

# PENDO ADVISORS, LLC

North American Industry Market Multiples – As of December 31, 2017

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Source: CapitalIQ

Median Values

	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>18.9x</b>	<b>20.0x</b>	<b>1.25x</b>	<b>10.6x</b>	<b>7.7x</b>	<b>3.63x</b>	<b>21.1%</b>	<b>21.6%</b>	<b>(14.2%)</b>	<b>27.5%</b>
Coal	8.3x	9.9x	0.79x	5.1x	5.6x	1.54x	22.3%	18.1%	11.1%	10.7%
Equipment & Services	27.7x	20.6x	0.37x	13.0x	8.1x	1.78x	20.2%	10.9%	(24.6%)	18.0%
Integrated Oil & Gas	27.2x	22.2x	0.92x	10.9x	7.9x	1.79x	21.9%	16.8%	(20.0%)	52.3%
Oil & Gas Exploration / Production	15.4x	23.9x	0.96x	8.7x	6.2x	5.03x	36.2%	40.9%	(18.8%)	52.8%
Oil & Gas Refining / Marketing	20.9x	15.2x	0.64x	10.7x	8.2x	0.69x	2.4%	4.5%	(11.1%)	33.6%
Oil & Gas Storage / Transportation	20.3x	18.4x	2.45x	13.4x	10.4x	5.49x	17.5%	40.0%	11.5%	13.3%
<b>Industrials</b>	<b>25.6x</b>	<b>20.6x</b>	<b>1.65x</b>	<b>12.3x</b>	<b>10.4x</b>	<b>1.44x</b>	<b>8.6%</b>	<b>9.1%</b>	<b>4.6%</b>	<b>7.9%</b>
Aerospace & Defense	25.1x	20.8x	2.46x	14.1x	11.8x	1.60x	10.9%	10.9%	2.7%	5.9%
Building Products	27.5x	20.6x	1.48x	12.0x	10.2x	1.75x	7.2%	11.5%	20.0%	7.9%
Commercial & Professional Services	23.6x	19.3x	1.54x	11.6x	9.9x	1.34x	8.6%	7.4%	6.7%	4.9%
Construction & Engineering	26.0x	20.1x	1.52x	11.4x	8.6x	0.74x	7.0%	5.9%	1.4%	11.1%
Machinery	28.1x	21.7x	1.67x	13.9x	11.9x	1.79x	10.0%	11.4%	2.5%	14.3%
Transportation	27.1x	21.3x	1.63x	9.8x	8.4x	1.38x	13.6%	14.0%	6.6%	3.2%
<b>Materials</b>	<b>22.5x</b>	<b>17.3x</b>	<b>1.74x</b>	<b>10.3x</b>	<b>8.1x</b>	<b>2.22x</b>	<b>12.9%</b>	<b>14.7%</b>	<b>2.7%</b>	<b>8.6%</b>
Chemicals	26.3x	18.5x	1.71x	11.7x	10.0x	2.26x	12.4%	14.8%	0.7%	5.3%
Construction Materials	22.1x	24.8x	1.53x	12.1x	11.9x	1.58x	11.9%	17.2%	23.9%	10.7%
Containers & Packaging	22.9x	17.7x	1.91x	10.4x	9.3x	1.56x	13.3%	13.8%	0.9%	6.3%
Metals & Mining	21.4x	15.7x	1.83x	9.0x	7.2x	2.77x	15.1%	14.7%	3.1%	18.5%
Paper & Forest Products	17.3x	13.4x	1.90x	8.9x	6.5x	1.08x	9.3%	13.5%	2.3%	10.2%
<b>Consumer Discretionary</b>	<b>20.8x</b>	<b>18.5x</b>	<b>1.50x</b>	<b>10.7x</b>	<b>9.4x</b>	<b>1.43x</b>	<b>10.8%</b>	<b>10.2%</b>	<b>5.1%</b>	<b>4.8%</b>
Automobile Manufacturers	15.1x	11.7x	0.55x	10.9x	10.7x	1.12x	(0.2%)	9.2%	34.4%	(9.5%)
Auto Parts & Equipment	17.0x	12.2x	1.08x	7.9x	6.5x	0.94x	7.2%	10.4%	10.4%	9.0%
Consumer Durables & Apparel	19.6x	17.0x	1.30x	12.0x	10.0x	1.34x	7.4%	9.2%	9.4%	7.9%
Hotels, Restaurants & Leisure	24.4x	22.6x	1.80x	11.5x	10.3x	2.30x	14.6%	15.3%	6.6%	3.9%
Media	20.1x	18.7x	2.07x	9.9x	8.5x	2.42x	17.7%	15.0%	3.6%	3.9%
Retailing	20.5x	18.1x	1.37x	9.5x	8.6x	0.76x	9.3%	7.7%	3.6%	3.2%
<b>Consumer Staples</b>	<b>25.2x</b>	<b>22.0x</b>	<b>2.15x</b>	<b>12.9x</b>	<b>12.4x</b>	<b>1.92x</b>	<b>8.2%</b>	<b>7.1%</b>	<b>5.2%</b>	<b>4.2%</b>
