

DUFF & PHELPS

Protect, Restore and Maximize Value

Industry Multiples in China

NOVEMBER 2019 - SECOND EDITION



Contents

Industry Multiples

- 4 Energy
- 5 Materials
- 6 Industrials
- 7 Consumer Discretionary
- 8 Consumer Staples
- 9 Healthcare
- 10 Financials
- 11 Information Technology
- 12 Communication Services
- 13 Utilities
- 14 Real Estate
- 15 Note

Foreword

This report provides trading multiples for various key industries in China as of September 30, 2019. China's GDP grew by 6.3% year-on-year from December 2018 to June 2019 to approximately CNY 45.09 trillion (US\$6.56 trillion), according to China's National Bureau of Statistics. Ongoing friction with the U.S. over trade and weakening local demand may have contributed to lower GDP growth as compared to prior periods.

Proactive but prudent fiscal policy initiatives are expected to offset negative impacts from trade tensions. The People's Bank of China announced it would cut the amount of cash that banks must hold as reserves for the third time in 2019, releasing CNY 900 billion (US\$126.35 billion) in liquidity. Chinese banks have also extended CNY 1.21 trillion (US\$170 billion) in new loans this year.

The China Shanghai Composite Stock Market Index increased by 467 points, or 18.94%, since the start of 2019, while Hong Kong's benchmark Hang Seng Index surged by 2,696 points, or 10%, in the first six months of 2019.

These numbers may be reflective of the Chinese government's continuing policies to encourage foreign portfolio inflows. These include releasing the 11 Measures for Further Opening Up the Financial Sector; removing ceilings on foreign investment from the QFII and RQFII schemes; and updating its Negative Lists for Foreign Investment Access.

Notwithstanding global headwinds affecting the information technology, healthcare and financial industries and highly volatile market settlement results, the P/E multiples for most industries as of Q3 2019 remained at similar levels as compared with Dec 31, 2018.

On the technology front, P/E multiples were buoyed partly by the July debut of Shanghai's Science and Technology Innovation Board, whose 27 listed companies achieved a total market cap of CNY 660 billion (US\$93 billion) by August. This was despite reduced fundraising activity and smaller investment volumes overall compared to 2018.

The healthcare market looks primed for growth, judging by the industry's robust P/E multiples. China's ageing population and an increase in patients with chronic diseases have encouraged a fast-growing market for medical devices and wearables, whose valuation is estimated to rise to US\$96.3 billion in 2019. A government bulk-buying programme for generic drugs has lowered drug prices by as much as 90%, putting pressure on pharmaceutical manufacturers.

Our report provides a detailed overview of the P/B, P/E, EV/ EBITDA and EV/Sales multiples of companies in the MSCI China Index covering industries for which such data is available. We also provide a two-year lookback at the trends of these multiples for most of the industries covered.

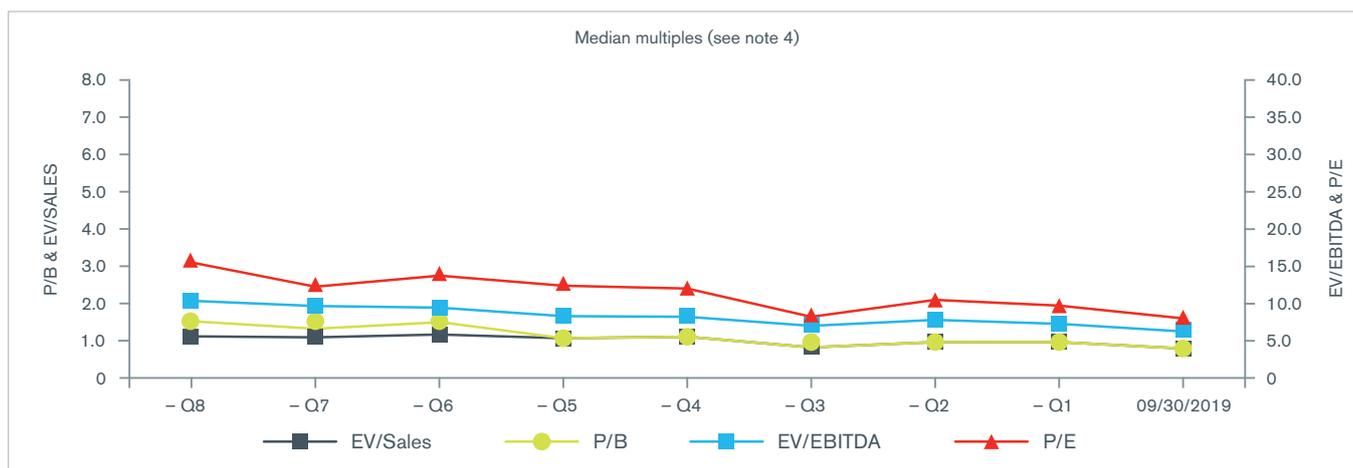
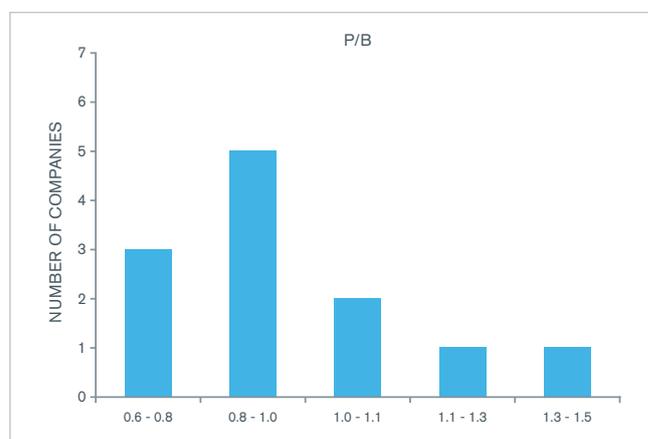
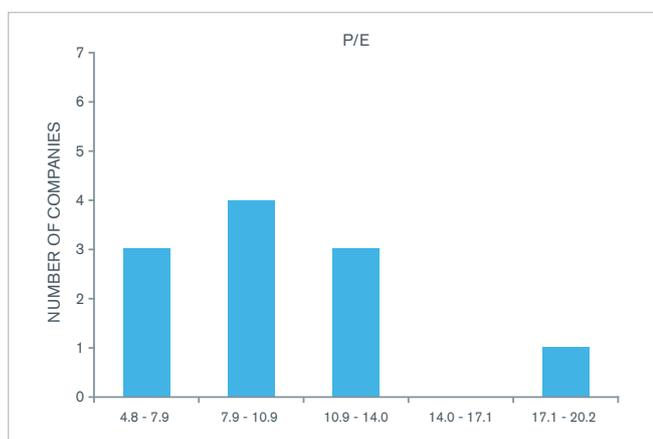
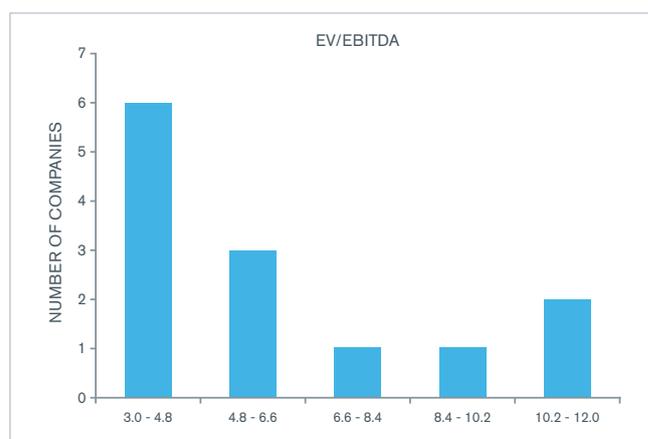
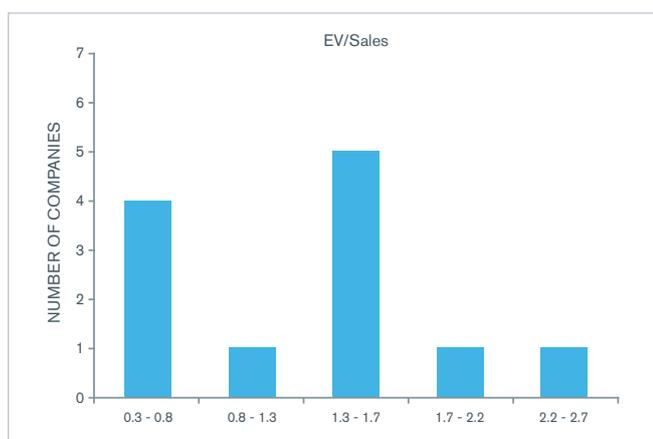
We hope you find this report useful to get a broad sense of the range of trading multiples for major industries in China. Readers should seek professional assistance and perform detailed valuation analysis before applying multiples on specific valuation subjects. Duff & Phelps has both global resources and local expertise to assist clients in meeting their valuation needs, including but not limited to the following areas:

- Pre-IPO ESOP pricing or restructuring of China-based IPO candidates planning to go public in Hong Kong or the U.S.;
- Fair-value measurement of equity investment in private companies in compliance with IFRS 9, effective for the financial year beginning with 1 January 2018, or from November 2018 as per SFC's New Fund Manager Code of Conduct;
- Indicators of potential impairment in the current fiscal year-end, and whether further robust independent valuation analysis may be needed; and
- Corporate transactions of Hong Kong-listed companies in accordance with corporate governance best practices.

