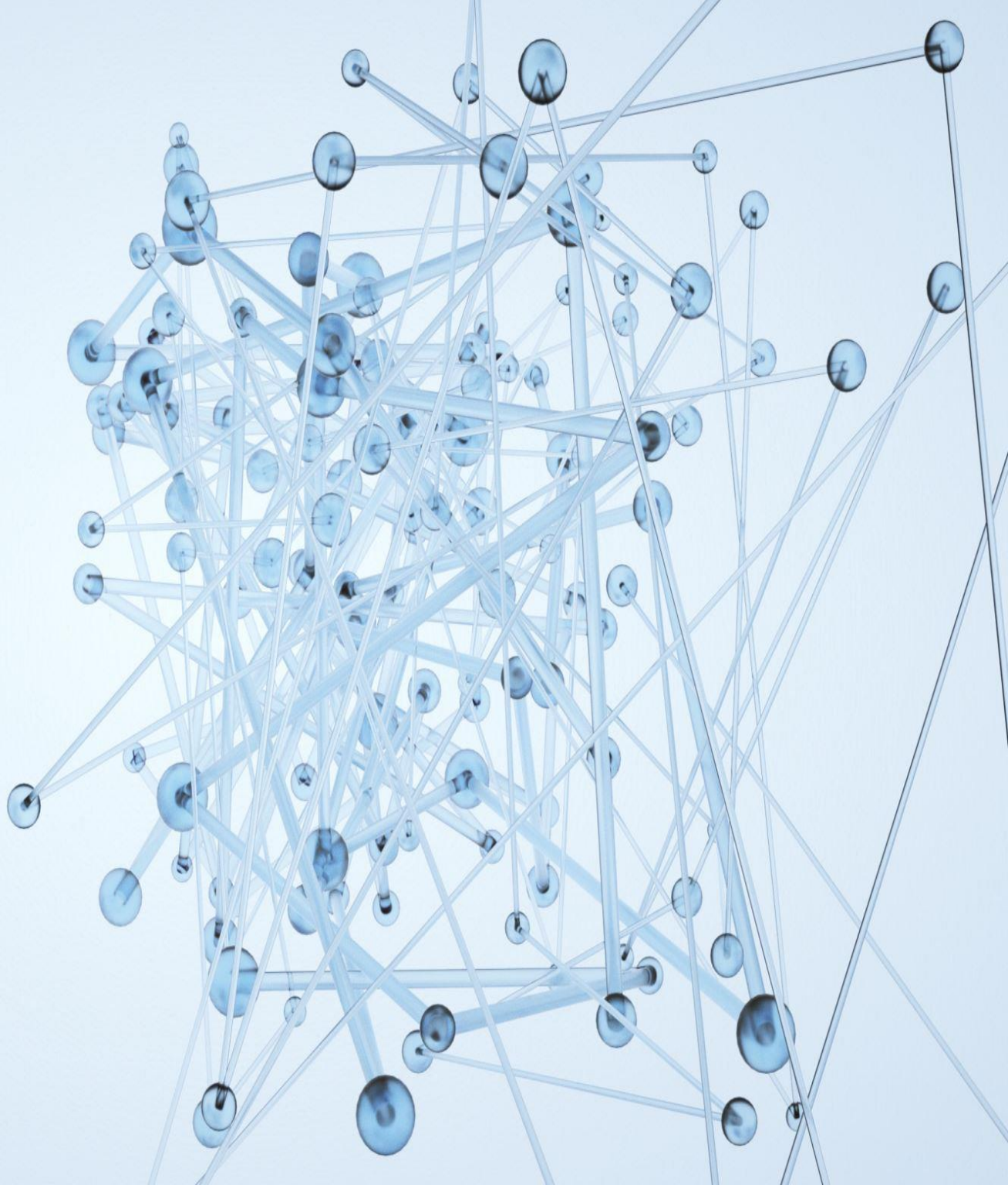


PLASTICS  
INDUSTRY  
REPORT  
JULY 2020



# PLASTICS INDUSTRY KEY TAKEAWAYS

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- ❑ **Polyether Ether Ketone (PET)** volume is expected to grow 6.4% per year through forecast period (Jan. 2020 to Dec. 2027). PET is widely used in engineering applications due to their colorless and organic characteristics.
- ❑ **Industry Demand Drivers**
  - **Automotive:** Is the fastest growing **application segment** in the global arena during the forecast period. Auto makers continue to substitute plastic for metal parts driving increased demand.
  - **Recycling:** As a result of the growing number of recycling plants and stringent regulations for recycling of plastic, recycling is anticipated to be the fastest growing **service segment** with 4.9% per year over the forecast period.
- ❑ **Global Plastics Markets**
  - **Global Waste Management:** The waste management plastic market size is anticipated to reach USD 42.2 billion by 2027, expanding at a CAGR of 3.1%.
  - **Plastic Waste Management:** In Asia Pacific, the plastic waste management market is anticipated to grow of 3.4% per year over the forecast period due to rising GDP, growing population, and increasing disposable income in the developing economies such as India, China, and Japan.
  - **Global Industrial Plastic:** The market size is anticipated to reach USD 103.96 billion by 2027, registering a revenue-based CAGR of 4.6% over the forecast period.
  - **Global Antimicrobial Plastic:** The global antimicrobial plastic market size is expected to reach USD 44.1 billion by 2027, expanding at a CAGR of 8.2%.

# PUBLIC COMPS

Company Name	Share Price	52 Week Range	Market Cap	Enterprise Value	Multiples	
					TTM EV/ Sales	TTM EV/ EBITDA
Dow Inc	\$ 42.44	21.95-56.25	\$ 29,340,000	\$ 39,036,958	0.9x	5.6x
Celanese	\$ 88.84	52.70-128.88	\$ 9,947,000	\$ 12,777,966	2.1x	7.3x
Berry Global	\$ 45.08	25.00-55.26	\$ 5,692,000	\$ 15,531,204	1.4x	8.6x
Sanmina	\$ 25.56	18.34-34.96	\$ 1,743,000	\$ 1,877,885	0.3x	4.9x
Trinseo	\$ 23.02	14.16-50.14	\$ 880,262	\$ 1,483,584	0.4x	4.8x
Core Molding Technologies	\$ 4.35	1.03-7.18	\$ 34,661	\$ 63,376	0.2x	4.8x
			Low	\$ 63,376	0.2x	4.8x
			Median	\$ 7,327,925	0.7x	5.3x
			High	\$ 39,036,958	2.1x	8.6x

\*All values in thousands, except for share prices and multiples.