Beverages	35.8x	26.1x	2.25x	17.9x	14.4x	2.96x	11.1%	8.6%	15.0%	8.0%
Food Products	24.6x	21.9x	2.35x	13.6x	12.4x	1.82x	9.0%	8.7%	6.3%	4.0%
Food & Staples Retailing	23.3x	18.3x	1.66x	10.2x	9.0x	0.55x	5.7%	4.7%	3.5%	4.2%
Household & Personal Products	25.2x	24.3x	2.24x	11.9x	14.1x	3.59x	13.0%	9.1%	4.8%	3.9%
<b>Healthcare</b>	<b>28.1x</b>	<b>22.3x</b>	<b>1.76x</b>	<b>15.4x</b>	<b>12.9x</b>	<b>5.36x</b>	<b>1.5%</b>	<b>1.2%</b>	<b>10.9%</b>	<b>9.3%</b>
Biotechnology	22.8x	22.6x	1.15x	15.4x	10.5x	13.80x	(62.7%)	(53.8%)	17.5%	18.8%
Healthcare Equipment & Supplies	39.5x	28.2x	2.12x	20.7x	16.7x	4.44x	4.2%	(0.2%)	11.3%	12.7%
Healthcare Services	22.8x	21.8x	1.39x	11.7x	11.2x	1.42x	7.1%	9.2%	18.6%	7.8%
Pharmaceuticals	24.0x	18.4x	1.73x	14.4x	13.6x	11.30x	(14.8%)	(14.5%)	8.9%	4.3%
<b>Information Technology</b>	<b>30.8x</b>	<b>22.9x</b>	<b>1.38x</b>	<b>15.9x</b>	<b>13.1x</b>	<b>2.51x</b>	<b>6.9%</b>	<b>5.5%</b>	<b>8.0%</b>	<b>11.7%</b>
Communications Equipment	26.7x	18.4x	1.19x	11.7x	10.0x	1.39x	5.1%	5.6%	4.4%	(0.7%)
Hardware, Storage & Peripherals	20.9x	14.8x	1.28x	10.9x	9.1x	1.29x	5.4%	6.0%	(1.8%)	5.1%
Internet Software & Services	37.1x	30.5x	1.23x	27.5x	15.6x	4.08x	(2.1%)	(2.1%)	17.0%	20.7%
IT Services	29.7x	19.9x	1.72x	14.0x	11.0x	1.98x	10.9%	8.3%	4.8%	7.7%
Semiconductors	38.7x	20.6x	1.27x	18.2x	14.2x	3.71x	16.9%	14.4%	12.6%	10.6%
Software	45.1x	33.0x	1.88x	23.7x	19.9x	4.36x	6.3%	0.1%	11.7%	12.6%
Technology Hardware & Equipment	26.4x	18.3x	1.23x	11.7x	9.9x	1.35x	5.3%	4.5%	5.7%	8.8%
<b>Telecommunications</b>	<b>22.3x</b>	<b>35.3x</b>	<b>2.73x</b>	<b>7.6x</b>	<b>7.9x</b>	<b>2.21x</b>	<b>28.6%</b>	<b>25.7%</b>	<b>5.9%</b>	<b>4.8%</b>
Alternative Carriers	62.8x	32.4x	2.61x	15.4x	11.0x	4.29x	15.0%	21.4%	9.1%	8.9%
Integrated Telecommunication Services	18.7x	27.8x	2.89x	6.4x	6.9x	1.94x	34.9%	29.4%	(0.3%)	2.5%
Wireless Telecommunication Services	25.7x	81.0x	2.03x	7.8x	7.0x	1.43x	25.1%	21.6%	26.8%	6.3%
<b>Utilities</b>	<b>22.9x</b>	<b>20.2x</b>	<b>3.58x</b>	<b>11.7x</b>	<b>10.6x</b>	<b>4.08x</b>	<b>25.6%</b>	<b>32.4%</b>	<b>4.6%</b>	<b>7.8%</b>
Electric Utilities	20.6x	19.0x	3.5%	10.6x	10.3x	3.73x	29.4%	33.2%	5.2%	5.6%
Gas Utilities	24.2x	22.1x	4.42x	12.0x	10.9x	2.90x	15.3%	23.3%	2.9%	9.2%
Water Utilities	30.9x	28.7x	4.39x	17.0x	15.0x	8.21x	40.5%	38.8%	3.8%	8.8%
	Price / Earnings Multiples			Price / BV Multiples			Net Income Margin		Return on Equity	
	LTM P/E	NTM P/E	PEG	Book Value	Tangible BV		3-yr avg.	LTM	3-yr avg.	LTM
<b>Financials</b>	<b>17.9x</b>	<b>15.6x</b>	<b>1.72x</b>	<b>1.37x</b>	<b>1.50x</b>		<b>18.5%</b>	<b>20.1%</b>	<b>8.0%</b>	<b>8.3%</b>
Commercial Banks	17.8x	16.0x	1.78x	1.43x	1.60x		19.9%	22.2%	8.2%	8.7%
Investment Banking & Brokerage	24.2x	20.1x	1.29x	1.85x	3.74x		6.6%	5.5%	7.8%	7.2%
Insurance	19.4x	15.2x	1.48x	1.37x	1.52x		7.3%	4.9%	8.7%	7.2%

