

Automotive Industry

2022 REVIEW AND OUTLOOK

Automotive M&A Activity in 2022 Pulls Back From Historic Prior Year Levels Ongoing Supply Chain Challenges

Continue to Disrupt Automotive Production

Proliferation in EV Production and Pent-Up Demand Create Favorable Tailwinds





2022 Market Summary and Outlook

INTRODUCTION

Stout is pleased to present our 2022 Automotive Review and Outlook. Through our team's active conversations with top industry participants and analysis of subsector performance, we have outlined key takeaways below, followed by a discussion of macroeconomic trends and recent M&A activity.

There were 744 M&A transactions in the middle-market automotive industry in 2022, almost a 10% decrease from record levels in 2021. Global macroeconomic issues such as recession fears, rampant inflation, rising interest rates, and supply chain constraints heavily impacted OEMs, suppliers, and retailers, causing softness in M&A activity during the second half of 2022. Despite the decline in deal volumes in recent quarters, 2022 activity increased 20% compared to pre-pandemic levels in 2019.

We have confidence that deal volumes will remain at healthy levels in the coming quarters as financial health improves and a transition to electric vehicles spurs investment in the face of recessionary fears. Automotive OEMs and suppliers have begun combating the instability in global supply chains and geopolitical unrest by relying on strategic alliances to acquire businesses with strategic proximity or in more geopolitically secure locations. M&A and strategic alliance options will be imperative in the coming years to securing enhanced access to semiconductor and rare earth materials supply.

The convergence of automotive and tech, such as connected, autonomous, shared, and electric ("CASE") trends, coupled with near record levels of dry powder on buyers' balance sheets, will bolster deal volumes in 2023 and beyond. Proactive product portfolio management and timely divestiture decisions will be imperative as the industry continues its evolution. Executives are reviewing product portfolios and evaluating which components are core and which are candidates for divestiture.

KEY THEMES & MACRO TRENDS

- Elevated geopolitical conflict, rising inflation and interest rates, and the war in Eastern Europe further exacerbated automotive supply chain challenges and impacted M&A in recent quarters
- Vehicle production has been increasingly hindered by the complexities of supply chain disruption
- CASE themes, led by electrification, continue to drive transformation and deal activity in the automotive industry
- M&A and restructuring activity over the next 18 to 24 months could be imperative in positioning firms for longer-term success

Sources: S&P Capital IQ, Pitchbook

2022 Market Summary and Outlook (cont.)

MACRO PERFORMANCE

Many macroeconomic themes influenced the global economy in 2022. The resilience of the global economy from COVID-19 disruption followed into 1H'22, while 2H'22 faced economic friction from high interest rates, rising inflation, geopolitical tension, and long lead times.

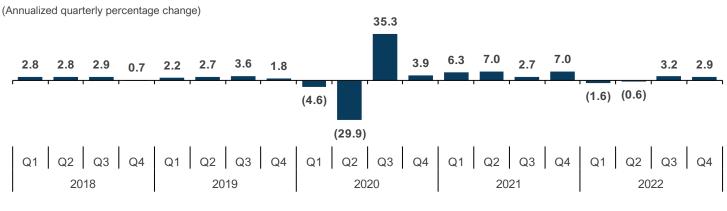
The 2022 unemployment rate and unemployed persons measures have remained relatively flat at ~3.5% and ~5.7M, respectively, with labor costs and availability impacting businesses across the supply chain. Real U.S. GDP growth was strong in 2H'22 despite macroeconomic headwinds.

AUTOMOTIVE SALES AND PRODUCTION

Although vehicle demand and production have increased from 2021 levels, auto manufacturing continues to be stifled by supply chain disruptions. Temporary production shutdowns and low inventory, coupled with increased demand for cars, have allowed manufacturers and suppliers to maintain pricing power, leading to elevated prices.

Despite lingering supply chain issues affecting automotive sales and operational trends, the longterm demand profile for automotive remains positive, and production is expected to return to pre-pandemic levels in the coming years.

