

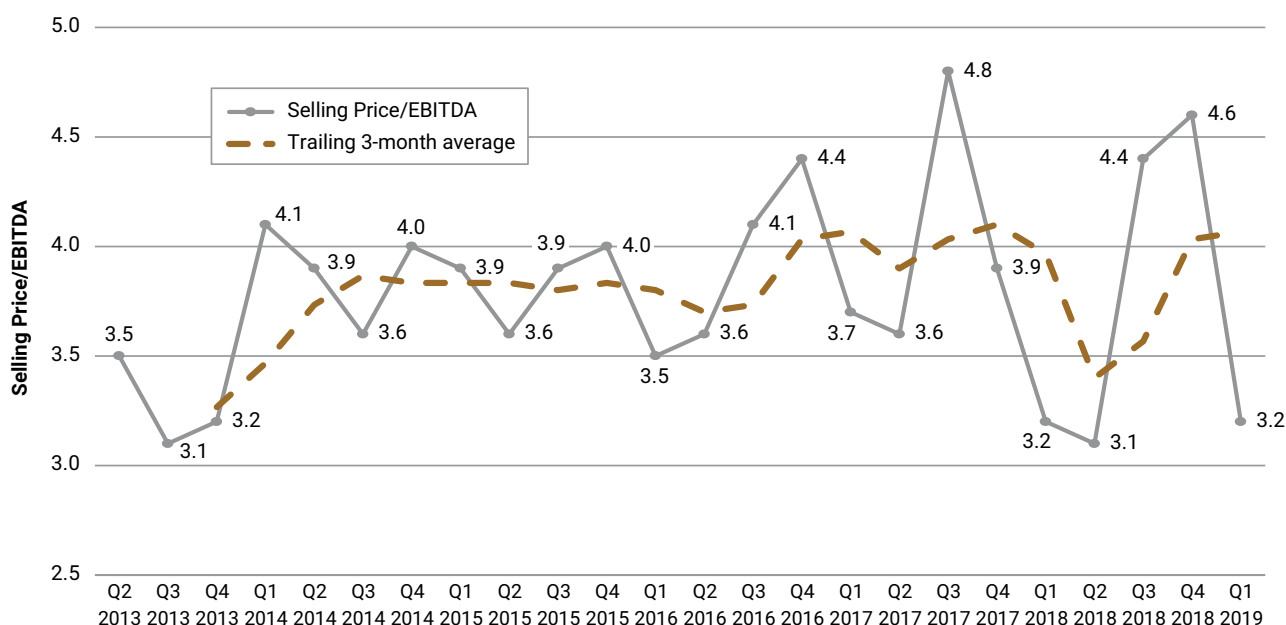
# DealStats Value Index 2Q 2019

The *DealStats Value Index* summarizes valuation multiples and profit margins for private companies that were sold over the past several quarters. Business Valuation Resources (BVR) captures this private company transaction data in its *DealStats* platform. Most BVR deals are not otherwise publicly available. The *DealStats Value Index* is updated quarterly and, as a result, past figures may change in future issues as new data are reported.

## MULTIPLES FALL IN 1Q 2019

EBITDA multiples across all industries were highest over a five-year period in the third quarter of 2017, at 4.8x. In the second quarter of 2018, these multiples fell to 3.1x—the lowest levels since the third quarter of 2013. After rising in the third and fourth quarters of 2018, these multiples once again fell to near recent lows (3.2x) in the first quarter of 2019. Nevertheless, the trailing three-month average for multiples has increased over the past three quarters. The relatively smooth trailing three-month average trend line from the third quarter of 2014 through the first half of 2017 gave no clear indication that large fluctuations in multiples paid would ensue in the quarters ahead.

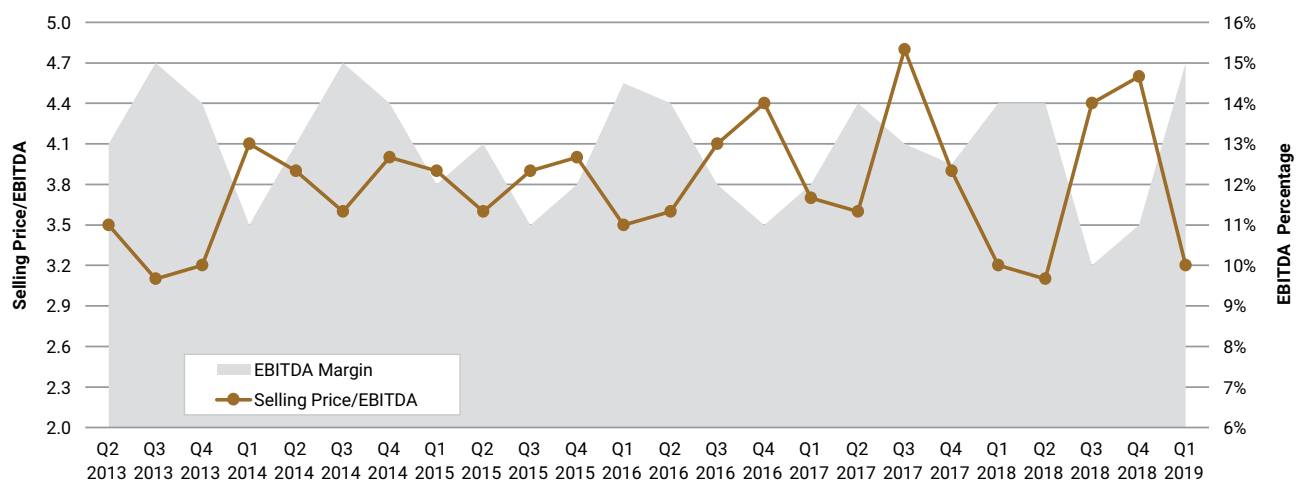
**EXHIBIT 1. MEDIAN SELLING PRICE/EBITDA WITH TRAILING THREE-MONTH AVERAGE**



## EBITDA MARGINS ON THE RISE

EBITDA, as a percentage of revenue, has trended upwards in the most recent two quarters, tying a five-year high in the first quarter of 2019, at 15%. After reporting at the lowest level (3.1x) in the second quarter of 2018, the selling price-to-EBITDA multiple steadily rose through the fourth quarter of 2018, to 4.6x, before falling near a five-year low to 3.2x in the first quarter of 2019. The peaks and valleys of the EBITDA multiple moved opposite to that of the EBITDA margins. *DealStats* is tracking the trend to see whether it continues through the rest of 2019.

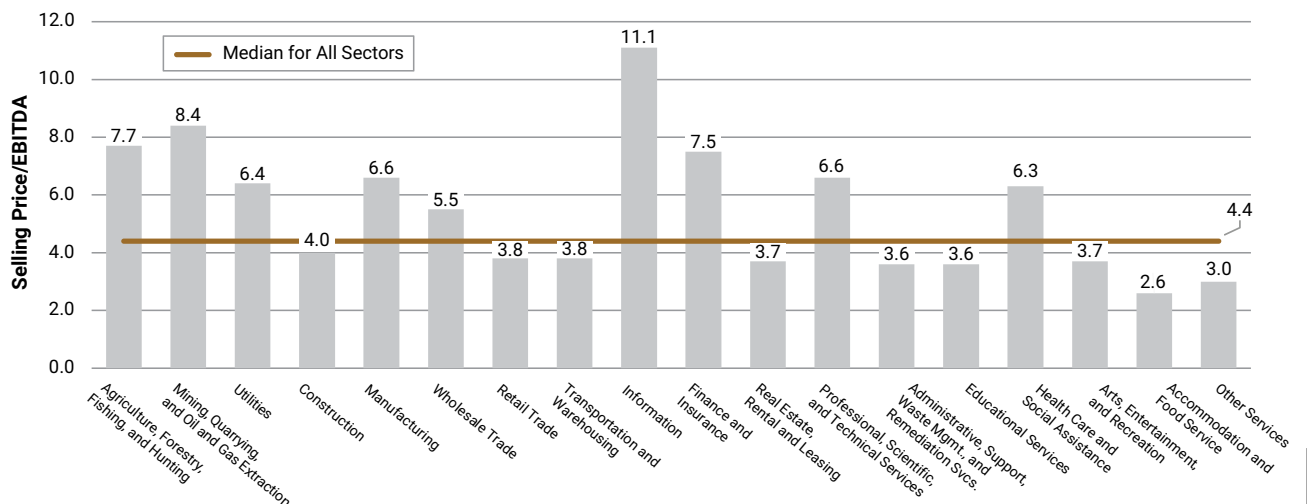
### EXHIBIT 2. MEDIAN SELLING PRICE/EBITDA WITH EBITDA MARGINS



## SELLING PRICE/EBITDA MEDIAN IS 4.4X

EBITDA multiples are highest for the information sector (11.1x) and the mining, quarrying, and oil and gas extraction sector (8.4x). Meanwhile, the lowest EBITDA multiples are in the accommodation and food services (2.6x) and the other services sectors (3.0x). The median across all industry sectors is 4.4x.

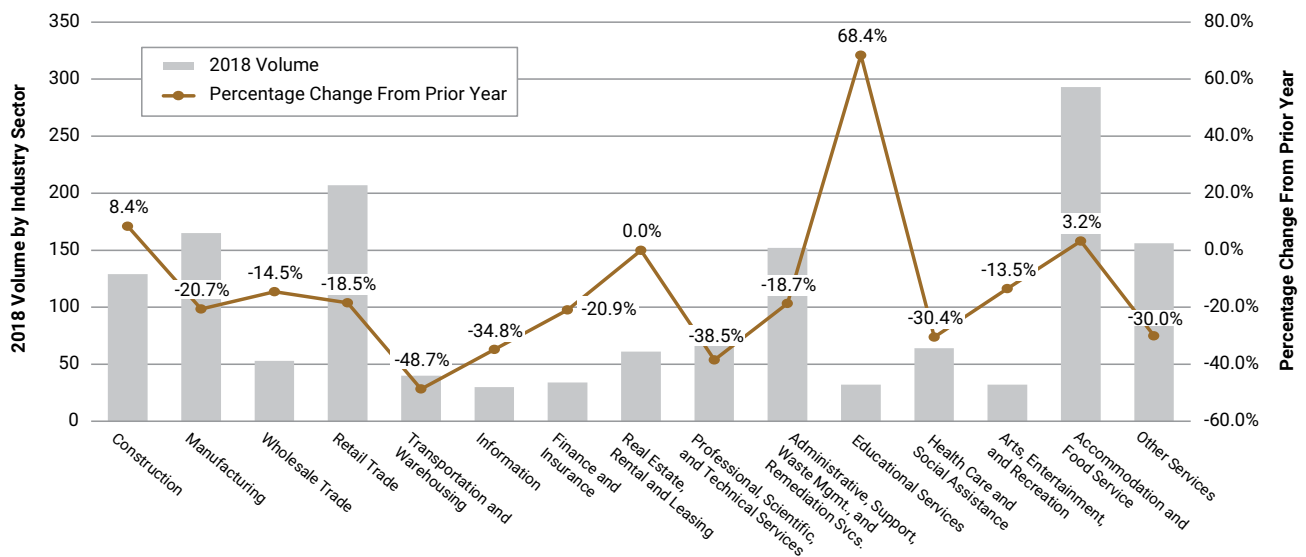
### EXHIBIT 3. SELLING PRICE/EBITDA BY SECTOR



## ACQUISITIONS SLOW IN 11 OF 15 INDUSTRY SECTORS IN 2018

The pace of private-company acquisitions slowed in 11 of the 15 industry sectors from 2017 to 2018. The number of acquisitions in the transportation and warehousing sector had the biggest decline, 48.7%, while acquisitions in the educational services sector saw the largest increase, 68.4%.

### EXHIBIT 4. 2018 INDUSTRY SECTOR VOLUME CHANGE FROM PRIOR YEAR



Note: Each data point in this chart is based on a minimum of 10 transactions of private targets. If an industry sector does not meet this criterion, it is not included in the chart.

