

# PENDO ADVISORS, LLC

North American Industry Market Multiples – As of September 30, 2019

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Source: CapitalIQ

	Stock Price Multiples			Enterprise Value Multiples			EBITDA Margin		EBITDA Growth	
	LTM P/E	NTM P/E	PEG	LTM EBITDA	NTM EBITDA	LTM Revenue	3-yr avg.	LTM	3-yr CAGR	NTM
<b>Energy</b>	<b>10.0x</b>	<b>12.8x</b>	<b>1.83x</b>	<b>6.1x</b>	<b>5.7x</b>	<b>2.15x</b>	<b>20.3%</b>	<b>21.2%</b>	<b>18.3%</b>	<b>2.9%</b>
Coal	6.1x	9.8x	3.26x	5.4x	4.9x	1.87x	14.5%	11.0%	(3.4%)	(10.9%)
Equipment & Services	13.5x	16.3x	1.17x	6.9x	5.9x	0.98x	11.3%	12.1%	9.8%	0.1%
Integrated Oil & Gas	11.7x	14.4x	2.25x	6.4x	6.1x	1.48x	20.4%	18.2%	32.8%	(9.8%)
Oil & Gas Exploration / Production	7.2x	11.4x	1.10x	4.3x	4.2x	2.71x	42.0%	50.9%	36.9%	4.0%
Oil & Gas Refining / Marketing	16.3x	11.2x	1.50x	9.0x	7.9x	0.50x	6.7%	2.0%	3.3%	(12.5%)
Oil & Gas Storage / Transportation	13.8x	13.1x	2.59x	11.1x	10.0x	3.92x	30.6%	28.6%	12.1%	8.2%
<b>Industrials</b>	<b>18.9x</b>	<b>15.9x</b>	<b>1.32x</b>	<b>11.2x</b>	<b>9.2x</b>	<b>1.35x</b>	<b>10.1%</b>	<b>9.2%</b>	<b>8.1%</b>	<b>7.8%</b>
Aerospace & Defense	22.8x	16.8x	1.66x	13.4x	11.7x	1.83x	13.0%	11.4%	8.4%	12.1%
Building Products	19.1x	16.5x	1.54x	10.3x	8.6x	1.29x	10.5%	10.0%	8.8%	4.5%
Commercial & Professional Services	19.6x	18.6x	1.33x	12.2x	10.0x	1.39x	9.6%	7.9%	5.9%	9.0%
Construction & Engineering	17.2x	15.2x	1.24x	9.6x	7.3x	0.75x	5.8%	6.4%	13.7%	11.4%
Machinery	20.4x	16.1x	1.38x	11.7x	10.2x	1.62x	11.8%	12.4%	8.8%	5.4%
Transportation	16.6x	13.5x	1.09x	8.2x	6.8x	1.33x	15.3%	13.1%	5.6%	5.5%
<b>Materials</b>	<b>17.7x</b>	<b>14.5x</b>	<b>1.65x</b>	<b>8.8x</b>	<b>7.6x</b>	<b>1.94x</b>	<b>13.3%</b>	<b>13.0%</b>	<b>7.6%</b>	<b>2.4%</b>
Chemicals	18.8x	14.2x	1.68x	9.5x	8.3x	2.02x	13.8%	13.0%	3.7%	(0.1%)
Construction Materials	20.4x	25.0x	1.73x	10.3x	10.0x	1.70x	19.8%	21.5%	6.2%	11.4%
Containers & Packaging	18.3x	14.5x	1.88x	9.2x	8.8x	1.35x	14.3%	14.2%	9.0%	6.3%
Metals & Mining	14.5x	13.8x	1.18x	8.2x	6.6x	2.65x	11.8%	11.2%	12.6%	8.8%
Paper & Forest Products	17.6x	16.5x	0.15x	8.3x	8.2x	0.95x	10.2%	11.1%	3.6%	(17.1%)
<b>Consumer Discretionary</b>	<b>17.4x</b>	<b>15.0x</b>	<b>1.26x</b>	<b>11.2x</b>	<b>10.0x</b>	<b>1.26x</b>	<b>10.3%</b>	<b>8.6%</b>	<b>3.5%</b>	<b>3.4%</b>
Automobile Manufacturers	13.6x	9.0x	0.65x	9.7x	7.3x	1.03x	9.1%	9.2%	(2.6%)	0.3%
Auto Parts & Equipment	11.7x	9.1x	0.89x	5.9x	5.4x	0.68x	10.1%	10.1%	4.3%	(5.5%)
Consumer Durables & Apparel	17.0x	12.9x	1.09x	11.1x	9.4x	1.10x	9.4%	7.8%	4.6%	8.4%
Hotels, Restaurants & Leisure	22.1x	18.7x	1.93x	11.7x	10.5x	2.40x	17.6%	16.0%	6.5%	4.1%
Media	13.4x	13.9x	1.11x	8.7x	7.8x	1.94x	18.8%	16.4%	4.0%	2.9%
Retailing	15.4x	13.3x	1.33x	11.0x	10.4x	0.87x	8.5%	6.0%	0.7%	2.1%
<b>Consumer Staples</b>	<b>23.6x</b>	<b>20.8x</b>	<b>2.65x</b>	<b>13.5x</b>	<b>11.9x</b>	<b>1.83x</b>	<b>7.8%</b>	<b>5.5%</b>	<b>2.0%</b>	<b>5.0%</b>
Beverages	26.9x	26.8x	1.64x	16.0x	16.3x	2.74x	12.3%	11.8%	6.8%	5.1%
Food Products	25.2x	21.4x	2.78x	14.4x	12.5x	1.53x	8.4%	7.7%	0.3%	3.1%
Food & Staples Retailing	22.1x	17.4x	2.39x	12.2x	11.1x	0.68x	4.9%	4.3%	2.3%	8.9%
Household & Personal Products	27.4x	18.4x	2.74x	12.9x	10.9x	3.11x	10.4%	4.7%	2.5%	4.4%
<b>Healthcare</b>	<b>27.3x</b>	<b>22.7x</b>	<b>1.70x</b>	<b>15.4x</b>	<b>14.2x</b>	<b>6.02x</b>	<b>1.6%</b>	<b>(5.7%)</b>	<b>8.1%</b>	<b>8.2%</b>
Biotechnology	16.6x	17.6x	0.89x	6.7x	16.0x	11.30x	(54.7%)	(54.2%)	12.6%	15.7%
Healthcare Equipment & Supplies	41.9x	29.1x	2.10x	21.7x	18.3x	4.67x	(2.4%)	1.1%	10.3%	7.8%
Healthcare Services	23.1x	22.3x	1.58x	13.8x	11.4x	2.03x	7.0%	4.3%	6.6%	15.4%
Pharmaceuticals	15.5x	17.0x	1.25x	10.3x	10.7x	8.78x	(1.7%)	(41.9%)	4.1%	9.6%
<b>Information Technology</b>	<b>28.5x</b>	<b>21.9x</b>	<b>1.56x</b>	<b>14.7x</b>	<b>13.0x</b>	<b>2.56x</b>	<b>5.0%</b>	<b>4.1%</b>	<b>10.5%</b>	<b>6.4%</b>
Communications Equipment	27.1x	19.6x	1.43x	13.8x	9.8x	1.24x	4.4%	2.7%	2.5%	7.7%
Hardware, Storage & Peripherals	18.6x	13.0x	1.11x	10.1x	7.4x	1.19x	5.4%	6.7%	2.4%	6.3%
Internet Software & Services	38.1x	26.7x	1.88x	17.5x	16.1x	4.13x	1.9%	0.9%	11.2%	10.9%
IT Services	30.5x	20.4x	1.62x	14.6x	11.9x	2.33x	9.9%	8.4%	8.0%	7.9%
Semiconductors	34.9x	25.4x	1.34x	19.8x	17.3x	4.20x	14.5%	11.5%	13.0%	(9.8%)
Software	43.8x	34.4x	1.97x	28.6x	22.6x	5.04x	(7.2%)	(5.8%)	13.0%	12.0%
Technology Hardware & Equipment	21.4x	18.0x	1.33x	11.9x	9.4x	1.23x	4.9%	4.1%	7.0%	6.9%
<b>Telecommunications</b>	<b>19.4x</b>	<b>17.6x</b>	<b>1.23x</b>	<b>10.3x</b>	<b>8.9x</b>	<b>2.41x</b>	<b>15.3%</b>	<b>10.8%</b>	<b>4.5%</b>	<b>4.9%</b>
Alternative Carriers	67.2x	48.0x	0.87x	17.3x	13.2x	4.87x	12.9%	11.5%	7.0%	4.9%
Integrated Telecommunication Services	15.7x	13.9x	3.56x	7.9x	7.7x	2.02x	25.9%	24.4%	2.5%	5.9%
Wireless Telecommunication Services	20.4x	25.1x	1.92x	8.3x	7.0x	1.90x	20.8%	19.8%	11.8%	0.3%
<b>Utilities</b>	<b>23.5x</b>	<b>22.1x</b>	<b>3.78x</b>	<b>13.8x</b>	<b>12.1x</b>	<b>4.72x</b>	<b>31.0%</b>	<b>32.2%</b>	<b>4.1%</b>	<b>7.6%</b>
Electric Utilities	23.3x	21.8x	3.88x	13.4x	11.9x	4.61x	30.7%	32.7%	3.1%	7.0%
Gas Utilities	23.6x	20.7x	3.64x	12.3x	12.7x	3.15x	24.1%	21.1%	5.7%	5.9%
Water Utilities	39.8x	33.1x	4.45x	20.9x	19.0x	8.58x	41.1%	37.6%	1.8%	7.9%
	<b>Price / Earnings Multiples</b>			<b>Price / BV Multiples</b>			<b>Net Income Margin</b>		<b>Return on Equity</b>	
	LTM P/E	NTM P/E	PEG	Book Value		Tangible BV	3-yr avg.	LTM	3-yr avg.	LTM
<b>Financials</b>	<b>13.0x</b>	<b>11.9x</b>	<b>1.34x</b>		<b>1.18x</b>	<b>1.31x</b>	<b>18.4%</b>	<b>24.3%</b>	<b>8.2%</b>	<b>9.7%</b>
Commercial Banks	10.5x	10.2x	1.91x		1.39x	1.77x	27.3%	30.2%	13.0%	12.7%
Investment Banking & Brokerage	13.0x	10.9x	1.24x		1.67x	2.00x	5.4%	8.4%	7.3%	10.1%
Insurance	15.5x	13.2x	1.29x		1.28x	1.46x	7.3%	6.1%	8.9%	7.7%