Real GDP Growth



Sources: IHS Markit, FRED Economic Data

AUTOMOTIVE INDUSTRY | 2022 REVIEW AND OUTLOOK

Global Passenger Car Sales

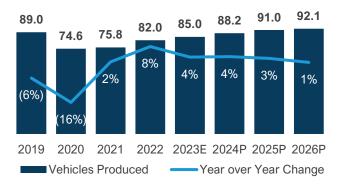
(sales in millions)

24.4 14.9 13.7 14.8 12.5 11.7 12.5 12.5 11.7 12.5 Western Europe

■2021 ■2022 ■2023E

Global Automotive Vehicle Production

(units in millions)



Automotive Supply Chain Update

MICROCHIP SHORTAGE CONTINUES

Semiconductor shortages continue to plague the manufacturer supply chain with long lead times, shipping delays, and raw material shortages. Automotive represents ~15% of global chip sales, and coupled with current component shortages, has forced OEMs to significantly cut production.

Semiconductors have become even more essential for modern vehicles. As auto manufacturers shift to EV, more smart features, and connectivity in cars, the rise in demand for semiconductors has provoked growing supply chain concern.

COMMODITY PRICES STABILIZE

Commodity prices in 2022 have trended downwards and back near pre-pandemic levels, providing some cost relief to auto manufacturers. Recent product price increases and lower input costs have resulted in favorable profitability dynamics for auto manufacturers.

Industry experts have forecasted stable steel price levels through 2024, though general industry sentiment toward the commodity price remains Dec-18 Dec-19 unclear as shortages loom from steel smelter ----- Steel - Domestic Hot Rolled Coil (NYMEX) Historical Pricing shutdowns and supply chain issues.

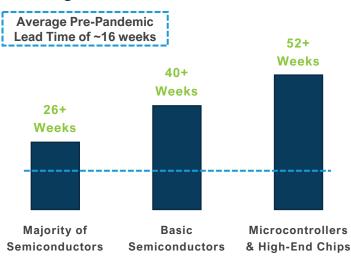
SHIPPING CONTAINER SHORTAGE

2022 saw notable improvement from the prior year's volatile shipping environment of congested sea routes, shipping delays, and stockpiling at ports around the globe. 1H'22 benefited from lower shipping container prices, but supply chain concerns returned in 2H'22 as economic volatility and geopolitical conflict persisted.

Supply chain delays for sourcing raw materials and components has forced OEMs to source from secondarv suppliers purchase or excess quantities on the open market to meet demand.

Sources: Public company reports, S&P Capital IQ

2022 Avg. Auto Semiconductor Lead Times



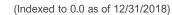
Steel Pricing Summary

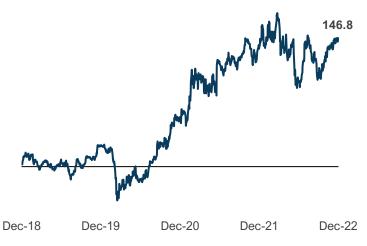
(\$ in actuals)



Dec-23 Dec-20 Dec-21 Dec-22 Dec-24 Steel - Domestic Hot Rolled Coil (NYMEX) Future Contracts

Shipping Container Leasing Index





Evolution of the Automotive Industry

The automotive industry is constantly evolving, with Autonomous Vehicle Share by Level the mobility ecosystem venturing into a fragmented future that is heavily influenced by CASE trends.

AUTONOMOUS VEHICLE TRENDS

The global market for autonomous vehicles is expected to grow ~12% by 2030. The race for autonomous technology will make fully manually controlled vehicles (level 0) obsolete by 2025. Highly to fully automated (level 3+) technology lags due to high cost of servicing and operational risks.

12% 30% 1% 37% 30% 34% 56% 64% 64% 51% 14% 2% 2015 2020 2025P Level 0 Level 1 Level 2 Level 3

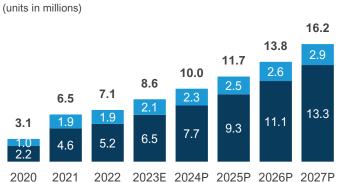
ELECTRIC VEHICLE TRENDS

EV adoption continues post-pandemic with sales and penetration accelerating in all major markets.

