

Consumer Goods Industry Operating Benchmarks

Operational and market capitalization data for 202
consumer goods companies

1-Jan-2022







Version



VERSION	NOTES
2021-1.1	Initial version, dated 04.01.21
2021-2.1	Updated financial and market cap data for 06.25.21. Removed companies that merged or were taken private.
2021-3.1	Updated financial and market cap data for 11.30.21. Removed companies that merged or were taken private.
2022-1.1	Updated financial and market cap data for 01.01.22. Added companies and removed those that merged or were taken private.

Versioning convention: This document is versioned as follows: **YYYY.N.n**, where **YYYY** is the year, **N** is the major release number, and **n** is the minor release number. A major release includes one or more of the following: the number of companies changes; reports and analyses change; financial and market cap information are updated, and a new date is attached to the report. A minor fixes errors, including data errors, formatting errors, and inconsistencies.

Contents

- 5  [DATA SET](#)
- 11  [OVERALL MARKET](#)
- 15  [ANALYSIS SUMMARY](#)
- 22  [APPENDIX](#)

2022 Consumer Goods Industry Report: Key Takeaways



- The Consumer Goods industry 3-year CAGR is 2.7% (overall dollars growth). The average company 3-year CAGR is 1.5%.
- The average Consumer Goods company has gross margins of 46.2% , invests 31.6% of revenue in selling, general, and administrative expense, 2.7% in research and development, and generates 8.7% operating margin, 12.5% EBITDA margin, 6.7% free cash flow, and 11.6% return on invested capital.
- The Consumer Goods company average inventory turns is 3.6 . The median is 3.0 . The difference between the average and the median indicates a few outliers raise the average. The median is more in line with the industry operational structure.
- The average Consumer Goods company has 34.9% PP&E, and 27.3% in goodwill and intangibles, all as a percentage of revenue. Goodwill and intangibles are a proxy for mergers and acquisitions; based on this measure, Consumer Goods is among the top industries in mergers and acquisitions. In a sign of the “intangibles economy,” and of increasing IP content in their products and services, consumer goods companies have almost as many intangible assets as physical assets.
- As expected, Consumer Goods companies that lead in operating profit, net profit, cash flow, and return on investment (ROA, ROIC, economic profit) are also leaders in market cap multiple.
- Consumer Goods companies with higher inventory turns tend to have significantly lower market cap multiples than companies with lower inventory turns. This is an indication that inventory turns is a poor indicator of company market performance. (Note: controlling for gross margin yields the same conclusion).
- Consumer Goods companies with higher gross margins have some element of product superiority along with superior pricing power. They tend to invest more in R&D and have significantly higher market cap multiples. There is a symbiotic relationship between gross margin and R&D investment: higher R&D investment leads to more differentiated products and higher gross margins; on the other hand, differentiated products create higher gross margins, which allows for higher R&D investment. Companies in a low gross margin trap may have challenges breaking out of it without multi-year increases in R&D investment (or M&A).
- Historical analysis (using aggregate data and ratios) indicates the operational structure is essentially the same as it was a decade ago. This includes similar gross margins, operating margins, asset intensity, inventory turns, and cash flows. This indicates the industry has a certain physical setpoint and that there are individual winners and losers around that setpoint, but that the overall industry is not operationally performing better than it was a decade ago.
- Individual operational measures are poor statistical predictors of market cap multiple. Quartile analysis was performed to contrast the operational characteristics of market cap multiple leaders with others.
- Market cap multiple leaders have cap multiples that are 2.4X average and 11.3X laggards. Leaders have significantly higher gross margins, invest significantly more in R&D, and generate significantly higher operating margins, cash flow, and return on investment (ROA, ROIC, and economic profit).
- From a supply chain management perspective, data in this report supports the thesis that market leaders run their supply chains with more of a profit center mentality than a cost center mentality, which has historically been the case. This further suggests supply chain management has evolved to a sophisticated multivariate decision science, rather than a unidimensional cost management function.

Data Set

Information on the companies and the data set used in the analysis.



Data Set



COMPANIES

The data set includes 202 publicly-traded consumer goods companies.



202



REVENUE

Aggregate revenue for companies in the data set is \$1.1 trillion for the latest reporting fiscal year as of the date on the cover of this report.



\$1.1T



MARKET CAPITALIZATION

Aggregate market cap for companies in the data set is \$3.6 trillion as of date on the cover of this report.



\$3.6T

Notes:

1. Unless otherwise noted, all company financial data are based on trailing twelve months results as of the date on the cover of this report.
2. All market capitalizations are as of the date on the cover of this report.
3. M=million; B=billion; T=trillion.