\*Share price and 52-week range as of 07/14/20

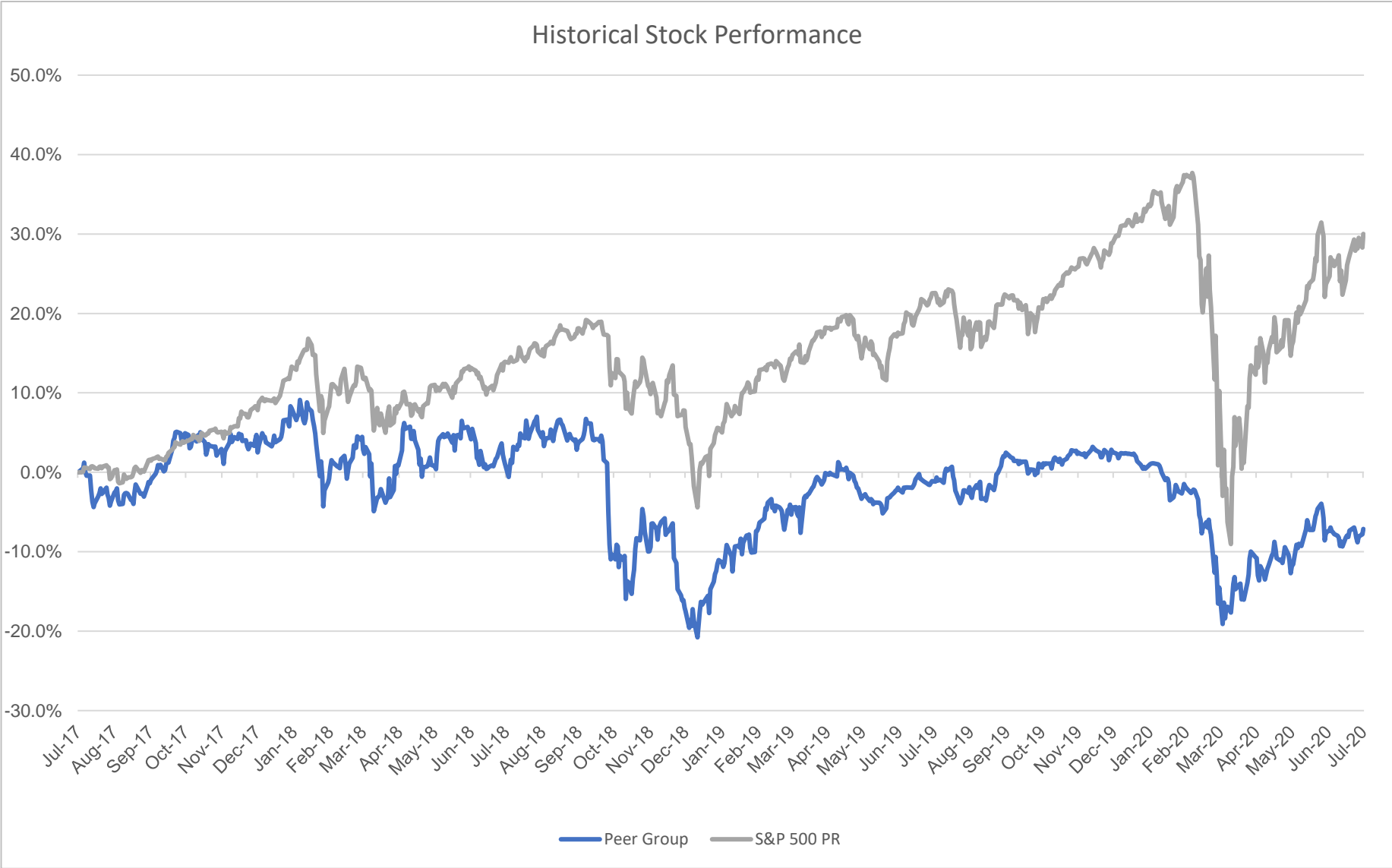


# PUBLIC COMPS

## TTM Data

Company Name	Sales	EBITDA	Gross Margin	EBIT Margin	EBITDA Margin	Revenue Growth%	Full-Time Employees	Revenue/FTE
Dow Inc	\$ 41,752,000	\$ 6,971,000	14.4%	9.7%	16.7%	-13.6%	36,500	\$ 1,143.89
Celanese	\$ 6,070,000	\$ 1,761,000	24.7%	23.1%	29.0%	-13.2%	7,700	\$ 788.31
Berry Global	\$ 10,747,000	\$ 1,810,000	18.6%	8.1%	16.8%	33.5%	48,000	\$ 223.90
Sanmina	\$ 7,349,923	\$ 382,243	7.2%	2.7%	5.2%	-8.2%	43,000	\$ 170.93
Trinseo	\$ 3,616,200	\$ 306,800	8.3%	1.4%	8.5%	-19.9%	2,700	\$ 1,339.33
Core Molding Technologies	\$ 276,047	\$ 13,084	10.6%	-1.2%	4.7%	-1.0%	1,821	\$ 151.59
Low	\$ 276,047	\$ 13,084	7.2%	-1.2%	4.7%	-19.9%	1,821	\$ 152
Median	\$ 6,709,962	\$ 1,071,622	12.5%	5.4%	12.6%	-10.7%	22,100	\$ 506
High	\$ 41,752,000	\$ 6,971,000	24.7%	23.1%	29.0%	33.5%	48,000	\$ 1,339

# PLASTICS INDEX Vs. S&P 500

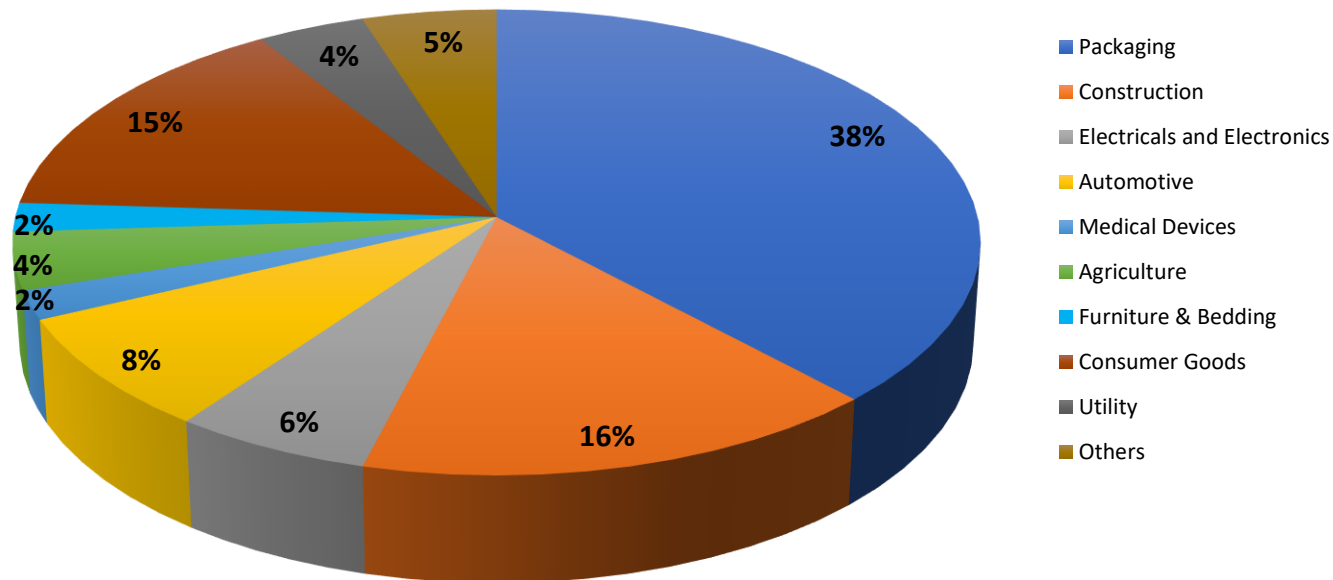


DCA Plastics Index: CE, DOW, BERY, CMT, TSE, SANM

# GLOBAL PLASTIC MARKET SHARE, BY APPLICATION, 2019 (%)

Report Attribute	Details
Market Size Value in 2020	579.7 Billion USD
Revenue Forecast in 2027	722.6 Billion USD
Growth Rate	CAGR of 3.2% from 2020 to 2027
Base Year for Estimation	2019
Largest Demand By Continent	Asia at 44.3%

World Plastics Production	Percentage
China	25%
Europe	20%
United States	19.50%



Source: [www.grandviewresearch.com](http://www.grandviewresearch.com)