Merger & Acquisition Advisory  
Fairness & Solvency Opinions

Private Placements  
Restructuring Advisory

Business & Asset Valuation  
ESOP / ERISA Advisory

# PENDO ADVISORS, LLC

Year-Over-Year Trend Analysis: December, 2016 to December, 2017

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## Stock Price / LTM EPS: December, 2016 to December, 2017

	Year-Over-Year		Dec-16	Jan-17	Feb-17	Mar-17	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17
	Delta	% Delta													
Energy	(1.0x)	(5.0%)	19.9x	21.0x	19.9x	20.1x	19.3x	19.8x	18.1x	18.3x	17.4x	19.0x	19.3x	18.4x	18.9x
Industrials	3.2x	14.3%	22.4x	22.3x	23.4x	23.4x	23.9x	22.4x	22.8x	23.0x	22.7x	24.1x	24.3x	25.0x	25.6x
Materials	0.2x	0.9%	22.3x	23.1x	22.5x	22.5x	22.2x	22.9x	22.2x	21.8x	22.0x	22.7x	21.5x	22.1x	22.5x
Consumer Discretionary	1.6x	8.3%	19.2x	19.0x	19.3x	19.8x	20.0x	19.4x	20.1x	19.6x	19.0x	19.5x	19.9x	20.4x	20.8x
Consumer Staples	1.3x	5.4%	23.9x	23.2x	23.5x	23.1x	24.1x	24.0x	23.6x	23.2x	22.6x	23.8x	23.4x	25.1x	25.2x
Healthcare	0.0x	0.0%	28.1x	28.4x	29.9x	30.1x	30.5x	29.0x	30.4x	31.7x	31.7x	32.8x	31.4x	27.6x	28.1x
Information Technology	2.1x	7.3%	28.7x	28.8x	29.0x	28.2x	28.6x	29.6x	28.8x	29.2x	28.7x	30.2x	31.4x	30.8x	30.8x
Telecommunications	3.7x	19.9%	18.6x	18.6x	21.4x	21.1x	22.1x	27.9x	27.3x	24.8x	22.7x	22.2x	22.4x	23.2x	22.3x
Utilities	0.8x	3.6%	22.1x	22.4x	22.3x	22.7x	22.6x	22.6x	22.7x	23.0x	23.3x	23.0x	23.8x	24.1x	22.9x
Financials	0.3x	1.7%	17.6x	17.0x	17.6x	17.5x	17.4x	16.8x	17.2x	17.0x	16.6x	17.7x	17.5x	18.0x	17.9x