Technology advancements and trends in EV such as lithium-ion battery prices falling, enhanced battery life and capacity, and EVs requiring far fewer moving components than ICE vehicles are creating tailwinds for EV-aligned suppliers.

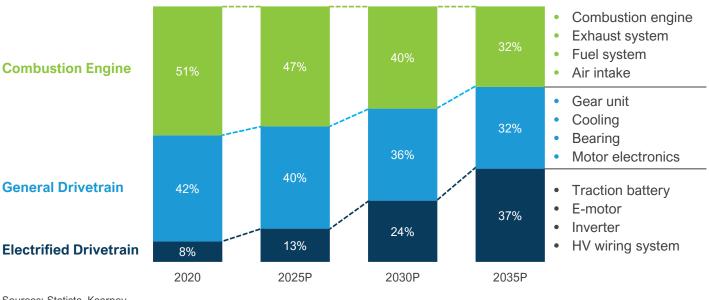
The trend toward electrification is disrupting the entire supply chain and creating a significant shift in market size for automotive components.

Global Electric Vehicle Sales by Type



■ Battery Electric Vehicles ■ Plug-in Hybrid Electric Vehicles

Electric Drivetrain Components Poised to Surpass ICE Components in Overall Value Creation



Sources: Statista, Kearney

Evolution of the Automotive Industry (cont.)

CONNECTED CAR TRENDS

Increased automotive connectivity promotes safer driving experiences and significantly enhances data collection for public transport, parking, predictive maintenance, driver safety, insurance, and fleet management applications.

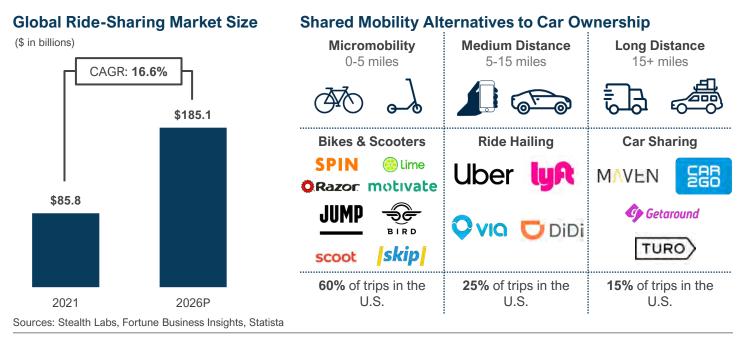
Future demand for connected cars is expected to be influenced by the rollout of stringent safety regulations, development of 5G infrastructure, autonomous vehicles, and growing adoption of integrated connectivity.

The global connected car market is expected to grow at an annualized rate of ~19% over the next several years.

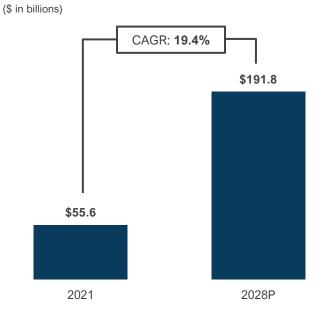
SHARED MOBILITY TRENDS

Consumer adoption of shared mobility has created new and profitable product and market penetration opportunities for many companies, including auto manufacturers, suppliers, tech, and even aerospace experts. Factors including the lack of proper public transport systems in developing nations, strict emission regulations, and increasing cost of vehicle ownership are expected to fuel shared mobility growth going forward.

The global ride-sharing market is expected to grow to ~\$185B in 2026, an increase of more than 115% between 2021 and 2026. DiDi, Uber, and Lyft are among the key players in this industry.