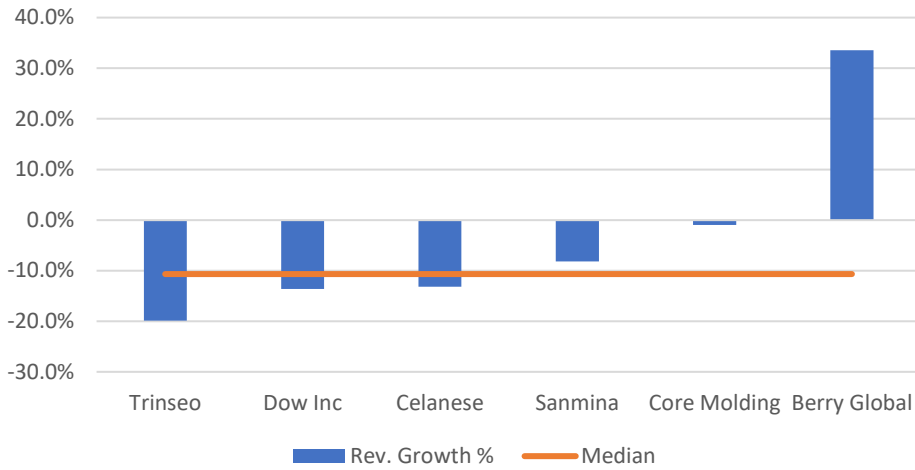
# RECENT TRANSACTIONS

Deal Date	Seller	HQ Location	Revenue	Acquiring Firm	Deal Size
11-Jun-2019	Bemis Company	Neenah, WI	4,063.90	Amtcor (NYS: AMCR)(Ronald Delia)	6,800.00
31-Aug-2016	Axiall	Atlanta, GA	3,105.10	Westlake Chemical (NYS: WLK)(Albert Chao)	3,800.00
31-Jan-2020	Reynolds Packaging Group (NAS: REYN)	Lake Forest, IL	3,032.00		1,226.42
31-Jul-2019	Infiltrator Water Technologies	Old Saybrook, CT	211.00	Advanced Drainage Systems (NYS: WMS)(D. Scott Barbour)	1,146.00
23-Apr-2019	Next Generation Films	Lexington, OH	422.00	Charter NEX Films(Kathy Bolhous), Leonard Green & Partners, Oak Hill Capital	1,070.00
27-Feb-2020	DS Smith Plastics	Romeoville, IL		Liqui-Box(Ken Swanson), Olympus Partners(Manu Bettegowda)	585.00
29-Mar-2019	Paragon Films	Broken Arrow, OK	190.20	Wellspring Capital Management(John Morningstar)	500.00
23-Jul-2019	Revolution Plastics	Little Rock, AR		Arsenal Capital Partners(Timothy Zappala)	500.00
17-Jun-2019	Amtcor (Three Manufacturing Facilities)	Milwaukee, WI		Genstar Capital(Robert Rutledge), Tekni-Plex(Paul Young)	215.00
31-Dec-2019	Thermoform Engineered Quality	Huntley, IL		Sonoco (NYS: SON)(Robert Tiede)	187.29
13-Mar-2020	Tekra	New Berlin, WI		Schweitzer Mauduit International (NYS: SWM)	170.60
15-Mar-2019	Polychem	Mentor, OH		Manulife Investment Management Private Equity & Credit, The Sterling Group(Gary Rosenthal)	152.00
01-Feb-2018	Omni Plastics	Evansville, IN		Celanese (NYS: CE)(Scott Sutton)	146.00
05-Mar-2020	Inno-Pak	Delaware, OH			50.00
27-Mar-2019	TRU Aseptics	Beloit, WI		Lyons Magnus(Ed Carolan), Paine Schwartz Partners (Kevin Schwartz), WP Global Partners	15.00
02-Nov-2015	Swisher Hygiene (U.S. operations)	Charlotte, NC		Ecolab (NYS: ECL)(Douglas Baker)	40.00
02-Jan-2018	Cascade Water Services	Hicksville, NY	35.00	Ecolab (NYS: ECL)(Michael Monahan)	
12-Aug-2019	Chemstar	Lithia Springs, GA		Ecolab (NYS: ECL)(Bobby Mendez)	
12-Jan-2019	Lubrizol Advanced Materials	Cleveland, OH		Dow Chemical (NYS: DOW)	

