

PENDO ADVISORS

North American Industry Market Multiples – As of December 31, 2021

www.pendoadvisors.com

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	2021E
Energy	11.9x	9.5x	1.21x	8.6x	5.7x	2.58x	19.3%	13.9%	(2.2%)	35.1%
Coal	19.1x	19.3x	NM	7.3x	3.7x	3.05x	13.8%	11.6%	(17.5%)	26.9%
Equipment & Services	14.2x	21.7x	0.44x	9.8x	7.0x	1.24x	12.2%	4.5%	(19.2%)	2.7%
Integrated Oil & Gas	35.7x	8.7x	0.32x	7.3x	5.0x	1.30x	19.4%	18.1%	(1.8%)	NM
Oil & Gas Exploration / Production	10.6x	6.3x	0.41x	7.7x	3.8x	3.61x	41.4%	27.3%	(0.4%)	NM
Oil & Gas Refining / Marketing	9.3x	14.1x	2.80x	7.5x	7.1x	0.47x	4.5%	3.3%	(1.0%)	NM
Oil & Gas Storage / Transportation	13.7x	10.6x	2.50x	10.0x	8.9x	3.63x	28.9%	29.7%	4.0%	3.8%
Industrials	24.0x	19.8x	1.54x	12.0x	11.5x	1.96x	9.8%	9.0%	6.2%	16.0%
Aerospace & Defense	20.3x	20.5x	2.07x	12.6x	12.2x	2.32x	13.0%	10.5%	2.5%	7.1%
Building Products	21.5x	18.5x	1.31x	11.8x	12.1x	1.42x	10.8%	14.2%	14.2%	15.8%
Commercial & Professional Services	25.5x	20.4x	1.59x	11.6x	11.7x	1.94x	9.2%	8.5%	7.1%	11.5%
Construction & Engineering	29.6x	20.0x	1.70x	10.5x	8.4x	1.12x	5.4%	6.7%	11.6%	9.0%
Machinery	31.4x	21.7x	1.57x	14.7x	13.4x	2.40x	11.8%	10.2%	3.1%	17.4%
Transportation	17.7x	15.8x	1.08x	9.0x	8.5x	1.82x	15.6%	11.1%	9.4%	21.2%
Materials	14.0x	12.7x	1.28x	7.5x	6.7x	2.10x	13.7%	16.2%	9.4%	23.1%
Chemicals	19.1x	15.7x	1.22x	10.0x	9.1x	2.32x	15.3%	15.4%	3.9%	19.2%
Construction Materials	20.2x	30.4x	1.29x	8.9x	11.4x	2.53x	19.8%	21.2%	10.5%	9.7%
Containers & Packaging	18.9x	15.0x	1.36x	9.0x	8.8x	1.47x	14.5%	15.5%	5.1%	7.1%
Metals & Mining	9.2x	10.5x	1.08x	5.9x	5.5x	2.42x	11.8%	19.6%	20.8%	47.8%
Paper & Forest Products	6.7x	7.2x	2.22x	4.5x	4.3x	0.84x	10.3%	16.6%	16.0%	NM
Consumer Discretionary	15.5x	15.2x	0.86x	9.6x	10.5x	1.69x	10.6%	10.3%	11.7%	40.0%
Automobile Manufacturers	7.9x	9.1x	1.50x	7.7x	7.1x	1.46x	9.1%	12.7%	27.3%	36.3%
Auto Parts & Equipment	15.6x	12.2x	0.45x	7.5x	7.4x	0.86x	10.4%	9.9%	(2.3%)	16.8%
Consumer Durables & Apparel	13.1x	12.3x	0.60x	9.0x	8.6x	1.44x	10.3%	11.8%	16.4%	40.7%
Hotels, Restaurants & Leisure	23.0x	24.2x	1.53x	13.7x	13.8x	4.29x	17.8%	13.8%	2.5%	74.0%
Media	12.0x	13.9x	0.95x	8.7x	8.5x	2.35x	20.1%	14.3%	5.1%	7.6%
Retailing	12.7x	12.1x	1.04x	7.1x	9.2x	1.11x	8.8%	7.9%	16.6%	44.2%
Consumer Staples	22.6x	20.4x	2.48x	12.3x	12.3x	2.15x	7.9%	6.1%	6.9%	7.5%