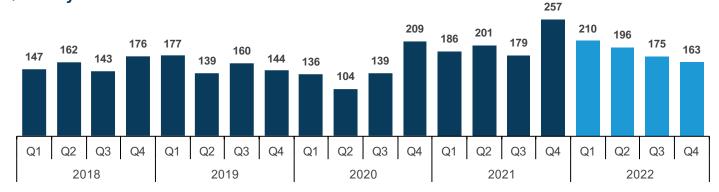


Global Connected Car Market Size





Automotive M&A Database Highlights



Quarterly Automotive M&A Transaction Volume¹

AUTOMOTIVE MIDDLE-MARKET M&A TRENDS

Macroeconomic challenges facing the automotive industry contributed to the pullback in M&A activity during 2022. The 744 M&A transactions completed during 2022 represent a 9.6% decline from 2021. However, deal volumes remained elevated compared to pre-pandemic levels. Despite the year-overyear decrease in transaction frequency, average deal size and total transaction size outperformed that of previous years, increasing 14.5% to \$32.6M and 3.5% to ~\$24.3B, respectively, from 2021 to 2022.

Developments of connected, autonomous, shared mobility, and electric concepts increase the importance of M&A and restructuring solutions, which provide the opportunity for organizations to fill gaps in capabilities, increase supply chain resiliency, and right-size operations to meet the demands of the continuously evolving automotive industry.



M&A Volume by Seller Type¹

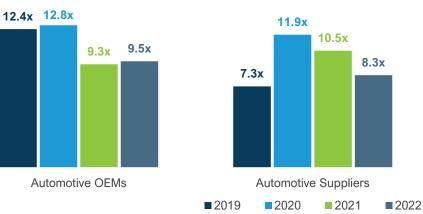
Source: S&P Capital IQ

(1) Represents announced deals and closed deals - excludes deals with EV below \$50 million and above \$1 billion

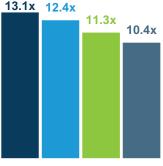
Automotive M&A and Market Trends

VALUATION METRICS

The U.S stock market had a difficult year in 2022, with all three major index averages posting their worst year since 2008 and ending a three-year win streak. The Dow fared the best among the indices, down 8.8%, while the S&P 500 sank 19.4%. The tech-heavy Nasdaq was the worst performer, falling 33.1%. Sticky inflation, aggressive rate hikes from the Federal Reserve, and geopolitical concerns were among the factors that weighed on the market throughout the year. While the automotive OEM subsector experienced strong performance compared to 2021, multiples for two of the three automotive industry subsectors that Stout tracks decreased in 2022.







Dealers & Aftermarket

RECENT AUTOMOTIVE INDUSTRY TRANSACTION HIGHLIGHTS

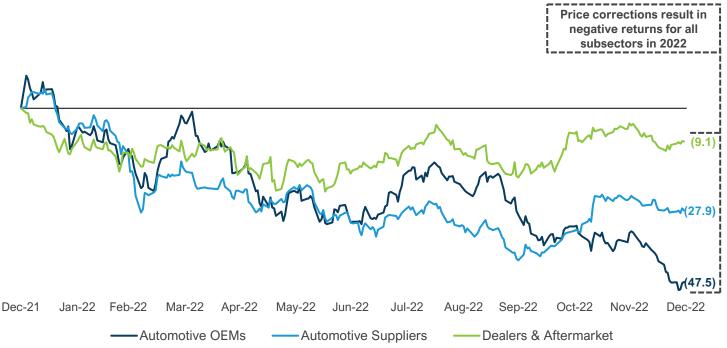
Date	Target (Ownership)	Subsector	Acquiror (Ownership)
Nov-22	Intercable Automotive Solutions	Technology Enabler	Aptiv PLC (NYSE:APTV)
Nov-22	Vehicle Energy Japan	Technology Enabler	Nissan Motor Co. (TSE:7201)
Nov-22	Tenneco (NYSE:TEN)	Metal Working	Apollo Global Management (NYSE:APO)
Oct-22	Varroc Lighting Systems	Automotive Supplier	Plastic Omnium (ENXTPA:POM)
Aug-22	Meritor (NYSE:MTOR)	Metal Working	Cummins (NYSE:CMI)
Apr-22	Jacobs Vehicle Systems	Automotive Supplier	Cummins (NYSE:CMI)
Mar-22	GM Cruise Holdings (SoftBank)	Automotive OEM	General Motors Company (NYSE:GM)
Mar-22	Santroll Automotive Components	Metal Working	BorgWarner (NYSE:BWA)
Feb-22	Melior Motion GmbH	Metal Working	Schaeffler AG (XTRA:SHA)
Jan-22	Optimus Ride	Automotive OEM	Magna International (TSX:MG)