Data Set

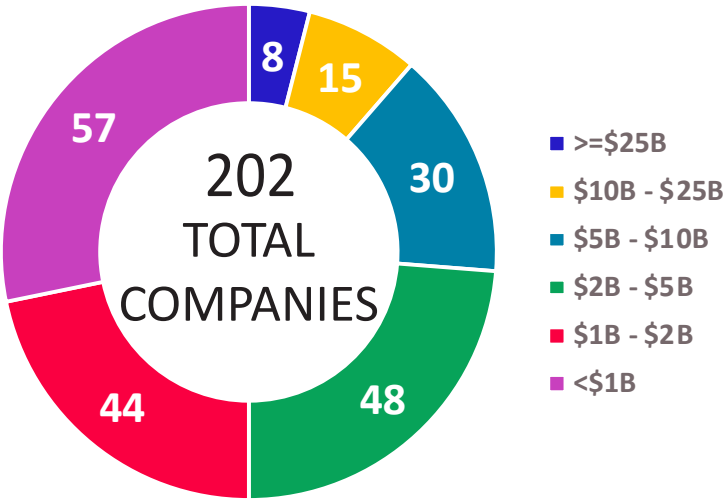
Companies included in this report

361 Degrees Internation	China Dongxiang (Group)	Edgewell Personal Care	Hengdeli Holdings Ltd	Levi Strauss & Co	Onward Holdings Co Ltd	Salvatore Ferragamo SpA	TOMY Co Ltd	Yonex Co Ltd
Accell Group NV	Chow Sang Sang Holdings	Electrolux AB	Henkel AG & Co KGaA	Li Ning Co Ltd	Oriental Land Co Ltd	Samsonite International	Traeger Inc	Yue Yuen Industrial (Ho
Acushnet Holdings Corp	Chow Tai Fook Jewellery	Ermenegildo Zegna NV	Hennes & Mauritz AB	Life Time Group Holding	Oriental Watch Holdings	SeaWorld Entertainment	TSI Holdings Co Ltd	
adidas AG	Christian Dior SE	Ethan Allen Interiors I	Hermes International SA	Lifetime Brands Inc	Oxford Industries Inc	SEB SA	Under Armour Inc	
American Woodmark Corp	Church & Dwight Co Inc	Ever-Glory Internationa	Hisense Home Appliances	Lion Corp	Paltac Corp	Shimano Inc	Unicharm Corp	
AmorePacific Corp	Citizen Watch Co Ltd	FANCL Corp	Hooker Furnishings Corp	L'Occitane Internationa	Pandora A/S	Shiseido Co Ltd	Unilever PLC	
ANTA Sports Products Lt	Citychamp Watch & Jewel	Flexsteel Industries In	Howden Joinery Group PL	L'Oreal SA	Peloton Interactive Inc	Signet Jewelers Ltd	Universal Entertainment	
Arcelik AS	Clorox Co	Fortune Brands Home & S	Hugo Boss AG	Luk Fook Holdings (Inte	Pigeon Corp	Sitoy Group Holdings Lt	Usana Health Sciences I	
ASICS Corp	Colgate-Palmolive Co	Fossil Group Inc	Hunter Douglas NV	LVMH Moet Hennessy Loui	Pola Orbis Holdings Inc	Six Flags Entertainment	Van de Velde NV	
BANDAI NAMCO Holdings	Columbia Sportswear Co	Fox-Wizel Ltd	Inter Parfums Inc	Man Wah Holdings Ltd	Pool Corp	Skechers USA Inc	Vera Bradley Inc	
Bassett Furniture Indus	Compagnie Financiere Ri	Funko Inc	Interface Inc	Mattel Inc	Prada SpA	Sleep Number Corp	VF Corp	
Beiersdorf AG	Coty Inc	Geox SpA	iRobot Corp	MillerKnoll Inc	Procter & Gamble Co	Spectrum Brands Holding	Victoria PLC	
Beter Bed Holding	Crocs Inc	G-III Apparel Group Ltd	JNBY Design Ltd	Mohawk Industries Inc	PT Unilever Indonesia T	Spin Master Corp	Vince Holding Corp	
Bic	Daiichikosho Co Ltd	Gildan Activewear Inc	Johnson Outdoors Inc	Moncler SpA	Puma SE	Stella International Ho	Vinda International Hol	
Blue Moon Group Holding	Daphne International Ho	Goldlion Holdings Ltd	JS Global Lifestyle Co	Movado Group Inc	Purple Innovation Inc	Steven Madden Ltd	Viomi Technology Co Ltd	
Bosideng International	Deckers Outdoor Corp	Goodbaby International	Kao Corp	MYT Netherlands Parent	PVH Corp	Superdry PLC	Vista Outdoor Inc	
Breville Group Ltd	Delta Apparel Inc	Gr. Sarantis SA	Kering SA	Natura &Co Holding SA	PZ Cussons PLC	Superior Group Of Compa	Wacoal Holdings Corp	
Brunello Cucinelli SpA	Delta Galil Industries	GWA Group Ltd	Kimball International I	Natuzzi SPA	Ralph Lauren Corp	Tapestry Inc	Watches of Switzerland	
Brunswick Corp	Descente Ltd	H.I.S. Co Ltd	Kimberly - Clark de Mex	Nautilus Inc	Reckitt Benckiser Group	Technogym SpA	Weber Inc	
Burberry Group PLC	Dickson Concepts (Inter	Haier Smart Home Co Ltd	Kimberly-Clark Corp	Newell Brands Inc	Revlon Inc	Tempur Sealy Internatio	Westwing Group AG	
Caleres Inc	Dometic Group AB	Hamilton Beach Brands H	Kobayashi Pharmaceutica	Nike Inc	Richelieu Hardware Ltd	The Estee Lauder Compan	Weyco Group Inc	
Callaway Golf Co	Dorel Industries Inc	Hanesbrands Inc	Kontoor Brands Inc	Nikon Corp	Rinnai Corp	The Lovesac Co	Whirlpool Corp	
Canada Goose Holdings I	Dr. Martens PLC	Hasbro Inc	KOSE Corp	Nobia AB	Rocky Brands Inc	The Swatch Group AG	Wolverine World Wide In	
Capri Holdings Ltd	Duni AB	Helen Of Troy Ltd	La-Z-Boy Inc	Nu Skin Enterprises Inc	Rohto Pharmaceutical Co	Thule Group AB	Yamaha Corp	
Cedar Fair LP	e.l.f. Beauty Inc	Hengan International Gr	Leggett & Platt Inc	Ontex Group NV	Round One Corp	Tod's SpA	YETI Holdings Inc	