Beverages	33.4x	24.5x	2.90x	18.8x	16.2x	3.52x	14.4%	10.7%	4.6%	9.2%
Food Products	20.3x	22.1x	2.44x	12.8x	13.2x	2.26x	9.3%	7.9%	4.4%	7.5%
Food & Staples Retailing	22.2x	17.5x	2.43x	9.5x	10.2x	0.70x	4.7%	4.3%	12.9%	6.8%
Household & Personal Products	20.7x	20.8x	2.15x	11.8x	15.3x	3.37x	11.8%	8.9%	8.5%	5.9%
Healthcare	27.8x	23.7x	1.62x	14.6x	14.4x	6.28x	2.8%	(7.3%)	10.8%	20.9%
Biotechnology	23.4x	16.6x	0.71x	7.6x	12.5x	12.30x	(61.3%)	(46.5%)	11.3%	33.3%
Healthcare Equipment & Supplies	39.6x	36.5x	2.36x	19.6x	20.2x	6.28x	0.9%	(2.4%)	8.0%	20.1%
Healthcare Services	27.8x	23.1x	1.27x	13.8x	13.0x	2.70x	10.0%	1.0%	18.9%	13.3%
Pharmaceuticals	20.4x	15.8x	1.43x	12.9x	9.7x	5.74x	10.4%	(15.3%)	11.3%	34.7%
Information Technology	27.6x	27.8x	1.48x	18.5x	17.5x	5.14x	6.1%	4.3%	9.9%	19.0%
Communications Equipment	23.9x	21.2x	1.38x	15.8x	14.5x	2.22x	4.5%	6.1%	5.3%	9.9%
Hardware, Storage & Peripherals	12.4x	19.8x	1.25x	9.6x	11.0x	1.41x	6.1%	6.9%	3.3%	22.9%
Internet Software & Services	38.0x	34.0x	1.86x	22.6x	20.9x	6.97x	4.5%	0.3%	9.4%	16.8%
IT Services	29.4x	21.9x	1.57x	17.8x	14.6x	4.37x	12.1%	5.7%	6.1%	19.7%
Semiconductors	37.7x	29.2x	1.52x	25.5x	18.5x	7.40x	15.1%	21.1%	15.5%	39.0%
Software	38.5x	43.4x	1.97x	29.1x	27.9x	8.10x	0.8%	(3.3%)	11.0%	12.7%
Technology Hardware & Equipment	19.1x	20.8x	1.23x	12.9x	13.4x	2.02x	5.2%	5.4%	8.1%	16.7%
Telecommunications	16.7x	21.9x	1.18x	11.3x	11.3x	3.18x	16.0%	9.4%	5.0%	8.7%
Alternative Carriers	17.8x	21.7x	2.39x	19.6x	17.6x	4.20x	33.5%	23.6%	6.9%	6.3%
Integrated Telecommunication Services	15.1x	24.7x	3.30x	9.2x	8.0x	2.44x	31.8%	23.9%	0.2%	3.4%
Wireless Telecommunication Services	32.3x	23.5x	1.34x	8.2x	8.5x	3.34x	21.0%	19.0%	0.7%	10.1%
Utilities	23.2x	19.9x	3.55x	13.1x	12.1x	4.75x	30.6%	35.0%	4.9%	7.3%
Electric Utilities	22.5x	20.3x	3.74x	12.0x	12.1x	4.25x	30.6%	34.2%	3.7%	6.4%
Gas Utilities	17.8x	18.1x	3.01x	10.8x	11.7x	3.28x	24.0%	26.3%	9.1%	9.2%
Water Utilities	38.4x	39.9x	5.63x	20.9x	19.9x	9.67x	44.4%	41.4%	5.1%	3.9%
	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
Financials	10.7x	12.4x	1.06x		1.15x	1.26x	18.9%	27.8%	8.4%	11.7%
Commercial Banks	11.3x	10.7x	1.38x		1.47x	1.86x	24.3%	30.6%	12.2%	12.6%
Investment Banking & Brokerage	10.2x	10.8x	0.99x		2.15x	2.44x	3.8%	15.1%	7.0%	20.0%
Insurance	10.8x	12.6x	1.11x		1.16x	1.20x	7.4%	8.3%	8.4%	9.2%