Merger & Acquisition Advisory  
Fairness & Solvency Opinions

Private Placements  
Restructuring Advisory

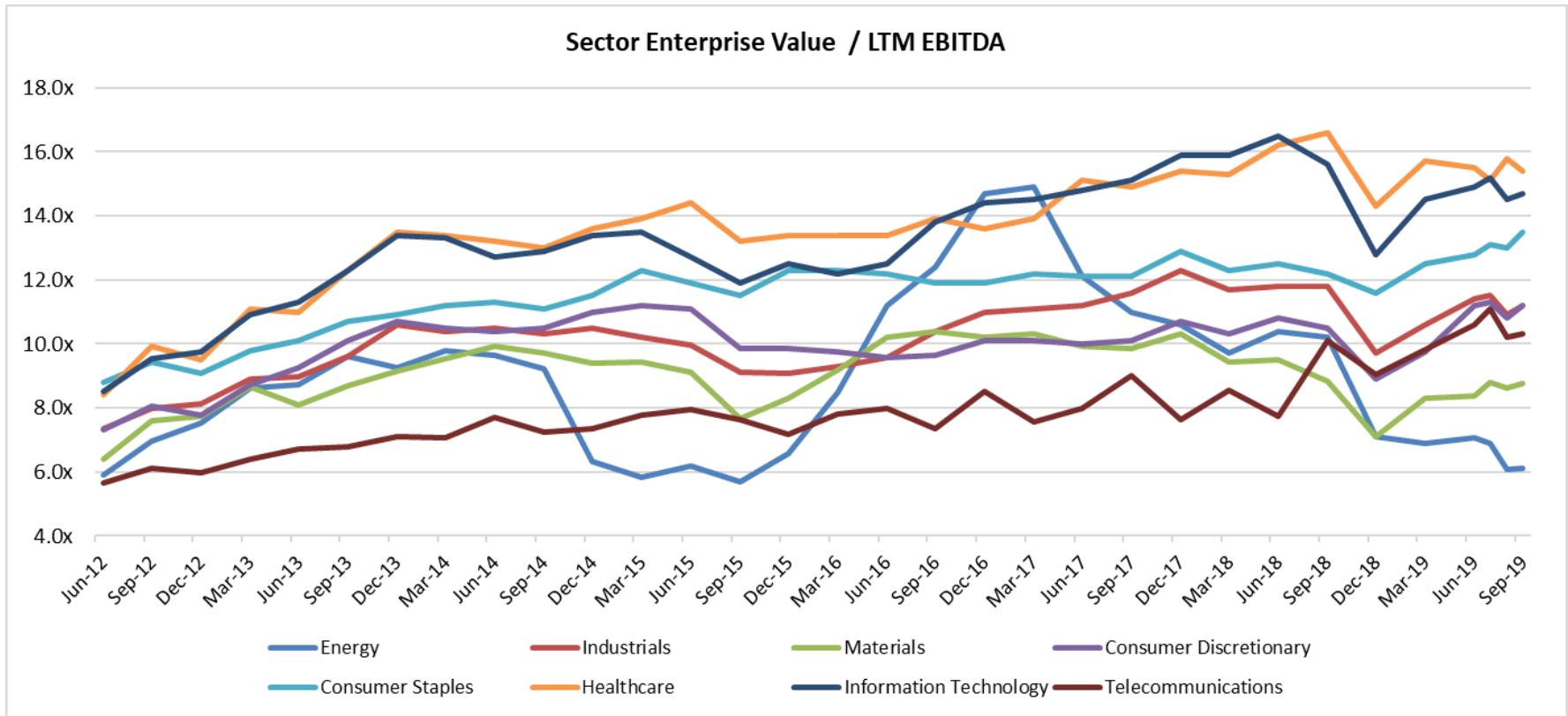
Business & Asset Valuation  
ESOP / ERISA Advisory



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**Enterprise Value Multiple Observations - Period from June 30, 2012 through September 30, 2019**

	Jun-12	Sep-12	Dec-12	Mar-13	Jun-13	Sep-13	Dec-13	Mar-14	Jun-14	Sep-14	Dec-14	Mar-15	Jun-15	Sep-15	Dec-15	Mar-16	Jun-16	Sep-16	Dec-16	Mar-17	Jun-17	Sep-17	Dec-17	Mar-18	Jun-18	Sep-18	Dec-18	Mar-19	Jun-19	Jul-19	Aug-19	Sep-19
Energy	5.9x	7.0x	7.5x	8.6x	8.7x	9.6x	9.3x	9.8x	9.7x	9.2x	6.3x	5.8x	6.2x	5.7x	6.6x	8.5x	11.2x	12.4x	14.7x	14.9x	12.1x	11.0x	10.6x	9.7x	10.4x	10.2x	7.1x	6.9x	7.1x	6.9x	6.1x	6.1x
Industrials	7.4x	8.0x	8.1x	8.9x	9.0x	9.6x	10.6x	10.4x	10.5x	10.3x	10.5x	10.2x	10.0x	9.1x	9.1x	9.3x	9.6x	10.4x	11.0x	11.1x	11.2x	11.6x	12.3x	11.7x	11.8x	11.8x	9.7x	10.6x	11.4x	11.5x	10.9x	11.2x
Materials	6.4x	7.6x	7.8x	8.7x	8.1x	8.7x	9.1x	9.6x	9.9x	9.7x	9.4x	9.5x	9.1x	7.7x	8.3x	9.2x	10.2x	10.4x	10.2x	10.3x	9.9x	9.9x	10.3x	9.4x	9.5x	8.8x	7.1x	8.3x	8.4x	8.8x	8.6x	8.8x
Consumer Discretionary	7.3x	8.1x	7.8x	8.7x	9.3x	10.1x	10.7x	10.5x	10.4x	10.5x	11.0x	11.2x	11.1x	9.9x	9.8x	9.6x	9.7x	10.1x	10.1x	10.1x	10.0x	10.1x	10.7x	10.3x	10.8x	10.5x	8.9x	9.8x	11.2x	11.3x	10.8x	11.2x
Consumer Staples	8.8x	9.5x	9.1x	9.8x	10.1x	10.7x	10.9x	11.2x	11.3x	11.1x	11.5x	12.3x	11.9x	11.5x	12.3x	12.3x	12.2x	11.9x	11.9x	12.2x	12.1x	12.1x	12.9x	12.3x	12.5x	12.2x	11.6x	12.5x	12.8x	13.1x	13.0x	13.5x
Healthcare	8.4x	9.9x	9.5x	11.1x	11.0x	12.3x	13.5x	13.4x	13.2x	13.0x	13.6x	13.9x	14.4x	13.2x	13.4x	13.4x	13.4x	13.9x	13.6x	13.9x	15.1x	14.9x	15.4x	15.3x	16.2x	16.6x	14.3x	15.7x	15.5x	15.1x	15.8x	15.4x
Information Technology	8.5x	9.5x	9.8x	10.9x	11.3x	12.3x	13.4x	13.3x	12.7x	12.9x	13.4x	13.5x	12.7x	11.9x	12.5x	12.2x	12.5x	13.8x	14.4x	14.5x	14.8x	15.1x	15.9x	15.9x	16.5x	15.6x	12.8x	14.5x	14.9x	15.2x	14.5x	14.7x
Telecommunications	5.7x	6.1x	6.0x	6.4x	6.7x	6.8x	7.1x	7.1x	7.7x	7.2x	7.3x	7.8x	8.0x	7.6x	7.2x	7.8x	8.0x	7.4x	8.5x	7.6x	8.0x	9.0x	7.6x	8.5x	7.8x	10.1x	9.0x	9.8x	10.6x	11.1x	10.2x	10.3x

Source: Capital IQ

Contact us at 312-242-3768 to be added to our industry sector multiple distribution list or to discuss your respective company or industry in more detail.