Data Set

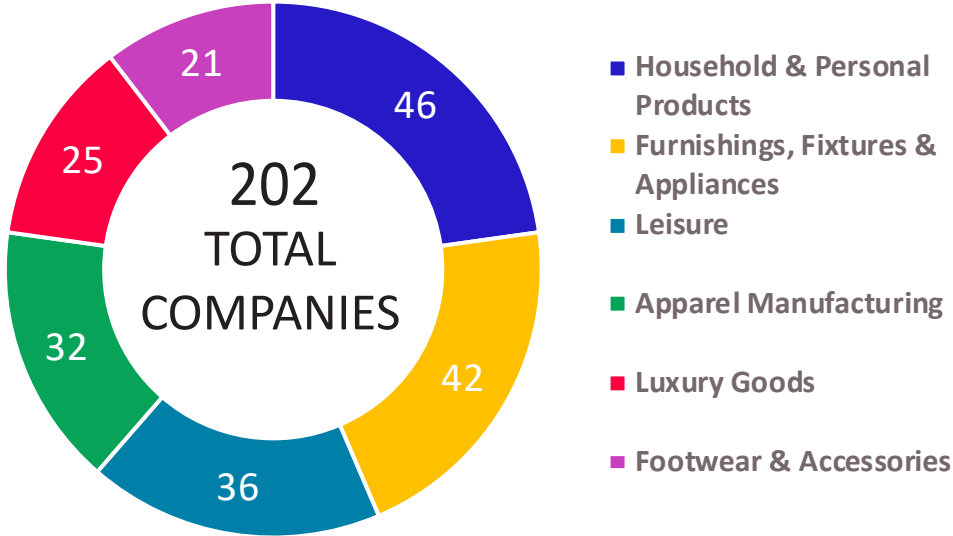
Company distribution

BY ANNUAL REVENUE

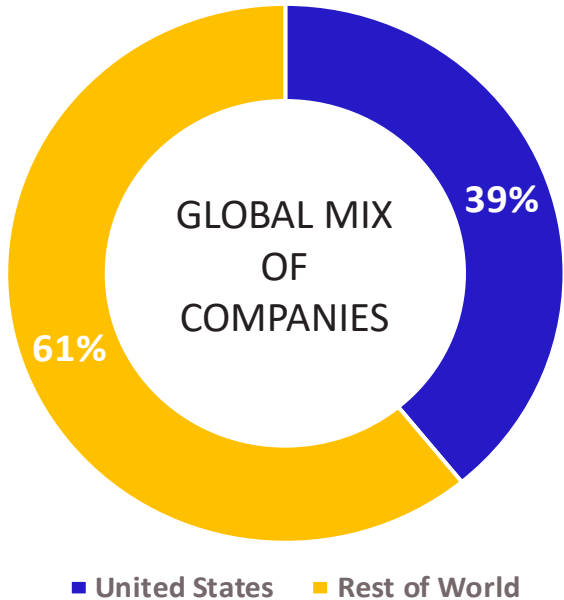


MEDIAN REVENUE = **\$2,037M**

BY SUB-INDUSTRY



GEOGRAPHIC REGION



Notes:
 1. Unless otherwise noted, all company financial data are based on trailing twelve months results as of the date on the cover of this report.
 2. All market capitalizations are as of the date on the cover of this report.
 3. M=million; B=billion; T=trillion.

Data Set

Index of key variables included in this report

This report provides analysis of the following variables (and derivatives) for trailing twelve months (TTM) results and for the historical period from 2010-2020.

REVENUE

GROWTH RATE

GROSS MARGIN

SELLING, GENERAL, AND ADMIN

RESEARCH & DEVELOPMENT

REVENUE PER EMPLOYEE

OPERATING PROFIT

NET PROFIT

FREE CASH FLOW

STOCK COMPENSATION

CASH

DEBT

NET CASH

EBITDA

EQUITY

CAPITAL EXPENDITURES (CAPEX)

PROPERTY, PLANT, AND EQUIPMENT (PP&E, NET)

GOODWILL

DEFERRED REVENUE

REMAINING PERFORMANCE OBLIGATIONS (RPOS)

INVENTORY

DAYS IN PAYABLES

DAYS IN RECEIVABLES

CASH-TO-CASH CYCLE

CAPITALIZATION TO REVENUE

CAPITALIZATION TO EBITDA

RETURN ON INVESTED CAPITAL

RETURN ON ASSETS

RETURN ON PHYSICAL ASSETS

ECONOMIC PROFIT

Data Set

Three different analysis approaches in this analysis



APPROACH	DESCRIPTION	EXAMPLE	GOOD FOR
1. Aggregate averages	Averages are computed by adding up all numbers from all companies. For example, the gross margin for the industry would be the sum of all revenue for all companies minus the sum of all COGS for all companies (divided by the sum of all revenue for all companies).	Average Gross Margin % = $\frac{(\text{sum of all revenues minus sum of all COGS})}{\text{sum of all revenues}}$	Overall industry structure and operations; smooths outliers.
2. Averages of percentages	Averages are computed by taking the averages of all percentages for all the companies. For example, the average gross margin % is the sum of all gross margin %s for all companies divided by the number of companies.	Average Gross Margin % = $\frac{(\text{sum of all gross margin \%s})}{(\text{number of companies})}$	Comparison across companies.
3. Quartile analysis	The market cap multiples of all companies are divided into quartiles. The operating characteristics of the top quartile companies are compared to the others. Likewise, measures for each company are divided into quartiles and the average market cap multiple within each quartile is shown.	<ol style="list-style-type: none">1) Isolate each quartile of market cap multiples; compare gross margin of leaders to others.2) Isolate each quartile of gross margin; display average market cap multiple within each gross margin quartile.	Understanding characteristics of leaders.