Merger & Acquisition Advisory
Fairness & Solvency Opinions

Private Placements
Restructuring Advisory

Business & Asset Valuation
ESOP / ERISA Advisory

PENDO ADVISORS

Year-Over-Year Trend Analysis: December 2020 to December 2021

www.pendoadvisors.com

Stock Price / LTM EPS: December 2020 to December 2021

	Year-Over-Year		Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21
	Delta	% Delta													
Energy	0.9x	8.2%	11.0x	12.5x	13.0x	13.9x	14.6x	14.8x	15.5x	14.6x	12.9x	13.6x	14.9x	12.0x	11.9x
Industrials	(3.0x)	(11.1%)	27.0x	27.0x	28.6x	30.8x	31.1x	29.5x	28.9x	26.7x	25.6x	24.1x	23.7x	23.9x	24.0x
Materials	(6.3x)	(31.0%)	20.3x	21.4x	20.4x	20.5x	20.9x	19.6x	19.0x	17.2x	15.2x	13.9x	14.0x	13.0x	14.0x
Consumer Discretionary	(5.4x)	(25.8%)	20.9x	22.7x	22.4x	22.9x	22.8x	20.7x	19.9x	19.4x	17.2x	16.6x	15.8x	15.3x	15.5x
Consumer Staples	1.1x	5.1%	21.5x	20.9x	21.0x	23.4x	22.6x	21.1x	22.2x	20.6x	20.7x	20.6x	20.5x	22.0x	22.6x
Healthcare	(3.0x)	(9.7%)	30.8x	34.9x	30.8x	29.1x	29.1x	29.8x	30.3x	30.8x	27.7x	26.8x	25.9x	26.0x	27.8x
Information Technology	(7.8x)	(22.0%)	35.4x	35.6x	34.9x	35.2x	35.9x	34.1x	34.4x	33.2x	34.4x	31.2x	30.2x	27.3x	27.6x
Telecommunications	(2.2x)	(11.6%)	18.9x	20.5x	20.9x	22.2x	23.1x	18.9x	19.0x	19.7x	19.7x	20.7x	20.2x	17.2x	16.7x
Utilities	3.4x	17.2%	19.8x	20.2x	19.8x	21.8x	21.9x	20.7x	20.5x	21.5x	21.9x	21.2x	21.4x	22.3x	23.2x
Financials	(1.6x)	(13.0%)	12.3x	12.5x	13.1x	13.8x	12.6x	11.9x	11.8x	10.9x	10.8x	11.0x	10.6x	10.7x	10.7x