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**Portfolio Valuation**  
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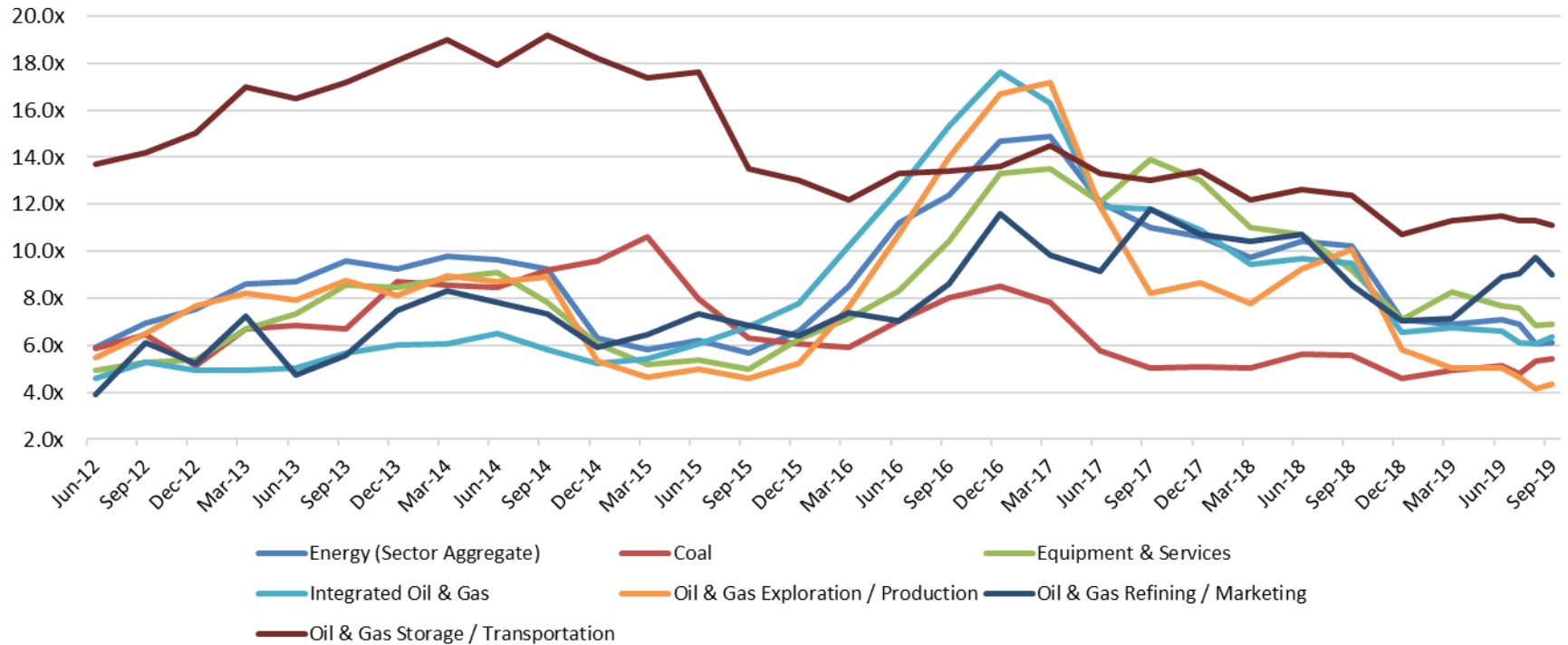
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### Energy Sector Enterprise Value / LTM EBITDA



### Enterprise Value Multiple Observations - Period from June 30, 2012 through September 30, 2019

	Jun-12	Sep-12	Dec-12	Mar-13	Jun-13	Sep-13	Dec-13	Mar-14	Jun-14	Sep-14	Dec-14	Mar-15	Jun-15	Sep-15	Dec-15	Mar-16	Jun-16	Sep-16	Dec-16	Mar-17	Jun-17	Sep-17	Dec-17	Mar-18	Jun-18	Sep-18	Dec-18	Mar-19	Jun-19	Jul-19	Aug-19	Sep-19
Energy (Sector Aggregate)	5.9x	7.0x	7.5x	8.6x	8.7x	9.6x	9.3x	9.8x	9.7x	9.2x	6.3x	5.8x	6.2x	5.7x	6.6x	8.5x	11.2x	12.4x	14.7x	14.9x	12.1x	11.0x	10.6x	9.7x	10.4x	10.2x	7.1x	6.9x	7.1x	6.9x	6.1x	6.1x
Coal	5.9x	6.5x	5.1x	6.7x	6.8x	6.7x	8.7x	8.6x	8.4x	9.2x	9.6x	10.6x	8.0x	6.3x	6.1x	5.9x	7.0x	8.0x	8.5x	7.8x	5.8x	5.0x	5.1x	5.0x	5.6x	5.6x	4.6x	4.9x	5.1x	4.8x	5.3x	5.4x
Equipment & Services	4.9x	5.3x	5.4x	6.7x	7.3x	8.6x	8.5x	8.9x	9.1x	7.8x	6.1x	5.2x	5.4x	5.0x	6.2x	7.2x	8.3x	10.4x	13.3x	13.5x	12.1x	13.9x	13.0x	11.0x	10.7x	9.2x	7.1x	8.3x	7.7x	7.6x	6.8x	6.9x
Integrated Oil & Gas	4.6x	5.3x	4.9x	4.9x	5.1x	5.7x	6.0x	6.1x	6.5x	5.8x	5.2x	5.4x	6.1x	6.8x	7.8x	10.2x	12.6x	15.3x	17.6x	16.3x	11.9x	11.8x	10.9x	9.5x	9.7x	9.5x	6.6x	6.7x	6.6x	6.1x	6.1x	6.4x
Oil & Gas Exploration / Production	5.5x	6.5x	7.7x	8.2x	7.9x	8.8x	8.1x	9.0x	8.7x	8.9x	5.3x	4.6x	5.0x	4.6x	5.2x	7.6x	10.7x	14.0x	16.7x	17.2x	11.9x	8.2x	8.7x	7.8x	9.2x	10.1x	5.8x	5.0x	5.0x	4.6x	4.2x	4.3x
Oil & Gas Refining / Marketing	3.9x	6.1x	5.2x	7.3x	4.7x	5.6x	7.5x	8.3x	7.8x	7.3x	5.9x	6.5x	7.3x	6.9x	6.4x	7.4x	7.0x	8.6x	11.6x	9.8x	9.1x	11.8x	10.7x	10.4x	10.7x	8.6x	7.1x	7.2x	8.9x	9.1x	9.8x	9.0x
Oil & Gas Storage / Transportation	13.7x	14.2x	15.0x	17.0x	16.5x	17.2x	18.1x	19.0x	17.9x	19.2x	18.2x	17.4x	17.6x	13.5x	13.0x	12.2x	13.3x	13.4x	13.6x	14.5x	13.3x	13.0x	13.4x	12.2x	12.6x	12.4x	10.7x	11.3x	11.5x	11.3x	11.3x	11.1x