Energy

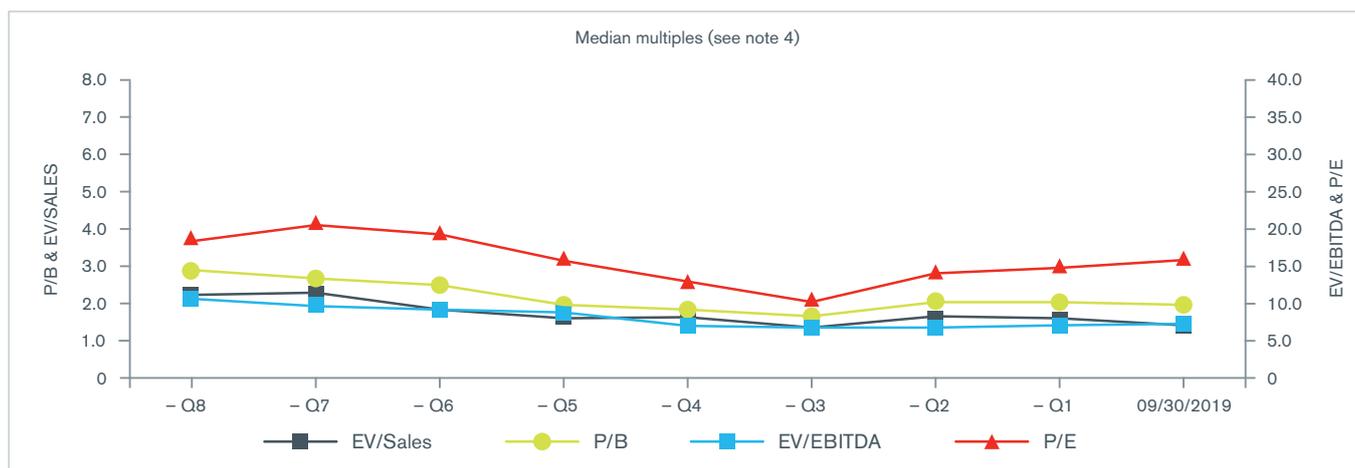
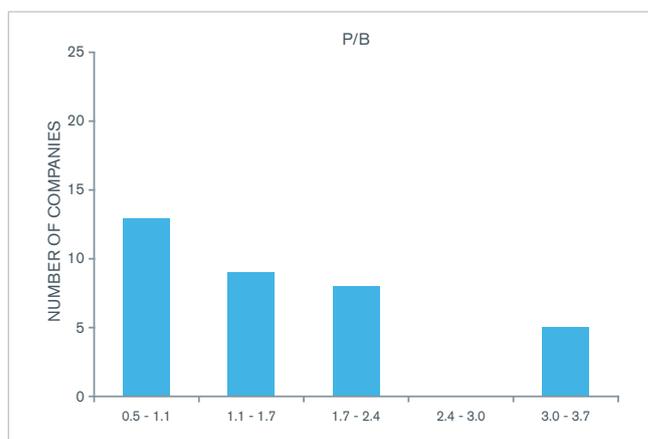
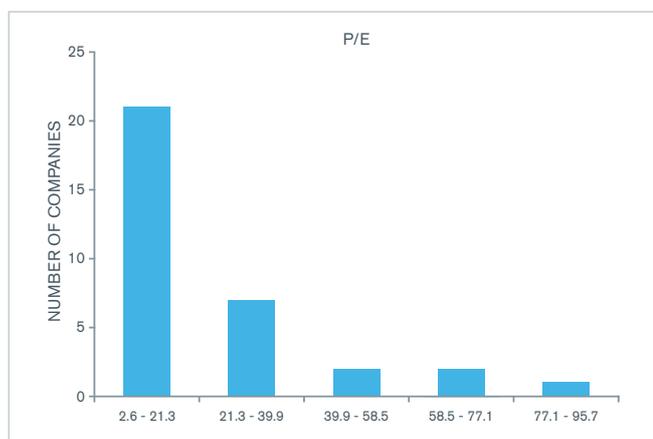
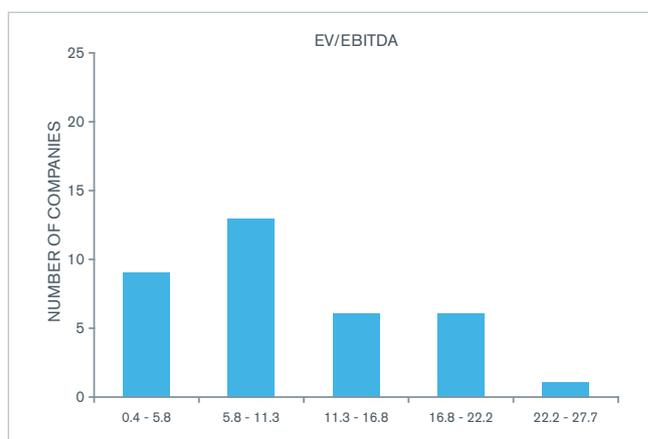
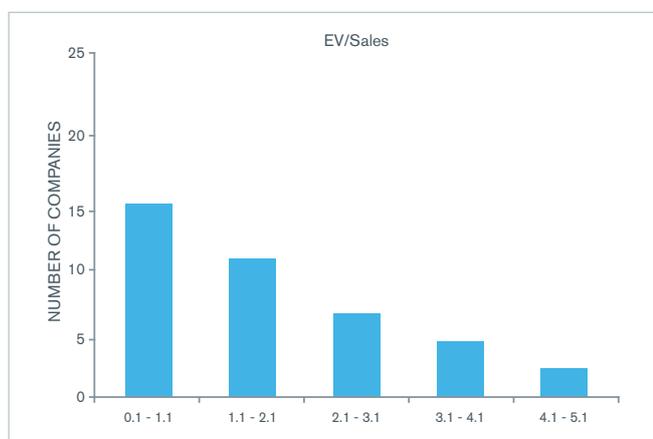
AS OF SEPTEMBER 30, 2019

	EV/Sales	EV/EBITDA	P/E	P/B
Number of Observations	14	14	14	14
Number of Outliers	2	1	3	1
High	2.7x	12.0x	20.2x	1.5x
Mean	1.3x	6.2x	10.0x	1.0x
Median	1.3x	5.0x	8.5x	0.9x
Low	0.3x	3.0x	4.8x	0.6x
Lower Quartile	0.7x	4.2x	7.9x	0.8x
Upper Quartile	1.5x	6.7x	12.0x	1.1x





	EV/Sales	EV/EBITDA	P/E	P/B
Number of Observations	38	38	38	38
Number of Outliers	2	3	5	3
High	5.1x	27.7x	95.7x	3.7x
Mean	1.7x	11.2x	21.8x	1.5x
Median	1.3x	9.9x	16.7x	1.4x
Low	0.1x	0.4x	2.6x	0.5x
Lower Quartile	0.8x	5.9x	6.9x	0.8x
Upper Quartile	2.4x	16.1x	28.7x	1.9x

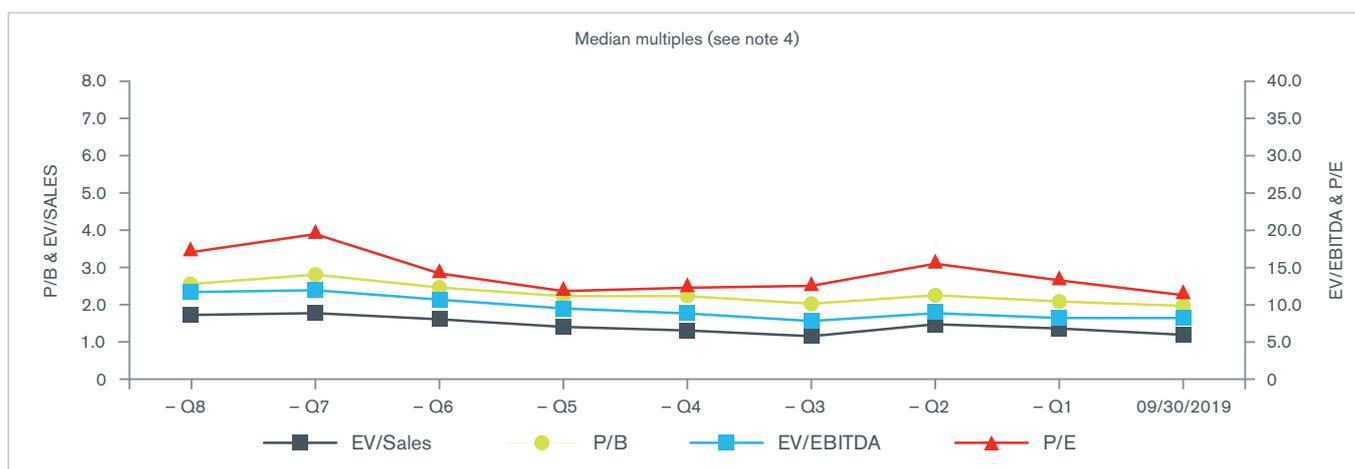
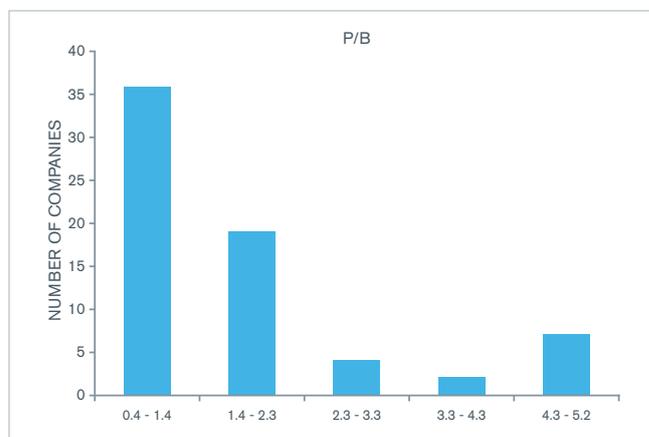
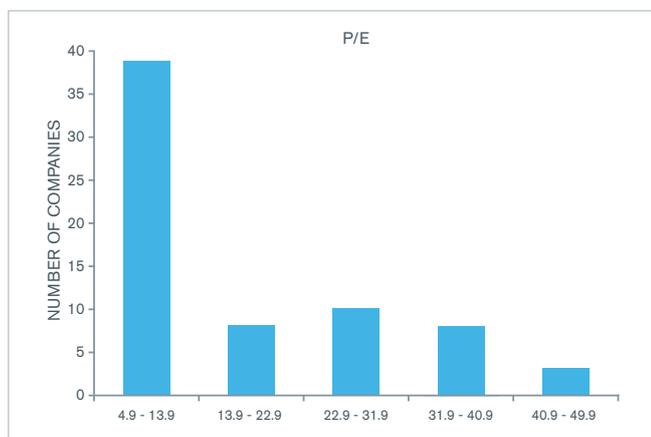
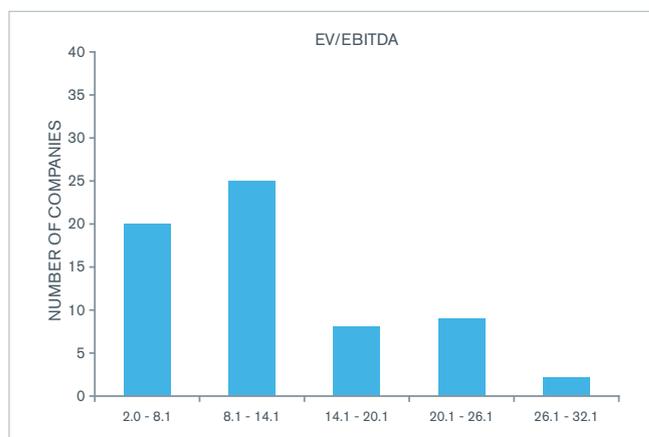
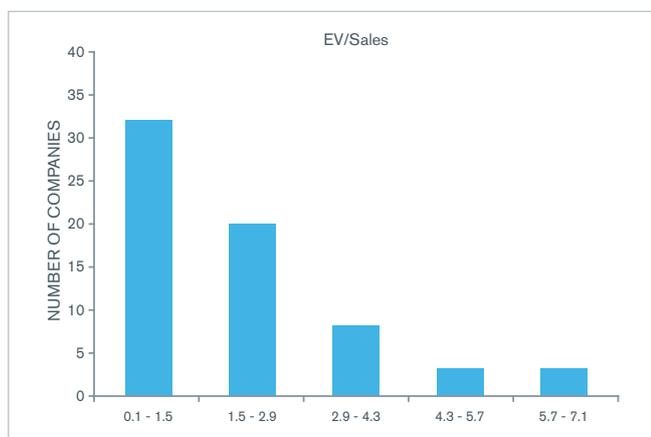