Stock Price / NTM EPS: December 2020 to December 2021

	Year-Over-Year		Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21
	Delta	% Delta													
Energy	(3.4x)	(26.7%)	12.9x	15.2x	15.3x	12.9x	12.9x	13.3x	13.0x	11.6x	10.5x	11.1x	11.5x	9.2x	9.5x
Industrials	(0.7x)	(3.4%)	20.5x	20.8x	21.9x	21.7x	22.6x	21.4x	20.8x	20.4x	20.0x	19.1x	19.9x	19.8x	19.8x
Materials	(2.8x)	(18.1%)	15.5x	15.2x	15.7x	14.7x	15.7x	15.3x	14.0x	13.3x	12.2x	11.2x	12.4x	12.7x	12.7x
Consumer Discretionary	(2.4x)	(13.6%)	17.6x	18.6x	18.7x	19.7x	20.4x	18.7x	17.9x	16.7x	16.0x	15.3x	15.4x	15.2x	15.2x
Consumer Staples	0.0x	0.0%	20.4x	21.6x	21.4x	21.5x	22.0x	19.9x	19.9x	20.0x	19.4x	19.4x	19.9x	19.6x	20.4x
Healthcare	(2.6x)	(9.9%)	26.3x	26.6x	27.1x	26.0x	27.1x	27.4x	28.2x	27.4x	26.0x	25.5x	25.7x	22.0x	23.7x
Information Technology	0.0x	0.0%	27.8x	28.6x	28.7x	29.1x	28.5x	28.9x	30.2x	29.0x	27.3x	25.8x	27.1x	27.4x	27.8x
Telecommunications	(1.9x)	(8.0%)	23.8x	23.5x	23.8x	24.5x	26.1x	24.7x	23.8x	22.5x	23.0x	22.2x	21.2x	22.4x	21.9x
Utilities	1.6x	8.7%	18.3x	18.0x	17.9x	19.5x	20.3x	19.5x	19.3x	20.4x	20.0x	19.1x	19.2x	18.9x	19.9x
Financials	0.6x	5.1%	11.8x	11.8x	12.3x	13.0x	12.8x	12.6x	12.1x	11.7x	11.8x	12.1x	12.1x	12.2x	12.4x

Enterprise Value / LTM EBITDA: December 2020 to December 2021

	Year-Over-Year		Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21
	Delta	% Delta													
Energy	1.7x	24.7%	6.9x	7.7x	8.4x	9.1x	9.3x	11.0x	11.4x	10.4x	9.3x	9.8x	10.4x	8.8x	8.6x
Industrials	0.2x	1.7%	11.8x	12.1x	13.0x	12.9x	13.4x	13.3x	13.0x	12.8x	12.2x	11.7x	12.1x	11.8x	12.0x
Materials	(2.6x)	(25.5%)	10.1x	10.0x	10.2x	10.3x	10.2x	10.2x	9.7x	9.3x	8.2x	8.2x	8.1x	7.1x	7.5x
Consumer Discretionary	(1.7x)	(15.0%)	11.3x	12.0x	11.7x	12.2x	12.4x	11.8x	11.6x	11.6x	10.1x	9.7x	9.7x	9.7x	9.6x
Consumer Staples	1.7x	16.0%	10.6x	11.3x	11.1x	11.6x	11.7x	11.6x	11.9x	11.2x	11.3x	11.6x	11.5x	11.9x	12.3x
Healthcare	(5.0x)	(25.5%)	19.6x	21.2x	19.9x	19.7x	19.8x	18.9x	19.8x	19.7x	18.6x	17.2x	16.3x	14.9x	14.6x
Information Technology	0.8x	4.5%	17.7x	19.1x	20.0x	20.8x	20.5x	19.8x	20.6x	20.5x	19.8x	19.4x	18.7x	18.0x	18.5x
Telecommunications	1.3x	13.0%	10.0x	10.7x	10.8x	10.2x	11.2x	11.9x	12.5x	12.5x	12.3x	11.6x	13.0x	11.0x	11.3x
Utilities	0.8x	6.5%	12.3x	12.3x	12.2x	12.7x	13.1x	12.8x	12.8x	13.0x	13.1x	12.7x	12.8x	13.3x	13.1x