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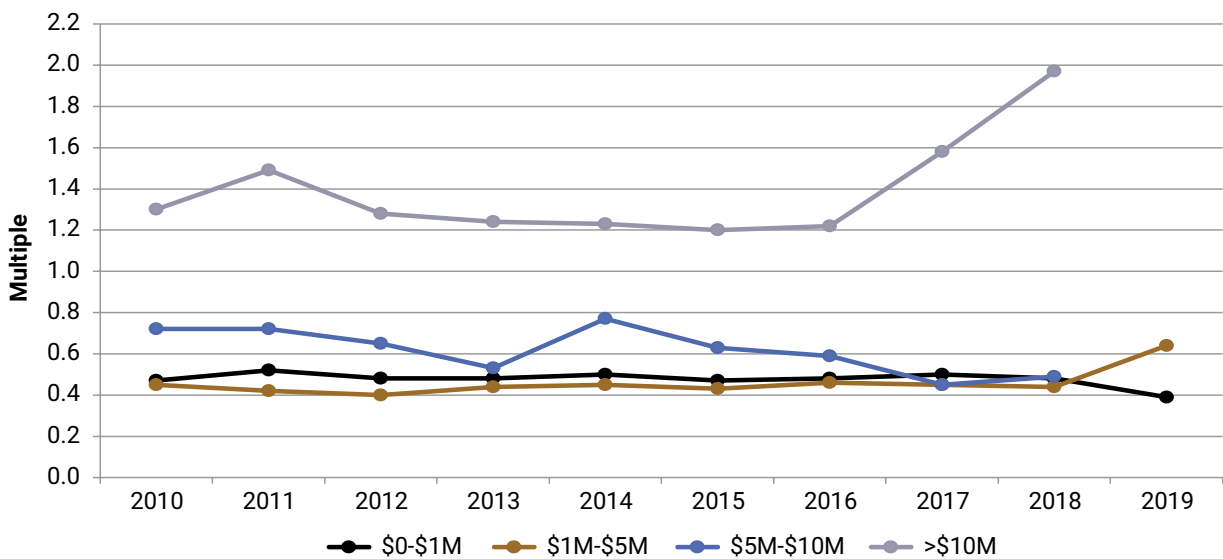
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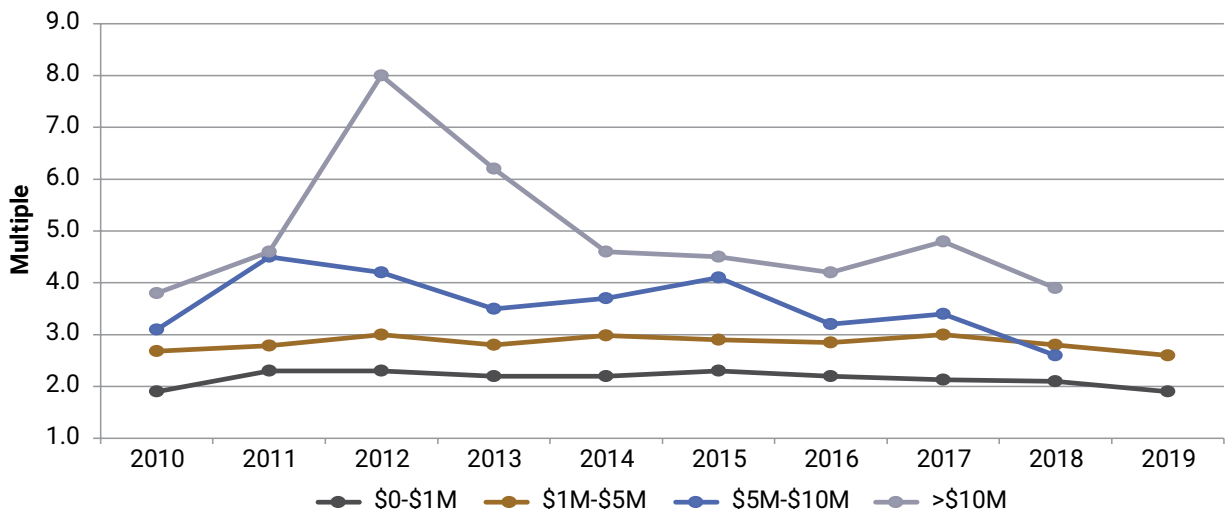
## PRICING MULTIPLES AND PROFIT MARGINS ON THE MOVE

As shown in the legend for Exhibits 5A to 5C and Exhibits 6A to 6C, pricing multiples for private target acquisitions are displayed across four selling price ranges. Exhibit 5A shows the nets sales multiple for transactions greater than \$10 million reached peak levels in 2017 and 2018, at 1.58x and 1.97x, respectively. Multiples for acquisitions between \$5 million and \$10 million trended downward from 2014 through 2017, but saw a modest rise in 2018. Net sales multiples for transactions between \$1 million and \$5 million had been relatively smooth, but rose from 0.44x in 2018 to 0.64x through the first quarter of 2019. Net sales multiples for transactions between \$1 million and \$5 million had been relatively smooth, but rose from 0.44x in 2018 to 0.64x through the first quarter of 2019.

**EXHIBIT 5A. MEDIAN SELLING PRICE/NET SALES BY NET SALES RANGE (PRIVATE TARGETS)**



**EXHIBIT 5B. MEDIAN SELLING PRICE/SDE BY NET SALES RANGE (PRIVATE TARGETS)**

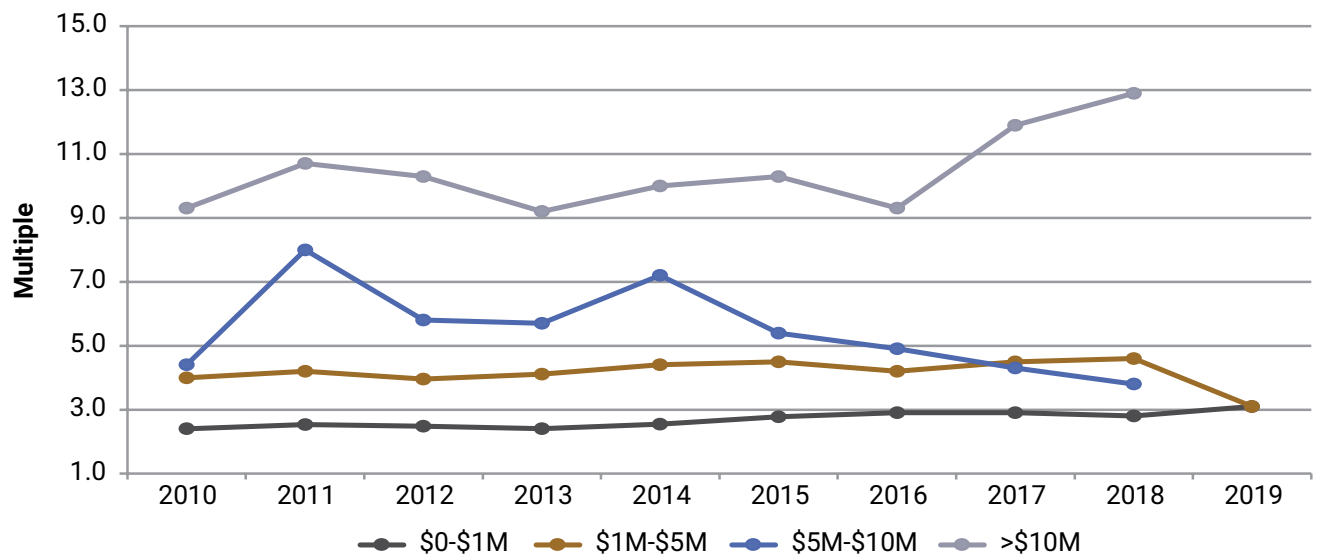


Note: Each data point in these charts is based on a minimum number of transactions of private targets. If a sales range does not meet this criterion, it is not included in the chart.

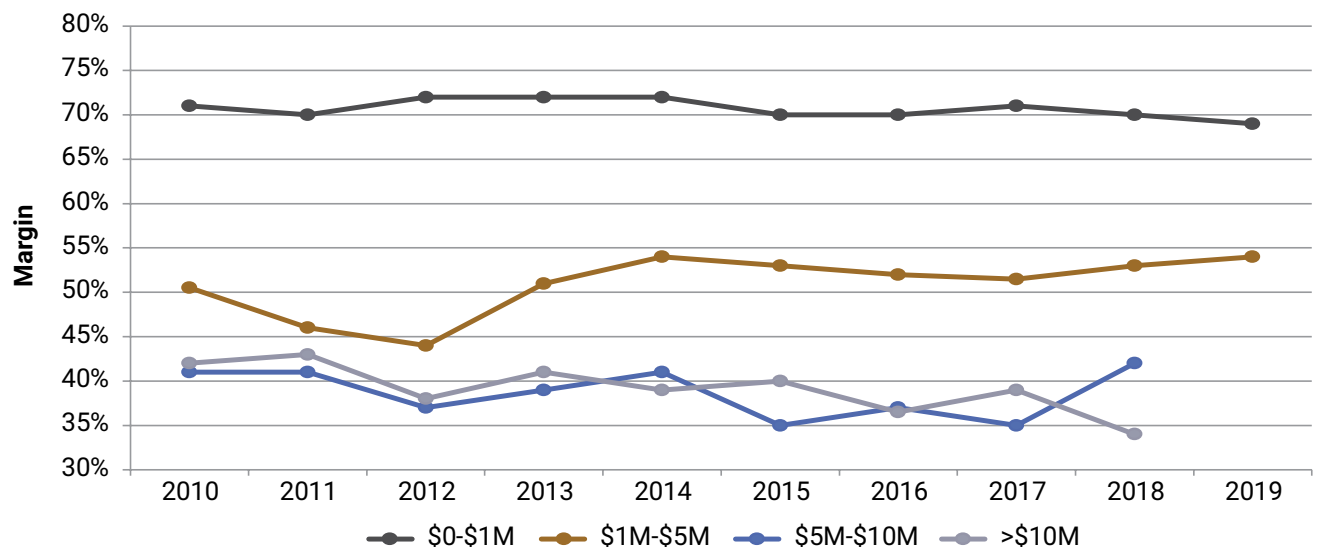
After a decline in the seller's discretionary earnings (SDE) multiple from 2012 to 2016, multiples for transactions priced greater than \$10 million increased in 2017 before falling to nearly an eight-year low in 2018, at 3.9x. Multiples for transactions priced between \$5 million and \$10 million fell to the lowest level in 2018, at 2.6x (see Exhibit 5B).

EBITDA multiples by net sales range have increased since 2016 for transactions greater than \$10 million, peaking in 2018, at 12.9x. Conversely, multiples for transactions between \$5 million and \$10 million have declined since 2014, falling to the lowest level in 2018, at 3.8x (see Exhibit 5C). EBITDA multiples for transactions between \$1 million and \$5 million fell to their lowest levels through the first quarter of 2019, to 3.1x.