Industrials

AS OF SEPTEMBER 30, 2019

	EV/Sales	EV/EBITDA	P/E	P/B
Number of Observations	72	72	72	72
Number of Outliers	6	8	4	4
High	7.1x	32.1x	49.9x	5.2x
Mean	2.0x	12.2x	17.2x	1.7x
Median	1.6x	10.2x	11.9x	1.2x
Low	0.1x	2.0x	4.9x	0.4x
Lower Quartile	0.8x	7.7x	8.4x	0.9x
Upper Quartile	2.5x	16.3x	24.3x	1.9x

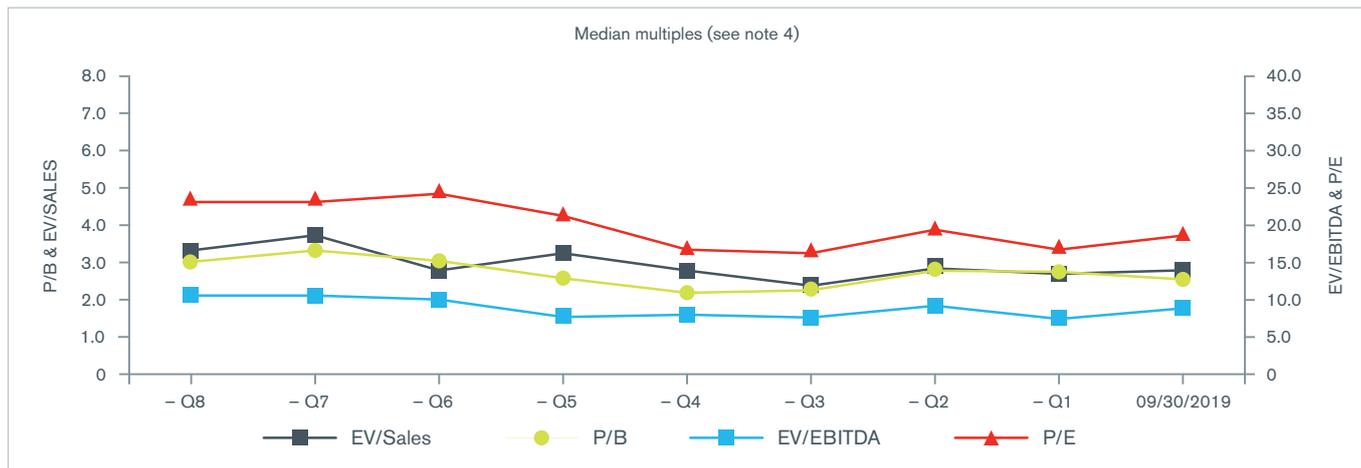
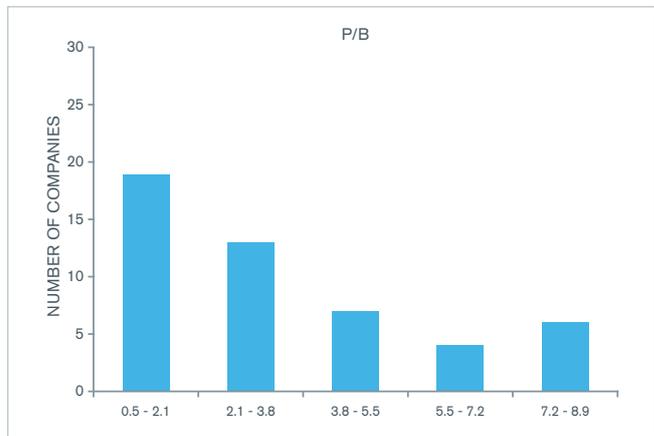
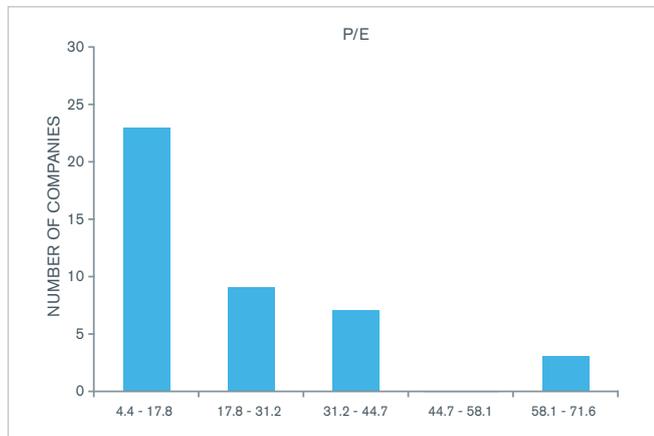
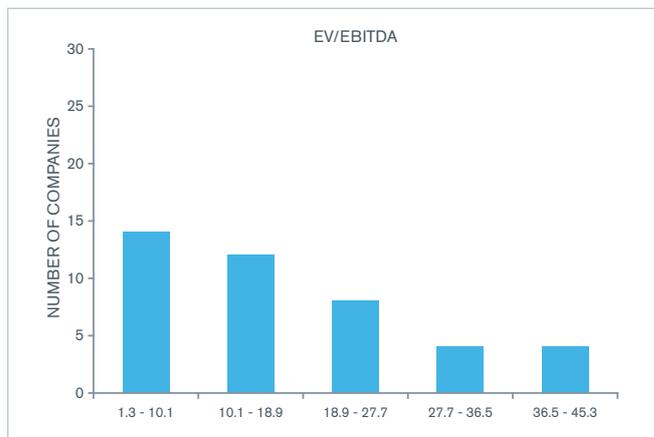
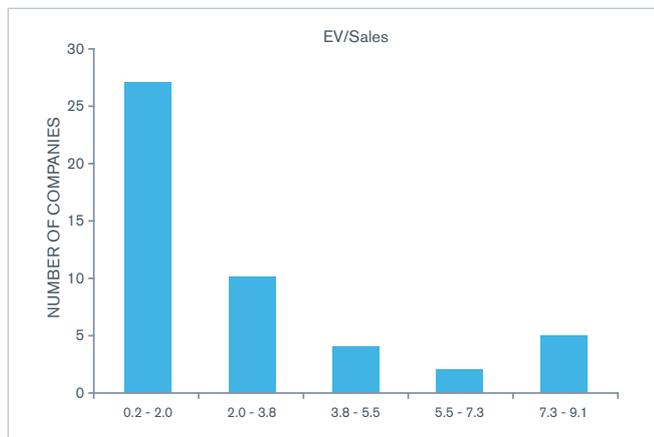