Enterprise Value / NTM EBITDA: December 2020 to December 2021

	Year-Over-Year		Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21
	Delta	% Delta													
Energy	(1.8x)	(23.6%)	7.5x	7.5x	7.9x	7.3x	7.2x	7.0x	6.8x	6.1x	5.6x	6.1x	6.3x	5.7x	5.7x
Industrials	(0.1x)	(0.9%)	11.6x	11.9x	12.1x	12.4x	12.9x	12.6x	12.2x	11.9x	11.6x	11.5x	11.7x	11.5x	11.5x
Materials	(1.6x)	(19.6%)	8.3x	7.7x	8.1x	7.7x	8.1x	7.8x	7.4x	7.2x	6.8x	6.8x	6.9x	6.8x	6.7x
Consumer Discretionary	(0.9x)	(7.9%)	11.4x	11.8x	11.8x	12.6x	12.6x	12.1x	12.0x	11.7x	11.0x	10.5x	10.7x	10.5x	10.5x
Consumer Staples	0.0x	0.0%	12.3x	12.8x	12.5x	12.7x	13.0x	12.8x	12.7x	12.4x	12.7x	12.2x	12.1x	11.9x	12.3x
Healthcare	(2.1x)	(12.7%)	16.5x	17.4x	17.7x	17.2x	17.5x	16.3x	16.0x	15.7x	15.5x	15.1x	15.3x	14.7x	14.4x
Information Technology	0.5x	2.9%	17.0x	17.6x	17.9x	17.9x	17.5x	17.0x	17.8x	18.0x	17.3x	17.0x	17.1x	17.4x	17.5x
Telecommunications	(0.4x)	(3.4%)	11.7x	11.6x	12.4x	13.0x	14.3x	14.5x	14.7x	14.1x	12.6x	12.6x	12.0x	10.6x	11.3x
Utilities	1.1x	10.0%	11.0x	10.9x	11.0x	11.6x	11.8x	11.6x	11.4x	12.0x	11.8x	11.6x	11.5x	11.6x	12.1x

Enterprise Value / LTM Revenue: December 2020 to December 2021

	Year-Over-Year		Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21
	Delta	% Delta													
Energy	0.20x	8.4%	2.38x	2.51x	2.74x	3.05x	3.14x	3.06x	3.52x	3.22x	2.66x	2.99x	3.20x	2.67x	2.58x
Industrials	0.31x	18.8%	1.65x	1.79x	2.03x	2.03x	2.11x	2.08x	2.08x	2.07x	2.03x	2.00x	1.94x	1.93x	1.96x
Materials	(0.26x)	(11.0%)	2.36x	2.37x	2.48x	2.43x	2.54x	2.51x	2.38x	2.40x	2.20x	2.03x	2.15x	2.18x	2.10x
Consumer Discretionary	0.09x	5.6%	1.60x	1.85x	1.94x	1.98x	2.03x	1.97x	2.08x	2.03x	1.85x	1.79x	1.76x	1.78x	1.69x
Consumer Staples	0.16x	8.0%	1.99x	2.13x	2.21x	2.25x	2.31x	2.25x	2.39x	2.46x	2.40x	2.41x	2.31x	2.20x	2.15x
Healthcare	(1.19x)	(15.9%)	7.47x	8.88x	9.82x	9.16x	9.21x	8.37x	8.43x	8.06x	7.50x	7.23x	7.05x	6.60x	6.28x
Information Technology	1.02x	24.8%	4.12x	4.67x	5.06x	4.98x	5.29x	5.17x	5.47x	5.50x	5.29x	5.27x	5.31x	5.21x	5.14x
Telecommunications	0.09x	2.9%	3.09x	3.31x	3.61x	3.94x	4.19x	3.69x	4.04x	3.89x	3.95x	3.87x	3.96x	3.31x	3.18x
Utilities	0.12x	2.6%	4.63x	4.68x	4.72x	4.95x	5.04x	4.85x	4.80x	4.90x	4.81x	4.55x	4.66x	4.57x	4.75x

Merger & Acquisition Advisory
Fairness & Solvency Opinions

Private Placements
Restructuring Advisory

Business & Asset Valuation
ESOP / ERISA Advisory