**EXHIBIT 5C. MEDIAN SELLING PRICE/EBITDA BY NET SALES RANGE (PRIVATE TARGETS)**



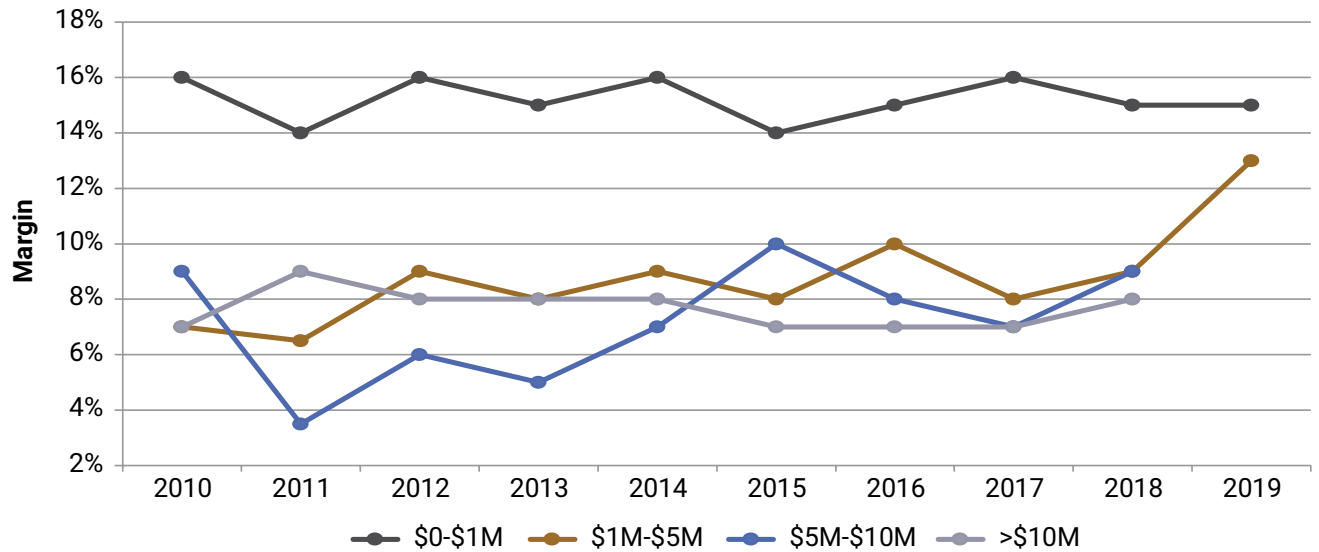
**EXHIBIT 6A. GROSS PROFIT MARGIN BY NET SALES RANGE (PRIVATE TARGETS)**



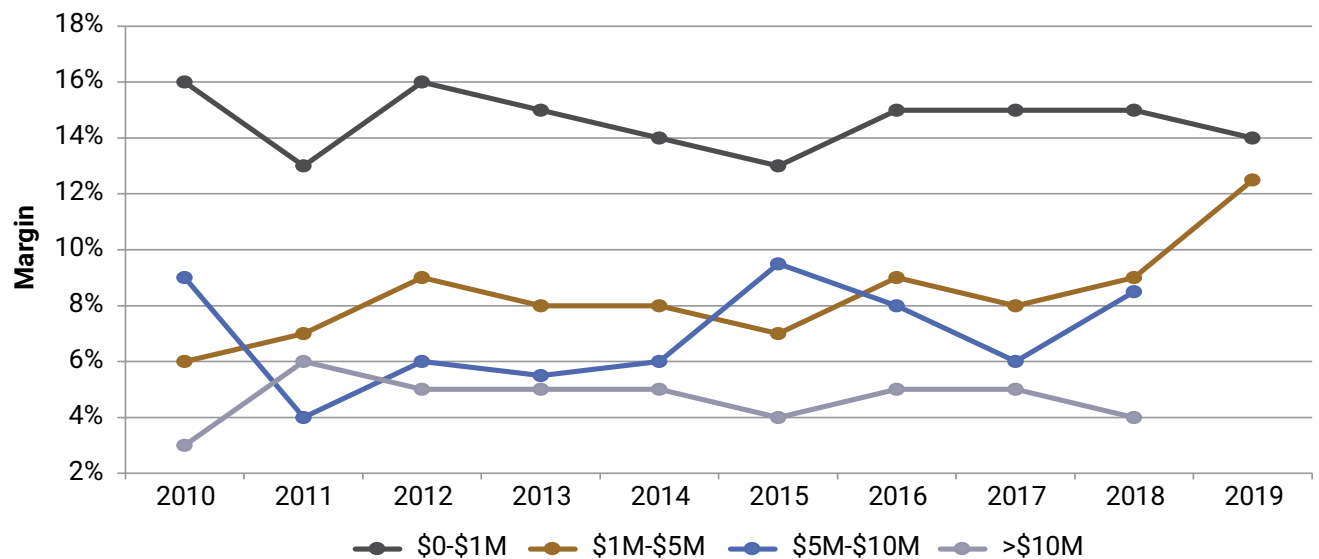
Note: Each data point in these charts is based on a minimum number of transactions of private targets. If a sales range does not meet this criterion, it is not included in the chart.

Profit margins for transactions priced up to \$1 million are considerably higher among all other transaction sizes for gross profit margin, operating profit margin, and net profit margin (see Exhibits 6A, 6B, and 6C). Transactions priced between \$1 million and \$5 million have seen their profit margins rise to their highest levels through the first quarter of 2019.

**EXHIBIT 6B. OPERATING PROFIT MARGIN BY NET SALES RANGE (PRIVATE TARGETS)**



**EXHIBIT 6C. NET PROFIT MARGIN BY NET SALES RANGE (PRIVATE TARGETS)**



Note: Each data point in these charts is based on a minimum number of transactions of private targets. If a sales range does not meet this criterion, it is not included in the chart.

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## INTERQUARTILE RANGES ARE FAIRLY CONSISTENT

Exhibits 7A through 7D display the interquartile range of the selling price-to-net sales and selling price-to-EBITDA multiples by major industry sector and by year for private targets. In addition to showing the median multiples by sector and year, the interquartile range provides a measure of dispersion. Interquartile range is the difference between the 25th and 75th percentiles (also called the first and third quartiles), so the interquartile range describes the middle 50% of observations. The top of the gray bar indicates the 75th percentile, the bottom of the brown bar indicates the 25th percentile, and the line where the two meet represents the median. A large interquartile range indicates that the middle 50% of observations are spaced wide apart, and, if the interquartile range is narrow, the middle 50% of observations are spaced close together.

As shown in Exhibits 7A and 7B, the information industry has the greatest selling price-to-net sales multiple and selling price-to-EBITDA multiple. When looking at the data by year (Exhibits 7C and 7D), the median selling price-to-net sales multiple is consistently around 0.5, while the selling price-to-EBITDA multiple is generally between 3.0 and 4.0.

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## INFORMATION SECTOR MULTIPLES ARE VOLITILE

Exhibits 8 through 13 display median multiples paid for private targets as well as median profit margins and are split out by industry sector. Notably, multiples in the information sector have shown the greatest volatility over time.

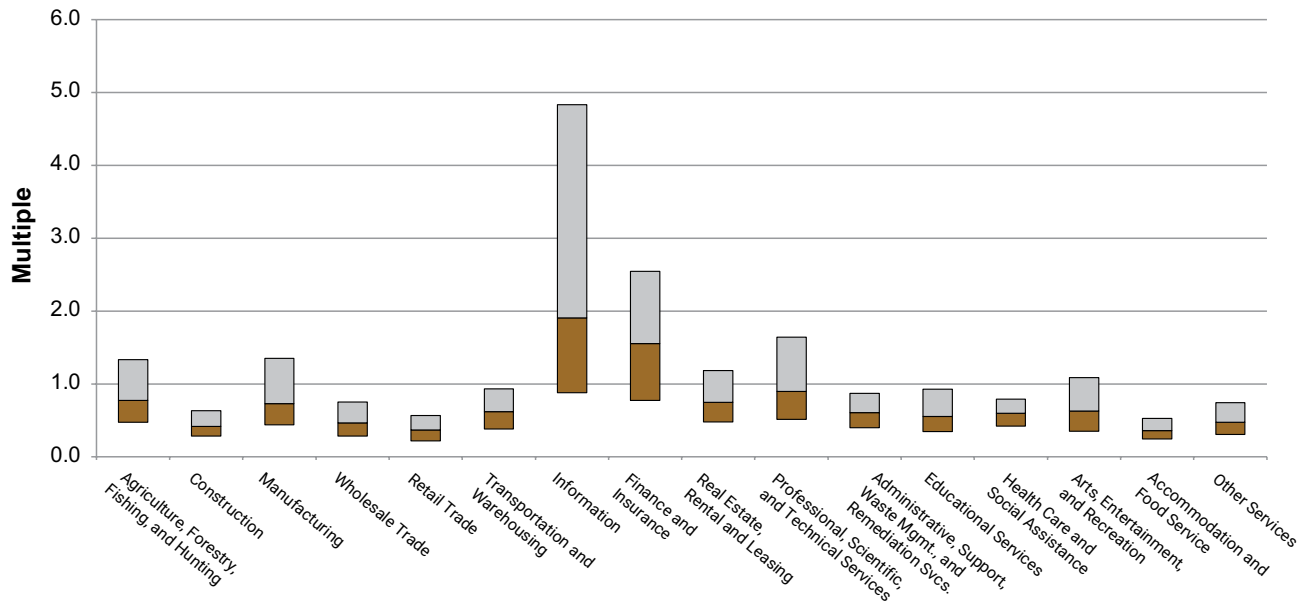
Median net sales multiples declined in 10 of 15 industry sectors in 2018. The median multiple for all sectors reached its lowest level over the last nine years in 2018, at 0.49x. Bucking this trend, the information sector reached a peak in its net sales multiples in 2018, at 4.31x. See Exhibit 8.

Median seller's discretionary earnings (SDE) multiples declined in 11 of the 15 industry sectors in 2018. The median for all sectors combined peaked at 2.6x from 2014 to 2016 but has steadily declined over the past two years, reporting at 2.4x in 2018. The retail trade sector has seen a gradual decline in the SDE multiple since 2015, falling to 2.3x in 2018. See Exhibit 9.

Median EBITDA multiples have declined in 11 of 15 industry sectors in 2018. The median for all sectors reported at its highest levels from 2014 through 2017, but fell to 3.5x in 2018. EBITDA multiples in the information sector have seen large changes, both upward and downward, across all nine years, and settled at seven-year lows in 2018, at 7.0x. See Exhibit 10.

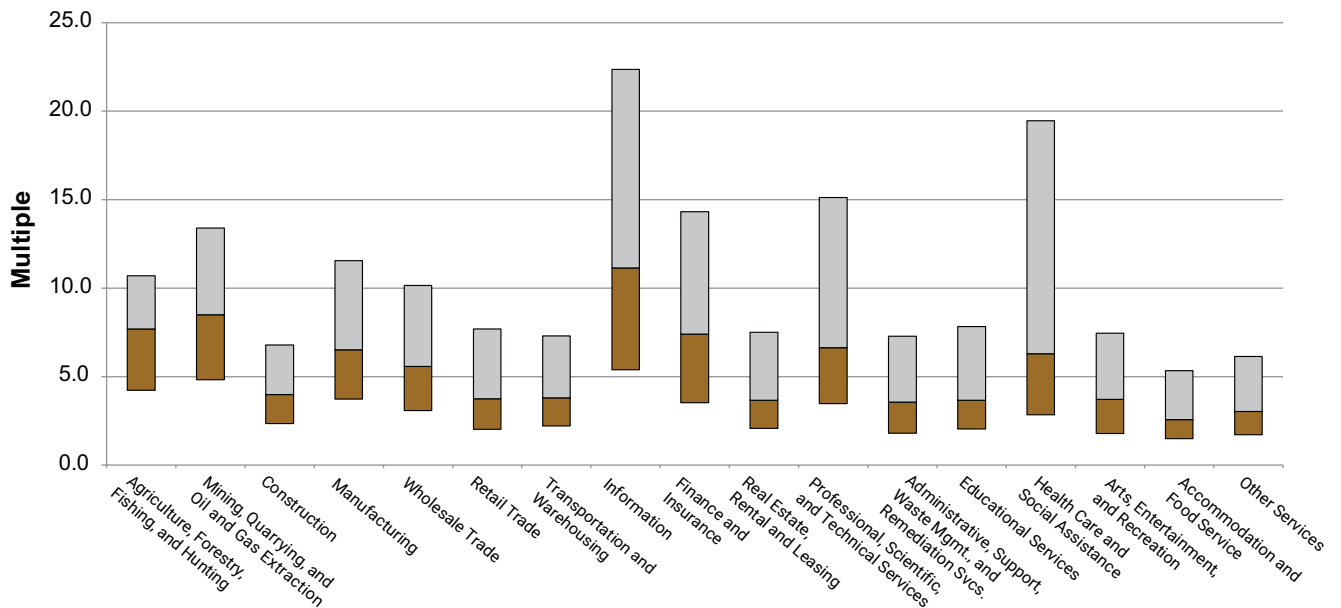
Neither median gross profit margins nor median operating profit margins, as displayed by industry sectors, show any clear trend in the "all sectors" category over the past nine years. Gross profit margins have ranged from 64% to 67% over this period (see Exhibit 11), and operating margins have ranged from 10% to 13% (see Exhibit 12). Likewise, median net profit margins, as displayed by industry sectors, show no clear trend in the "all sectors category" and have ranged from 9% to 12% over time (see Exhibit 13).

**EXHIBIT 7A. SELLING PRICE/NET SALES INTERQUARTILE RANGE BY INDUSTRY SECTOR (PRIVATE TARGETS)**



Note: Each data point in this chart is based on a minimum of 10 transactions of private targets. If an industry sector does not meet this criterion, it is not included in the chart.