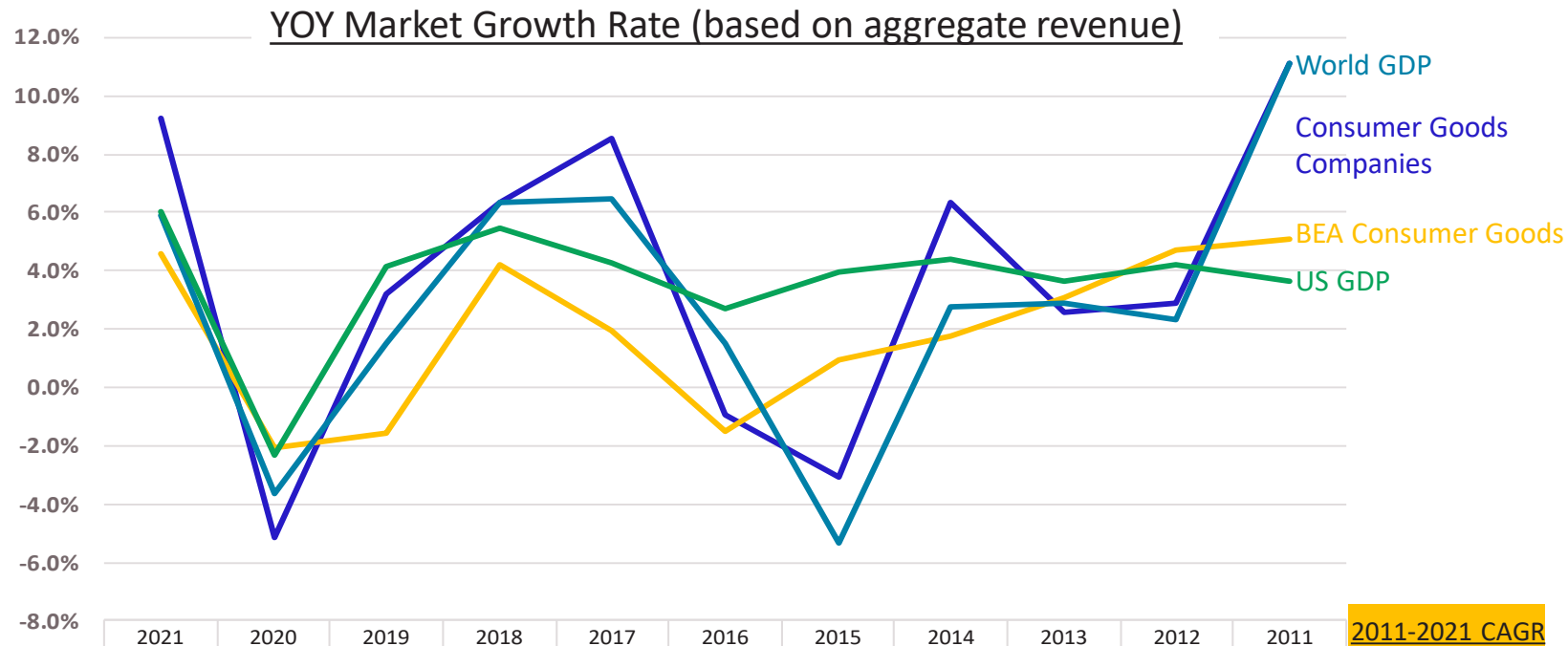
Overall Market

Summary of the market using the companies in this report as a proxy for the overall consumer goods market. Charts in this section use the “aggregate averages” approach.



Overall Market

YOY growth rates, 2011-2021



NOTES & INSIGHTS

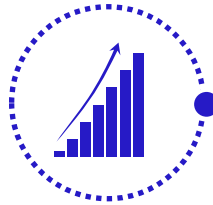
- Consumer Goods market CAGR for the past decade was 3.7%, which is higher than the current dollar global GDP growth rate (2.8%). CAGR is skewed higher by the early years of the 2010s as industry recovered from the great recession.
- BEA numbers are for US domestic manufacturing only. They are shown here for comparison purposes only.
- Growth rates in the early part of the decade were higher, probably due to the rebound from the great recession of 2009-2010.

Notes:

1. "Consumer Goods Companies" represents all companies in the data set for which there are year-over-year revenue numbers. The number of companies varies from year-to-year based on companies going public and some companies merging or being taken private as the decade progresses.
2. "BEA Consumer Goods Output" growth is calculated from the US Bureau of Economic Analysis (<https://apps.bea.gov/iTable/iTable.cfm?reqid=150&step=2&isuri=1&categories=gdpixind>), GDP by Industry. Consumer Goods output as defined here is based on output of the following sub-industries: Furniture and related products; Apparel and leather and allied products; Paper products; and Plastics and rubber products. BEA updates its past numbers periodically, so past reports may not reflect the same past BEA numbers.
3. World GDP and US GDP numbers are sourced from The World Bank (data.worldbank.org)
4. World GDP and US GDP growth rates are based on *current* dollars. This means they have not been adjusted for inflation. *Current* numbers are used to ensure apples-to-apples comparisons with Consumer Goods market growth rates. Note that GDP growth rates are typically reported in constant dollars pegged to a certain year in order to account for the effect of price inflation. Thus, GDP growth rates commonly reported in media are typically lower than those shown here.