Consumer Discretionary

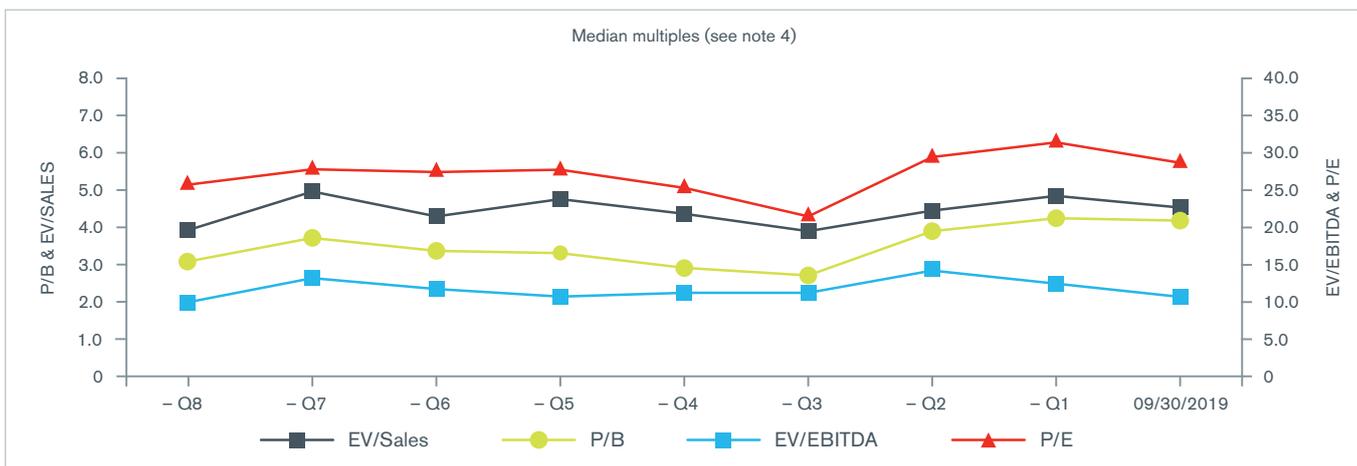
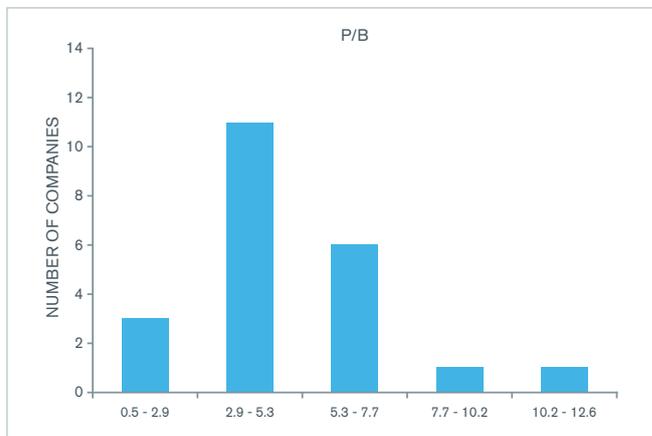
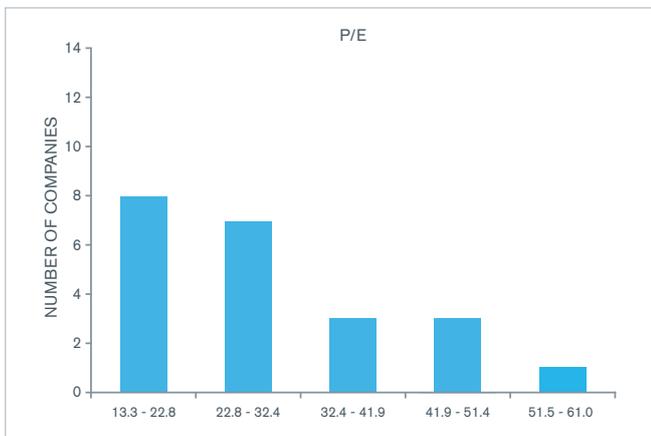
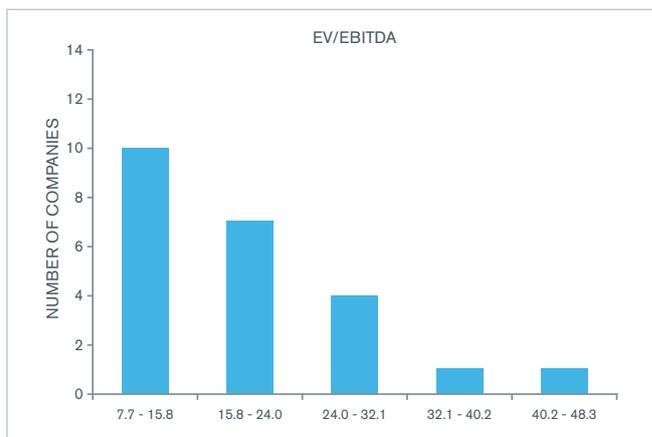
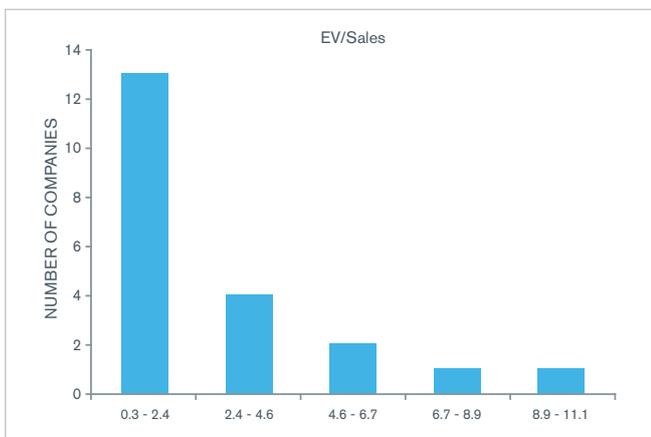
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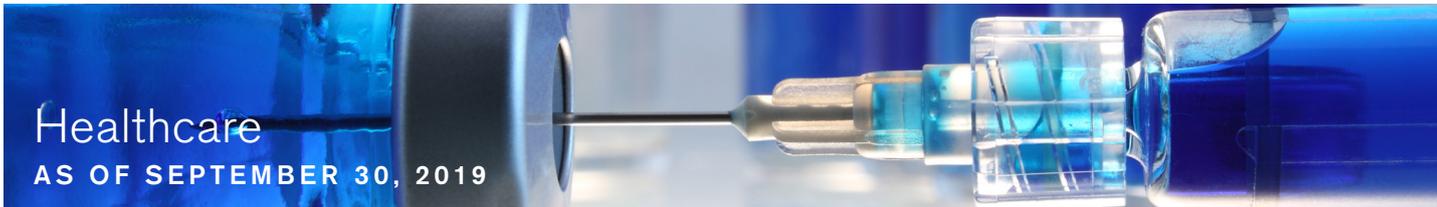
	EV/Sales	EV/EBITDA	P/E	P/B
Number of Observations	53	53	53	53
Number of Outliers	5	11	11	4
High	9.1x	45.3x	71.6x	8.9x
Mean	2.6x	17.5x	22.5x	3.3x
Median	1.6x	12.6x	17.0x	2.6x
Low	0.2x	1.3x	4.4x	0.5x
Lower Quartile	0.6x	8.9x	11.3x	1.3x
Upper Quartile	3.6x	25.9x	30.6x	4.4x





	EV/Sales	EV/EBITDA	P/E	P/B
Number of Observations	25	25	25	25
Number of Outliers	3	2	3	3
High	11.1x	48.3x	61.0x	12.6x
Mean	3.2x	19.5x	29.2x	4.8x
Median	2.0x	19.1x	27.6x	4.1x
Low	0.3x	7.7x	13.3x	0.5x
Lower Quartile	1.3x	11.9x	19.6x	3.1x
Upper Quartile	3.5x	24.1x	36.4x	6.0x

