An aerial photograph of a city skyline, likely Shanghai, featuring a prominent, dark, angular skyscraper in the foreground. The city is densely packed with buildings, and the sky is hazy. The image is overlaid with a semi-transparent red and blue gradient.

DUFF & PHELPS

Protect, Restore and Maximize Value

Industry Multiples in China

APRIL 2019 - FIRST EDITION

年4月 - 第1版

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Foreword

Continuing trade tensions with the U.S. have weighed heavily on the overall macroeconomic outlook. On one hand, China's economy has experienced significant upward movement over the last year. According to data released by the National Bureau of Statistics, China's gross domestic product (GDP) experienced a growth of 6.6%, exceeding the 6.5% target set by the government. The country's GDP is projected to expand 6.2% in 2019, well within the target range of 6.0%-6.5%.

The current growth rate will be powered by an expected double-digit growth in domestic consumption, lower crude oil prices, monetary policy supporting a strong renminbi, and fiscal stimulus plans, beginning with RMB 2 trillion (around US\$298 billion) in tax cuts.

On the flip side, the lower projected 2019 GDP relative to the previous year reflects an ongoing economic deceleration influenced by slowdowns in the housing and automotive sectors, constrained domestic activity due to ongoing debt deleveraging efforts, and uncertainty regarding the outcome of U.S.-China trade negotiations.

Nevertheless, interventions by the government of China have helped put the economy on a firmer footing. To boost domestic demand, the government introduced a stimulus package that included a RMB 65.0 billion (US\$9.6 billion) tax cut for companies with research and development expenditures, and special bond sales to finance local infrastructure investment.

Foreign investors in China have also benefited from relaxed regulations, including a new draft of the foreign investment law that offers stronger intellectual property protections for foreign-invested enterprises; and policy changes for China's free-trade zones that ultimately allow foreign investment in formerly-closed areas like the transportation sector and Internet businesses.

Due in part to such efforts, China advanced to the 46th position (up from 78th in 2017) in the World Bank Ease of Doing Business Index released in October 2018. In addition, Standard & Poor's cited good growth prospects and the government's reform agenda to justify maintaining China's "A+/A-1" rating, which will cause growth to remain close to 6.0% annually up to 2020.

The Chinese equity market bore the brunt of financial uncertainty in 2018, with the Shanghai Composite ending the trade year at 2,493.9, or 24.6% lower than the previous year's final close. The Shenzhen Composite experienced a 33.3% decline, and the Hong Kong Hang Seng Index fell about 13.6%.

