the author of the popular enterprise software blog Supply Chain Shaman which is read by over 340,000 supply chain professionals. She is also a LinkedIn influencer and a contributor to Forbes. Lora is the author of twelve books, including Bricks Matter in 2012 and Metrics that Matter in 2014.

CONGRATULATIONS TO THE 2025

SUPPLY CHAINS TO ADMIRE WINNERS

AIR PRODUCTS

APPLE

ARMSTRONG WORLD INDUSTRIES

BORG WARNER

BEIERSDORF

CF INDUSTRY

CHURCH & DWIGHT

INTUITIVE SURGICAL

HOME DEPOT

HUBBLE

INDITEX

JOHN DEERE

LOCKHEED MARTIN CORPORATION

L'OREAL

LENOVO

LG

LYONDELLBASELL

MONSTER BEVERAGES

NATHANS FAMOUS

INC

NIKE INC.

NINTENDO

NORTHRUP GRUMMAN

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