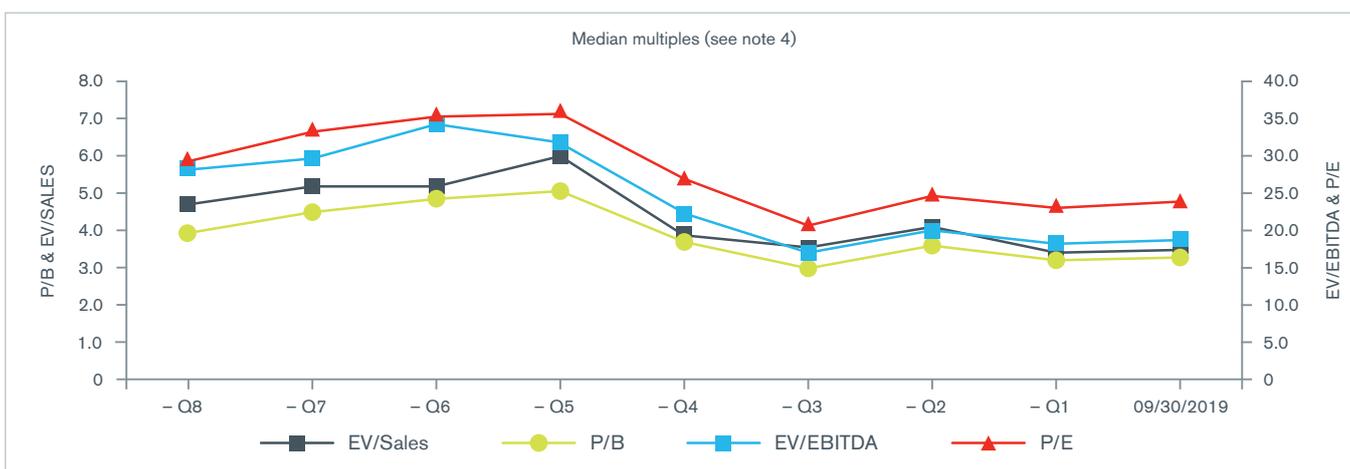
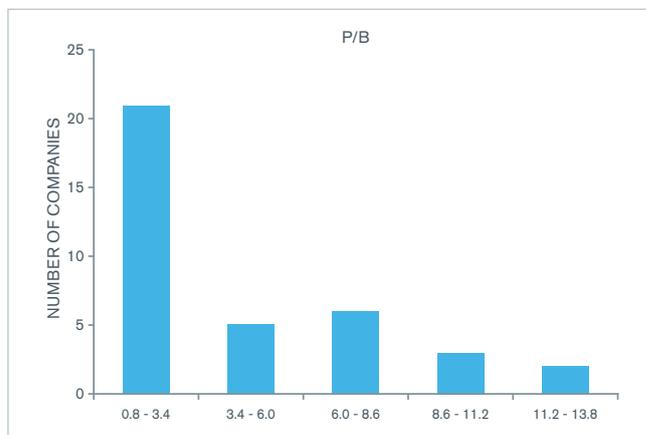
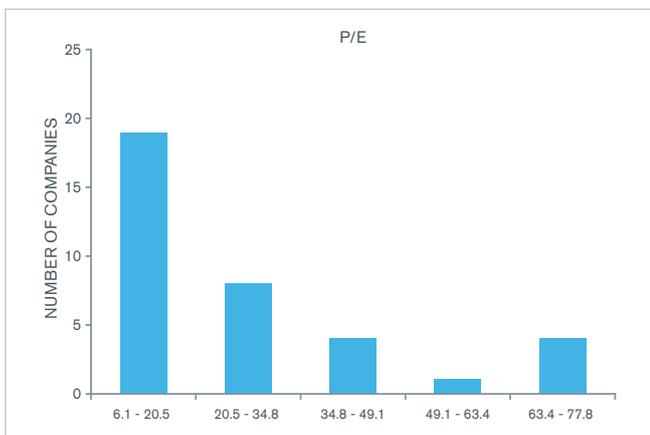
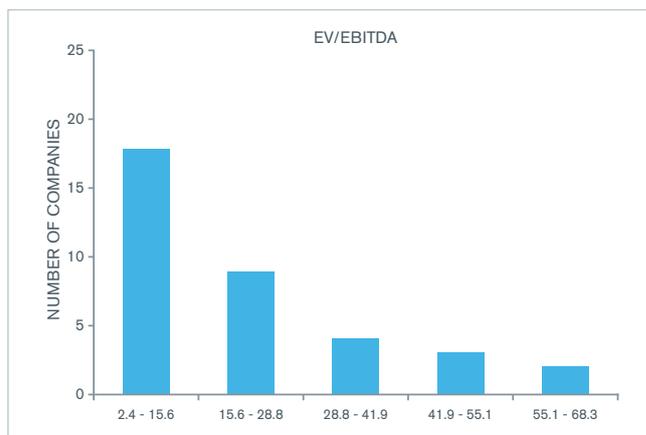
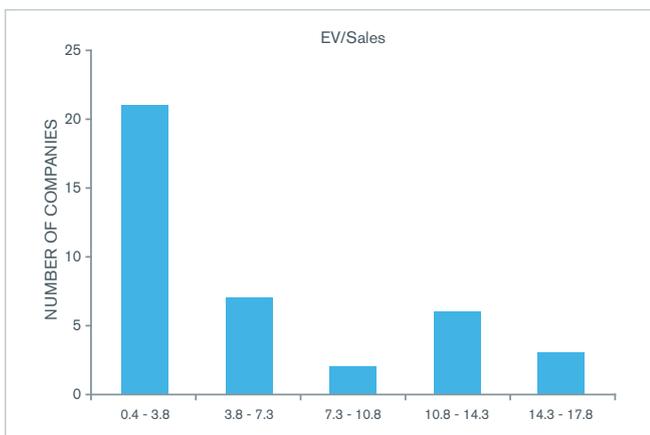




Healthcare

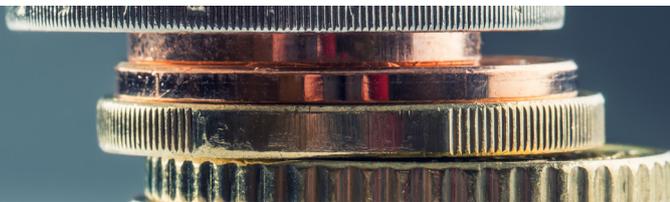
AS OF SEPTEMBER 30, 2019

	EV/Sales	EV/EBITDA	P/E	P/B
Number of Observations	42	42	42	42
Number of Outliers	3	6	6	5
High	17.8x	68.3x	77.8x	13.8x
Mean	5.7x	21.5x	27.5x	4.4x
Median	3.6x	14.8x	19.1x	2.8x
Low	0.4x	2.4x	6.1x	0.8x
Lower Quartile	1.6x	10.4x	12.4x	1.9x
Upper Quartile	9.9x	25.9x	33.8x	7.0x

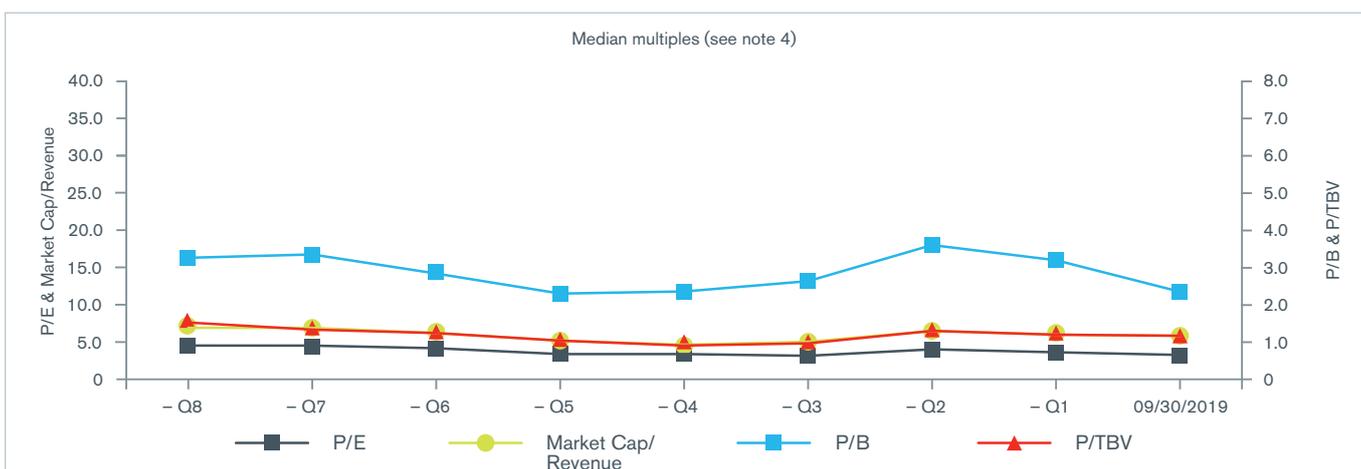
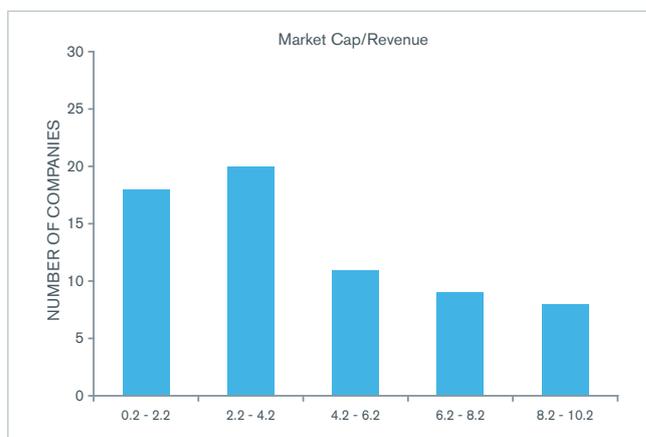
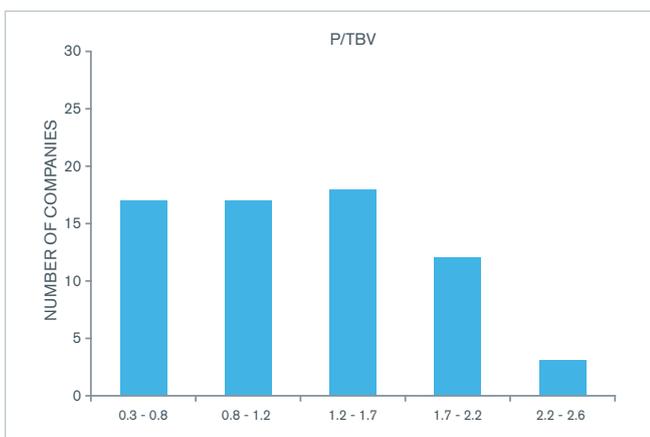
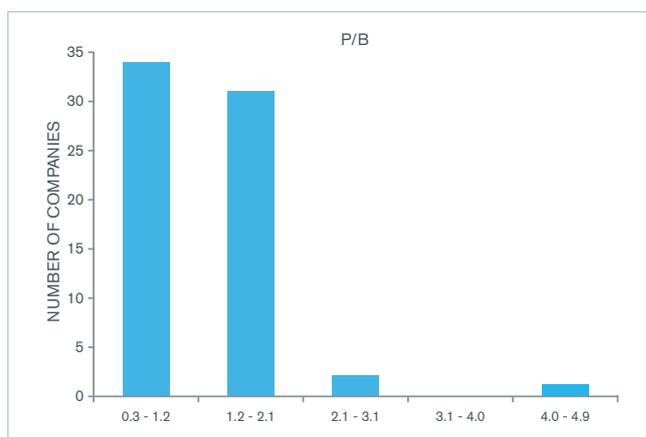
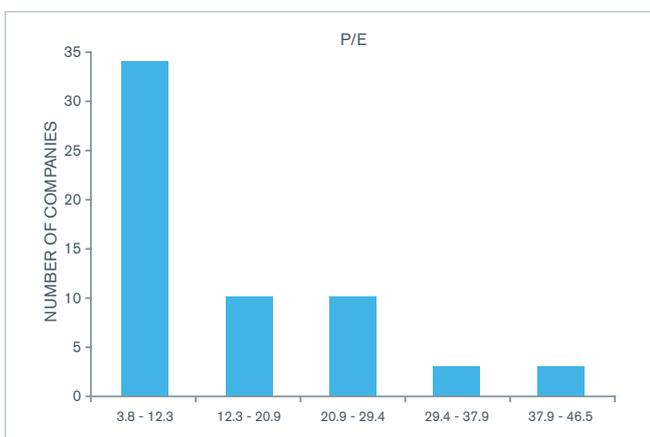