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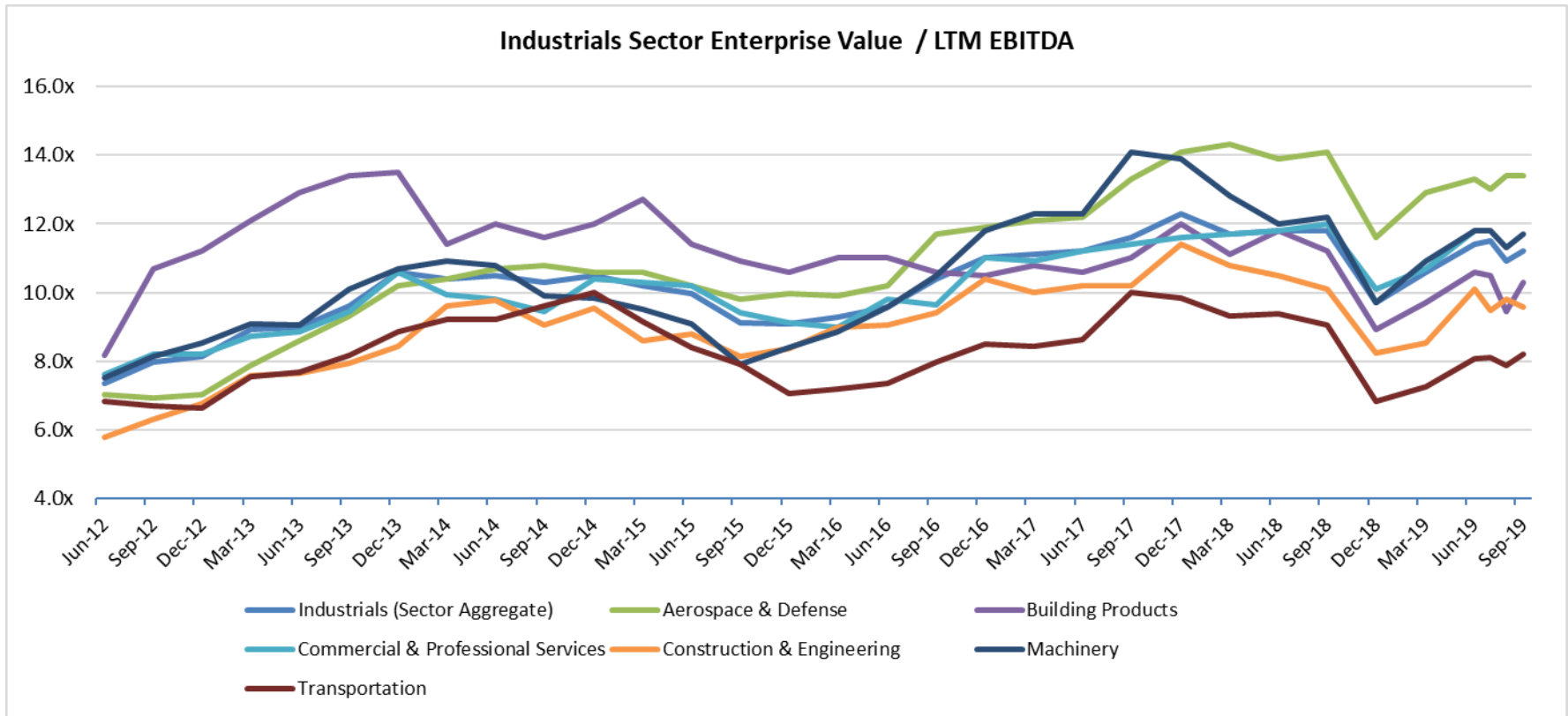
**Portfolio Valuation**  
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Industrials (Sector Aggregate)	7.4x	8.0x	8.1x	8.9x	9.0x	9.6x	10.6x	10.4x	10.5x	10.3x	10.5x	10.2x	10.0x	9.1x	9.1x	9.3x	9.6x	10.4x	11.0x	11.1x	11.2x	11.6x	12.3x	11.7x	11.8x	11.8x	9.7x	10.6x	11.4x	11.5x	10.9x	11.2x
Aerospace & Defense	7.0x	6.9x	7.0x	7.9x	8.6x	9.3x	10.2x	10.4x	10.7x	10.8x	10.6x	10.6x	10.2x	9.8x	10.0x	9.9x	10.2x	11.7x	11.9x	12.1x	12.2x	13.3x	14.1x	14.3x	13.9x	14.1x	11.6x	12.9x	13.3x	13.0x	13.4x	13.4x
Building Products	8.2x	10.7x	11.2x	12.1x	12.9x	13.4x	13.5x	11.4x	12.0x	11.6x	12.0x	12.7x	11.4x	10.9x	10.6x	11.0x	11.0x	10.6x	10.5x	10.8x	10.6x	11.0x	12.0x	11.1x	11.8x	11.2x	8.9x	9.7x	10.6x	10.5x	9.5x	10.3x
Commercial & Professional Services	7.6x	8.2x	8.2x	8.7x	8.9x	9.5x	10.6x	9.9x	9.8x	9.4x	10.4x	10.3x	10.2x	9.4x	9.1x	9.0x	9.8x	9.6x	11.0x	10.9x	11.2x	11.4x	11.6x	11.7x	11.8x	12.0x	10.1x	10.7x	11.8x	12.5x	11.9x	12.2x
Construction & Engineering	5.8x	6.3x	6.8x	7.6x	7.7x	8.0x	8.4x	9.6x	9.8x	9.1x	9.5x	8.6x	8.8x	8.1x	8.4x	9.0x	9.1x	9.4x	10.4x	10.0x	10.2x	10.2x	11.4x	10.8x	10.5x	10.1x	8.2x	8.5x	10.1x	9.5x	9.8x	9.6x
Machinery	7.5x	8.2x	8.5x	9.1x	9.0x	10.1x	10.7x	10.9x	10.8x	9.9x	9.9x	9.5x	9.1x	7.9x	8.4x	8.9x	9.6x	10.5x	11.8x	12.3x	12.3x	14.1x	13.9x	12.8x	12.0x	12.2x	9.7x	10.9x	11.8x	11.8x	11.3x	11.7x
Transportation	6.8x	6.7x	6.6x	7.5x	7.7x	8.2x	8.9x	9.2x	9.2x	9.6x	10.0x	9.1x	8.4x	7.9x	7.1x	7.2x	7.3x	8.0x	8.5x	8.4x	8.6x	10.0x	9.8x	9.3x	9.4x	9.1x	6.8x	7.3x	8.1x	8.1x	7.9x	8.2x

Source: Capital IQ

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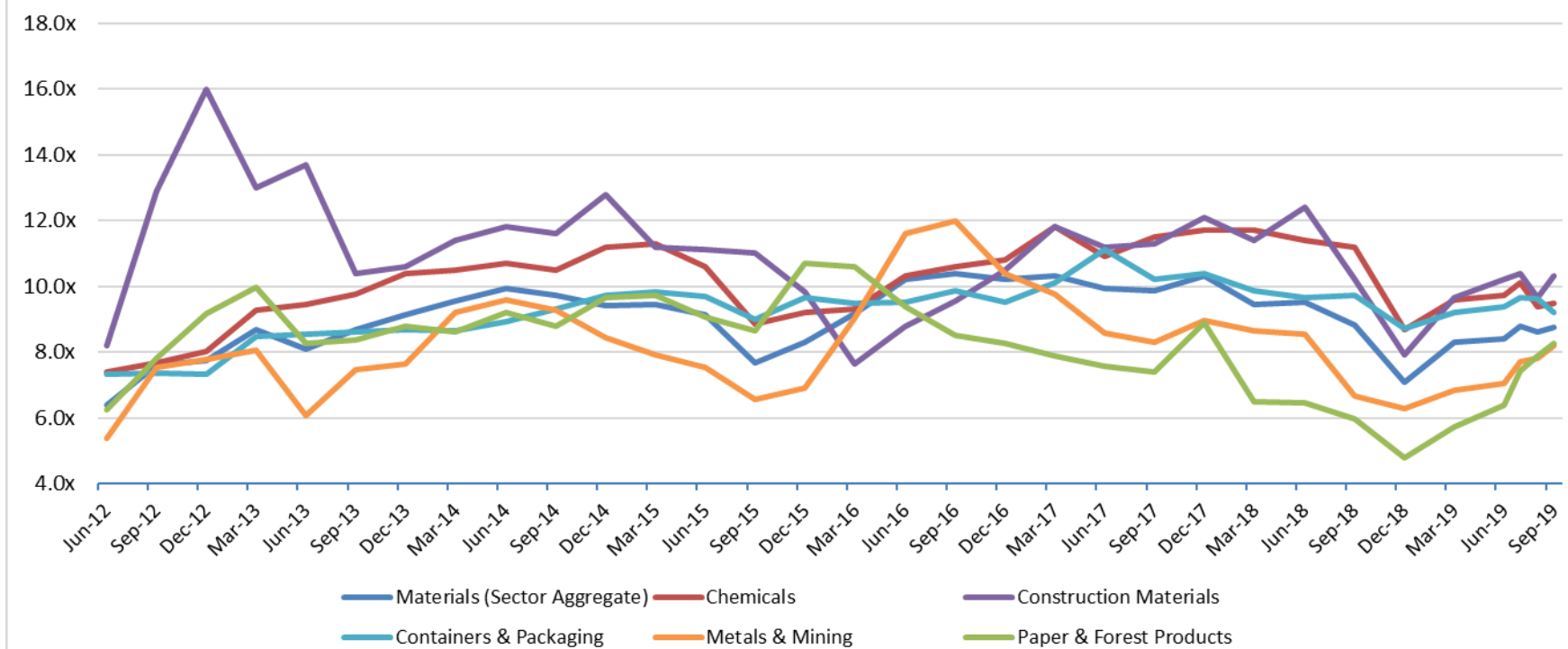
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Materials Sector Enterprise Value / LTM EBITDA