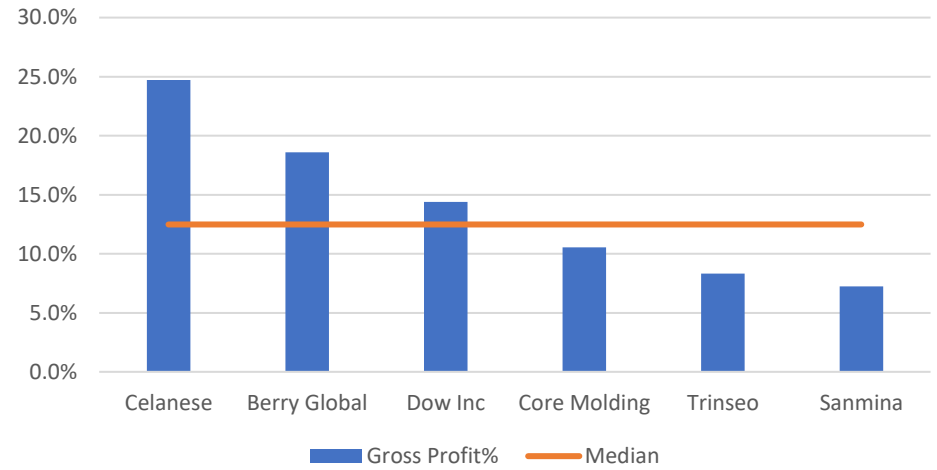


# OPERATING METRICS

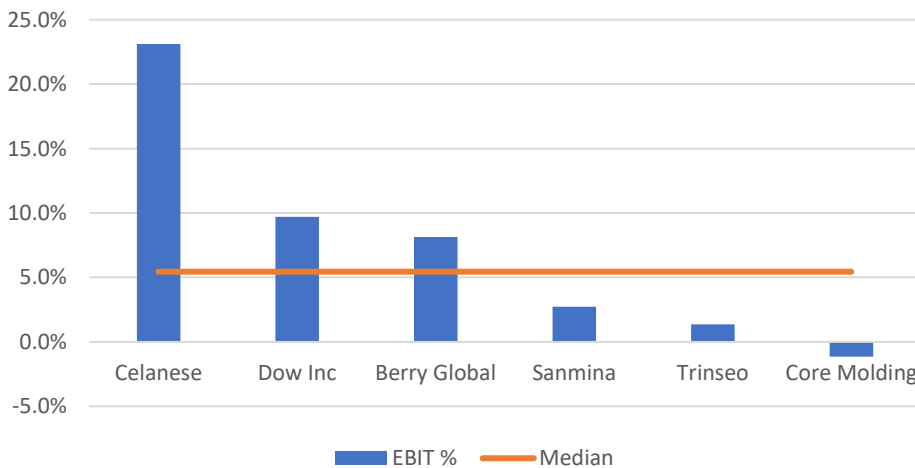
## Revenue Growth



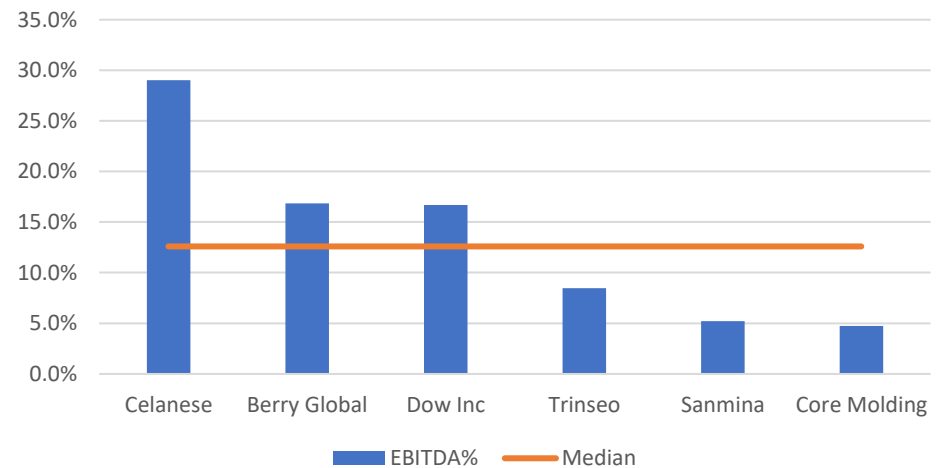
## Gross Profit



## EBIT



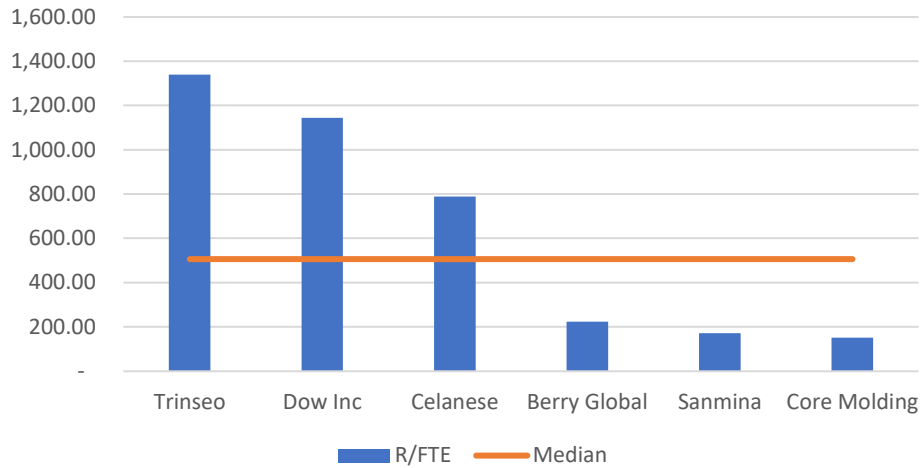
## EBITDA



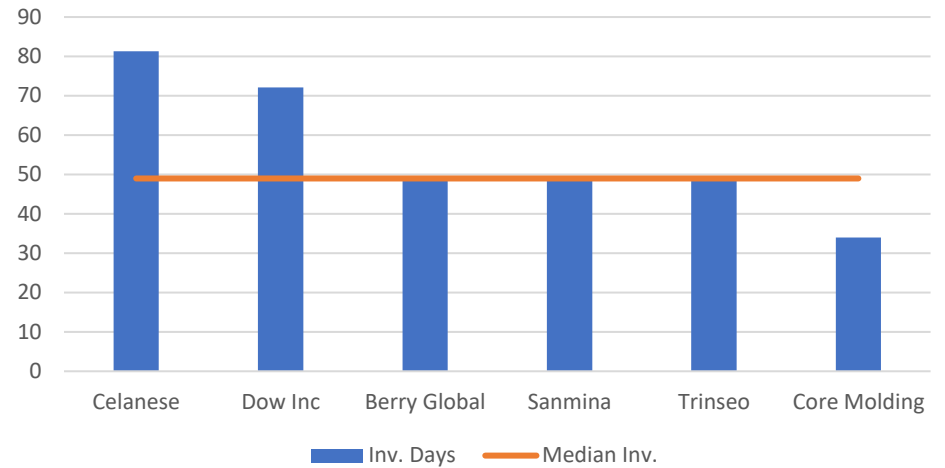


# RATIO ANALYSIS

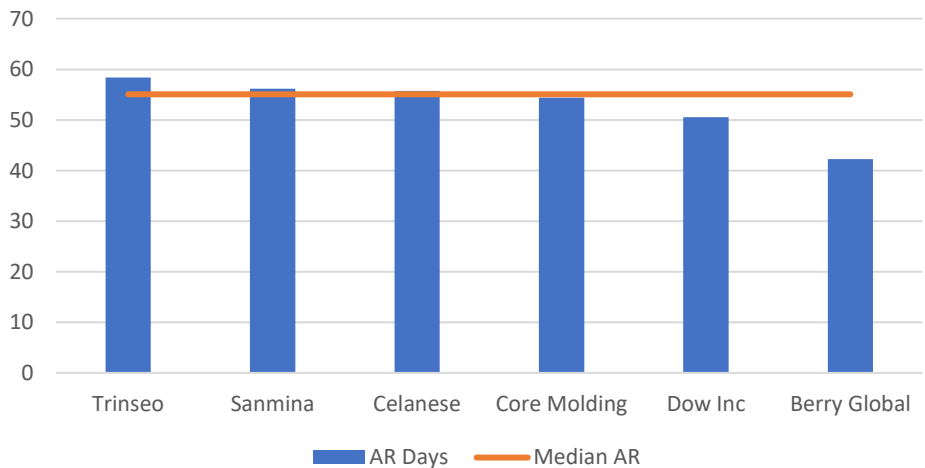
## Revenue per Employee



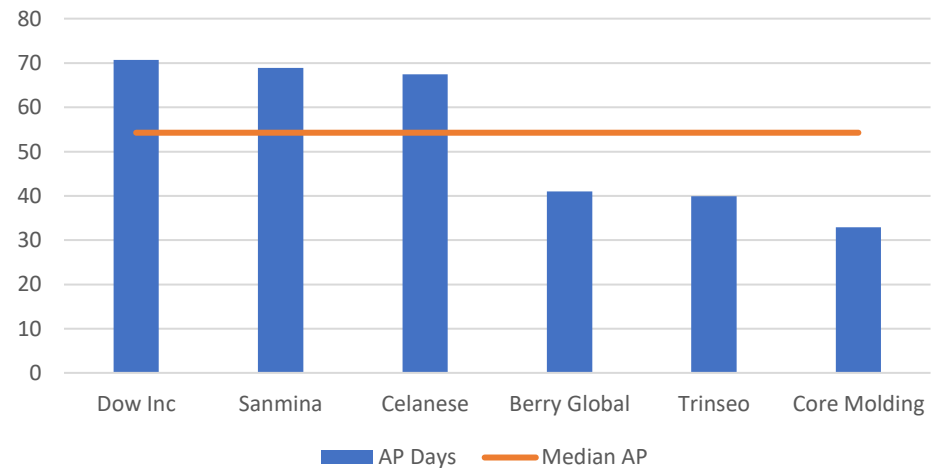
## Inventory Days



## AR Days

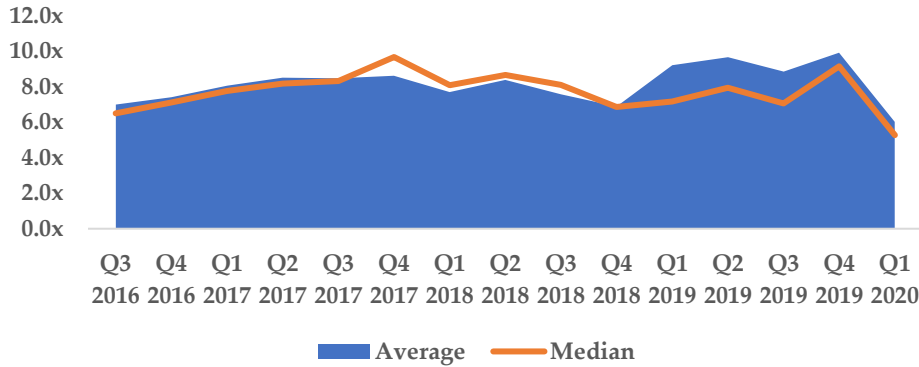


## AP Days

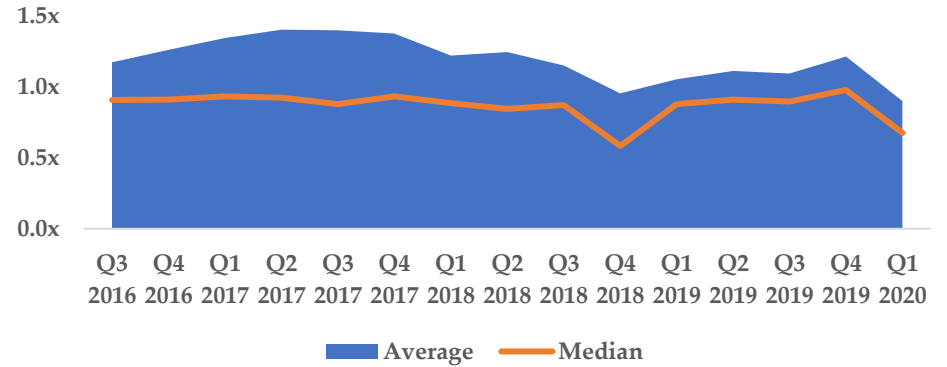


# VALUATION TRENDS

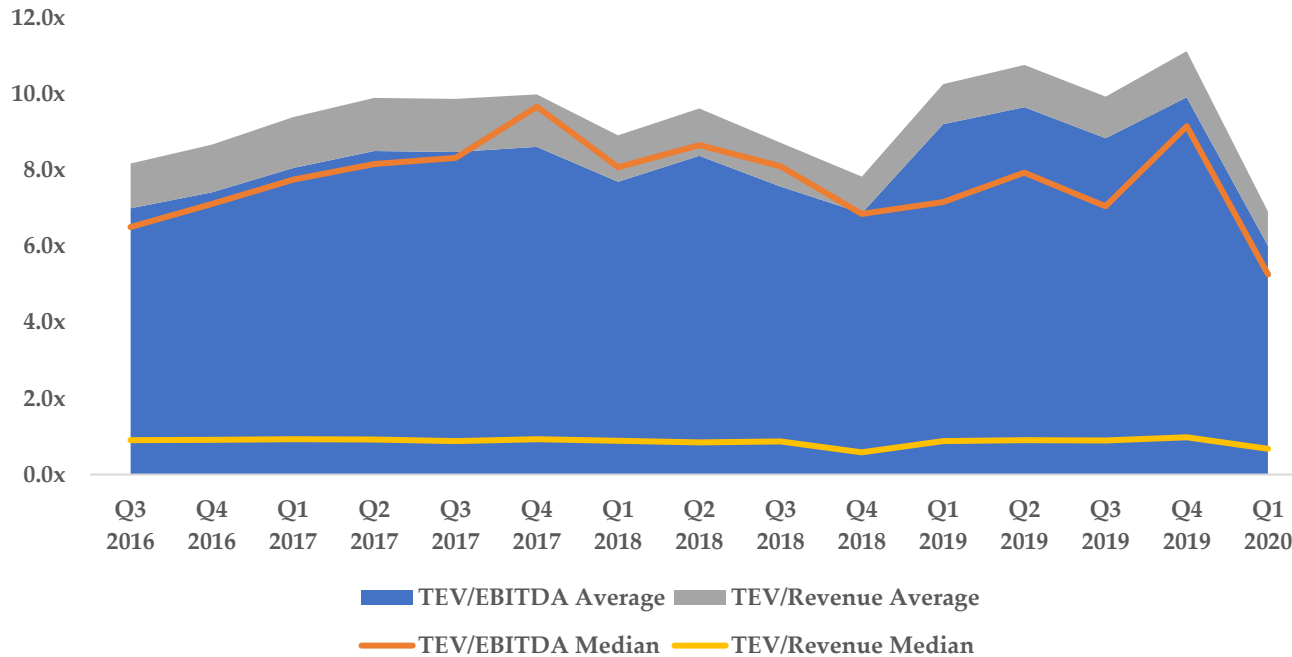
## Public EBITDA Multiples Over Time



## Public Revenue Multiples Over Time



## Public Comps Valuation Trends

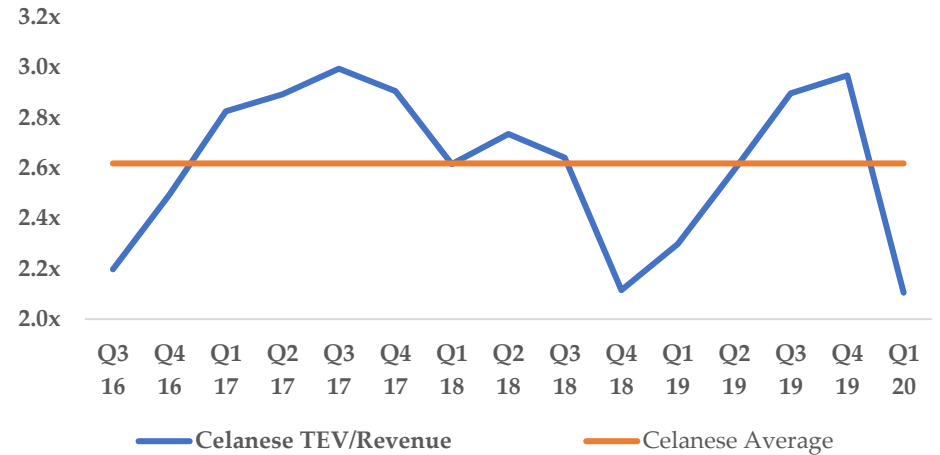


# PUBLIC COMP

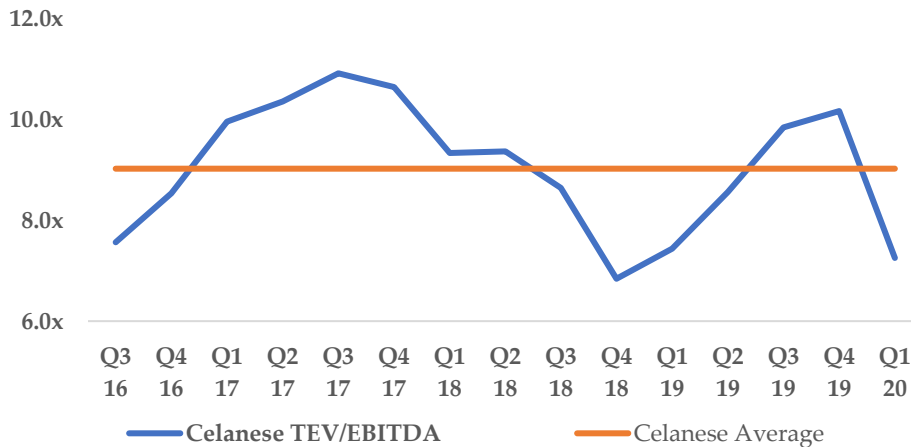
## Celanese (NYS: CE)

Celanese Corporation (Celanese) is a technology and specialty materials company. The Company's segments include Advanced Engineered Materials, Consumer Specialties, Industrial Specialties, Acetyl