Sources: S&P Capital IQ, Stout Proprietary Database

Automotive Subsector Performance

Subsector Indices — LTM Stock Price Performance

(Indexed to 0.0 as of 12/31/2021)



Subsector Indices — L5Y Stock Price Performance



Source: S&P Capital IQ

Automotive Public Comps

Automotive OEMs

	Market Data			LTM Financial Performance Data			Valuation Multiples		
(\$ in millions, except share data) Share Print Company Name 12/31/22		Price	Ent. Value	Revenue	EBITDA	EBITDA Margin	EV / Rev LTM	EV / EB	TDA
		% 52 High						LTM	NTM
North American OEMs									
Ford Motor Company	\$11.63	45.0%	\$153,468.3	\$158,057.0	\$14,139.0	8.9%	1.0x	10.9x	9.9x
General Motors Company	33.64	50.1	139,680.2	156,735.0	17,824.0	11.4	0.9	7.8	6.5
Stellantis N.V.	14.18	68.5	25,952.3	172,285.2	24,474.2	14.2	0.2	1.1	0.9
Tesla, Inc.	123.18	30.6	371,303.2	81,462.0	17,439.0	21.4	4.6	21.3	17.9
Group Median		47.5%	\$146,574.3	\$157,396.0	\$17,631.5	12.8%	0.9x	9.3x	8.2x
Group Mean		48.5%	\$172,601.0	\$142,134.8	\$18,469.0	14.0%	1.6x	10.3x	8.8x
Asian OEMs									
FAW Jiefang Group Co., Ltd	\$1.12	64.1%	\$1,575.9	\$5,707.5	(\$234.4)	(4.1%)	0.3x	nmf	8.4x
Geely Automobile Holdings Limited	1.46	51.7	11,409.2	17,130.6	417.9	2.4	0.7	27.3x	6.2
Honda Motor Co., Ltd.	22.99	80.7	71,263.7	124,355.8	17,155.7	13.8	0.6	4.2	7.0
Hyundai Motor Company	120.07	69.4	103,836.4	113,332.4	11,618.9	10.3	0.9	8.9	9.0
Nissan Motor Co., Ltd.	3.17	64.3	56,188.4	74,088.3	5,133.9	6.9	0.8	10.9	9.1
SAIC Motor Corporation Limited	2.09	68.4	23,212.5	106,059.9	3,806.9	3.6	0.2	6.1	4.8
Suzuki Motor Corporation	32.39	75.3	16,646.3	33,417.6	3,744.5	11.2	0.5	4.4	4.4
Tata Motors Limited	4.69	73.5	29,539.2	38,481.5	2,159.9	5.6	0.8	13.7	5.4
Toyota Motor Corporation	13.74	73.2	349,108.9	269,778.5	32,018.1	11.9	1.3	10.9	11.9
Group Median		69.4%	\$29,539.2	\$74,088.3	\$3,806.9	6.9%	0.7x	9.9x	7.0x
Group Mean		69.0%	\$73,642.3	\$86,928.0	\$8,424.6	6.8%	0.7x	10.8x	7.3x
European OEMs									
Bayerische Motoren Werke Aktiengesellschaft	\$89.11	83.0%	\$146,325.7	\$128,942.9	\$18,743.9	14.5%	1.1x	7.8x	6.5x
Mercedes-Benz Group AG	65.62	78.8	166,681.7	141,453.2	20,870.8	14.8	1.2	8.0	6.3
Renault SA	33.42	82.2	8,931.7	49,578.9	5,640.7	11.4	0.2	1.6	1.3
Volkswagen AG	124.42	59.7	231,794.7	261,421.8	29,646.0	11.3	0.9	7.8	5.8
Group Median		80.5%	\$156,503.7	\$135,198.1	\$19,807.3	13.0%	1.0x	7.8x	6.0x
Group Mean		75.9%	\$138,433.5	\$145,349.2	\$18,725.3	13.0%	0.8x	6.3x	5.0x
Overall Median		68.5%	\$71,263.7	\$113,332.4	\$14,139.0	11.3%	0.8x	7.9x	6.5x
Overall Mean		65.8%	\$112,171.7	\$113,664.0	\$13,211.7	10.0%	0.9x	9.5x	7.1x