Enterprise Value Multiple Observations - Period from June 30, 2012 through September 30, 2019

	Jun-12	Sep-12	Dec-12	Mar-13	Jun-13	Sep-13	Dec-13	Mar-14	Jun-14	Sep-14	Dec-14	Mar-15	Jun-15	Sep-15	Dec-15	Mar-16	Jun-16	Sep-16	Dec-16	Mar-17	Jun-17	Sep-17	Dec-17	Mar-18	Jun-18	Sep-18	Dec-18	Mar-19	Jun-19	Jul-19	Aug-19	Sep-19
Materials (Sector Aggregate)	6.4x	7.6x	7.8x	8.7x	8.1x	8.7x	9.1x	9.6x	9.9x	9.7x	9.4x	9.5x	9.1x	7.7x	8.3x	9.2x	10.2x	10.4x	10.2x	10.3x	9.9x	9.9x	10.3x	9.4x	9.5x	8.8x	7.1x	8.3x	8.4x	8.8x	8.6x	8.8x
Chemicals	7.4x	7.7x	8.0x	9.3x	9.5x	9.8x	10.4x	10.5x	10.7x	10.5x	11.2x	11.3x	10.6x	8.8x	9.2x	9.3x	10.3x	10.6x	10.8x	11.8x	10.9x	11.5x	11.7x	11.7x	11.4x	11.2x	8.7x	9.6x	9.7x	10.1x	9.4x	9.5x
Construction Materials	8.2x	12.9x	16.0x	13.0x	13.7x	10.4x	10.6x	11.4x	11.8x	11.6x	12.8x	11.2x	11.1x	11.0x	9.8x	7.7x	8.8x	9.6x	10.5x	11.8x	11.2x	11.3x	12.1x	11.4x	12.4x	10.2x	7.9x	9.7x	10.2x	10.4x	9.7x	10.3x
Containers & Packaging	7.3x	7.4x	7.3x	8.5x	8.5x	8.6x	8.7x	8.7x	8.9x	9.3x	9.7x	9.8x	9.7x	9.0x	9.7x	9.5x	9.5x	9.9x	9.5x	10.1x	11.1x	10.2x	10.4x	9.9x	9.6x	9.7x	8.7x	9.2x	9.4x	9.7x	9.6x	9.2x
Metals & Mining	5.4x	7.6x	7.8x	8.1x	6.1x	7.5x	7.6x	9.2x	9.6x	9.3x	8.4x	7.9x	7.6x	6.6x	6.9x	9.0x	11.6x	12.0x	10.4x	9.8x	8.6x	8.3x	9.0x	8.6x	8.5x	6.7x	6.3x	6.9x	7.1x	7.7x	7.8x	8.2x
Paper & Forest Products	6.3x	7.8x	9.2x	10.0x	8.3x	8.4x	8.8x	8.6x	9.2x	8.8x	9.7x	9.7x	9.1x	8.7x	10.7x	10.6x	9.4x	8.5x	8.3x	7.9x	7.6x	7.4x	8.9x	6.5x	6.5x	6.0x	4.8x	5.7x	6.4x	7.4x	7.9x	8.3x

Source: Capital IQ

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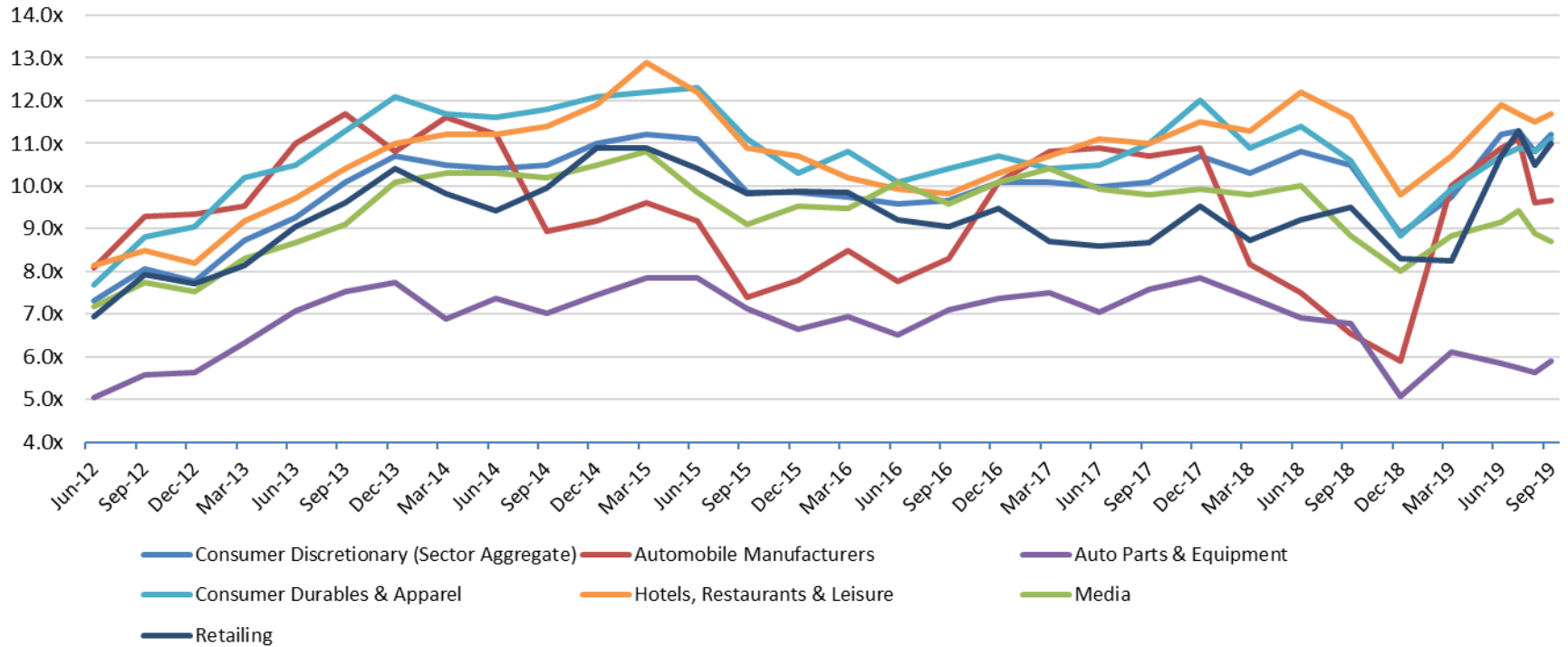
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Consumer Discretionary Sector Enterprise Value / LTM EBITDA



Enterprise Value Multiple Observations - Period from June 30, 2012 through September 30, 2019

	Jun-12	Sep-12	Dec-12	Mar-13	Jun-13	Sep-13	Dec-13	Mar-14	Jun-14	Sep-14	Dec-14	Mar-15	Jun-15	Sep-15	Dec-15	Mar-16	Jun-16	Sep-16	Dec-16	Mar-17	Jun-17	Sep-17	Dec-17	Mar-18	Jun-18	Sep-18	Dec-18	Mar-19	Jun-19	Jul-19	Aug-19	Sep-19
Consumer Discretionary (Sector Aggregate)	7.3x	8.1x	7.8x	8.7x	9.3x	10.1x	10.7x	10.5x	10.4x	10.5x	11.0x	11.2x	11.1x	9.9x	9.8x	9.8x	9.6x	9.7x	10.1x	10.1x	10.0x	10.1x	10.7x	10.3x	10.8x	10.5x	8.9x	9.8x	11.2x	11.3x	10.8x	11.2x
Automobile Manufacturers	8.1x	9.3x	9.4x	9.5x	11.0x	11.7x	10.8x	11.6x	11.2x	9.0x	9.2x	9.6x	9.2x	7.4x	7.8x	8.5x	7.8x	8.3x	10.1x	10.8x	10.9x	10.7x	10.9x	8.2x	7.5x	6.5x	5.9x	10.0x	10.9x	11.1x	9.6x	9.7x
Auto Parts & Equipment	5.1x	5.6x	5.6x	6.3x	7.1x	7.5x	7.7x	6.9x	7.4x	7.0x	7.4x	7.8x	7.9x	7.1x	6.7x	6.9x	6.5x	7.1x	7.4x	7.5x	7.0x	7.6x	7.9x	7.4x	6.9x	6.8x	5.1x	6.1x	5.8x	5.8x	5.6x	5.9x
Consumer Durables & Apparel	7.7x	8.8x	9.1x	10.2x	10.5x	11.3x	12.1x	11.7x	11.6x	11.8x	12.1x	12.2x	12.3x	11.1x	10.3x	10.8x	10.1x	10.4x	10.7x	10.4x	10.5x	11.0x	12.0x	10.9x	11.4x	10.6x	8.8x	9.9x	10.7x	10.9x	10.8x	11.1x
Hotels, Restaurants & Leisure	8.1x	8.5x	8.2x	9.2x	9.7x	10.4x	11.0x	11.2x	11.2x	11.4x	11.9x	12.9x	12.2x	10.9x	10.7x	10.2x	9.9x	9.8x	10.3x	10.7x	11.1x	11.0x	11.5x	11.3x	12.2x	11.6x	9.8x	10.7x	11.9x	11.7x	11.5x	11.7x
Media	7.2x	7.7x	7.5x	8.3x	8.7x	9.1x	10.1x	10.3x	10.3x	10.2x	10.5x	10.8x	9.9x	9.1x	9.5x	9.5x	10.1x	9.6x	10.1x	10.4x	9.9x	9.8x	9.9x	9.8x	10.0x	8.8x	8.0x	8.8x	9.2x	9.4x	8.9x	8.7x
Retailing	6.9x	7.9x	7.7x	8.2x	9.0x	9.6x	10.4x	9.8x	9.4x	10.0x	10.9x	10.9x	10.4x	9.8x	9.9x	9.9x	9.2x	9.0x	9.5x	8.7x	8.6x	8.7x	9.5x	8.7x	9.2x	9.5x	8.3x	8.3x	10.7x	11.3x	10.5x	11.0x