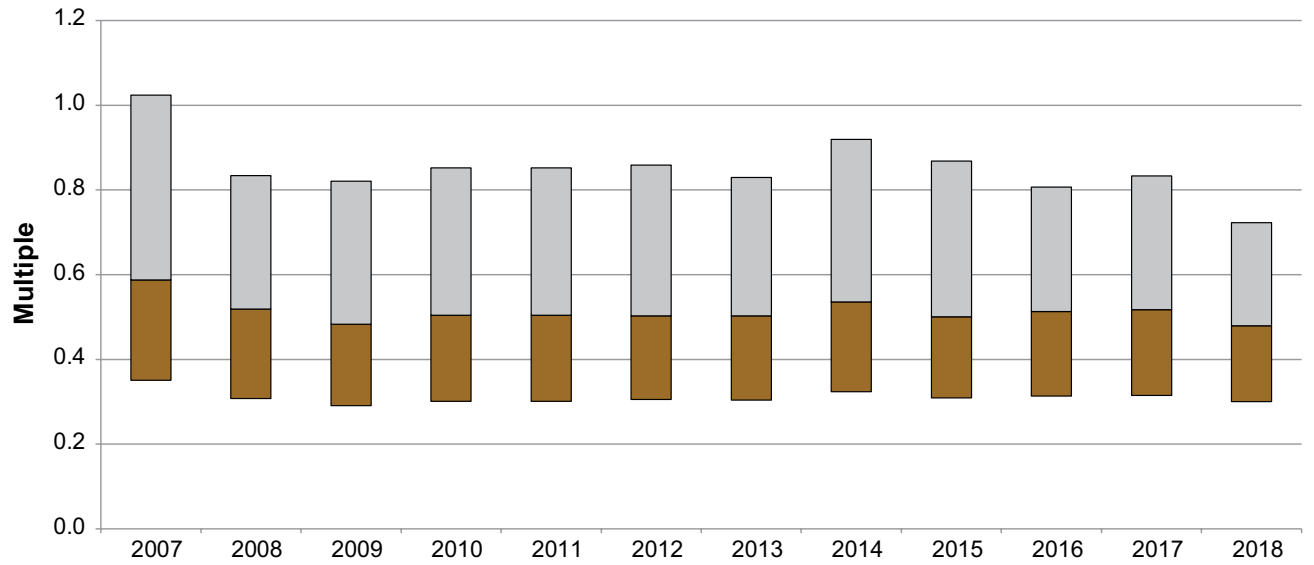
**EXHIBIT 7B: SELLING PRICE/EBITDA INTERQUARTILE RANGE BY INDUSTRY SECTOR (PRIVATE TARGETS)**



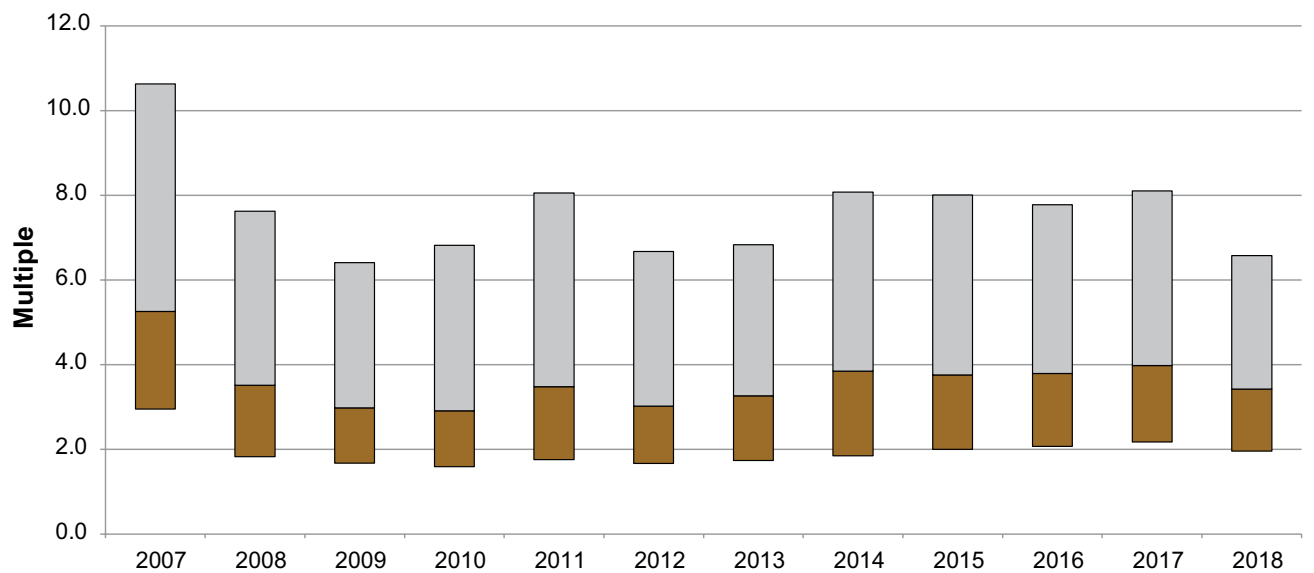
Note: Each data point in this chart is based on a minimum of 10 transactions of private targets. If an industry sector does not meet this criterion, it is not included in the chart.



**EXHIBIT 7C: SELLING PRICE/NET SALES  
INTERQUARTILE RANGE BY YEAR (PRIVATE TARGETS)**



**EXHIBIT 7D: SELLING PRICE/EBITDA  
INTERQUARTILE RANGE BY YEAR (PRIVATE TARGETS)**



**EXHIBIT 8. MEDIAN SELLING PRICE/NET SALES  
BY SECTOR (PRIVATE TARGETS)**

NAICS	NAICS Industry Sector	2010	2011	2012	2013	2014	2015	2016	2017	2018
23	Construction	0.43	0.38	0.47	0.45	0.42	0.46	0.46	0.42	0.39
31-33	Manufacturing	0.81	0.87	0.74	0.81	0.66	0.70	0.62	0.67	0.65
42	Wholesale Trade	0.52	0.53	0.52	0.46	0.51	0.47	0.46	0.52	0.38
44-45	Retail Trade	0.35	0.34	0.36	0.39	0.36	0.37	0.39	0.38	0.38
48-49	Transportation and Warehousing	0.60	0.59	0.58	0.66	0.58	0.77	0.73	0.72	0.60
51	Information	1.40	2.38	1.36	2.17	2.17	1.80	2.05	2.51	4.31
52	Finance and Insurance	1.58	1.29	1.19	1.58	1.87	1.59	1.80	2.00	1.95
53	Real Estate, Rental, and Leasing	0.78	0.78	0.81	0.61	0.80	0.72	0.72	0.68	0.63
54	Professional, Scientific, and Technical Services	0.74	0.95	0.81	0.74	0.89	0.86	0.90	0.82	0.79
56	Administrative, Support, Waste Mgmt., and Remediation Svcs.	0.59	0.60	0.58	0.63	0.59	0.52	0.59	0.64	0.61
61	Educational Services	0.66	0.53	0.61	0.34	0.60	0.37	0.66	0.62	0.45
62	Health Care and Social Assistance	0.56	0.50	0.55	0.58	0.56	0.51	0.55	0.54	0.56
71	Arts, Entertainment, and Recreation	0.40	0.49	0.51	0.72	0.62	0.67	0.76	0.51	0.46
72	Accommodation and Food Services	0.33	0.32	0.30	0.32	0.32	0.32	0.34	0.32	0.33
81	Other Services	0.42	0.52	0.43	0.40	0.47	0.42	0.44	0.43	0.48
	<b>All Sectors</b>	<b>0.50</b>	<b>0.53</b>	<b>0.50</b>	<b>0.50</b>	<b>0.54</b>	<b>0.50</b>	<b>0.52</b>	<b>0.52</b>	<b>0.49</b>

Note: Each data point in this chart is based on a minimum of 10 transactions of private targets. If an industry sector does not meet this criterion, it is not included in the chart.

**EXHIBIT 9. MEDIAN SELLING PRICE/SELLER'S  
DISCRETIONARY EARNINGS BY SECTOR (PRIVATE TARGETS)**

NAICS	NAICS Industry Sector	2010	2011	2012	2013	2014	2015	2016	2017	2018
23	Construction	2.5	2.3	2.9	2.4	2.5	2.6	2.3	2.4	2.1
31-33	Manufacturing	2.8	3.0	3.6	3.5	2.9	2.9	2.9	2.9	2.9
42	Wholesale Trade	3.1	3.4	2.7	3.5	3.7	3.2	3.2	3.7	2.6
44-45	Retail Trade	2.3	2.5	2.9	2.6	2.9	2.9	2.8	2.5	2.3
48-49	Transportation and Warehousing	2.6	2.2	2.7	3.7	2.7	3.2	3.2	2.1	2.5
51	Information	2.1	1.5	2.8	2.4	3.5	3.3	3.4	4.3	2.9
52	Finance and Insurance	3.0	2.6	4.3	3.6	3.2	3.4	5.1	4.1	3.8
53	Real Estate, Rental, and Leasing	2.2	2.5	2.9	2.2	2.6	2.5	2.4	2.9	2.5
54	Professional, Scientific, and Technical Services	2.5	2.6	2.4	2.4	2.7	2.5	2.4	2.3	2.2
56	Administrative, Support, Waste Mgmt., and Remediation Svcs.	1.8	2.2	2.5	2.4	2.5	2.4	2.3	2.5	2.2
61	Educational Services	2.1	2.1	2.4	1.8	2.9	2.0	2.2	1.8	2.0
62	Health Care and Social Assistance	1.5	2.3	1.5	1.7	2.0	2.1	2.1	2.2	2.3
71	Arts, Entertainment, and Recreation	1.8	2.0	2.9	2.4	3.0	2.8	2.7	3.0	2.7
72	Accommodation and Food Services	1.7	2.0	2.1	2.1	2.1	2.2	2.1	2.1	2.0
81	Other Services	1.7	2.3	2.1	2.1	2.0	2.4	2.2	2.5	2.3
	<b>All Sectors</b>	<b>2.1</b>	<b>2.4</b>	<b>2.6</b>	<b>2.4</b>	<b>2.6</b>	<b>2.6</b>	<b>2.6</b>	<b>2.5</b>	<b>2.4</b>

Note: Each data point in this chart is based on a minimum of 10 transactions of private targets. If an industry sector does not meet this criterion, it is not included in the chart.

**EXHIBIT 10. MEDIAN SELLING PRICE/EBITDA  
BY SECTOR (PRIVATE TARGETS)**

NAICS	NAICS Industry Sector	2010	2011	2012	2013	2014	2015	2016	2017	2018
23	Construction	2.8	3.1	4.1	4.0	3.3	3.7	3.3	3.7	3.9
31-33	Manufacturing	5.0	6.5	6.6	7.2	5.8	6.1	6.5	5.3	5.9
42	Wholesale Trade	3.9	4.7	4.8	4.8	6.2	6.9	6.3	5.3	4.0
44-45	Retail Trade	2.9	3.3	2.9	3.1	3.4	3.5	3.5	3.6	3.4
48-49	Transportation and Warehousing	3.1	2.9	2.6	3.2	3.2	3.5	4.2	3.7	3.0
51	Information	6.4	10.1	7.0	8.6	10.0	7.2	10.7	13.6	7.0
52	Finance and Insurance	6.2	3.2	4.5	3.8	6.3	7.8	9.6	12.6	9.6
53	Real Estate, Rental, and Leasing	2.6	2.8	3.1	2.3	4.3	2.9	3.8	4.2	4.2
54	Professional, Scientific, and Technical Services	5.2	8.5	4.2	4.6	5.5	8.0	5.2	5.7	3.3
56	Administrative, Support, Waste Mgmt., and Remediation Svcs.	2.5	2.7	3.2	2.6	2.8	3.0	3.8	3.4	3.3
61	Educational Services	2.6	2.8	4.5	2.7	3.2	3.6	4.1	3.1	4.3
62	Health Care and Social Assistance	4.3	5.4	2.6	4.5	4.2	3.5	4.2	3.8	3.4
71	Arts, Entertainment, and Recreation	2.1	2.2	2.5	3.1	3.9	3.3	4.6	2.8	2.5
72	Accommodation and Food Services	1.9	1.9	1.8	1.8	2.1	2.4	2.4	2.8	2.5
81	Other Services	2.2	2.6	2.4	2.6	2.4	2.8	2.6	3.1	2.7
	<b>All Sectors</b>	<b>2.9</b>	<b>3.5</b>	<b>3.0</b>	<b>3.3</b>	<b>3.9</b>	<b>3.8</b>	<b>3.8</b>	<b>4.0</b>	<b>3.5</b>

Note: Each data point in this chart is based on a minimum of 10 transactions of private targets. If an industry sector does not meet this criterion, it is not included in the chart.