Dealers & Aftermarket

	Market Data			LTM Financial Performance Data			Valuation Multiples		
(\$ in millions, except share data)	Share Price		Ent.			EBITDA	EV / Rev	EV / EE	BITDA
Company Name	12/31/22	% 52 High	Value	Revenue	EBITDA	Margin	LTM	LTM	NTM
Aftermarket Parts & Repair									
Advance Auto Parts, Inc.	\$147.03	60.1%	\$9,825.3	\$11,078.0	\$1,012.9	9.1%	0.9x	9.7x	7.7x
AutoZone, Inc.	2,466.18	94.5	53,558.4	16,568.4	3,691.2	22.3	3.2	14.5	13.7
Genuine Parts Company	173.51	92.4	27,163.1	21,375.5	2,103.5	9.8	1.3	12.9	13.7
LKQ Corporation	53.41	88.4	16,479.8	12,978.5	1,675.6	12.9	1.3	9.8	9.5
Monro, Inc.	45.20	75.4	1,887.0	1,342.6	165.3	12.3	1.4	11.4	10.1
O'Reilly Automotive, Inc.	844.03	96.9	57,541.4	14,409.9	3,312.4	23.0	4.0	17.4	16.4
Group Median		90.4%	\$21,821.5	\$13,694.2	\$1,889.6	12.6%	1.3x	12.2x	11.9x
Group Mean		84.6%	\$27,742.5	\$12,958.8	\$1,993.5	14.9%	2.0x	12.6x	11.8x
Automotive Dealers									
Asbury Automotive Group, Inc.	\$179.25	87.9%	\$7,564.9	\$15,433.9	\$1,344.1	8.7%	0.5x	5.6x	6.7x
AutoNation, Inc.	107.30	79.1	11,336.4	26,985.0	2,203.8	8.2	0.4	5.1	6.2
CarMax, Inc.	60.89	46.6	27,341.1	33,050.8	1,141.9	3.5	0.8	23.9	nmf
Carvana Co.	4.74	2.0	7,340.2	14,520.0	(917.0)	(6.3)	0.5	nmf	nmf
Group 1 Automotive, Inc.	180.37	89.4	5,575.2	16,222.1	1,182.1	7.3	0.3	4.7	6.2
Lithia Motors, Inc.	204.74	58.6	12,977.7	28,231.5	2,118.9	7.5	0.5	6.1	7.4
Penske Automotive Group, Inc.	114.93	87.4	12,706.8	27,814.8	1,614.6	5.8	0.5	7.9	8.0
Sonic Automotive, Inc.	49.27	83.2	4,578.5	14,001.1	748.9	5.3	0.3	6.1	6.9
Group Median		81.2%	\$9,450.6	\$21,603.6	\$1,263.1	6.5%	0.5x	6.1x	6.8x
Group Mean		66.8%	\$11,177.6	\$22,032.4	\$1,179.7	5.0%	0.5x	8.5x	6.9x
Overall Median		85.3%	\$12,021.6	\$15,828.0	\$1,479.3	8.4%	0.7x	9.7x	7.8x
Overall Mean		74.4%	\$18,276.8	\$18,143.7	\$1,528.4	9.2%	1.1x	10.4x	9.4x

Note: EV/EBITDA multiples greater than 35.0x excluded from median and mean figures; LTM EBITDA excludes extraordinary items Source: S&P Capital IQ

Automotive Public Comps (cont.)