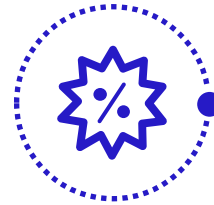
Analysis Summary

Operational ratios based on aggregate data, TTM¹



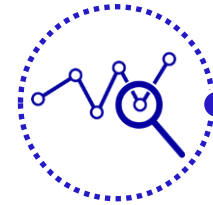
3-YEAR CAGR²

3.3%



GROSS MARGIN

48.6%



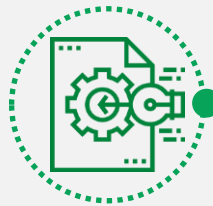
MARKET CAP³

3.3X



NET PROFIT

8.9%



R&D

2.6%



SG&A

31.5%



INVENTORY TURNS

2.8



C2C (DAYS)

69.6



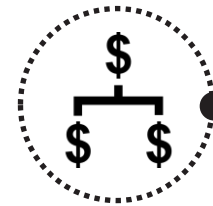
PP&E

31.0%



CAPEX

3.5%



FREE CASH FLOW

11.7%



ROIC

9.3%

Notes:

1. All revenue and cost numbers are aggregate values for all companies for the trailing twelve months (TTM) as of the date on the cover of this report.
2. Growth rate is based on total dollars growth of the industry over the past four years.
3. Market capitalization ratio is aggregate market capitalization for all companies as of the date on the cover of this report divided by total revenue for all companies on TTM basis.

Overall Market

Historical key metrics based on aggregate data, 2011-Current



HISTORY

NOTES & INSIGHTS

- This chart shows the operational structure of the industry today and for the past decade.
- These data indicate that the operational structure of the industry has remained relatively constant for the past decade.
- This indicates that industry operates around a certain “setpoint” driven by physics and physical characteristics.
- That said, individual companies deviate significantly from the overall structural setpoint, resulting in significantly different company-level operational results (next section).
- The final three years of CAGR are one-year growth rates (due to lack of data).
- Historical numbers beyond ten years have fewer companies and need further analysis for apples-to-apples comparisons.

2010	2000
47.7%	35.3%
31.3%	28.2%
2.2%	2.5%
3.7	4.7
98.5	77.8
13.9%	11.1%
9.5%	5.1%
17.3%	14.9%
13.8%	9.2%
10.2%	4.4%
3.6%	4.8%
0.6%	
40.0	48.6
78.8	61.3
59.7	65.1
20.6%	26.5%
12.5%	5.6%
20.8%	24.2%
39.6%	26.2%
8.5%	5.1%
13.3%	9.5%
40.1%	27.7%
6.3%	3.8%
1.9	2.7
7.2	16.4

	METRIC	TTM	2021	2020	2019	2018	2017	2016	2015	2014	2013	2012	2011	AVG11-21	
OPERATIONS	Growth Rate (3YRCAGR)	3.3%	2.7%	2.9%	4.3%	2.7%	2.6%	1.1%	2.1%	5.6%	2.6%	2.9%	11.1%	3.7%	
	Gross Margin	48.6%	48.5%	48.4%	49.4%	49.1%	48.8%	48.6%	48.4%	48.1%	47.7%	47.2%	47.5%	48.3%	
	SG&A % of Revenue	31.5%	31.7%	33.0%	32.5%	32.3%	32.9%	32.6%	32.8%	31.8%	31.4%	31.2%	31.5%	32.1%	
	R&D % of Revenue	2.6%	2.6%	2.5%	2.5%	2.4%	2.3%	2.2%	2.2%	2.3%	2.3%	2.3%	2.4%	2.4%	
	Inventory Turns (COGS/Inv)	2.8	2.8	2.8	3.0	3.1	3.1	3.1	3.2	3.3	3.2	3.4	3.5	3.1	
	Days in Inventory	129.8	129.4	130.7	120.8	117.3	118.2	117.3	113.1	111.3	112.5	108.2	104.0	116.6	
PROFIT & CASH FLOW	Operating Income	13.6%	13.2%	11.9%	13.9%	13.8%	13.7%	13.7%	13.5%	13.9%	13.8%	13.5%	13.9%	13.5%	
	Net Profit	8.9%	8.3%	6.4%	7.0%	8.5%	9.9%	9.2%	8.2%	9.8%	9.2%	8.7%	8.6%	8.5%	
	EBITDA	18.4%	18.9%	16.7%	17.3%	17.1%	17.0%	17.2%	16.8%	17.8%	16.9%	16.5%	16.8%	17.2%	
	Operating Cash Flow	15.2%	15.7%	15.4%	14.3%	13.8%	13.2%	14.0%	12.7%	12.2%	12.4%	11.7%	11.1%	13.3%	
	FCF % of Revenue	11.7%	12.2%	11.5%	10.0%	9.3%	8.9%	9.4%	8.2%	7.8%	8.1%	7.6%	7.0%	9.1%	
	CAPEX % of Revenue	3.5%	3.5%	3.9%	4.4%	4.5%	4.3%	4.6%	4.4%	4.5%	4.3%	4.1%	4.1%	4.2%	
	Stock Compensation	0.8%	0.8%	0.7%	0.6%	0.6%	0.6%	0.7%	0.6%	0.6%	0.6%	0.5%	0.5%	0.6%	
	Days in Receivables	39.1	38.9	37.8	38.5	38.8	42.1	40.6	37.8	38.8	40.8	40.4	39.5	39.4	
	Days in Payables	99.3	98.7	95.3	86.9	86.4	88.7	82.3	75.5	75.2	77.2	74.2	78.0	83.5	
	Cash-to-Cash Cycle (Days)	69.6	69.6	73.2	72.3	69.7	71.6	75.7	75.4	74.9	76.0	74.4	65.5	72.6	
	ASSETS	Property, Plant, Equipment %	31.0%	31.9%	34.0%	28.1%	21.4%	21.7%	21.2%	19.8%	20.2%	21.0%	20.4%	20.0%	23.6%
		Cash % of Revenue	23.8%	24.5%	25.3%	15.7%	16.5%	16.6%	14.7%	13.6%	15.7%	15.3%	14.4%	11.7%	16.7%
Debt % of Revenue		43.0%	43.8%	47.0%	34.1%	27.8%	29.0%	24.8%	21.8%	22.2%	21.6%	21.3%	20.9%	28.6%	
Goodwill and Intangibles % of		40.6%	41.8%	43.6%	39.0%	40.6%	44.3%	40.5%	36.1%	37.5%	39.7%	39.5%	40.5%	40.3%	
ROI	ROA	6.3%	5.7%	4.3%	5.6%	7.1%	7.7%	7.6%	7.2%	8.5%	7.6%	7.4%	7.5%	6.9%	
	ROIC	9.3%	8.5%	6.3%	8.5%	10.9%	12.0%	12.0%	11.3%	13.6%	12.0%	11.8%	12.1%	10.8%	
	Return on Physical Assets	27.5%	26.3%	22.7%	31.0%	36.8%	35.9%	36.4%	37.6%	38.7%	37.1%	37.6%	39.7%	34.5%	
	Economic Profit % of Revenue	5.0%	3.4%	3.6%	5.8%	6.2%	6.0%	5.8%	5.6%	5.9%	5.7%	5.6%	4.1%	5.3%	
CAP	Market Cap / Revenue	3.3	3.4	3.6	3.1	2.7	2.3	2.9	2.3	2.2	2.5	2.7	2.2	2.7	
	Market Cap / EBITDA	18.1	18.1	21.7	16.8	14.5	12.4	13.2	11.3	10.5	11.9	12.6	10.1	13.9	