## Stock Price / NTM EPS: December, 2016 to December, 2017

	Year-Over-Year		Dec-16	Jan-17	Feb-17	Mar-17	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17
	Delta	% Delta													
Energy	(4.6x)	(18.7%)	24.6x	24.9x	23.3x	23.9x	22.1x	19.4x	19.9x	21.5x	19.5x	20.6x	20.0x	19.0x	20.0x
Industrials	0.8x	4.0%	19.8x	19.5x	19.5x	19.5x	19.7x	18.7x	19.3x	19.2x	18.7x	19.6x	20.0x	20.3x	20.6x
Materials	(0.6x)	(3.4%)	17.9x	18.8x	19.2x	18.2x	18.3x	17.7x	18.2x	17.8x	17.1x	17.8x	17.2x	16.8x	17.3x
Consumer Discretionary	0.9x	5.1%	17.6x	17.0x	17.0x	17.9x	17.8x	17.1x	17.5x	17.5x	16.8x	17.5x	16.9x	18.0x	18.5x
Consumer Staples	1.0x	4.8%	21.0x	20.7x	21.5x	21.7x	21.8x	22.0x	21.2x	21.6x	21.4x	21.5x	20.8x	21.9x	22.0x
Healthcare	2.0x	9.9%	20.3x	20.8x	21.7x	21.5x	22.0x	22.9x	24.3x	23.4x	23.0x	23.3x	23.1x	22.6x	22.3x
Information Technology	2.5x	12.3%	20.4x	20.8x	21.2x	21.2x	21.5x	21.9x	22.1x	21.9x	21.0x	22.0x	22.7x	22.6x	22.9x
Telecommunications	3.4x	10.7%	31.9x	38.0x	39.8x	36.9x	38.0x	41.1x	39.4x	37.0x	32.5x	31.1x	30.8x	31.2x	35.3x
Utilities	0.5x	2.5%	19.7x	19.6x	20.0x	20.3x	20.3x	20.6x	19.5x	20.4x	20.9x	20.1x	21.3x	21.5x	20.2x
Financials	(1.8x)	(10.3%)	17.4x	16.6x	17.1x	16.5x	16.0x	15.5x	16.2x	15.7x	15.1x	16.3x	15.9x	16.3x	15.6x

## Enterprise Value / LTM EBITDA: December, 2016 to December, 2017

	Year-Over-Year		Dec-16	Jan-17	Feb-17	Mar-17	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17
	Delta	% Delta													
Energy	(4.1x)	(27.9%)	14.7x	14.5x	14.3x	14.9x	13.6x	12.2x	12.1x	12.2x	10.4x	11.0x	10.8x	10.3x	10.6x
Industrials	1.3x	11.8%	11.0x	11.1x	11.2x	11.1x	11.3x	11.1x	11.2x	11.2x	11.0x	11.6x	11.7x	12.0x	12.3x
Materials	0.1x	1.0%	10.2x	10.6x	10.5x	10.3x	10.0x	9.9x	9.9x	9.8x	9.7x	9.9x	10.2x	10.1x	10.3x
Consumer Discretionary	0.6x	5.9%	10.1x	10.0x	10.1x	10.1x	10.0x	9.8x	10.0x	10.0x	9.7x	10.1x	10.2x	10.6x	10.7x
Consumer Staples	1.0x	8.4%	11.9x	12.0x	11.9x	12.2x	12.3x	12.2x	12.1x	12.1x	12.0x	12.1x	12.3x	12.6x	12.9x
Healthcare	1.8x	13.2%	13.6x	13.7x	14.2x	13.9x	13.9x	14.0x	15.1x	14.7x	14.3x	14.9x	14.9x	15.4x	15.4x
Information Technology	1.5x	10.4%	14.4x	14.9x	14.9x	14.5x	14.8x	15.1x	14.8x	14.9x	14.6x	15.1x	15.3x	15.7x	15.9x
Telecommunications	(0.9x)	(10.4%)	8.5x	8.8x	8.1x	7.6x	8.0x	7.9x	8.0x	8.4x	8.8x	9.0x	9.0x	7.6x	7.6x
Utilities	0.3x	2.6%	11.4x	11.3x	11.5x	11.4x	11.4x	11.6x	11.7x	11.7x	11.6x	11.7x	11.8x	12.0x	11.7x