Intermediates and Other Activities. They are one of the world's largest producers of chemicals in the acetyl chain, which are used in various end markets, including coatings and adhesives. The company also produces specialty polymers used in the automotive, medical, and consumer end markets as well as cellulose derivatives used in cigarette filters. The company is headquartered in Irving, TX.

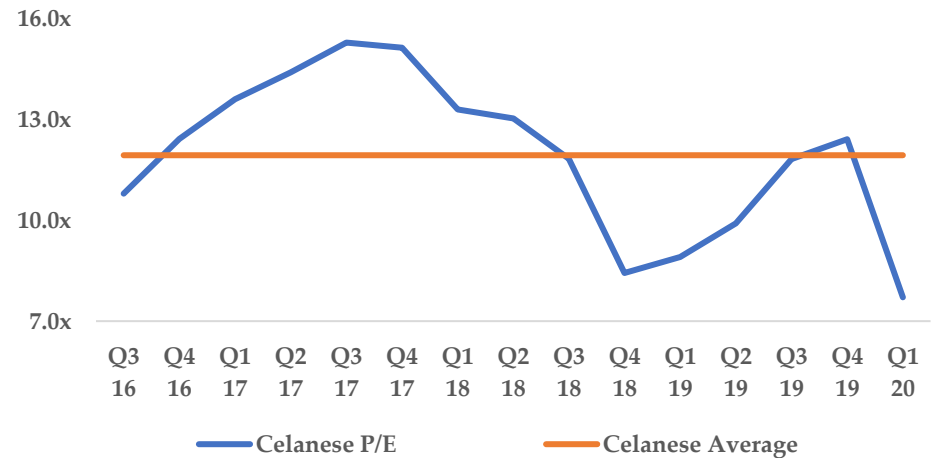
### Revenue Multiples - Celanese



### EBITDA Multiples - Celanese



### P/E Multiples - Celanese

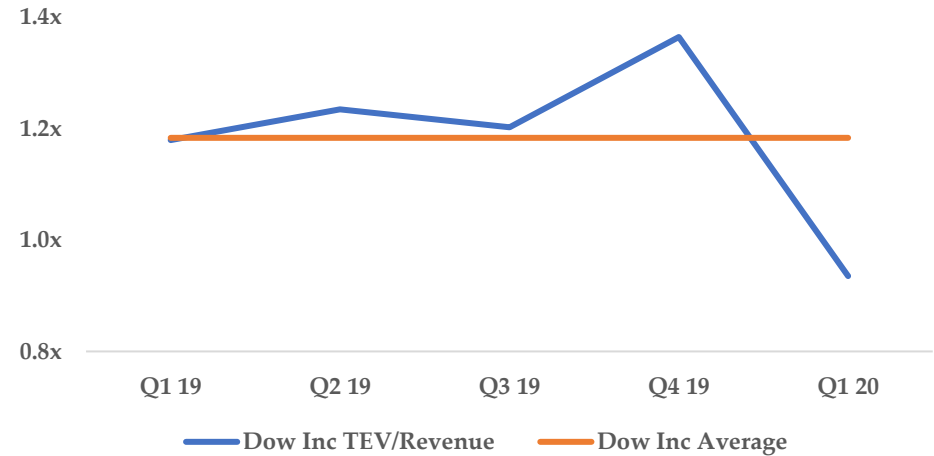


# PUBLIC COMP

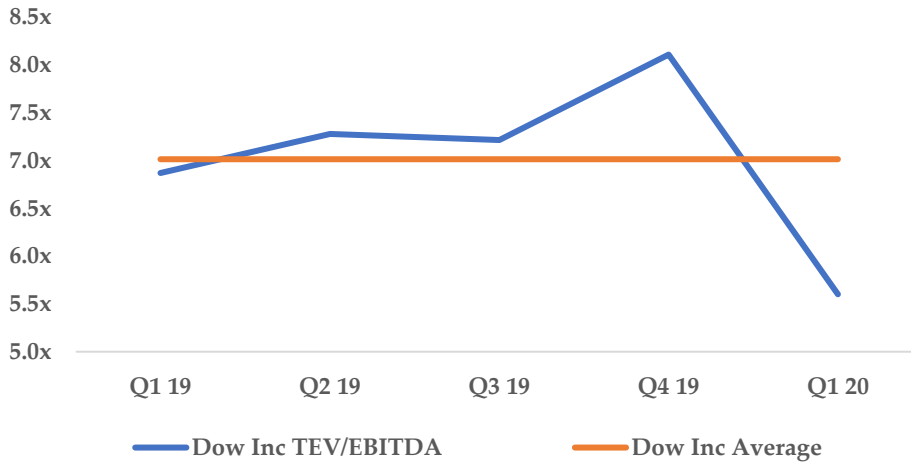
Dow Inc (NYS: DOW)

Dow Inc is a diversified chemical manufacturing company. It is combining science and technology to develop innovative solutions that are essential to human progress. Dow's portfolio is comprised of six global business units, organized into three operating segments: Performance Materials and Coatings, Industrial Intermediates and Infrastructure and Packaging and Specialty Plastics.