Analysis Summary

Charts that summarize key variables in the report. Charts in this section use the “averages of percentages” approach. In other words, it shows the averages of all percentages for all companies. (These numbers will differ from industry structural numbers in the previous section)



Analysis Summary

Average and median for different variables, TTM



The table below contains the average and median values for the 202 companies investigated. This shows that the average consumer goods company operates with a gross margin of **46.2%**, spends **31.6%** of revenue on SG&A, **2.7%** on R&D, and has inventory turns of **3.6**, operating income of **8.7%**, net income of **4.7%**, free cash flow of **6.7%**, and return on invested capital of **11.6%**.

	REVENUE (TTM)		OPERATIONS				PROFIT AND CASH			ROIC
	Annual Revenue (\$M)	3-Year CAGR	Gross Margin	SG&A	R&D	Inventory Turns	Operating Income	Net Income	Free Cash Flow	
Average	\$5,335	1.5%	46.2%	31.6%	2.7%	3.6	8.7%	4.7%	6.7%	11.6%
Median	\$2,037	1.2%	44.1%	30.4%	2.5%	3.0	10.5%	6.8%	7.8%	9.9%

Notes:

1. TTM = trailing twelve months. All revenue and cost numbers are based on trailing twelve months results as of the date on the cover of this report. This report provides the averages of the percentages of all companies, including outliers.
2. Growth rate is based on the past four years of financial results
3. All percentage numbers are a percentage of revenue. Average is the average of all the percentages for each of the companies.

Analysis Summary

Average values by revenue quartile, TTM¹

Market cap multiples for smaller companies are larger than larger companies. SG&A and R&D costs are also significantly higher, with operating income, free cash flow and return on invested capital all significantly lower.

All numbers are averages within each quartile

		REVENUE (TTM)		MKT CAP	OPERATIONS				PROFIT AND CASH			
	#	Revenue(\$M)	3-Year CAGR	Mkt Cap/ Revenue	Gross Margin	SG&A	R&D	Inventory Turns	Operating Income	Net Income	Free Cash Flow	ROIC
Quartile 4	51	\$16,155	2.9%	2.9	47.9%	31.6%	2.5%	3.7	12.8%	8.7%	10.7%	12.8%
Quartile 3	50	\$3,139	4.0%	2.2	46.7%	32.4%	2.7%	3.4	11.8%	7.8%	7.9%	20.0%
Quartile 2	50	\$1,393	-0.5%	2.7	48.7%	28.7%	3.5%	3.7	7.3%	2.9%	4.9%	9.3%
Quartile 1	51	\$533	-0.5%	1.5	41.5%	33.5%	1.8%	3.4	2.9%	-0.7%	3.4%	4.4%

REVENUE QUANTILES (\$M)

Quartile 4 >= \$5,179
 Quartile 3 >= \$2,037 , < \$5,179
 Quartile 2 >= \$863 , < \$2,037
 Quartile 1 < \$863

Notes:

1. TTM = trailing twelve months. All revenue and cost numbers are based on trailing twelve months results as of the date on the cover of this report. This report provides the averages of the percentages of all companies, including outliers.
2. Growth rate is based on the past four years of financial results
3. All percentage numbers are a percentage of revenue. Average is the average of all the percentages for each of the companies.

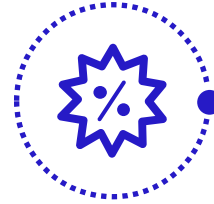
Analysis Summary

Average numbers for the entire data set, TTM¹



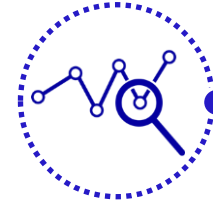
3-YEAR CAGR

1.5%



GROSS MARGIN

46.2%



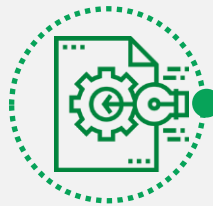
MARKET CAP

2.3X



NET PROFIT

4.7%



R&D

2.7%



SG&A

31.6%



INVENTORY TURNS

3.6



C2C (DAYS)

123.4



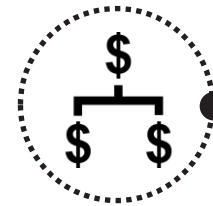
PP&E

34.9%



CAPEX

3.8%



FREE CASH FLOW

6.7%



ROIC

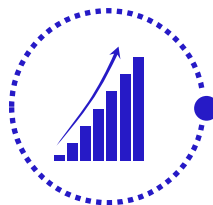
11.6%

Notes:

1. All revenue and cost numbers are based on trailing twelve months (TTM) results as of the date on the cover of this report for all companies in the data set.
2. All ratios shown here are averages of the ratios of each company.