## Enterprise Value / NTM EBITDA: December, 2016 to December, 2017

	Year-Over-Year		Dec-16	Jan-17	Feb-17	Mar-17	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17
	Delta	% Delta													
Energy	(2.4x)	(24.2%)	10.1x	10.0x	9.4x	9.2x	8.7x	7.8x	7.6x	7.8x	7.4x	8.1x	7.8x	7.5x	7.7x
Industrials	0.6x	6.4%	9.8x	9.9x	9.9x	9.7x	9.8x	9.7x	9.7x	9.6x	9.4x	10.0x	10.0x	10.2x	10.4x
Materials	(0.4x)	(4.1%)	8.5x	8.9x	8.6x	8.4x	8.4x	7.9x	7.9x	8.0x	7.9x	8.1x	8.0x	8.0x	8.1x
Consumer Discretionary	0.4x	4.2%	9.0x	8.9x	8.7x	9.0x	9.0x	8.8x	8.8x	8.8x	8.6x	9.0x	9.1x	9.4x	9.4x
Consumer Staples	1.1x	9.7%	11.3x	11.5x	11.4x	11.7x	11.9x	11.6x	11.2x	11.5x	10.9x	11.4x	11.1x	11.7x	12.4x
Healthcare	0.9x	7.5%	12.0x	12.4x	12.3x	12.3x	12.7x	12.7x	13.5x	13.2x	12.9x	13.3x	13.3x	12.9x	12.9x
Information Technology	1.7x	14.9%	11.4x	11.7x	11.7x	12.0x	12.2x	12.1x	12.0x	12.3x	12.1x	12.6x	13.0x	12.9x	13.1x
Telecommunications	0.2x	2.5%	7.7x	7.8x	7.8x	7.9x	8.2x	8.0x	7.9x	7.6x	8.0x	7.4x	7.6x	8.2x	7.9x
Utilities	0.2x	1.9%	10.4x	10.3x	10.7x	10.7x	10.8x	10.7x	9.9x	10.7x	10.8x	10.7x	10.8x	10.9x	10.6x

## Enterprise Value / LTM Revenue: December, 2016 to December, 2017

	Year-Over-Year		Dec-16	Jan-17	Feb-17	Mar-17	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17
	Delta	% Delta													
Energy	(0.97x)	(21.1%)	4.60x	4.63x	4.49x	4.35x	4.17x	3.82x	3.71x	3.78x	3.34x	3.64x	3.47x	3.50x	3.63x
Industrials	0.07x	5.1%	1.37x	1.38x	1.38x	1.39x	1.42x	1.35x	1.37x	1.36x	1.35x	1.47x	1.42x	1.41x	1.44x
Materials	(0.06x)	(2.6%)	2.28x	2.47x	2.30x	2.37x	2.30x	2.09x	2.14x	2.13x	2.18x	2.18x	2.16x	2.15x	2.22x
Consumer Discretionary	0.12x	9.2%	1.31x	1.29x	1.30x	1.29x	1.32x	1.32x	1.40x	1.36x	1.34x	1.41x	1.38x	1.43x	1.43x
Consumer Staples	0.14x	7.9%	1.78x	1.76x	1.73x	1.69x	1.77x	1.69x	1.76x	1.77x	1.75x	1.75x	1.79x	1.89x	1.92x
Healthcare	1.11x	26.1%	4.25x	4.28x	4.43x	4.65x	4.66x	4.62x	4.85x	4.89x	4.93x	5.22x	5.01x	5.27x	5.36x
Information Technology	0.37x	17.3%	2.14x	2.32x	2.34x	2.34x	2.40x	2.44x	2.38x	2.49x	2.41x	2.47x	2.44x	2.52x	2.51x
Telecommunications	0.16x	7.8%	2.05x	2.21x	2.33x	2.10x	2.09x	2.10x	2.03x	2.10x	2.16x	2.16x	2.03x	2.08x	2.21x
Utilities	0.09x	2.3%	3.99x	4.03x	4.05x	3.99x	3.97x	4.05x	2.34x	4.00x	3.99x	4.03x	4.06x	4.10x	4.08x

Merger & Acquisition Advisory  
Fairness & Solvency Opinions

Private Placements  
Restructuring Advisory

Business & Asset Valuation  
ESOP / ERISA Advisory