**EXHIBIT 11. MEDIAN GROSS PROFIT MARGINS  
BY SECTOR (PRIVATE TARGETS)**

NAICS	NAICS Industry Sector	2010	2011	2012	2013	2014	2015	2016	2017	2018
23	Construction	46%	42%	43%	46%	53%	49%	53%	45%	47%
31-33	Manufacturing	48%	47%	47%	44%	46%	44%	46%	48%	49%
42	Wholesale Trade	41%	39%	36%	45%	36%	38%	35%	40%	38%
44-45	Retail Trade	47%	44%	44%	42%	46%	44%	45%	45%	46%
48-49	Transportation and Warehousing	59%	86%	89%	96%	68%	86%	77%	98%	91%
51	Information	70%	66%	72%	67%	71%	68%	46%	71%	74%
52	Finance and Insurance	100%	100%	100%	94%	93%	96%	90%	98%	97%
53	Real Estate, Rental, and Leasing	91%	89%	89%	91%	87%	93%	86%	78%	76%
54	Professional, Scientific, and Technical Services	67%	68%	74%	85%	67%	74%	76%	88%	89%
56	Administrative, Support, Waste Mgmt., and Remediation Svcs.	81%	86%	79%	84%	79%	76%	71%	81%	83%
61	Educational Services	90%	89%	100%	99%	98%	89%	100%	91%	100%
62	Health Care and Social Assistance	100%	100%	100%	100%	100%	100%	100%	95%	89%
71	Arts, Entertainment, and Recreation	100%	80%	90%	92%	99%	89%	95%	98%	91%
72	Accommodation and Food Services	67%	68%	68%	68%	66%	66%	68%	67%	68%
81	Other Services	85%	90%	82%	84%	84%	75%	79%	76%	86%
	<b>All Sectors</b>	<b>65%</b>	<b>65%</b>	<b>65%</b>	<b>67%</b>	<b>65%</b>	<b>65%</b>	<b>64%</b>	<b>64%</b>	<b>65%</b>

Note: Each data point in this chart is based on a minimum of 10 transactions of private targets. If an industry sector does not meet this criterion, it is not included in the chart.

**EXHIBIT 12. MEDIAN OPERATING PROFIT MARGINS BY SECTOR (PRIVATE TARGETS)**

NAICS	NAICS Industry Sector	2010	2011	2012	2013	2014	2015	2016	2017	2018
23	Construction	7%	7%	11%	10%	12%	11%	13%	9%	10%
31-33	Manufacturing	10%	10%	10%	8%	10%	9%	7%	10%	10%
42	Wholesale Trade	10%	10%	11%	6%	8%	6%	9%	8%	7%
44-45	Retail Trade	11%	8%	9%	10%	9%	8%	10%	9%	8%
48-49	Transportation and Warehousing	10%	15%	19%	16%	13%	18%	18%	19%	14%
51	Information	1%	6%	10%	0%	5%	6%	1%	6%	7%
52	Finance and Insurance	18%	22%	15%	27%	21%	18%	22%	25%	29%
53	Real Estate, Rental, and Leasing	23%	20%	18%	26%	18%	16%	17%	15%	14%
54	Professional, Scientific, and Technical Services	11%	4%	13%	10%	9%	8%	14%	13%	18%
56	Administrative, Support, Waste Mgmt., and Remediation Svcs.	17%	16%	14%	18%	19%	15%	15%	17%	16%
61	Educational Services	23%	8%	6%	10%	15%	9%	16%	19%	16%
62	Health Care and Social Assistance	12%	7%	12%	11%	12%	13%	11%	11%	13%
71	Arts, Entertainment, and Recreation	15%	17%	18%	19%	18%	10%	12%	19%	8%
72	Accommodation and Food Services	15%	12%	14%	15%	13%	12%	14%	13%	13%
81	Other Services	18%	16%	18%	13%	15%	13%	15%	13%	15%
	<b>All Sectors</b>	<b>13%</b>	<b>11%</b>	<b>12%</b>	<b>12%</b>	<b>11%</b>	<b>10%</b>	<b>12%</b>	<b>12%</b>	<b>12%</b>

Note: Each data point in this chart is based on a minimum of 10 transactions of private targets. If an industry sector does not meet this criterion, it is not included in the chart.

**EXHIBIT 13. MEDIAN NET PROFIT MARGINS BY SECTOR (PRIVATE TARGETS)**

NAICS	NAICS Industry Sector	2010	2011	2012	2013	2014	2015	2016	2017	2018
23	Construction	6%	7%	10%	9%	11%	11%	12%	9%	10%
31-33	Manufacturing	7%	7%	8%	6%	8%	7%	6%	8%	9%
42	Wholesale Trade	9%	10%	11%	6%	8%	5%	7%	8%	8%
44-45	Retail Trade	11%	6%	9%	10%	8%	7%	10%	9%	8%
48-49	Transportation and Warehousing	9%	11%	20%	14%	12%	16%	17%	19%	15%
51	Information	-3%	4%	9%	-1%	5%	5%	-2%	2%	1%
52	Finance and Insurance	14%	18%	12%	24%	19%	14%	17%	15%	27%
53	Real Estate, Rental, and Leasing	19%	19%	18%	26%	18%	15%	17%	14%	14%
54	Professional, Scientific, and Technical Services	11%	4%	12%	7%	8%	6%	15%	12%	19%
56	Administrative, Support, Waste Mgmt., and Remediation Svcs.	17%	15%	14%	18%	14%	13%	15%	17%	16%
61	Educational Services	23%	8%	5%	9%	12%	8%	16%	19%	13%
62	Health Care and Social Assistance	10%	5%	12%	10%	10%	11%	10%	10%	13%
71	Arts, Entertainment, and Recreation	12%	15%	15%	19%	18%	12%	13%	19%	7%
72	Accommodation and Food Services	14%	12%	13%	15%	10%	10%	13%	12%	13%
81	Other Services	18%	16%	17%	13%	13%	13%	14%	12%	15%
	<b>All Sectors</b>	<b>11%</b>	<b>10%</b>	<b>12%</b>	<b>11%</b>	<b>10%</b>	<b>9%</b>	<b>11%</b>	<b>11%</b>	<b>12%</b>

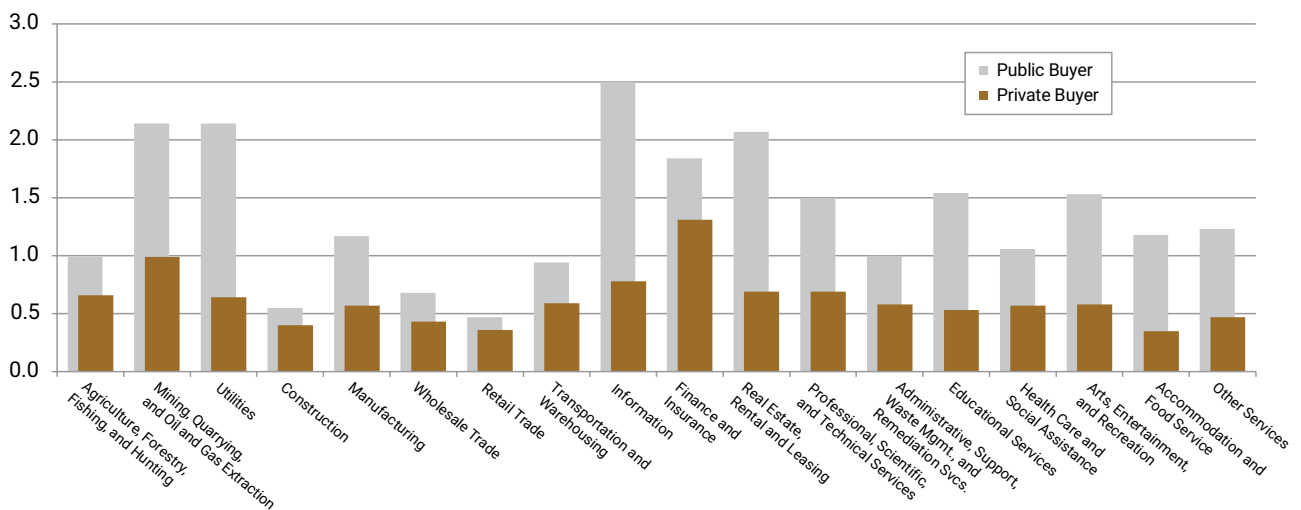
Note: Each data point in this chart is based on a minimum of 10 transactions of private targets. If an industry sector does not meet this criterion, it is not included in the chart.

## PUBLIC BUYERS PAY HIGHER MULTIPLES FOR PRIVATE TARGETS

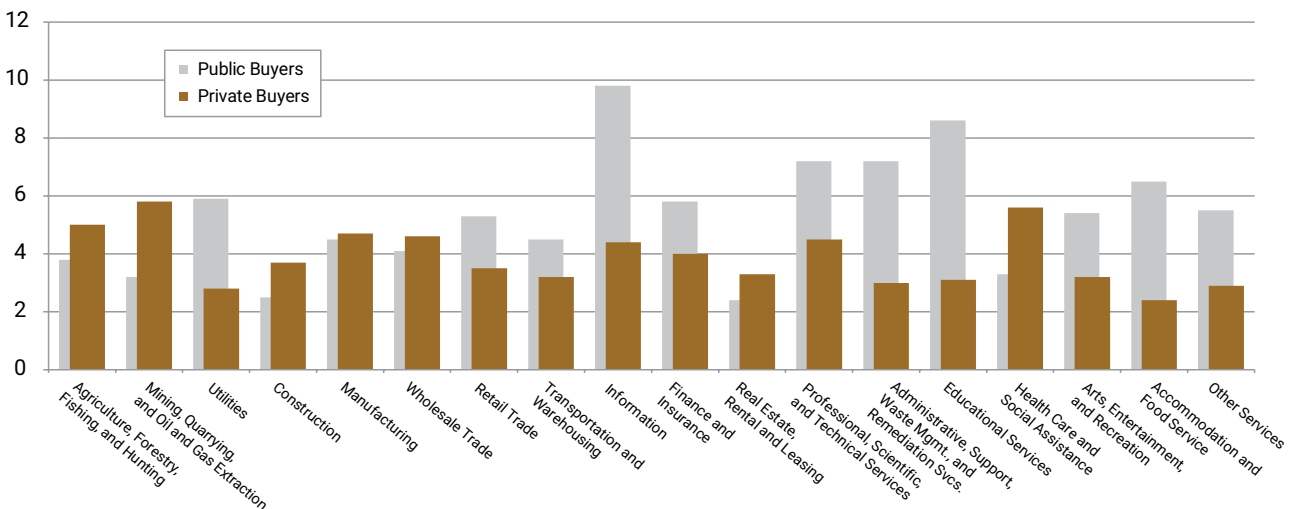
Exhibits 14 and 15 compare the median valuation multiples private buyers paid (those transactions business intermediaries brokered) to what public-company buyers paid based on major industry sector groups.

In general, public buyers paid higher multiples for private targets than private buyers paid. This may partially reflect synergies between the public buyer and the private target. Also, the typical acquisition public buyers made was larger than those private buyers made, so it is possible to conclude that larger companies sell for higher multiples than smaller companies.