Financials

AS OF SEPTEMBER 30, 2019

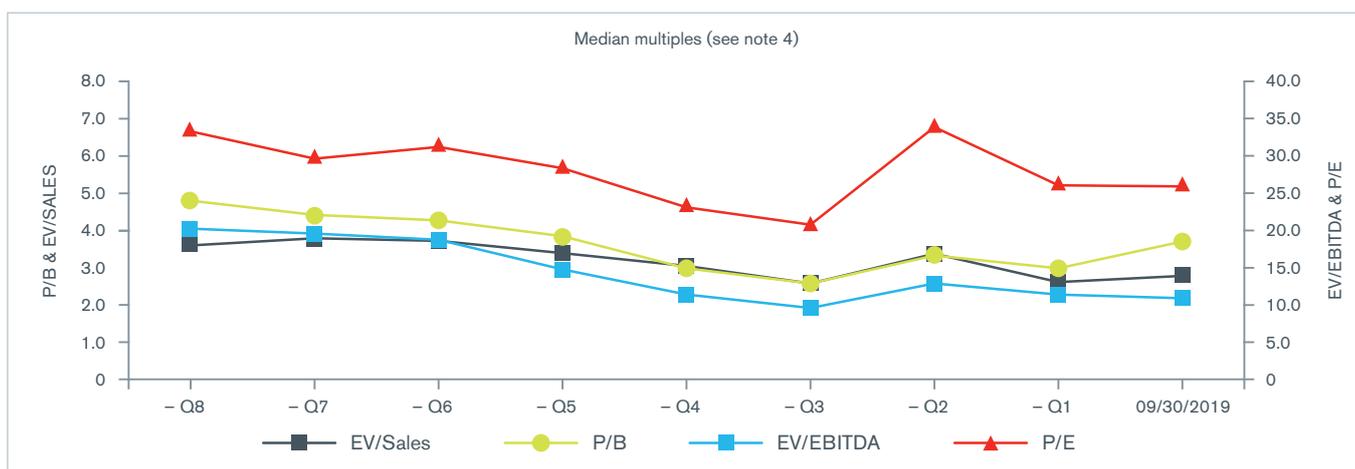
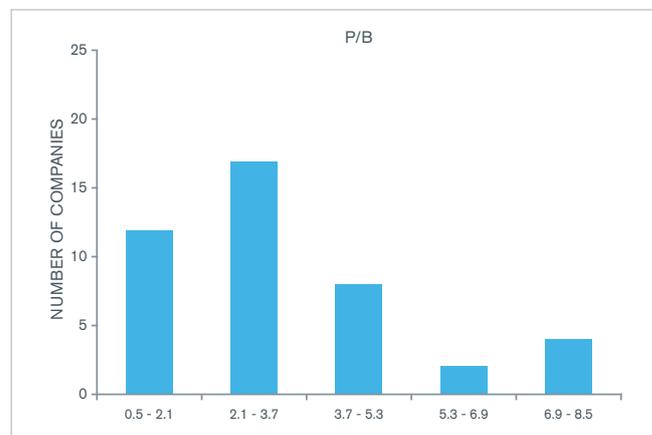
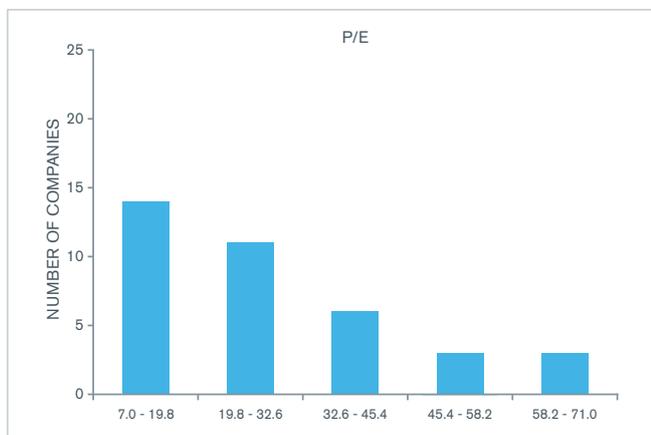
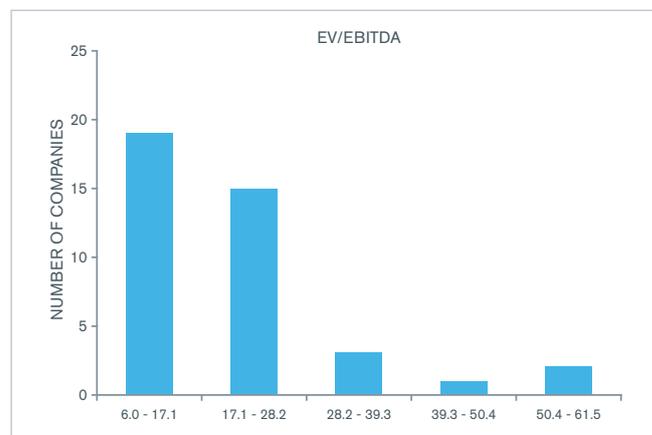
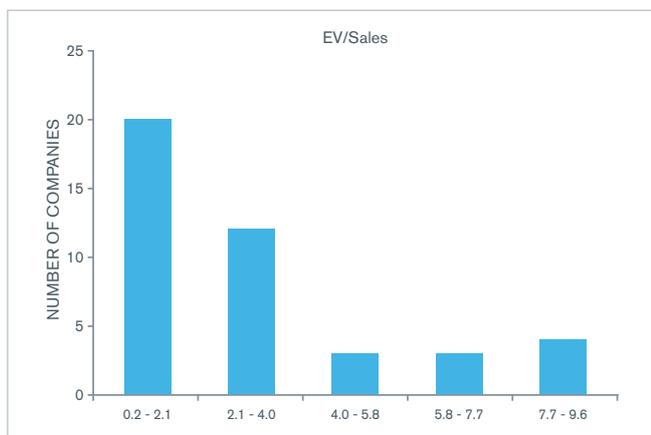


	P/E	P/B	P/TBV	Market Cap/ Revenue
Number of Observations	70	70	70	70
Number of Outliers	10	2	3	4
High	46.5x	4.9x	2.6x	10.2x
Mean	15.0x	1.2x	1.2x	4.2x
Median	10.4x	1.2x	1.2x	3.5x
Low	3.8x	0.3x	0.3x	0.2x
Lower Quartile	5.9x	0.7x	0.8x	2.2x
Upper Quartile	21.4x	1.6x	1.7x	6.4x





	EV/Sales	EV/EBITDA	P/E	P/B
Number of Observations	46	46	46	46
Number of Outliers	4	6	9	3
High	9.6x	61.5x	71.0x	8.5x
Mean	3.1x	19.6x	28.6x	3.3x
Median	2.2x	17.3x	24.5x	2.7x
Low	0.2x	6.0x	7.0x	0.5x
Lower Quartile	1.4x	10.8x	16.4x	2.0x
Upper Quartile	3.8x	23.4x	36.0x	4.3x