Source: Capital IQ

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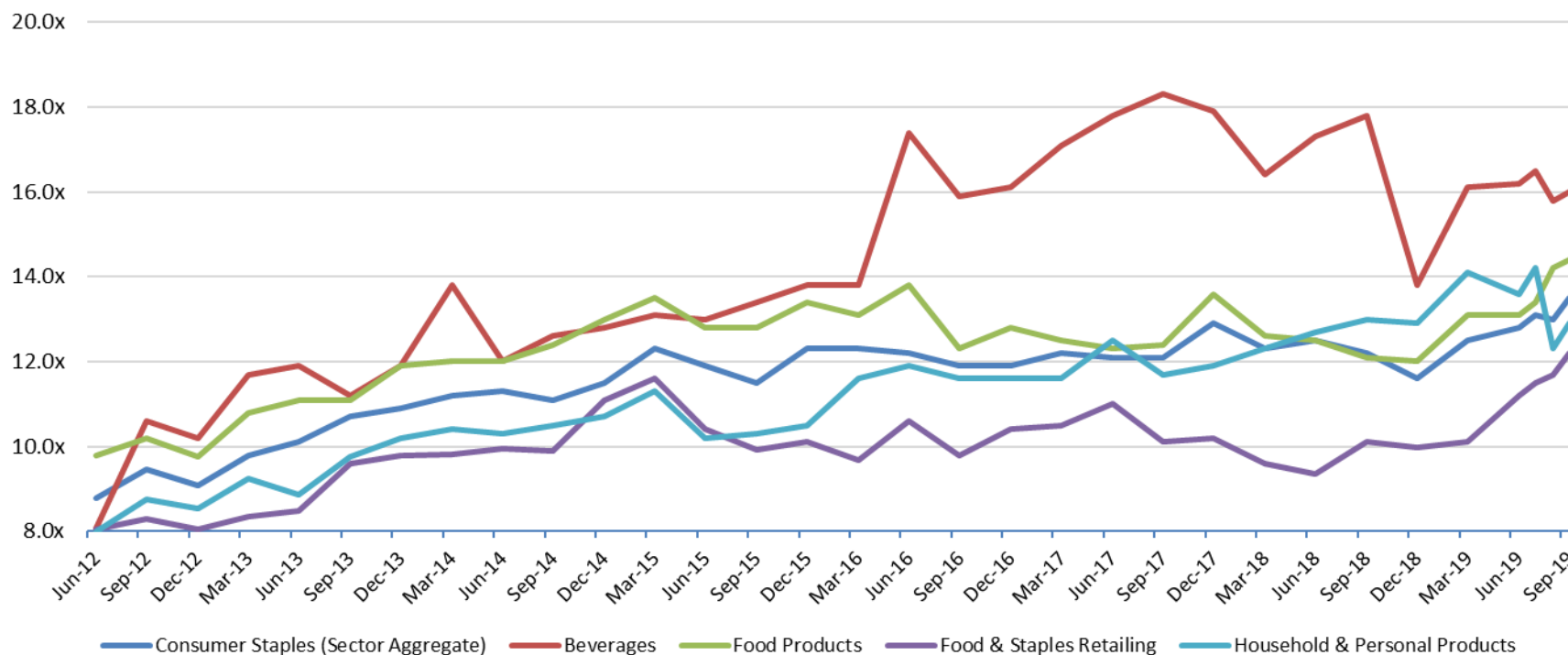
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Consumer Staples Sector Enterprise Value / LTM EBITDA



Enterprise Value Multiple Observations - Period from June 30, 2012 through September 30, 2019

	Jun-12	Sep-12	Dec-12	Mar-13	Jun-13	Sep-13	Dec-13	Mar-14	Jun-14	Sep-14	Dec-14	Mar-15	Jun-15	Sep-15	Dec-15	Mar-16	Jun-16	Sep-16	Dec-16	Mar-17	Jun-17	Sep-17	Dec-17	Mar-18	Jun-18	Sep-18	Dec-18	Mar-19	Jun-19	Jul-19	Aug-19	Sep-19
Consumer Staples (Sector Aggregate)	8.8x	9.5x	9.1x	9.8x	10.1x	10.7x	10.9x	11.2x	11.3x	11.1x	11.5x	12.3x	11.9x	11.5x	12.3x	12.3x	12.2x	11.9x	11.9x	12.2x	12.1x	12.1x	12.9x	12.3x	12.5x	12.2x	11.6x	12.5x	12.8x	13.1x	13.0x	13.5x
Beverages	8.1x	10.6x	10.2x	11.7x	11.9x	11.2x	11.9x	13.8x	12.0x	12.6x	12.8x	13.1x	13.0x	13.4x	13.8x	13.8x	17.4x	15.9x	16.1x	17.1x	17.8x	18.3x	17.9x	16.4x	17.3x	17.8x	13.8x	16.1x	16.2x	16.5x	15.8x	16.0x
Food Products	9.8x	10.2x	9.8x	10.8x	11.1x	11.1x	11.9x	12.0x	12.0x	12.4x	13.0x	13.5x	12.8x	12.8x	13.4x	13.1x	13.8x	12.3x	12.8x	12.5x	12.3x	12.4x	13.6x	12.6x	12.5x	12.1x	12.0x	13.1x	13.1x	13.4x	14.2x	14.4x
Food & Staples Retailing	8.0x	8.3x	8.1x	8.4x	8.5x	9.6x	9.8x	9.8x	10.0x	9.9x	11.1x	11.6x	10.4x	9.9x	10.1x	9.7x	10.6x	9.8x	10.4x	10.5x	11.0x	10.1x	10.2x	9.6x	9.3x	10.1x	10.0x	10.1x	11.2x	11.5x	11.7x	12.2x
Household & Personal Products	8.0x	8.8x	8.5x	9.2x	8.9x	9.8x	10.2x	10.4x	10.3x	10.5x	10.7x	11.3x	10.2x	10.3x	10.5x	11.6x	11.9x	11.6x	11.6x	11.6x	12.5x	11.7x	11.9x	12.3x	12.7x	13.0x	12.9x	14.1x	13.6x	14.2x	12.3x	12.9x