### EXHIBIT 14. SELLING PRICE/NET SALES (PRIVATE TARGETS)



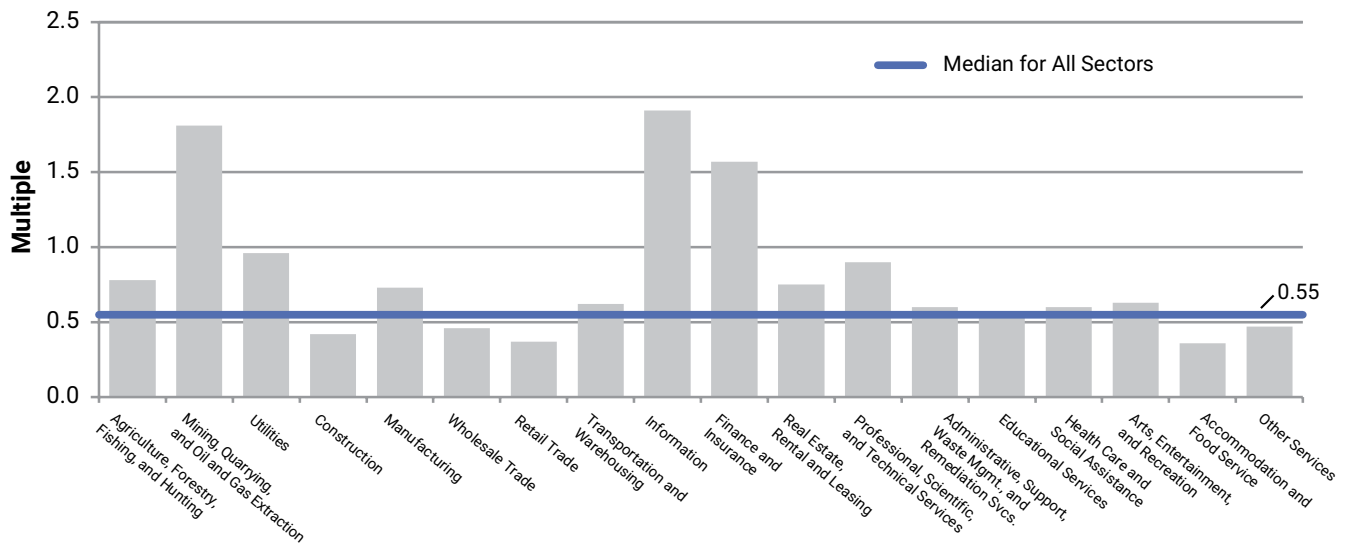
### EXHIBIT 15. SELLING PRICE/EBITDA (PRIVATE TARGETS)



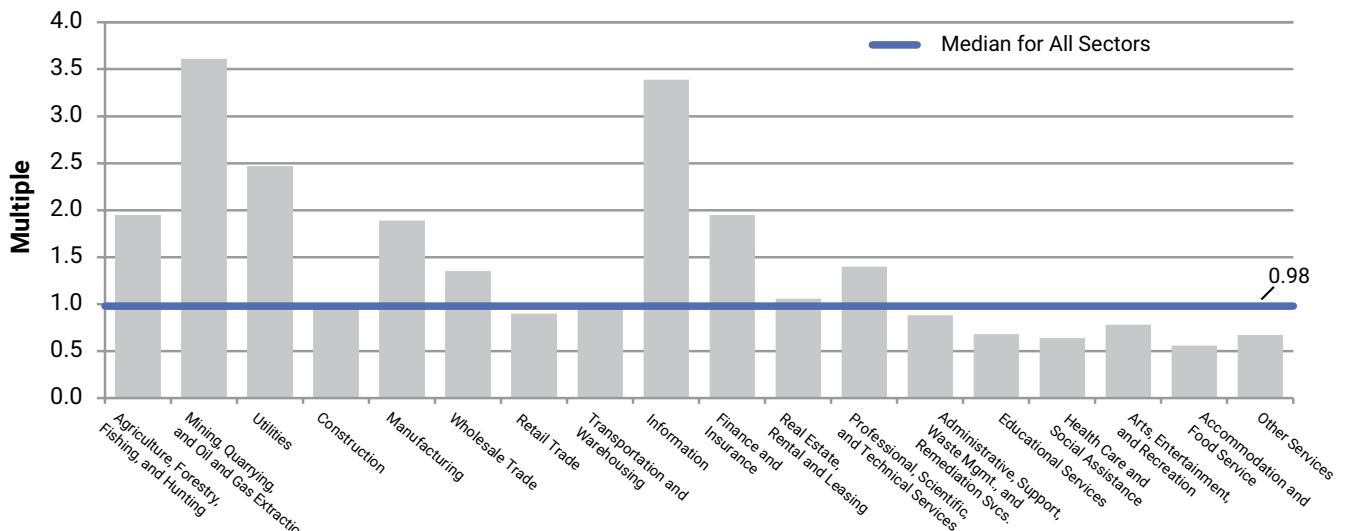
## HOW DO INDUSTRY PRICING MULTIPLES AND PROFIT MARGINS COMPARE?

Exhibits 16A through 17C compare pricing multiples and profit margin ratios across 18 industry sectors. Target companies in industries with asset-heavy balance sheets clearly trade at higher revenue and earnings-based pricing multiples than companies in other industries (see Exhibits 16A to 16E). The trend for margin ratios is less evident among the 18 industry sectors, although companies in the information sector appear to operate less efficiently, with a median operating profit margin of 0.0% and a median net profit margin of -2.0% (see Exhibits 17A to 17C).