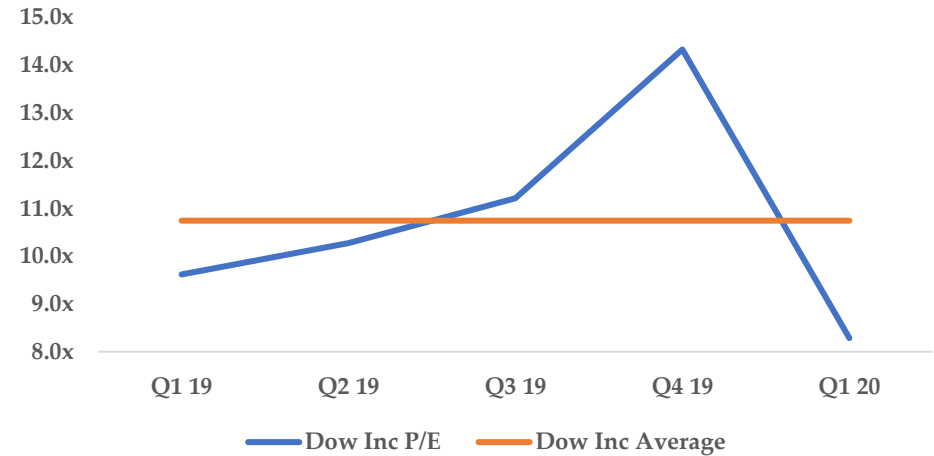
## Revenue Multiples - Dow Inc



## EBITDA Multiples - Dow Inc



## P/E Multiples - Dow Inc

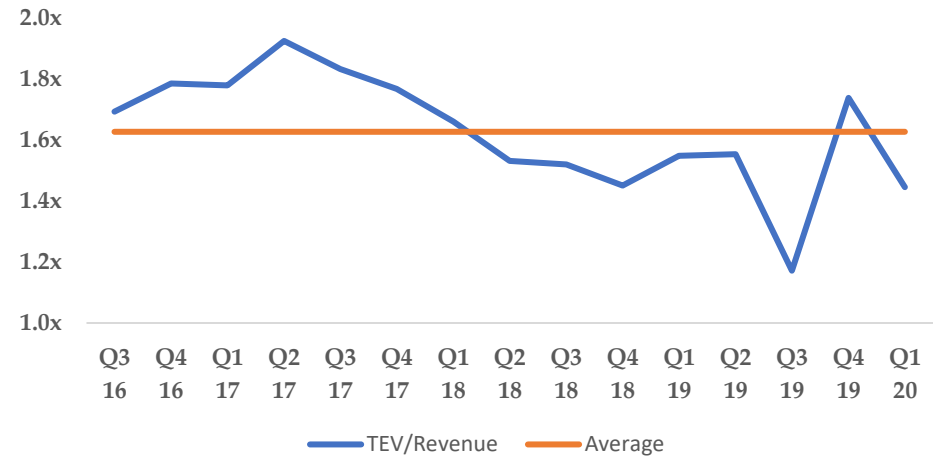


# PUBLIC COMP

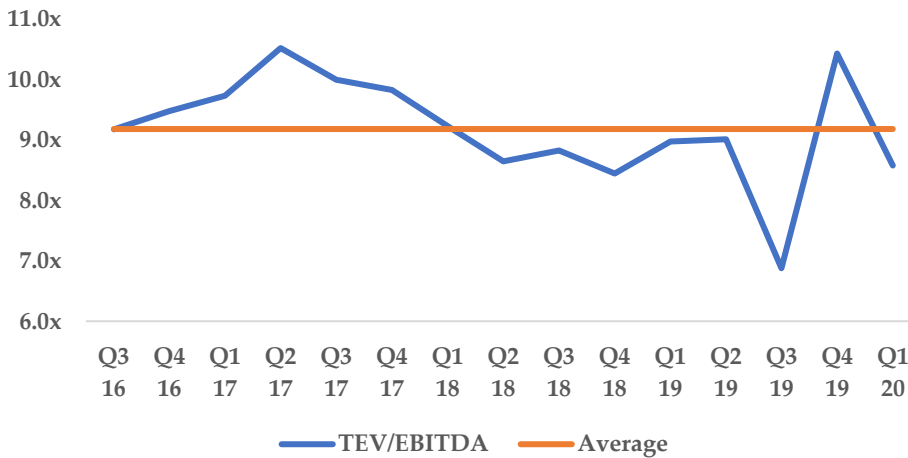
## Berry Global (NYS: BERY)

Berry Global is a provider of value-added plastic consumer packaging, non-woven specialty materials and engineered materials. The Company operates through three segments: Health, Hygiene & Specialties, Consumer Packaging, and Engineered Materials. The Consumer Packaging segment primarily consists of containers, foodservice items, closures, overcaps, bottles, prescription vials, tubes, and printed films. The Health, Hygiene & Specialties segment primarily consists of non-woven specialty materials used in hygiene, infection prevention, personal care, industrial, construction, and filtration applications. The Engineered Materials segment primarily consists of pipeline corrosion protection solutions, tapes and adhesives, polyethylene-based film products, and specialty coated and laminated products.