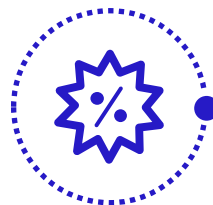
Analysis Summary

Average numbers for the top-quartile market cap¹ multiple leaders



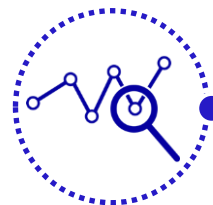
3-YEAR CAGR²

4.1%



GROSS MARGIN

56.1%



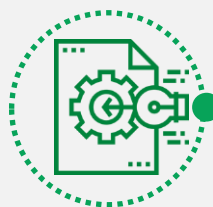
MARKET CAP

5.4X



NET PROFIT

9.2%



R&D

3.3%



SG&A

32.5%



INVENTORY TURNS

3.4



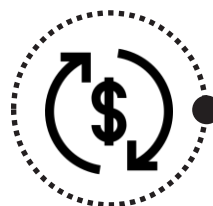
C2C (DAYS)

164.1



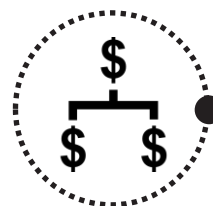
PP&E

52.1%



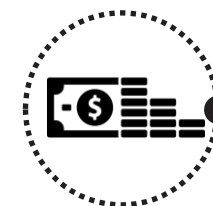
CAPEX

6.3%



FREE CASH FLOW

11.1%



ROIC

16.6%

Notes:

1. All revenue and cost numbers are based on trailing twelve months (TTM) results as of the date on the cover of this report for all companies in the top quartile of market cap multiple performance.
2. All ratios shown here are averages of the ratios of each company.

Analysis Summary

Key metric benchmarks and relationship to market cap multiple

Average metric value within the quartile and corresponding average market cap within the quartile

	n=202 METRIC	INDUSTRY BENCHMARKS			MARKET CAP MULTIPLE		
		Q4 AVG	MEDIAN	Q1 AVG	Q4 AVG	Q1 AVG	
OPERATIONS	3-Year CAGR	19.4%	1.2%	-15.0%	2.5	2.2	
	Gross Margin	68.7%	44.1%	24.9%	3.7	1.7	← Gross margin is important to market performance, indicating product superiority and pricing power are paramount.
	SG&A	52.3%	30.4%	13.3%	2.3	1.7	
	R&D	5.2%	10.5%	0.8%	2.3	1.5	
PROFIT	Operating Margin	20.0%	10.5%	-5.1%	4.2	2.1	← All forms of profitability have the highest correlation with market performance.
	EBITDA Margin	25.3%	13.7%	-2.6%	4.0	1.7	
	Net Profit Margin	14.7%	6.8%	-9.6%	3.9	2.1	
CASH	Free Cash Flow	19.1%	7.8%	-7.6%	3.8	1.8	
	CAPEX % of Revenue	8.5%	2.8%	1.0%	3.6	1.3	
	PP&E (net) % of Revenue	83.9%	22.0%	9.1%	3.3	1.7	
ROI	ROIC % of Revenue	33.0%	9.9%	-6.4%	3.2	2.2	← All forms of ROI are strong indicators of market performance, at about the same level as profitability.
	ROA % of Revenue	16.0%	6.3%	-3.8%	3.4	2.2	
	ROPA % of Revenue	61.2%	23.4%	-7.8%	3.6	2.2	
	conomic Profit % of Revenue	17.5%	3.8%	-15.9%	3.6	2.2	
C2C	Inventory Turns	6.8	3.0	1.4	2.5	3.0	← Inventory turns and cash-to-cash (days) correlate little or negatively with market performance
	Payables (days)	302.8	120.1	64.0	2.9	2.4	
	Receivables (days)	169.4	44.5	19.2	1.9	3.1	
	Cash-to-Cash (days)	110.4	101.8	-5.6	2.6	3.0	

Notes:

1. All metric numbers are based on trailing twelve months (TTM) results as of the date on the cover of this report. Market capitalization numbers are as of the date on the cover of this report.
2. This chart uses the averages and medians of the percentages of each company within a quartile and across the entire data set. Q4=top quartile; Q1=bottom quartile.
3. Source of all data is Calcbench and YCharts and Worldlocity analysis.

Analysis Summary

Market cap multiple quartile comparison

This chart compares the operating characteristics of each market cap multiple quartile in order to glean insights into what cap leaders do differently. It summarizes the difference between the top and bottom quartiles in order to draw contrasts.