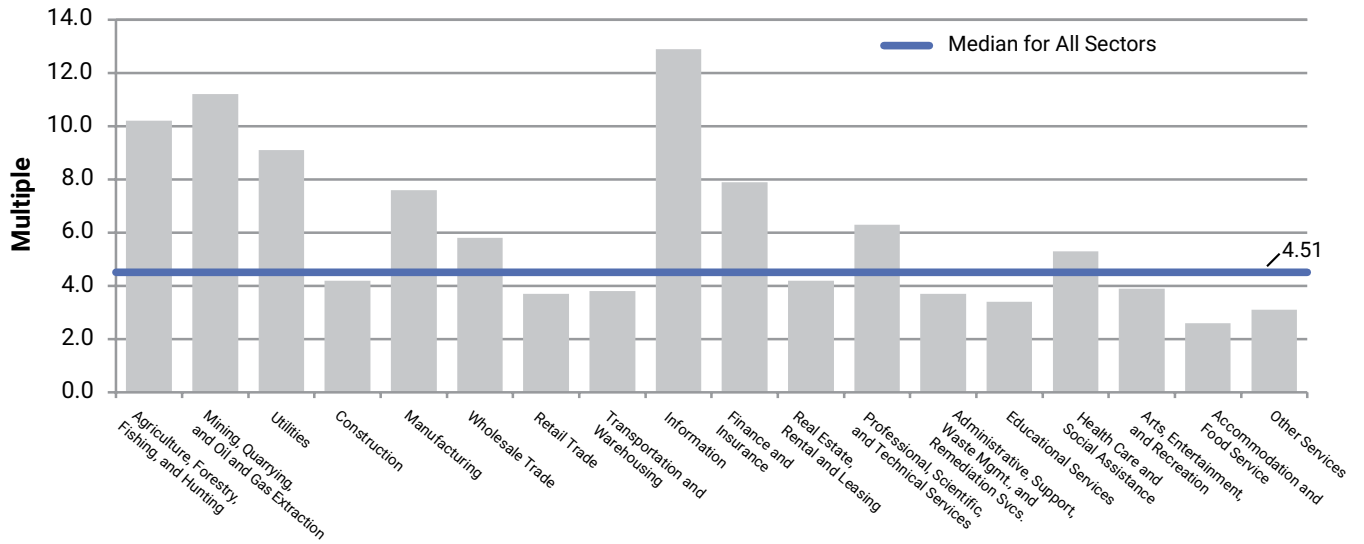
**EXHIBIT 16A. MEDIAN SELLING PRICE/NET SALES (PRIVATE TARGETS)**



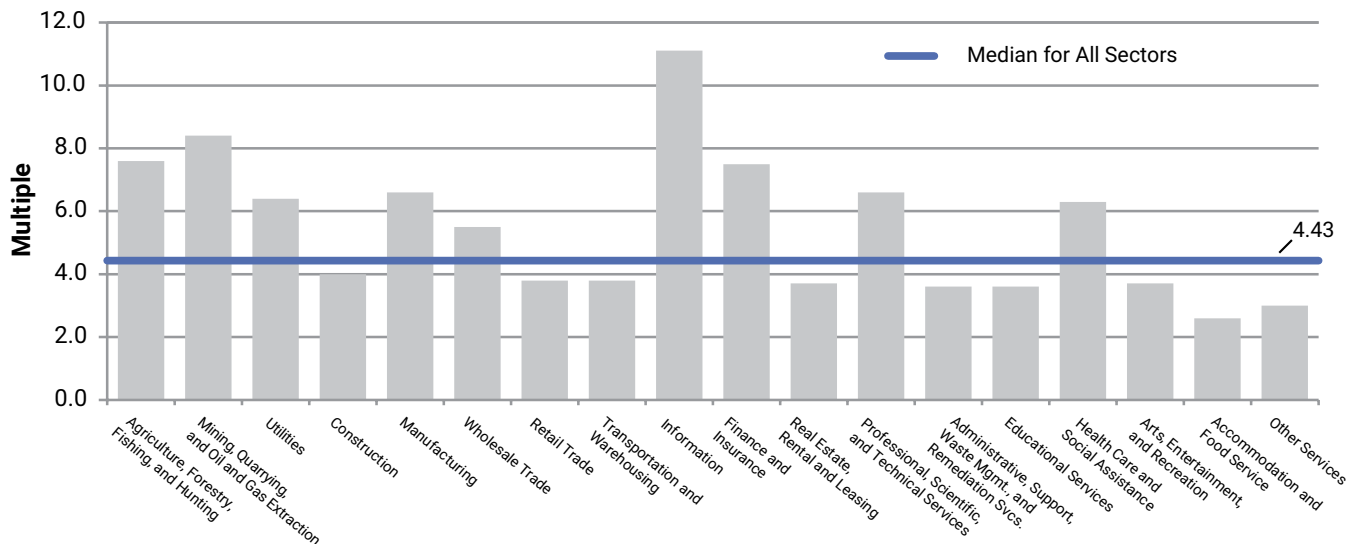
**EXHIBIT 16B. MEDIAN SELLING PRICE/GROSS PROFIT (PRIVATE TARGETS)**



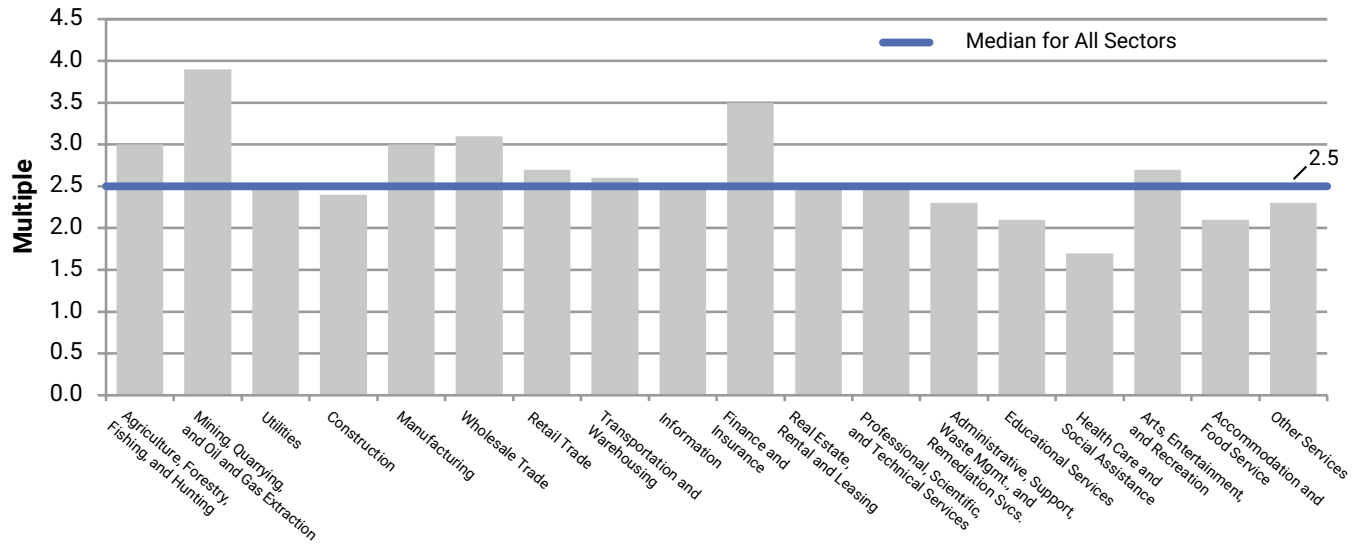
**EXHIBIT 16C. MEDIAN SELLING PRICE/EBIT  
(PRIVATE TARGETS)**



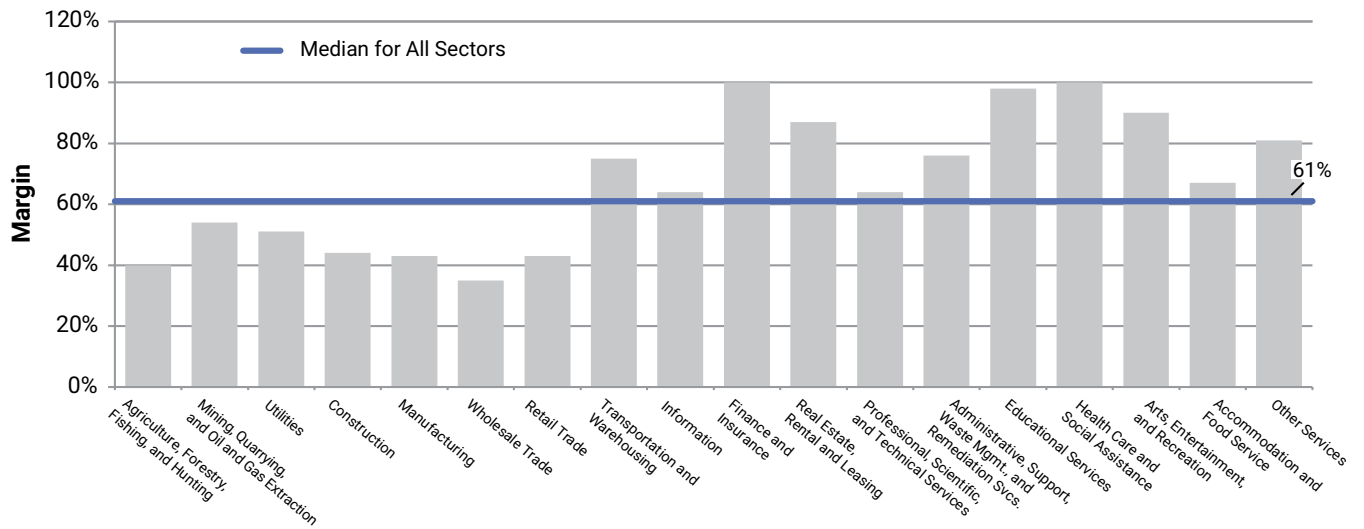
**EXHIBIT 16D. MEDIAN SELLING PRICE/EBITDA  
(PRIVATE TARGETS)**



**EXHIBIT 16E: MEDIAN SELLING PRICE/SDE  
(PRIVATE TARGETS)**

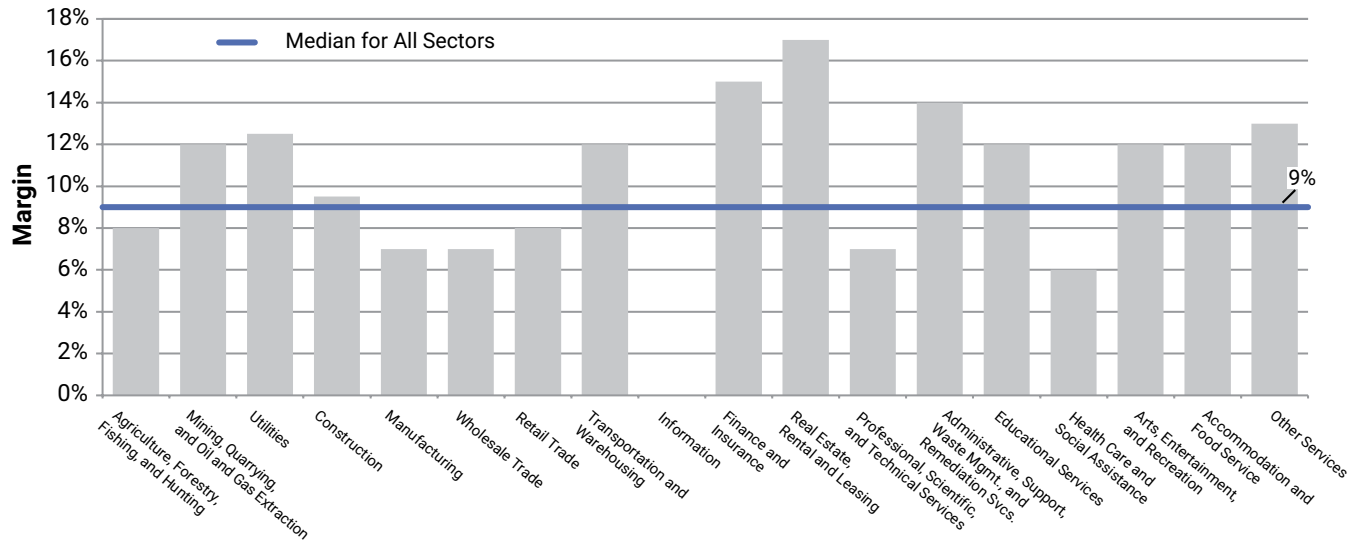


**EXHIBIT 17A. MEDIAN GROSS PROFIT MARGIN  
(PRIVATE TARGETS)**

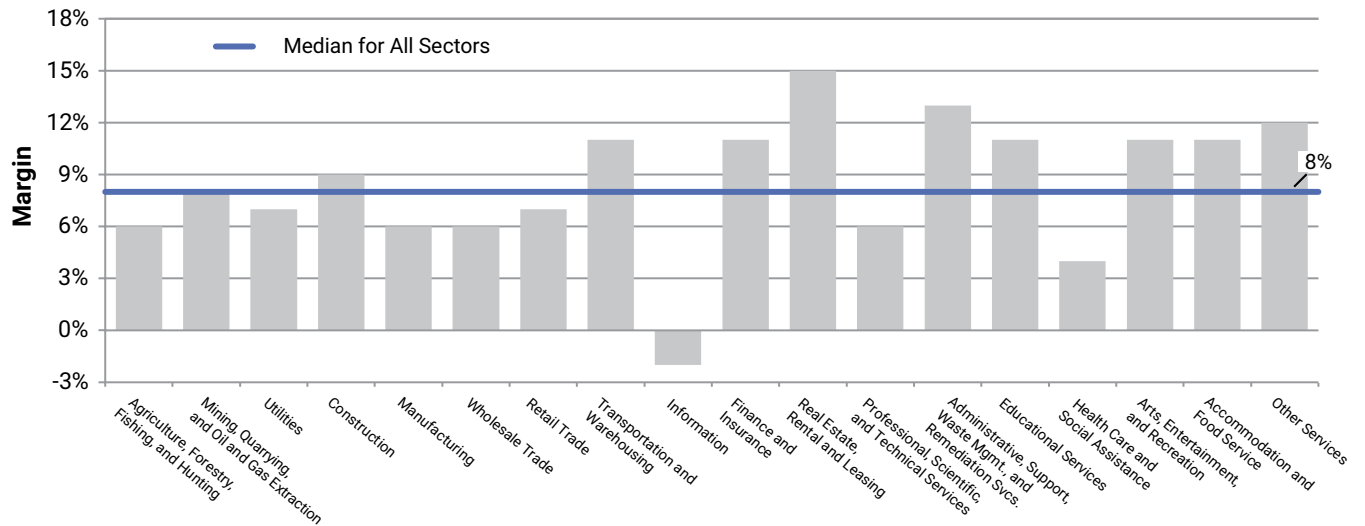




**EXHIBIT 17B. MEDIAN OPERATING PROFIT MARGIN (PRIVATE TARGETS)**



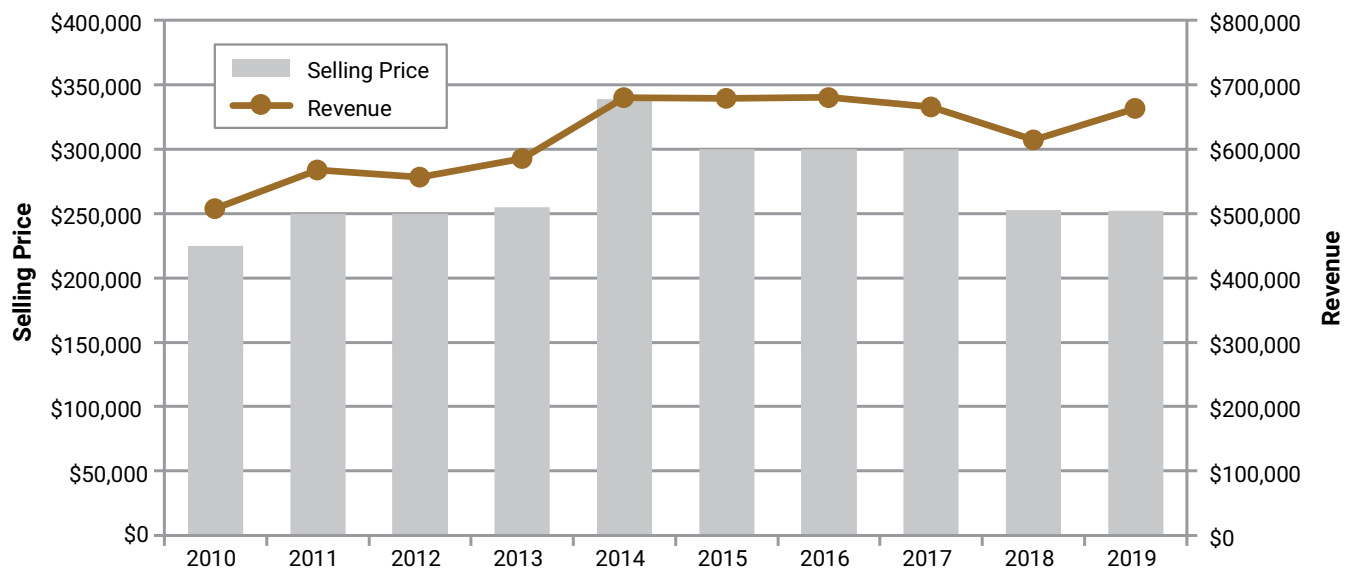
**EXHIBIT 17C. MEDIAN NET PROFIT MARGIN (PRIVATE TARGETS)**



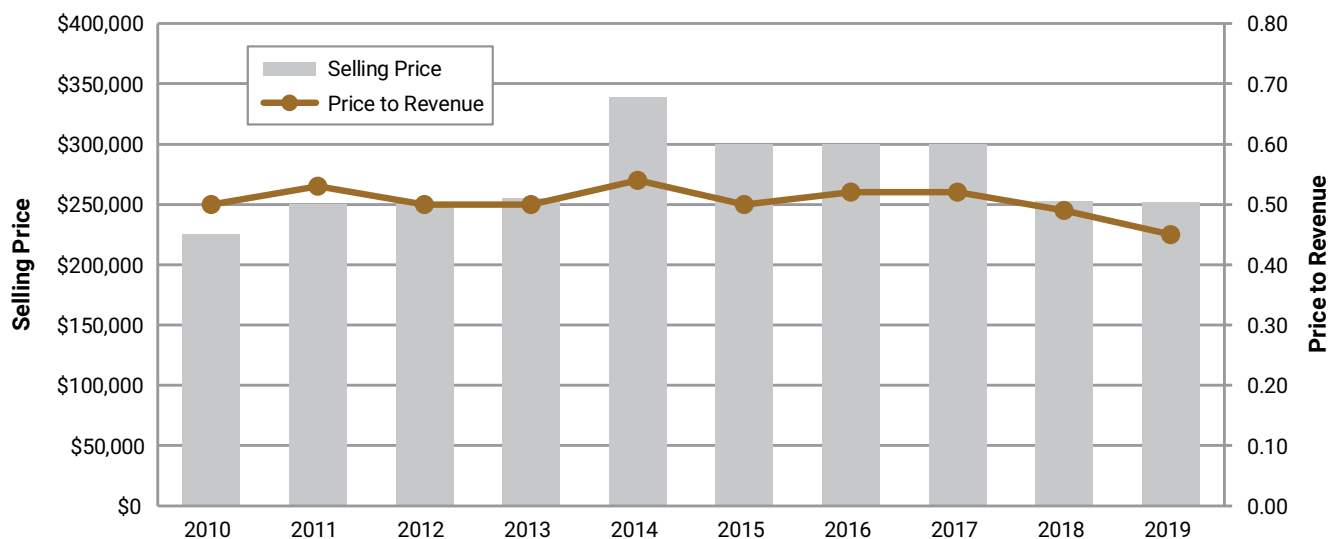
## MEDIAN SELLING PRICE TO REVENUE FALLING

Exhibit 18A shows that the median selling price for private targets across all industries peaked in 2014, at \$338,679, while median revenues reached a high point in 2016, at \$680,243. However, a decline in the median revenue figure led to a decline in the median selling price in the years following. As shown in Exhibit 18B, the median selling price-to-revenue multiple fell to the lowest point (0.49x) in 2018.