Source: Capital IQ

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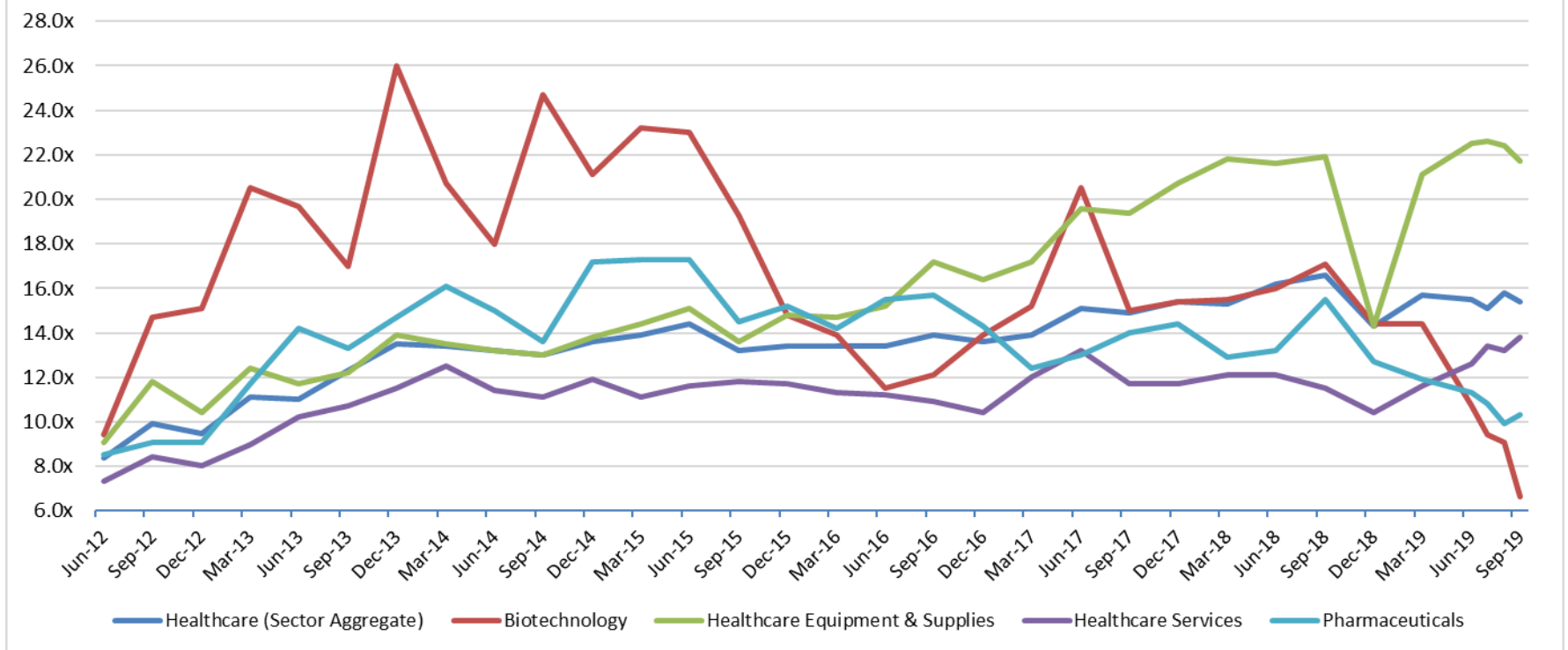


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Healthcare Sector Enterprise Value / LTM EBITDA



Enterprise Value Multiple Observations - Period from June 30, 2012 through September 30, 2019

	Jun-12	Sep-12	Dec-12	Mar-13	Jun-13	Sep-13	Dec-13	Mar-14	Jun-14	Sep-14	Dec-14	Mar-15	Jun-15	Sep-15	Dec-15	Mar-16	Jun-16	Sep-16	Dec-16	Mar-17	Jun-17	Sep-17	Dec-17	Mar-18	Jun-18	Sep-18	Dec-18	Mar-19	Jun-19	Jul-19	Aug-19	Sep-19
Healthcare (Sector Aggregate)	8.4x	9.9x	9.5x	11.1x	11.0x	12.3x	13.5x	13.4x	13.2x	13.0x	13.6x	13.9x	14.4x	13.2x	13.4x	13.4x	13.4x	13.9x	13.6x	13.9x	15.1x	14.9x	15.4x	15.3x	16.2x	16.6x	14.3x	15.7x	15.5x	15.1x	15.8x	15.4x
Biotechnology	9.5x	14.7x	15.1x	20.5x	19.7x	17.0x	26.0x	20.7x	18.0x	24.7x	21.1x	23.2x	23.0x	19.3x	14.8x	13.9x	11.5x	12.1x	13.9x	15.2x	20.5x	15.0x	15.4x	15.5x	16.0x	17.1x	14.4x	14.4x	10.7x	9.4x	9.1x	6.7x
Healthcare Equipment & Supplies	9.1x	11.8x	10.4x	12.4x	11.7x	12.2x	13.9x	13.5x	13.2x	13.0x	13.8x	14.4x	15.1x	13.6x	14.8x	14.7x	15.2x	17.2x	16.4x	17.2x	19.6x	19.4x	20.7x	21.8x	21.6x	21.9x	14.3x	21.1x	22.5x	22.6x	22.4x	21.7x
Healthcare Services	7.3x	8.4x	8.0x	9.0x	10.2x	10.7x	11.5x	12.5x	11.4x	11.1x	11.9x	11.1x	11.6x	11.8x	11.7x	11.3x	11.2x	10.9x	10.4x	12.0x	13.2x	11.7x	11.7x	12.1x	12.1x	11.5x	10.4x	11.6x	12.6x	13.4x	13.2x	13.8x
Pharmaceuticals	8.5x	9.1x	9.1x	11.7x	14.2x	13.3x	14.7x	16.1x	15.0x	13.6x	17.2x	17.3x	17.3x	14.5x	15.2x	14.2x	15.5x	15.7x	14.3x	12.4x	13.0x	14.0x	14.4x	12.9x	13.2x	15.5x	12.7x	11.9x	11.3x	10.8x	9.9x	10.3x

Source: Capital IQ

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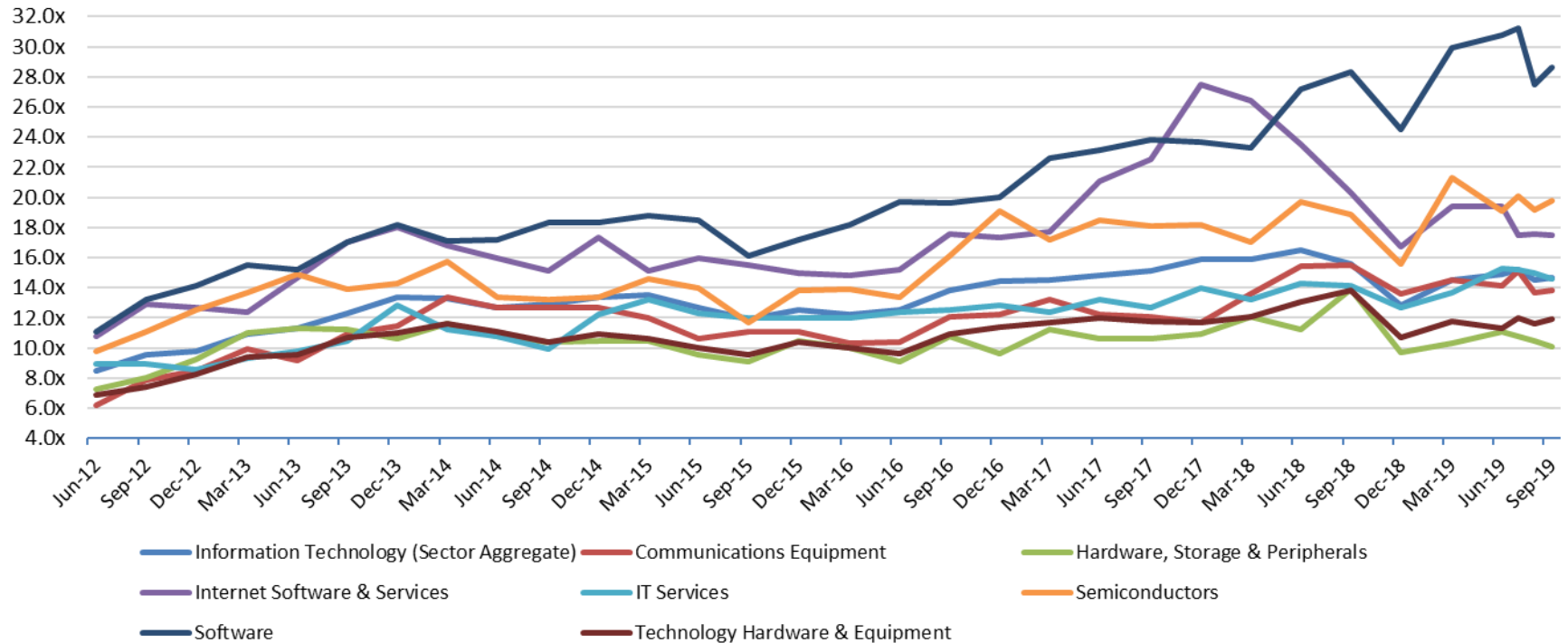
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### Information Technology Sector Enterprise Value / LTM EBITDA