Automotive Suppliers

	Market Data			LTM Financial Performance Data			Valuation Multiples		
(\$ in millions, except share data)	Share Price		Ent.			EBITDA	EV / Rev	EV / EB	ITDA
Company Name	12/31/22	% 52 High	Value	Revenue	EBITDA	Margin	LTM	LTM	NTM
Automotive Metal Working									
American Axle & Manufacturing Holdings, Inc.	\$7.82	65.4%	\$3,408.3	\$5,802.4	\$725.9	12.5%	0.6x	4.7x	4.5x
BorgWarner Inc.	40.25	80.4	12,598.7	15,801.0	2,242.0	14.2	0.8	5.6	5.2
Dana Incorporated	15.13	59.3	4,409.9	10,156.0	635.0	6.3	0.4	6.9	5.5
Gestamp Automoción, S.A.	3.86	76.9	5,232.0	11,536.2	1,100.8	9.5	0.5	4.8	3.8
Linamar Corporation	45.29	75.4	3,116.4	5,384.3	664.1	12.3	0.6	4.7	3.7
Magna International Inc.	56.20	67.5	18,737.6	37,840.0	3,161.0	8.4	0.5	5.9	5.7
Schaeffler AG	6.80	81.1	7,067.5	16,895.4	2,208.0	13.1	0.4	3.2	3.2
Group Median		75.4%	\$5,232.0	\$11,536.2	\$1,100.8	12.3%	0.5x	4.8x	4.5x
Group Mean		72.3%	\$7,795.8	\$14,773.6	\$1,533.8	10.9%	0.5x	5.1x	4.5x
Automotive Plastics									
Adient plc	\$34.69	68.1%	\$5,391.8	\$14,340.0	\$624.0	4.4%	0.4x	8.6x	6.1x
Autoliv, Inc.	76.58	70.5	7,834.4	8,842.0	935.0	10.6	0.9	8.4	6.1
Compagnie Plastic Omnium SE	14.51	55.2	2,097.4	9,124.7	554.6	6.1	0.2	3.8	2.2
Faurecia S.E.	15.10	31.3	13,304.7	27,207.7	1,852.9	6.8	0.5	7.2	3.8
Lear Corporation	124.02	63.5	8,975.2	20,891.5	1,391.7	6.7	0.4	6.4	5.6
Samvardhana Motherson International Limited	0.90	43.7	7,271.9	8,819.0	615.0	7.0	0.8	11.8	8.3
Group Median		59.3%	\$7,553.1	\$11,732.4	\$779.5	6.7%	0.5x	7.8x	5.8x
Group Mean		55.4%	\$7,479.2	\$14,870.8	\$995.5	6.9%	0.5x	7.7x	5.3x
Technology Enablers									
Aptiv PLC	\$93.13	52.9%	\$30,478.5	\$17,489.0	\$2,124.0	12.1%	1.7x	14.3x	11.1x
Continental Aktiengesellschaft	59.83	56.1	18,552.0	37,176.9	2,404.1	6.5	0.5	7.7	3.7
DENSO Corporation	49.56	64.2	40,428.0	46,576.2	5,521.3	11.9	0.9	7.3	6.3
HELLA GmbH & Co. KGaA	81.28	92.1	9,464.7	7,328.5	611.9	8.4	1.3	15.5	9.0
Methode Electronics, Inc.	44.37	88.1	1,676.2	1,178.6	155.0	13.2	1.4	10.8	8.7
Stoneridge, Inc.	21.56	83.3	703.6	899.9	36.9	4.1	0.8	19.1	14.2
Valeo SE	17.85	58.6	9,417.2	21,413.9	1,777.3	8.3	0.4	5.3	3.3
Visteon Corporation	130.83	86.0	3,618.4	3,756.0	303.0	8.1	1.0	11.9	8.5
Group Median		73.8%	\$9,441.0	\$12,408.8	\$1,194.6	8.3%	0.9x	11.4x	8.6x
Group Mean		72.7%	\$14,292.3	\$16,977.4	\$1,616.7	9.1%	1.0x	11.5x	8.1x
Overall Median		67.5%	\$7,271.9	\$11,536.2	\$935.0	8.4%	0.6x	7.2x	5.6x
Overall Mean		67.6%	\$10,180.2	\$15,640.9	\$1,411.6	9.1%	0.7x	8.3x	6.1x

Note: EV/EBITDA multiples greater than 35.0x excluded from median and mean figures; LTM EBITDA excludes extraordinary items Source: S&P Capital IQ

Stout IB Auto & Transportation Components

ABOUT

For more than 30 years, Stout has exclusively focused on serving the unique M&A transaction advisory needs of middle-market clients. Our firm is a trusted advisor to leading organizations due to our deep industry knowledge, senior-level attention, process expertise, and relentless focus on delivering unparalleled results.