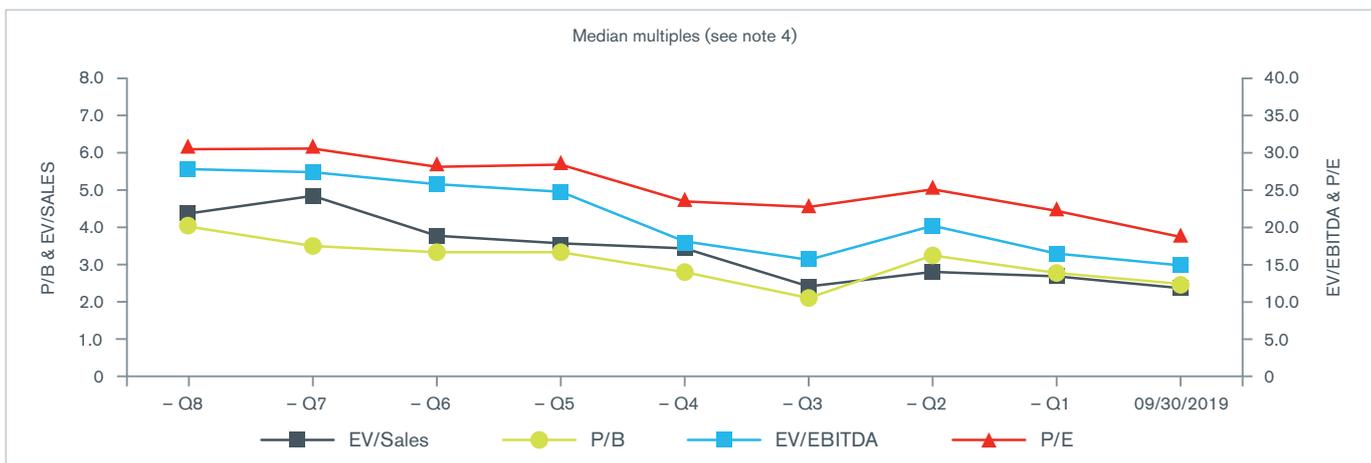
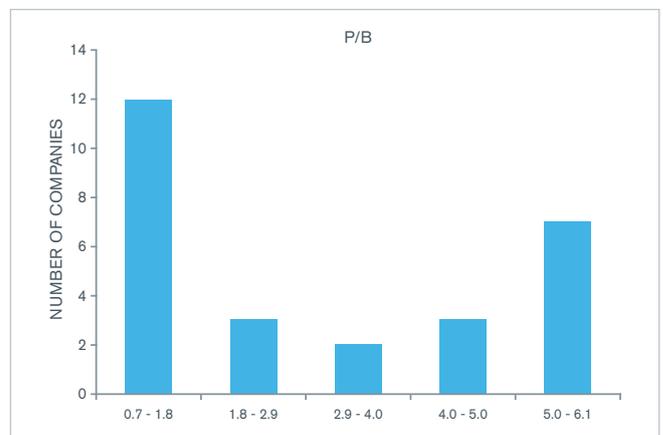
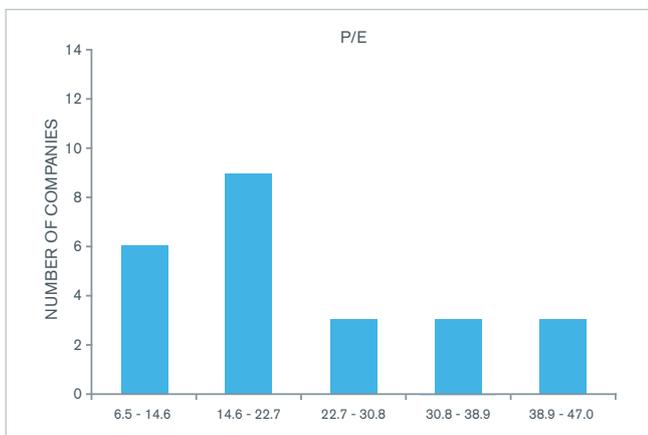
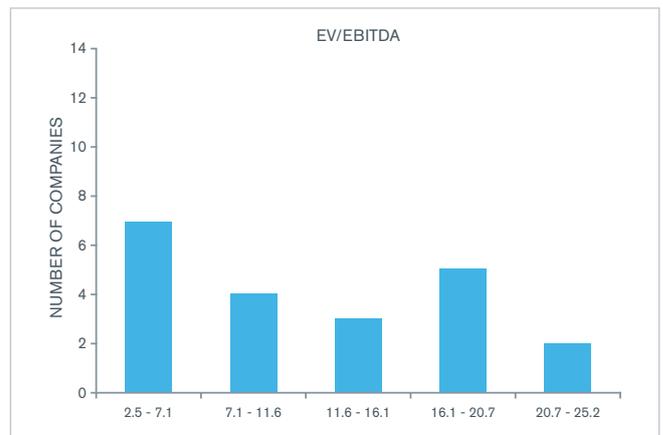
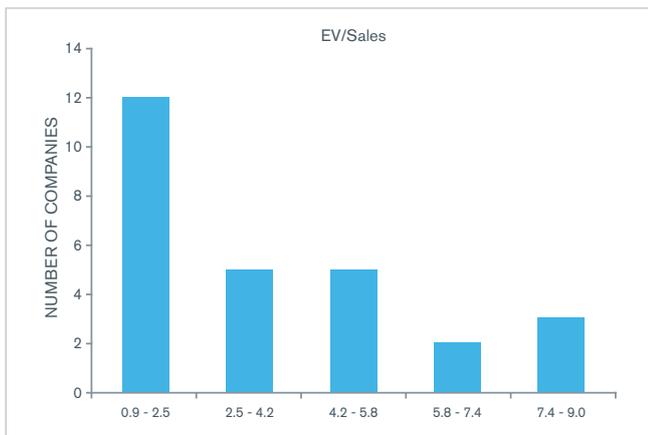


Communication Services

AS OF SEPTEMBER 30, 2019

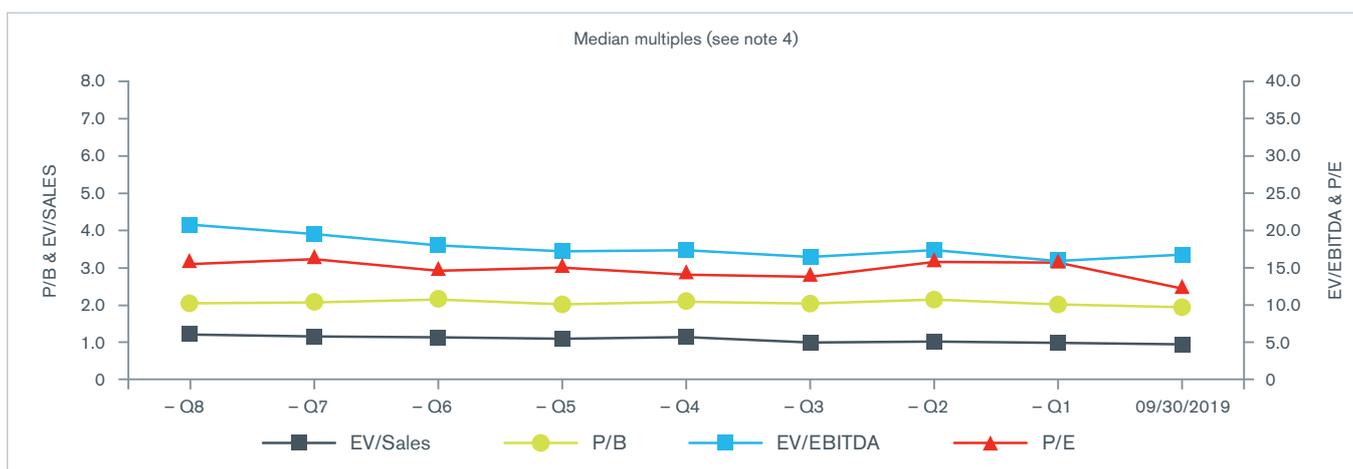
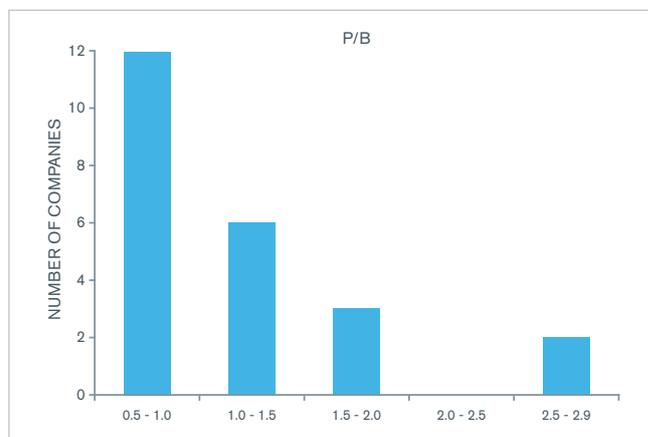
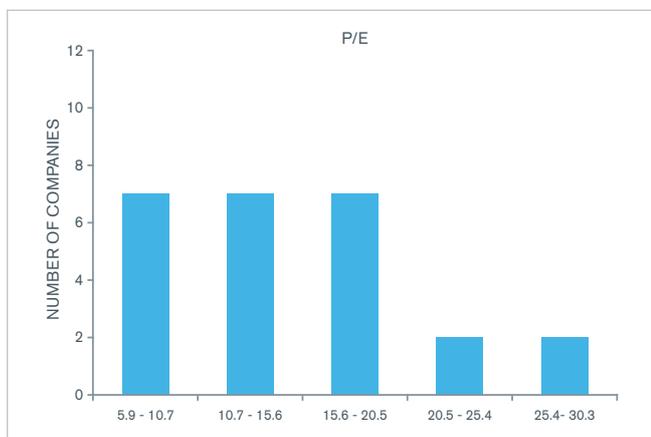
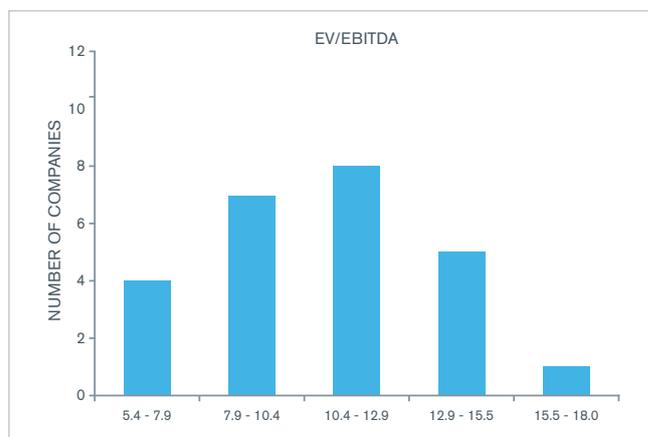
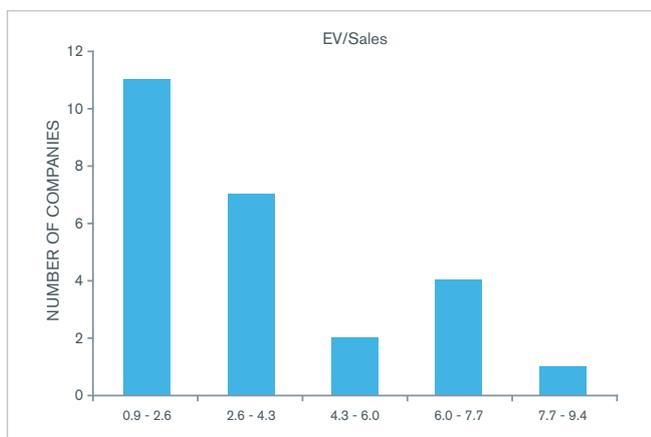