### Enterprise Value Multiple Observations - Period from June 30, 2012 through September 30, 2019

	Jun-12	Sep-12	Dec-12	Mar-13	Jun-13	Sep-13	Dec-13	Mar-14	Jun-14	Sep-14	Dec-14	Mar-15	Jun-15	Sep-15	Dec-15	Mar-16	Jun-16	Sep-16	Dec-16	Mar-17	Jun-17	Sep-17	Dec-17	Mar-18	Jun-18	Sep-18	Dec-18	Mar-19	Jun-19	Jul-19	Aug-19	Sep-19
Information Technology (Sector Aggregate)	8.5x	9.5x	9.8x	10.9x	11.3x	12.3x	13.4x	13.3x	12.7x	12.9x	13.4x	13.5x	12.7x	11.9x	12.5x	12.2x	12.5x	13.8x	14.4x	14.5x	14.8x	15.1x	15.9x	15.9x	16.5x	15.6x	12.8x	14.5x	14.9x	15.2x	14.5x	14.7x
Communications Equipment	6.2x	7.9x	8.5x	10.0x	9.2x	10.9x	11.5x	13.4x	12.7x	12.7x	12.7x	12.0x	10.6x	11.1x	11.1x	10.3x	10.4x	12.1x	12.2x	12.2x	12.1x	11.7x	13.6x	15.4x	15.5x	13.6x	14.5x	14.1x	15.1x	13.7x	13.8x	
Hardware, Storage & Peripherals	7.3x	8.1x	9.3x	11.0x	11.3x	11.2x	10.6x	11.6x	10.8x	10.4x	10.5x	10.5x	9.5x	9.1x	10.5x	10.0x	9.1x	10.8x	9.6x	11.2x	10.6x	10.6x	10.9x	12.1x	11.2x	13.9x	9.7x	10.3x	11.1x	10.8x	10.5x	10.1x
Internet Software & Services	10.8x	12.9x	12.7x	12.4x	14.7x	17.0x	18.0x	16.8x	16.0x	15.1x	17.3x	15.1x	16.0x	15.5x	15.0x	14.8x	15.2x	17.6x	17.3x	17.7x	21.1x	22.5x	27.5x	26.4x	23.5x	20.3x	16.7x	19.4x	19.4x	17.5x	17.6x	17.5x
IT Services	8.9x	9.0x	8.6x	9.4x	9.8x	10.5x	12.8x	11.2x	10.8x	9.9x	12.2x	13.2x	12.3x	12.0x	12.0x	12.0x	12.4x	12.5x	12.8x	12.4x	13.2x	12.7x	14.0x	13.2x	14.3x	14.1x	12.7x	13.7x	15.3x	15.2x	15.0x	14.6x
Semiconductors	9.8x	11.1x	12.5x	13.7x	14.9x	13.9x	14.3x	15.7x	13.4x	13.2x	13.4x	14.6x	14.0x	11.7x	13.8x	13.9x	13.4x	16.1x	19.1x	17.2x	18.5x	18.1x	18.2x	17.0x	19.7x	18.9x	15.6x	21.3x	19.1x	20.1x	19.2x	19.8x
Software	11.1x	13.2x	14.1x	15.5x	15.2x	17.0x	18.2x	17.1x	17.2x	18.3x	18.3x	18.8x	18.5x	16.1x	17.2x	18.2x	19.7x	19.6x	20.0x	22.6x	23.1x	23.8x	23.7x	27.2x	28.3x	24.5x	29.9x	30.8x	31.2x	27.5x	28.6x	
Technology Hardware & Equipment	6.9x	7.4x	8.3x	9.4x	9.6x	10.7x	11.0x	11.6x	11.1x	10.4x	10.9x	10.6x	10.0x	9.6x	10.4x	10.0x	9.6x	10.9x	11.4x	11.7x	12.0x	11.8x	11.7x	12.1x	13.1x	13.8x	10.7x	11.8x	11.3x	12.0x	11.6x	11.9x

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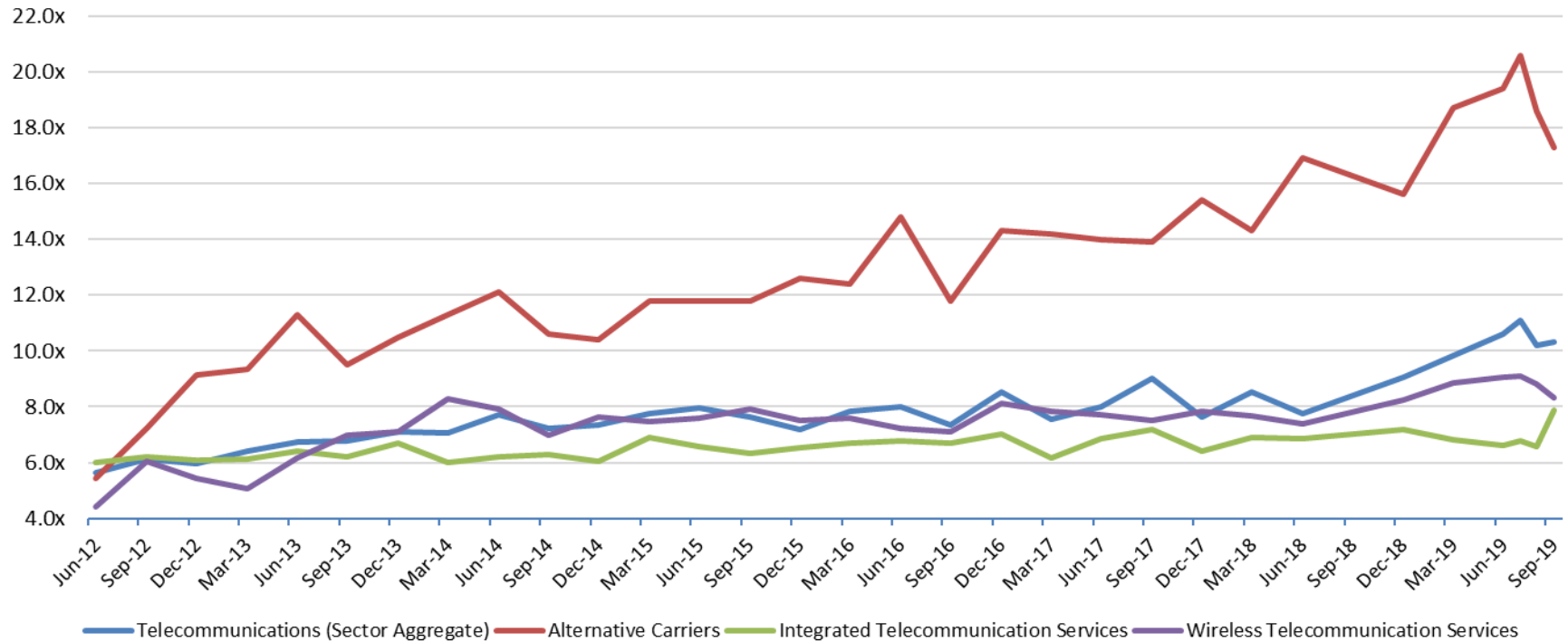
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**Restructuring Advisory**

# PENDO ADVISORS, LLC

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Telecommunications Sector Enterprise Value / LTM EBITDA



Enterprise Value Multiple Observations - Period from June 30, 2012 through September 30, 2019

	Jun-12	Sep-12	Dec-12	Mar-13	Jun-13	Sep-13	Dec-13	Mar-14	Jun-14	Sep-14	Dec-14	Mar-15	Jun-15	Sep-15	Dec-15	Mar-16	Jun-16	Sep-16	Dec-16	Mar-17	Jun-17	Sep-17	Dec-17	Mar-18	Jun-18	Sep-18	Dec-18	Mar-19	Jun-19	Jul-19	Aug-19	Sep-19
Telecommunications (Sector Aggregate)	5.7x	6.1x	6.0x	6.4x	6.7x	6.8x	7.1x	7.1x	7.7x	7.2x	7.3x	7.8x	8.0x	7.6x	7.2x	7.8x	8.0x	7.4x	8.5x	7.6x	8.0x	9.0x	7.6x	8.5x	7.8x	10.1x	9.0x	9.8x	10.6x	11.1x	10.2x	10.3x
Alternative Carriers	5.4x	7.2x	9.1x	9.3x	11.3x	9.5x	10.5x	11.3x	12.1x	10.6x	10.4x	11.8x	11.8x	11.8x	12.6x	12.4x	14.8x	11.8x	14.3x	14.2x	14.0x	13.9x	15.4x	14.3x	16.9x	21.0x	15.6x	18.7x	19.4x	20.6x	18.6x	17.3x
Integrated Telecommunication Services	6.0x	6.2x	6.1x	6.1x	6.4x	6.2x	6.7x	6.0x	6.2x	6.3x	6.0x	6.9x	6.6x	6.3x	6.5x	6.7x	6.8x	6.7x	7.0x	6.2x	6.9x	7.2x	6.4x	6.9x	6.8x	6.8x	7.2x	6.8x	6.6x	6.8x	6.6x	7.9x
Wireless Telecommunication Services	4.4x	6.1x	5.5x	5.1x	6.2x	7.0x	7.1x	8.3x	7.9x	7.0x	7.6x	7.5x	7.6x	7.9x	7.5x	7.6x	7.2x	7.1x	8.1x	7.8x	7.7x	7.5x	7.8x	7.7x	7.4x	8.6x	8.2x	8.9x	9.1x	9.1x	8.8x	8.3x

Source: Capital IQ

Contact us at 312-242-3768 to be added to our industry sector multiple distribution list or to discuss your respective company or industry in more detail.

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