**EXHIBIT 18A. MEDIAN SELLING PRICE AND MEDIAN REVENUE (PRIVATE TARGETS)**



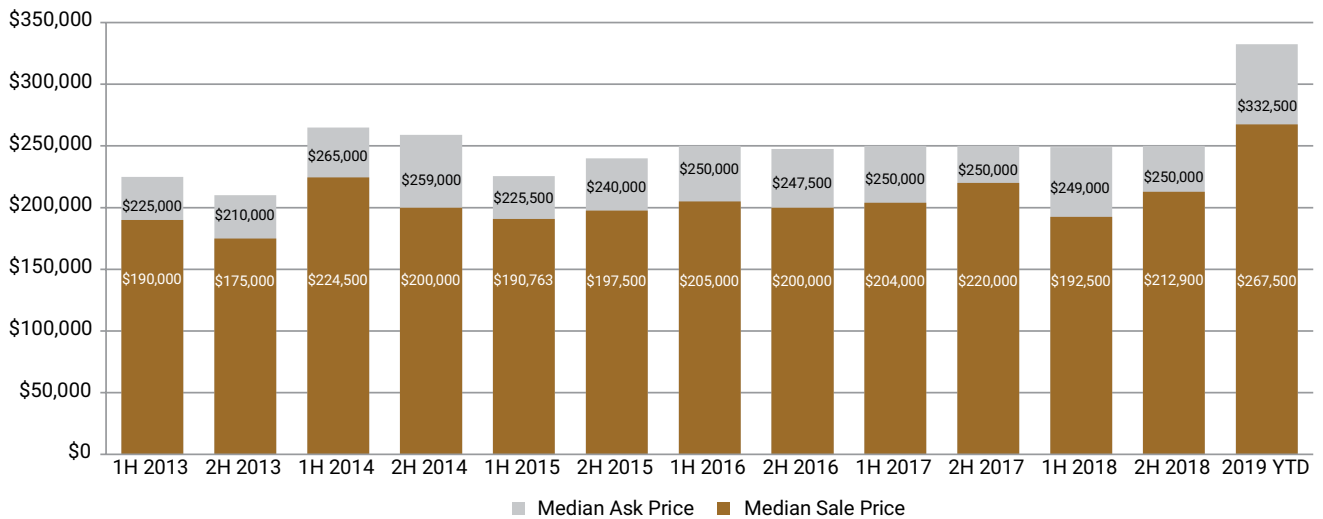
**EXHIBIT 18B. MEDIAN SELLING PRICE AND MEDIAN SELLING PRICE/REVENUE (PRIVATE TARGETS)**



## 2019 TRANSACTIONS SELL AT 80.5% OF THE ASKING PRICE

Exhibit 19 compares the median asking price with the median sales price for private targets since 2013. In all years, the sales price was discounted from the asking price, with the second half of 2017 offering the smallest discount, at 88.0% of the asking price. In the second half of 2014, the sales price reported at the largest discount, 77.2%, of the asking price. Through the first quarter of 2019, the median sales price was 80.5% of the asking price.

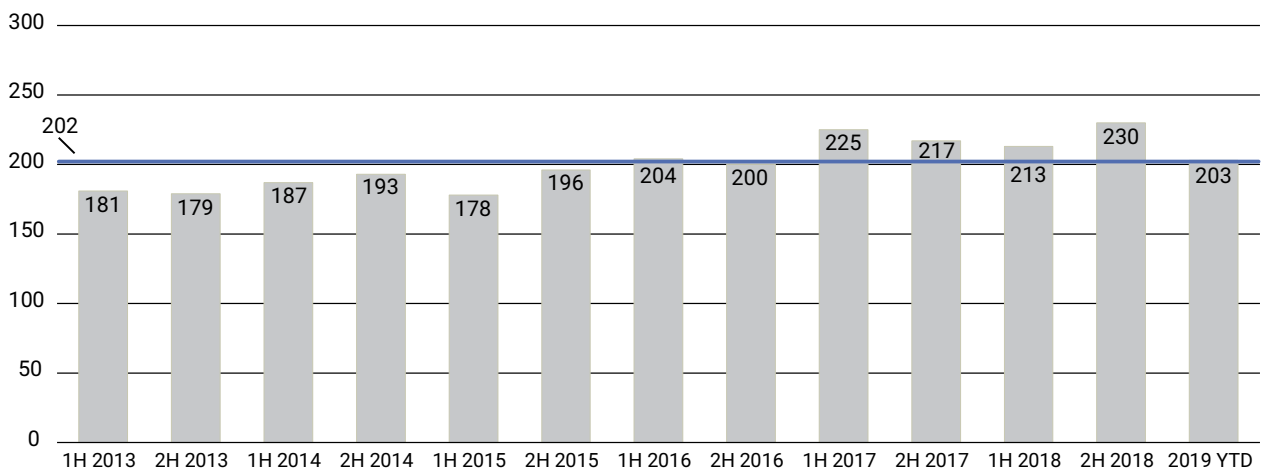
**EXHIBIT 19. MEDIAN ASK PRICE VS. MEDIAN SALE PRICE SEMIANNUALLY (PRIVATE TARGETS)**



## DAYS TO SELL AT THREE-YEAR LOW

The median number of days to sell for private targets reached its highest point in the second half of 2018, at 230 days. Through the first quarter of 2019, the median number of days to sell, at 203 days, returned to near the median level of 202 days, as displayed in Exhibit 20.

**EXHIBIT 20. MEDIAN DAYS TO SELL SEMIANNUALLY\* (PRIVATE TARGETS)**

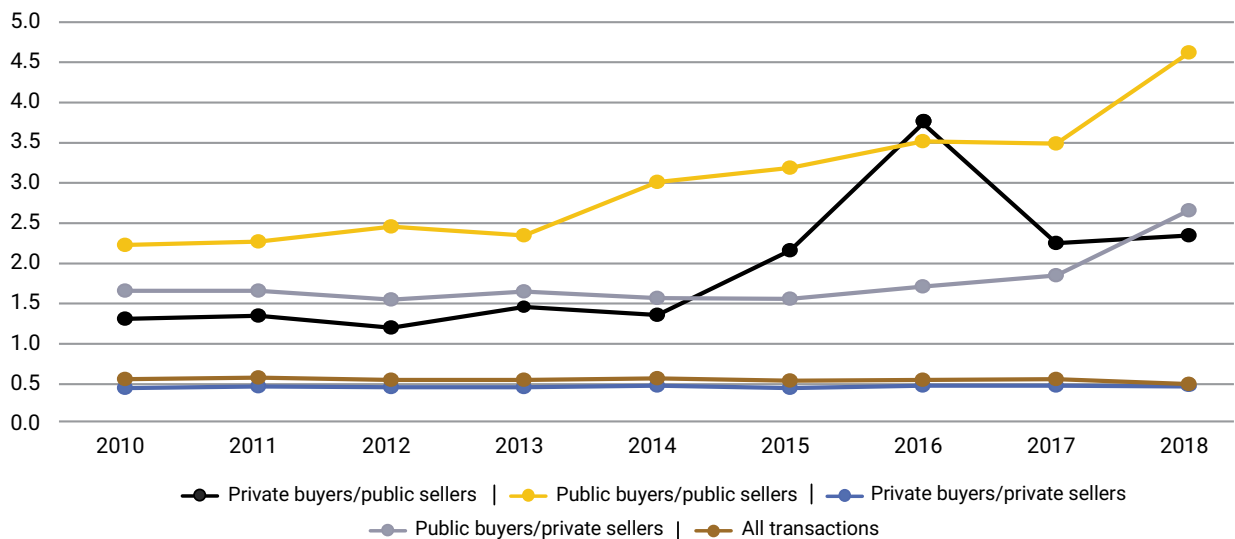


\* Based on the sale date of transactions

## NET SALES MULTIPLES REACH HISTORIC LOWS IN 'ALL TRANSACTIONS' CATEGORY

Stepping outside historical norms, private buyers of public targets paid a higher net sales multiple (3.74x) in 2016 when compared to public buyers of public targets (3.52x). Public buyers saw net sales multiples reach a peak in 2018 for acquisitions of both public companies and private companies, at 4.62x and 2.66x. Conversely, net sales multiples for all transactions are reporting at the lowest historical level in 2018, falling to 0.50x.

EXHIBIT 21. MEDIAN SELLING PRICE/NET SALES

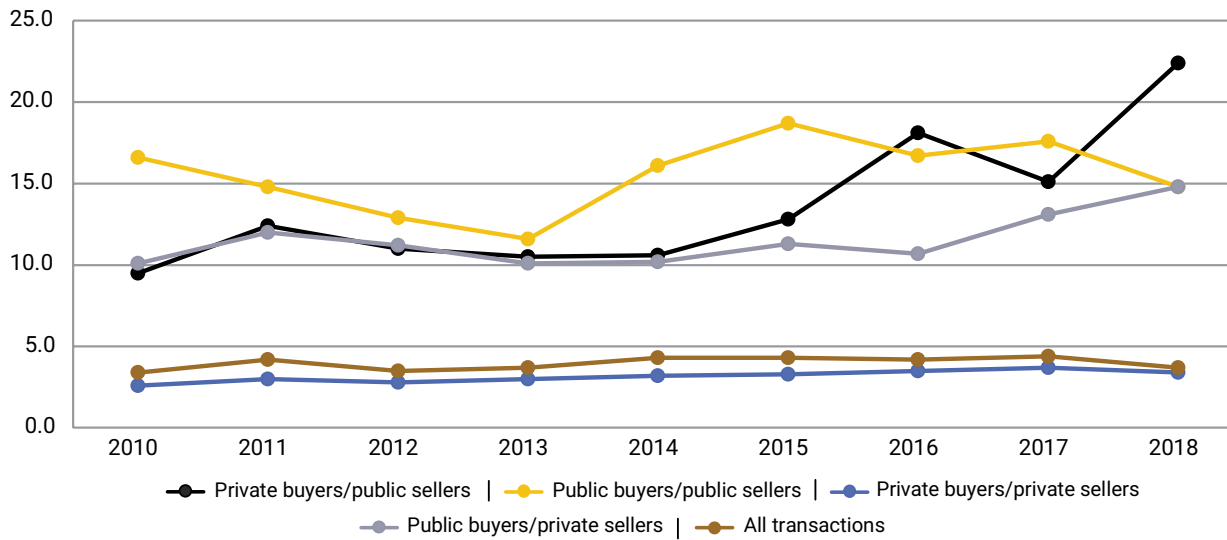


Note: Each data point in this chart is based on a minimum of 10 transactions. If there are not enough transactions for a particular year, the data are not included.

## EBITDA AT A HIGH FOR PRIVATE SELLERS

Private buyers of public targets paid a higher EBITDA multiple (22.4x) in 2018 when compared to public buyers of public targets (14.8x) in 2018, matching the trend first established in 2016, at 18.1x and 16.7x, respectively. Public buyers have seen the EBITDA multiple for acquisitions of private targets reach the highest level in 2018, at 14.8x. Conversely, EBITDA multiples across all transactions matched a five-year low in 2018, at 3.5x.

EXHIBIT 22. MEDIAN SELLING PRICE/EBITDA



Note: Each data point in this chart is based on a minimum of 10 transactions. If there are not enough transactions for a particular year, the data are not included.

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