	EV/Sales	EV/EBITDA	P/E	P/B
Number of Observations	28	28	28	28
Number of Outliers	1	7	4	1
High	9.0x	25.2x	47.0x	6.1x
Mean	3.6x	11.8x	22.5x	3.0x
Median	3.1x	11.4x	20.6x	2.3x
Low	0.9x	2.5x	6.5x	0.7x
Lower Quartile	1.4x	6.2x	15.9x	1.3x
Upper Quartile	5.3x	17.4x	30.5x	5.0x





	EV/Sales	EV/EBITDA	P/E	P/B
Number of Observations	26	26	26	26
Number of Outliers	1	1	1	3
High	9.4x	18.0x	30.3x	2.9x
Mean	3.6x	10.8x	15.3x	1.2x
Median	3.3x	11.2x	13.3x	1.0x
Low	0.9x	5.4x	5.9x	0.5x
Lower Quartile	1.8x	9.4x	10.0x	0.8x
Upper Quartile	4.4x	12.2x	19.0x	1.3x

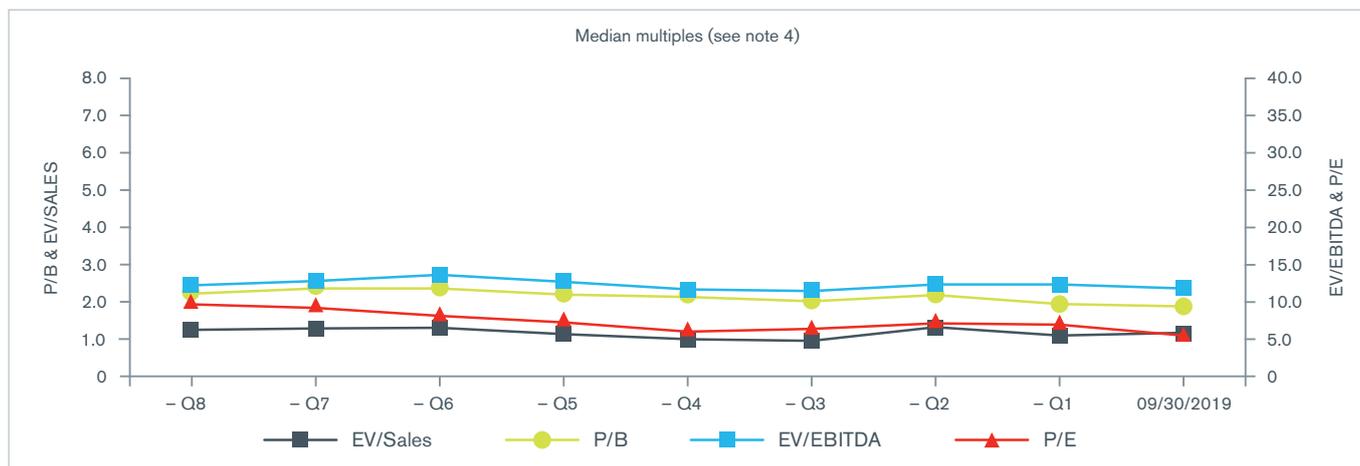
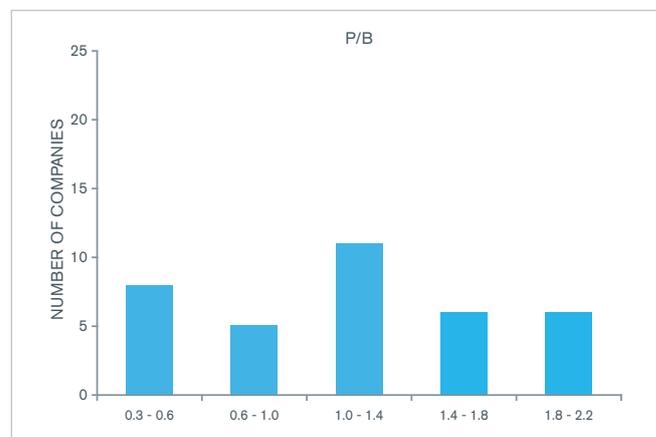
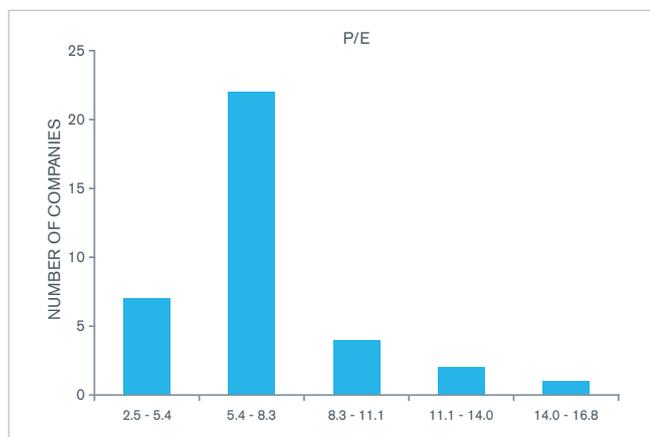
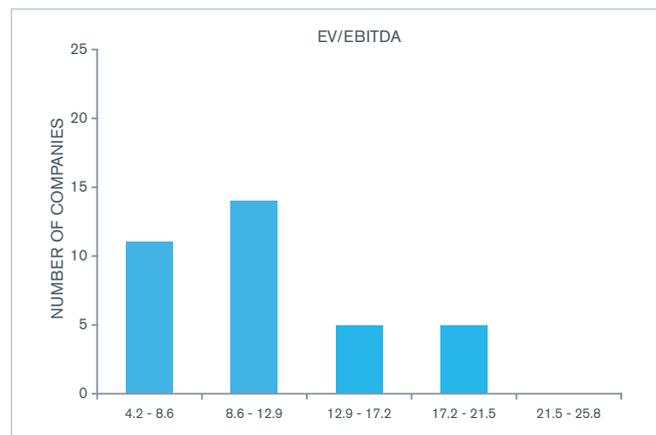
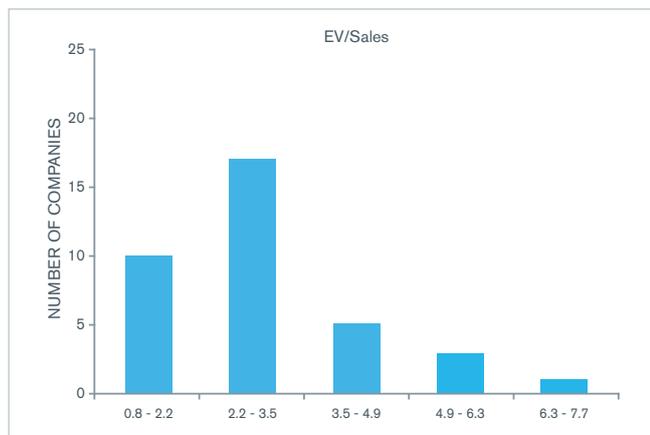




Real Estate

AS OF SEPTEMBER 30, 2019

	EV/Sales	EV/EBITDA	P/E	P/B
Number of Observations	38	38	38	38
Number of Outliers	2	2	2	2
High	7.7x	25.8x	16.8x	2.2x
Mean	2.9x	11.5x	7.0x	1.2x
Median	2.4x	10.0x	6.3x	1.1x
Low	0.8x	4.2x	2.5x	0.3x
Lower Quartile	2.0x	8.3x	5.6x	0.7x
Upper Quartile	3.2x	13.8x	7.7x	1.6x



Note:

1. GICS® was used as the basis for industry definitions
An industry must have a minimum of 5 company participants to be considered for analysis. For all reported multiples in China, we have considered all companies in MSCI China Index as of September 30, 2019. The MSCI China Index is constructed based on the integrated China equity universe included in the MSCI Emerging Markets Index, providing a standardized definition of the China equity opportunity set. The index aims to reflect the opportunity of China share classes listed in Hong Kong, Shanghai, Shenzhen and outside of China.

To avoid duplication, industry multiples for dual-listed companies are based on the shares listed in the Primary Exchange. Source: Index Constituents were captured from MSCI's website: <https://www.msci.com/china>; Financial Data was derived from Standard & Poor's Capital IQ database.
2. Any outliers in the industry have been excluded from above analysis.
Outliers selection criteria: 1) negative multiples 2) multiples that excess two standard deviations over the median
3. EV = Enterprise Value = Market value of equity plus book value of debt plus book value of preferred stock and minority interest less book value of cash and short-term investments, Sales = Revenue for latest 12 months, EBITDA = Earnings before interest, taxes, depreciation and amortization for latest 12 months, P/E = Market Capitalization / Net Income to Common Excluding Extraordinary Items, P/B = Market Capitalization / Book value of common equity.
Financial information of companies reflect the latest available information based on company filings as of September 30, 2019.

For financial industry only: P/E = Market capitalization/Net Income to Common Excluding Extraordinary Items, P/B = Market capitalization/Book value of Common Equity, P/TBV = Market capitalization/ Total Tangible Book Value of Equity.
4. Outliers are not excluded for median multiple trend analysis.

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