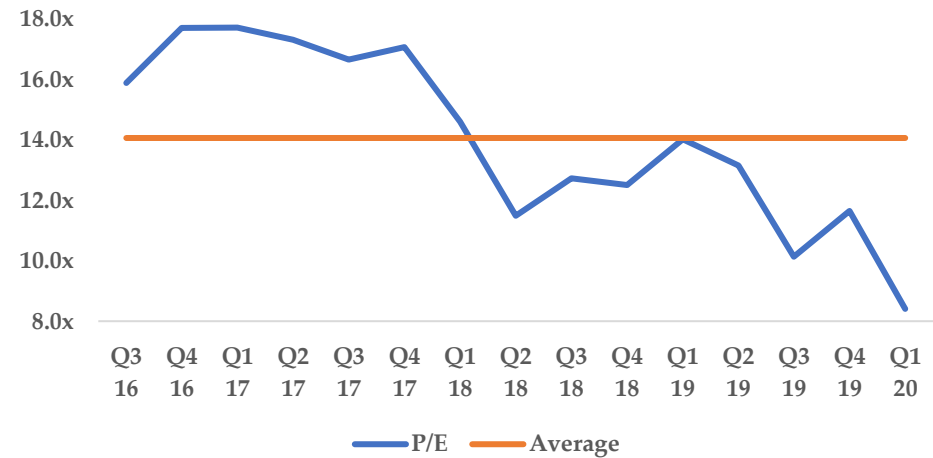
### Revenue Multiples - Berry Global



### EBITDA Multiples - Berry Global



### P/E Multiples - Berry Global

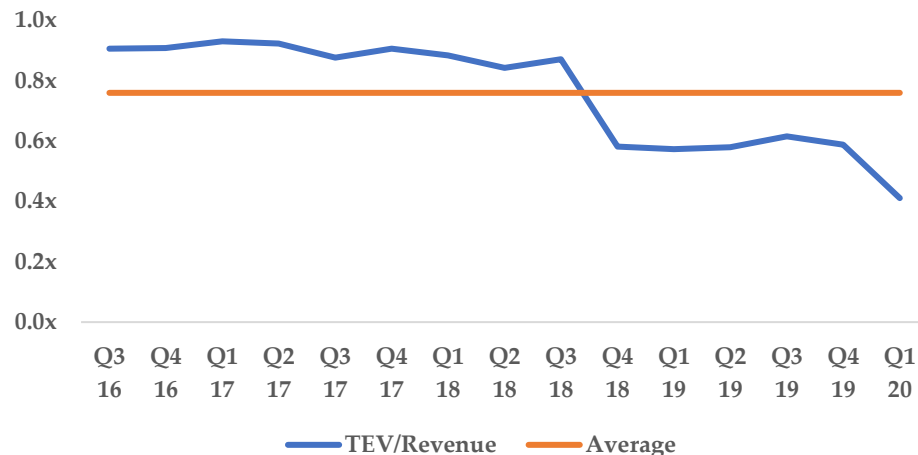


# PUBLIC COMP

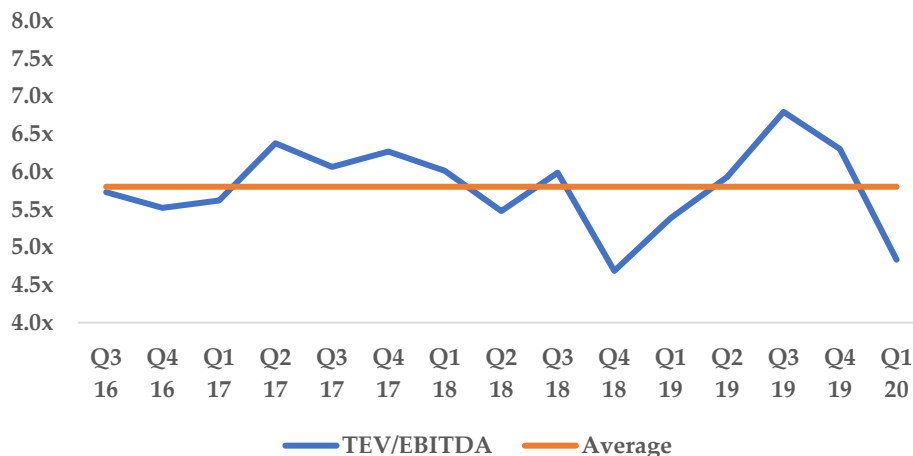
Trinseo (NYS: TSE)

Trinseo SA manufactures synthetic rubber, latex, and plastics products in six segments. latex binders produces binding latex for artificial turf and carpet. The firm manufactures synthetic rubber, used in tires and footwear, in its synthetic rubber segment. Performance plastics creates plastic blends for automotive end markets and consumer products. The polystyrene segment makes polystyrene, which clients use to construct appliances and disposable packaging. The company creates styrene monomer, used to create plastic, in its feedstocks segment. Trinseo and Chevron Phillips co-own the Americas styrenics segment, in which they manufacture polystyrene and styrene monomer for North America.

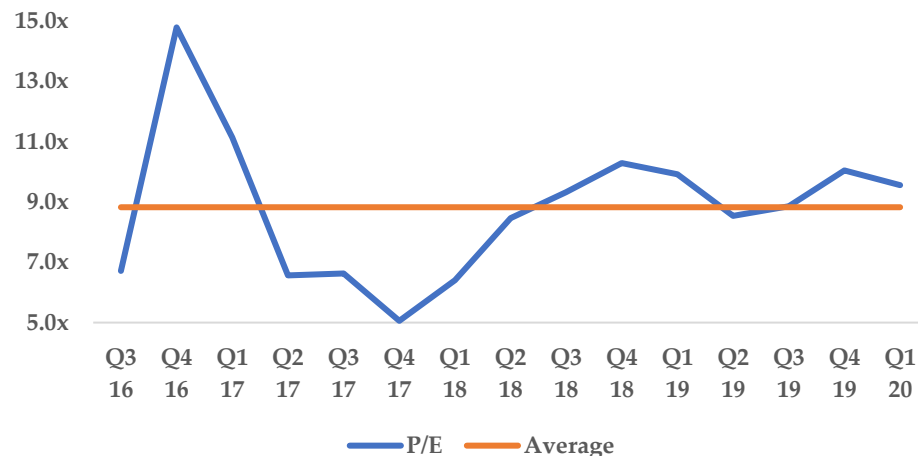
## Revenue Multiples - Trinseo



## EBITDA Multiples - Trinseo



## P/E Multiples - Trinseo

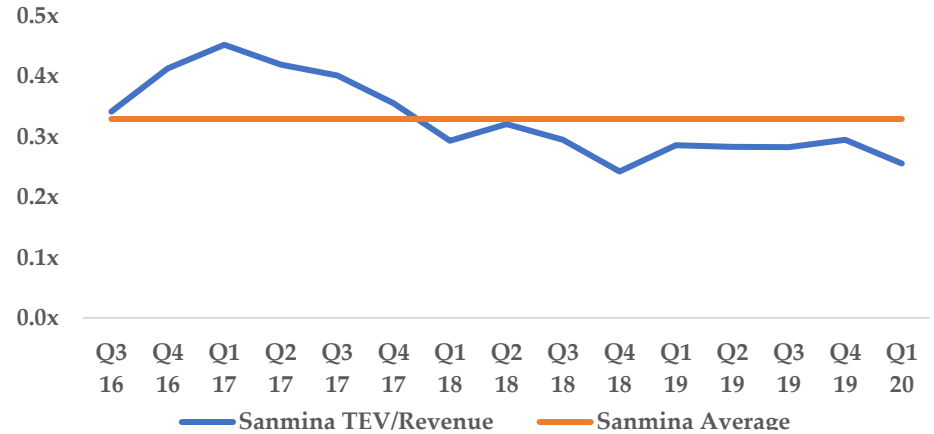


# PUBLIC COMP

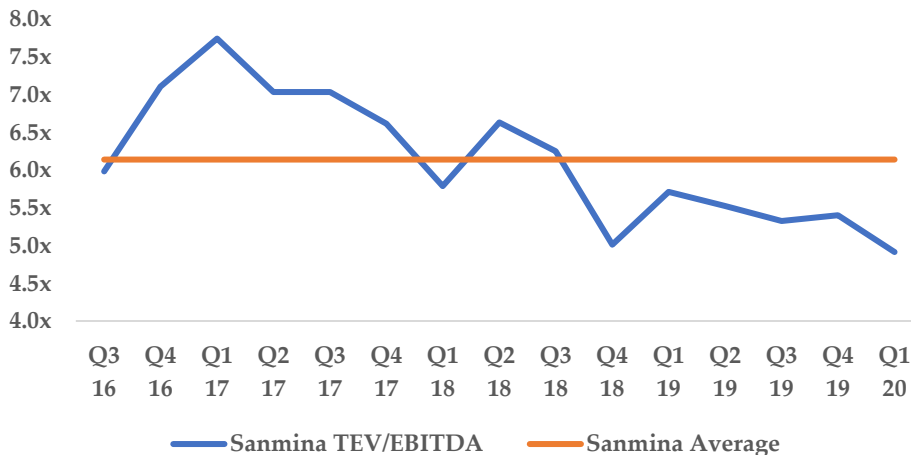
## Sanmina (NYS: SANM)

Sanmina Corp is a provider of integrated manufacturing solutions, components, and after-market services to original equipment manufacturers in the communications networks, storage, industrial, defense and aerospace end markets. The company operates in two business segments: Integrated Manufacturing Solutions, which consists of printed circuit board assembly and represents most of the firm's revenue; and Components, Products, and Services, which includes interconnect systems and mechanical systems. The firm generates revenue primarily in the United States, China, and Mexico, but has a presence around the world.

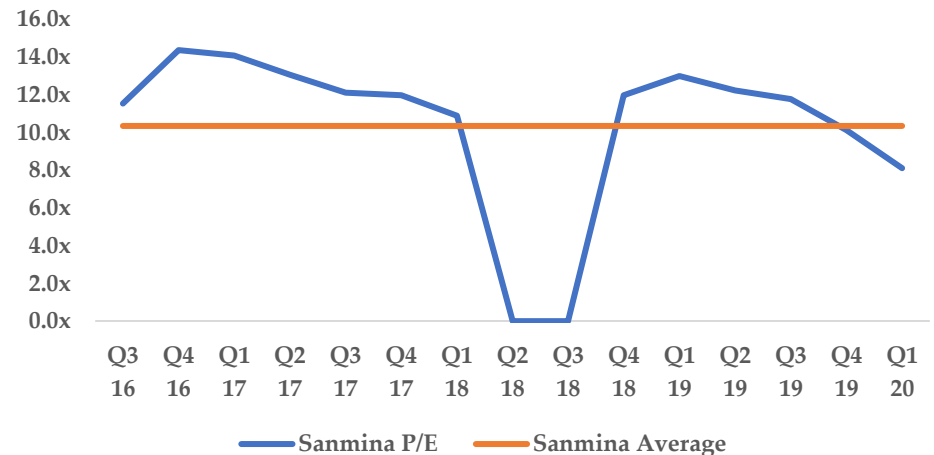
### Revenue Multiples - Sanmina



### EBITDA Multiples - Sanmina



### P/E Multiples - Sanmina



- Sanmina had a rough Q1 2018 with negative earnings. This caused their TTM calculations for Q2 2018 and Q3 2019 to have negative earnings, and therefore, P/E ratios were not available for these two quarters. The low earnings in this quarter were caused by the Tax Act, as well as, restructuring expenses undertaken to address the relocation and closure of three major manufacturing facilities.