The Stout Automotive & Transportation Components team leverages deep advisory experience and dedicated coverage and expertise across numerous industry subsectors, processes, and end markets.

FOCUS AREAS

Diverse Industry Participants

- Automotive
- Offroad
- Heavy Truck
- Agriculture
- Construction
- Dealers
- Aftermarket

Subsector Coverage

- Tires
- Plastics
- Tool & Die
- Machining
- Casting
- Stamping
- Forging
- Rubber and NVH

SELECT STOUT TRANSACTIONS



FOR MORE INFORMATION

Michael Benson

Managing Director mbenson@stout.com 248.432.1229

Steve Rathbone

Managing Director srathbone@stout.com 646.810.4366

David Hale

Director dhale@stout.com 248.432.1316

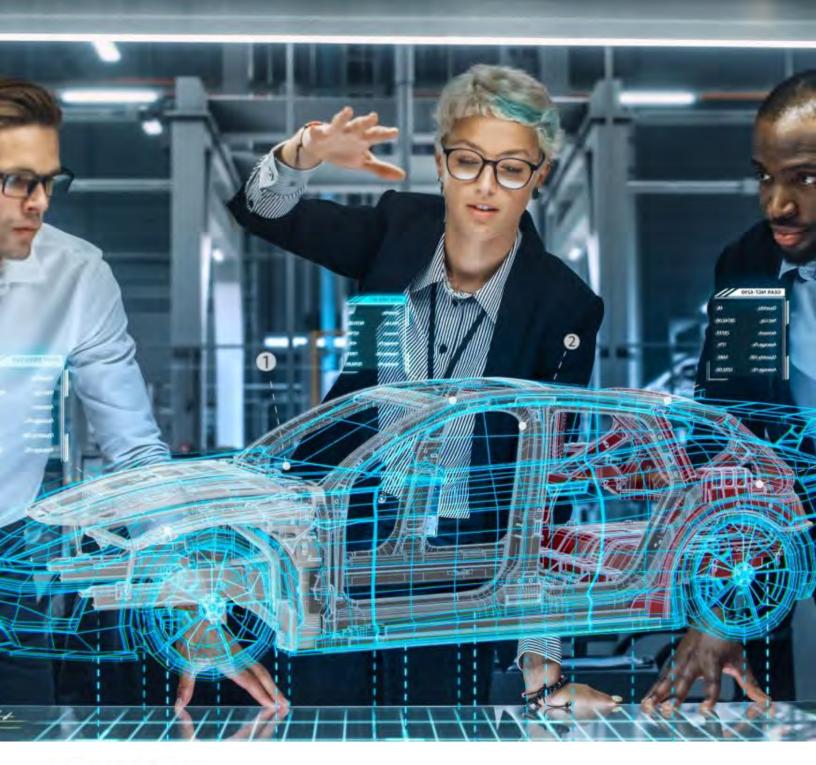
Johnathan Lekosiotis

Associate jlekosiotis@stout.com 312.752.3300

Jack Ronan

Analyst jronan@stout.com 248.432.1245

Note: Transaction experience may include work by Stout professionals while at prior firms





ABOUT STOUT INVESTMENT BANKING

Stout's Investment Banking group provides mergers and acquisitions (M&A) advisory, capital market financing, and other financial advisory services to portfolio companies of private equity firms, closely held or family-owned businesses, and divisions of large corporate parents. Learn more about our **Investment Banking services**.

Stout is a trade name for Stout Risius Ross, LLC, Stout Advisors SA, Stout Bluepeak Asia Ltd, Stout GmbH, MB e Associati S.r.I.,Stout Park Ltd, and Stout Capital, LLC, a FINRA-registered broker-dealer and SIPC member firm. The term "Stout" refers to one or more of these legally separate and independent advisory practices. Please see <u>www.stout.com/about</u> to learn more.