VARIABLE	DATA SET	QUARTILE (AVGS WITHIN EACH CAP QUARTILE)				DIFFERENCE
	AVG	TOP (Q4)	Q3	Q2	BOTTOM (Q1)	TOP-BOTTOM
Market Cap Multiple	2.3	5.4	2.1	1.2	0.5	11.3X
1-Year Growth	1.5%	4.1%	2.2%	-1.8%	1.5%	2.6 pps
Gross Margin	46.2%	56.1%	51.5%	41.0%	36.1%	20.0 pps
SG&A	31.6%	32.5%	36.0%	30.5%	27.4%	5.1 pps
R&D	2.7%	3.3%	2.4%	3.1%	2.1%	1.2 pps
Operating Profit	8.7%	14.6%	8.7%	6.1%	5.3%	9.3 pps
Net Profit	4.7%	9.2%	3.3%	3.5%	2.8%	6.4 pps
Inventory Turns	3.6	3.4	3.2	3.6	4.1	-0.7 Turns
C2C Cycle (days)	123.4	164.1	113.6	115.3	100.4	63.7 Days
Net Cash	-14.3%	-18.0%	-14.9%	-7.4%	-16.8%	-1.2 pps
CAPEX	3.8%	6.3%	3.4%	3.2%	2.4%	3.9 pps
Free Cash Flow	6.7%	11.1%	8.1%	4.2%	3.5%	7.6 pps
ROIC	11.6%	16.6%	9.6%	13.8%	6.3%	10.3 pps
Return on Physical Assets	25.5%	40.2%	27.2%	17.7%	16.7%	23.5 pps
Economic Profit	2.3%	5.1%	5.9%	-0.4%	-1.5%	6.7 pps

NOTES & INSIGHTS

- Leaders have market cap multiples that are 2.4X average, and 11.3X laggards.
- Leaders have significantly higher gross margins and investments in R&D. This is perhaps a chicken-and-egg question: does the higher investment in R&D result in a higher gross margin product, or does the higher gross margin product allow for a higher investment in R&D? It is likely a symbiotic and self-reinforcing relationship.
- Leaders excel in all forms of profitability, cash flow, and return on investment.
- Paradoxically, cap leaders do not lead in inventory turns. Cap laggards are more likely to lead in inventory turns than cap leaders. This is likely because cap leaders are managing their supply chains as profit centers and cap laggards are solely focused on cost.
- All financial numbers are for the trailing twelve months as of the date on the cover of this report. All market cap numbers are as of the date on the cover of this report.

Appendix

Additional supporting material and notes.



Notes and Definitions

1. Primary data sources for the analysis are YCharts and Calcbench.
2. Companies included in this analysis are filtered based on available financial, operational, and market cap data. Some significant companies such as Samsung and LG have been excluded because of lack of market capitalization data from the primary data sources.
3. Free cash flow = operating cash flow minus CAPEX.
4. ROA = return on assets = net income divided by total assets.
5. ROIC = return on invested capital = net income divided by (total debt plus equity).
 1. Note: the formal definition of ROIC uses NOPAT in the numerator. Furthermore, some companies may employ their own specific definition. The results here will be close to the formal definition, but generally slightly less.
6. ROCE = return on capital employed = EBIT divided by capital employed. Capital employed = total assets minus total current liabilities.
7. ROPA = return on physical assets = operating profit divided by (PP&E (net) plus inventory).
8. Economic profit = net operating profit after taxes (NOPAT) minus weighted average cost of capital (WACC) times capital invested. Capital invested = Equity plus the non-current portion of debt. WACC is industry-specific, as publicly reported by Aswath Damodaran, NYU Stern Business School.
9. Inventory turns = COGS (end of period) divided by inventory (end of period).
10. C2C = cash-to-cash in days = days in receivables plus days in inventory minus days in payables.
11. Unless otherwise noted, all data are based on the most recent fiscal year (MRY) for each company, as reported in the SEC EDGAR database as of the date on the cover of this report.
12. Historical data is for fiscal years 2010-2020 for all companies. The number of companies grows for each year in the historical analysis, as more companies became public across the decade.
13. In the case of companies formed from mergers, the oldest company is used to designate the resultant company founding year.
14. 3-Year CAGR is based on the past four years of annual financial data.
15. Market capitalization is based on the stock prices as of the date on the cover of this report for each company. Market cap to revenue ratios are market capitalization divided by trailing twelve months (TTM) revenue through the most recently reported fiscal quarter as of the date on the cover of this report.
16. EBITDA is calculated as operating income plus depreciation and amortization.
17. Adjusted EBITDA = EBITDA minus stock compensation
18. Cash = cash, cash equivalents, and marketable securities.
19. Total debt includes short-term debt, the current portion of long-term debt, long-term debt, borrowings under credit facility, capital lease obligations, convertible notes, and deferred rent.
20. CAPEX = gross CAPEX, in other words it does not net out the sale of assets.
21. Enterprise value (EV) = market cap plus total debt minus cash.
22. Most companies allocate depreciation and amortization costs to individual cost buckets, including cost of revenue, SG&A, and R&D. Some subset of companies explicitly show depreciation and amortization costs on the income statement after the other cost buckets. No attempt was made to reallocate these costs for this subset of companies. This has the effect of understating COGS, SG&A, and R&D for those companies.
23. Individual company YOY numbers may be distorted due to mergers and acquisitions. No attempt has been made to normalize for mergers, acquisitions, and divestitures.

Notes and Definitions

24. Aggregate inventory turns is calculated as follows: sum of all COGS for all companies in an industry divided by sum of all inventories for all companies in an industry. In a certain small number of cases, companies do not have an inventory entry on their balance sheets. In this case, to maintain consistency across calculations, inventory is assumed to be zero for those companies. This is most prevalent in service-oriented industries such as transportation and wholesale distribution, where certain companies own zero inventory. This may have the effect of slightly overstating aggregate inventory turns versus if the calculation were only done for those companies that carry inventory. (Note: in goods-producing industries, companies without COGS or without inventories have been filtered out of the analysis).



www.worldlocity.com