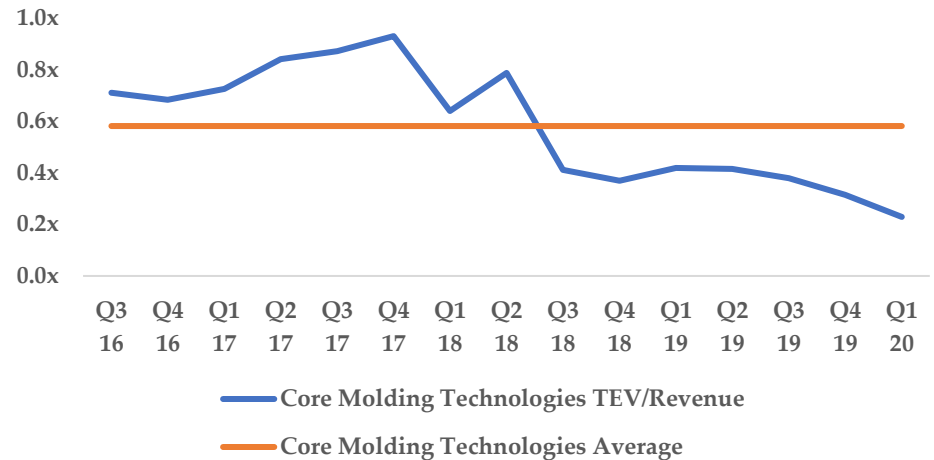


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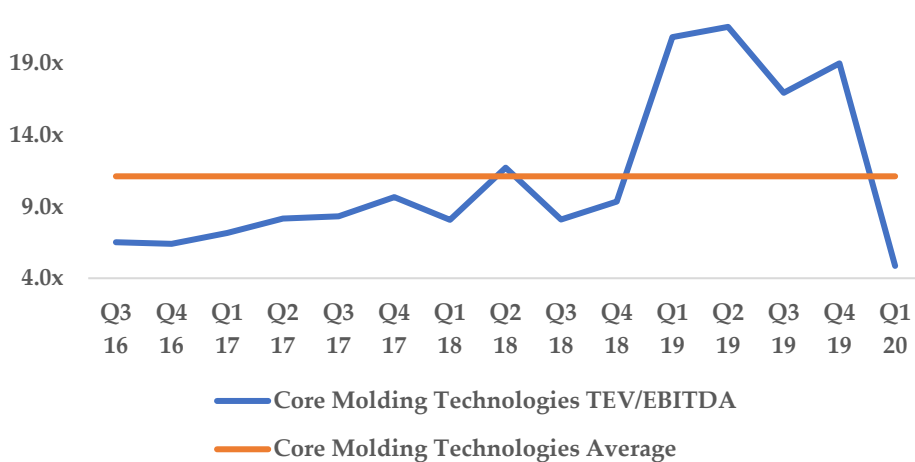
## Core Molding Technologies (ASE: CMT)

Core Molding Technologies Inc is a sheet molding compound and molder of fiberglass reinforced plastics manufacturer. The company along with its subsidiaries operates in the plastics market in a family of products known as reinforced plastics. Its products include large-format moldings and fiberglass processes, including compression molding of SMC(Sheet Molding Compound), glass mat thermoplastics, and bulk molding compounds; spray-up, hand-lay-up, and resin transfer molding. The firm operates various production facilities across the United States, Canada, Mexico and other parts of the world, out of which much of the revenue is generated from the United States.

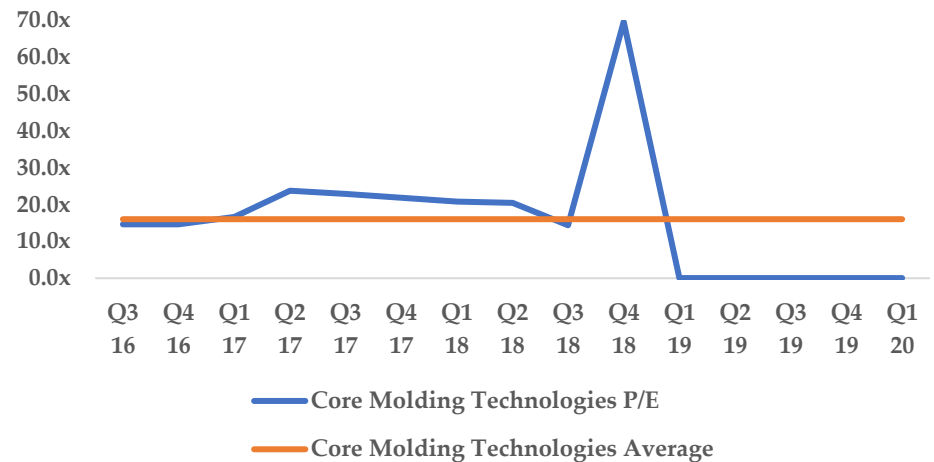
## Revenue Multiples - Core Molding



## EBITDA Multiples - Core Molding



## P/E Multiples - Core Molding



❖ Core Molding Technologies did not have a TTM P/E number starting Q1 2019 because they stopped having positive earnings as of Q3 2018 all the way until the end of 2019. However, they had positive earnings in Q1 2020 despite most of these other competitors struggling during this period.

# DAVIDSON CAPITAL ADVISORS PROFESSIONALS

## **Robert S. Cashion** **Managing Director, Investment Banking and Advisory Services**

Prior to joining Davidson Capital Advisors, Mr. Cashion spent over 20 years in the financial services industry. He manages the firm's overall corporate finance and consulting practice where he oversees and executes the firm's investment banking, advisory and capital raising engagements.

Mr. Cashion worked with several financial institutions and consulting firms delivering investment banking, leveraged finance, consulting and restructuring services. He worked with Bank of America Merrill Lynch and its predecessor firms in the High Grade Capital Markets, Corporate Finance and the Special Situations group.

Mr. Cashion has been involved in industry sectors including general industrial, distribution, business services, retail, technology and healthcare. Mr. Cashion holds B.A. Education, B.S. Accounting, and an MBA from the University of North Carolina. He is a Certified Public Accountant and holds FINRA 7, 63 and 79 securities licenses.



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# DAVIDSON CAPITAL ADVISORS PROFESSIONALS

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## **Elizabeth Folger** **Managing Director, Institutional Client Coverage**

Prior to joining Davidson Capital Advisors, Ms. Folger spent 16 years in the financial services industry in a variety of functions, most recently with Bank of America Merrill Lynch and its predecessor firms. She manages the sales and auction processes for the firm's sell side M&A and capital raising engagements. Her deep experience in the sales and trading has resulted in excellent execution for our client's projects.

She worked in the Loan Syndication Sales Group, headquartered in Charlotte, with her primary responsibilities for sales and distribution of syndicated loans for middle market and large corporate credits. Also, Ms. Folger worked on the Corporate Bond Trading desk where she managed and traded risk positions of \$50-\$100 million of intermediate term bank and finance paper.

Ms. Folger has been involved in a variety of sectors including general industrial, distribution, business services, retail, technology and healthcare. She holds a Bachelor of Arts from Hollins University.



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# DAVIDSON CAPITAL ADVISORS ANALYST TEAM

---

**David Airing**  
**Analyst, Investment Banking**

Prior to joining Davidson Capital Advisors in 2019, Mr. Airing worked in operations at Bank of America for two and a half years. He graduated from the University of South Carolina with a Bachelor of Science degree in Business Administration majoring in Finance and Economics.

**Jacob Dailey**  
**Analyst, Investment Banking**

Prior to joining Davidson Capital Advisors, Mr. Dailey interned with International Electric Power in Pittsburgh, PA. He graduated from Wake Forest University in 2019 with a BA in Economics.

**Troy Terveer**  
**Analyst, Investment Banking**

Prior to joining Davidson Capital in 2020, Mr. Terveer worked with Neptune Wellness Solutions. He graduated from University of South Carolina with a Bachelor of Science in Finance, Operations and Supply Chain