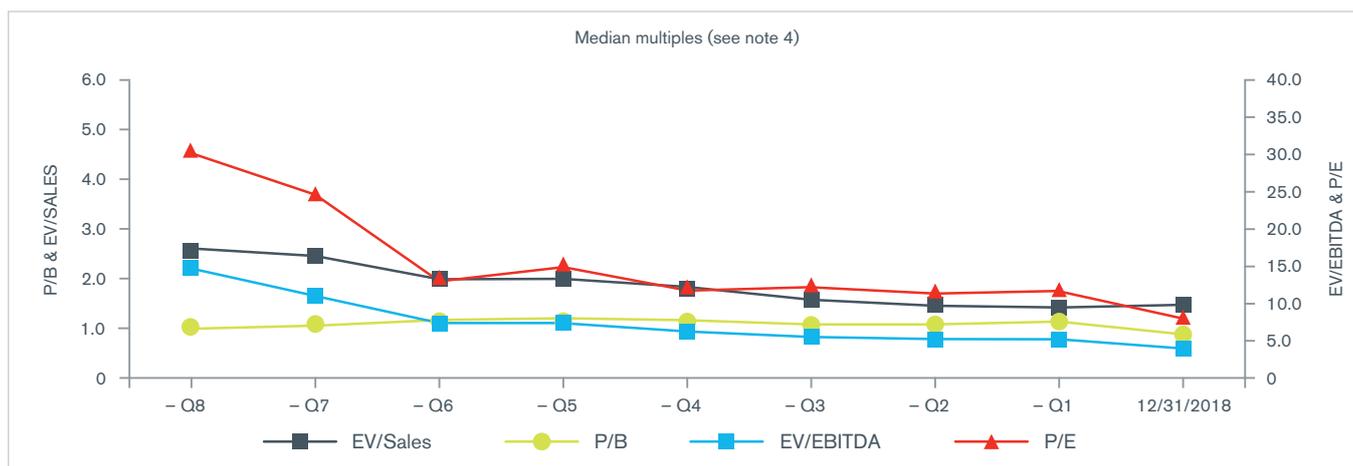
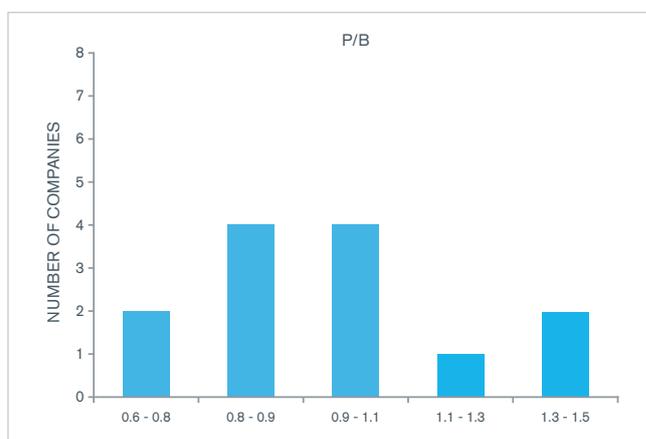
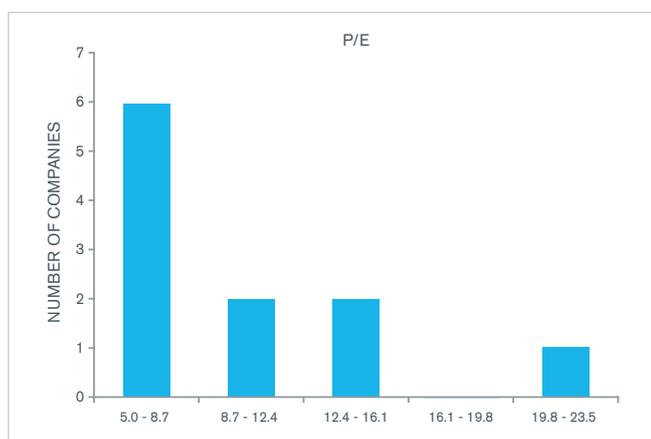
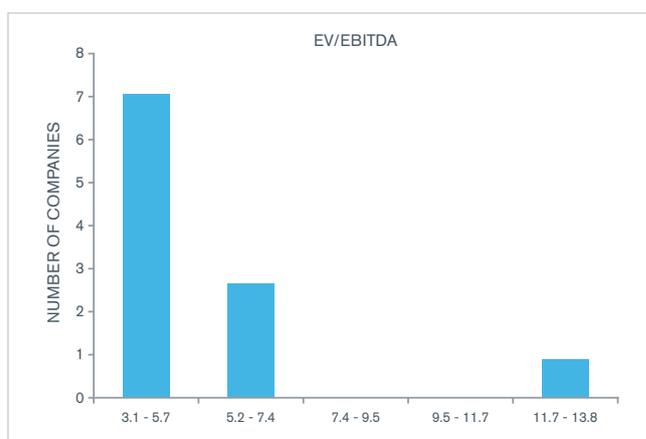
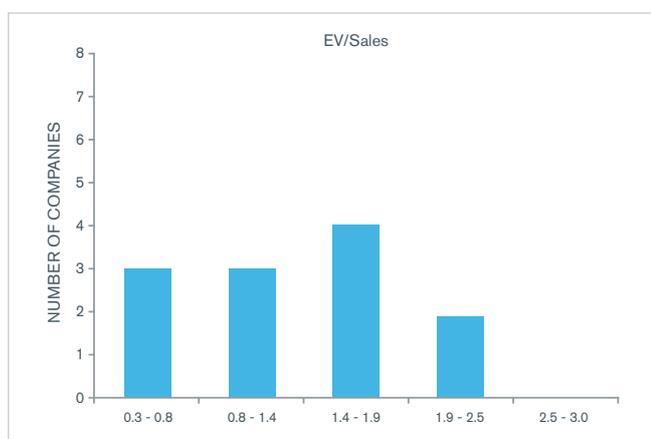
This report provides trading multiples for various key industries in China as of December 31, 2018. It includes a detailed overview of the P/B, P/E, EV/ EBITDA and EV/Sales multiples for non-financial industries, and P/E, P/B, Market Cap/Revenue and P/TBV multiples for financial industry of companies in the MSCI China Index, covering industries for which such data is available. Additionally, the report provides a two-year lookback at the quarterly trends of these multiples for most of the industries covered.

We hope you find this report helpful to get a broad sense of the range of trading multiples for major industries in China. If you would like to receive further information or wish to discuss any findings of this analysis, please feel free to contact us.

Energy

AS OF DECEMBER 31, 2018

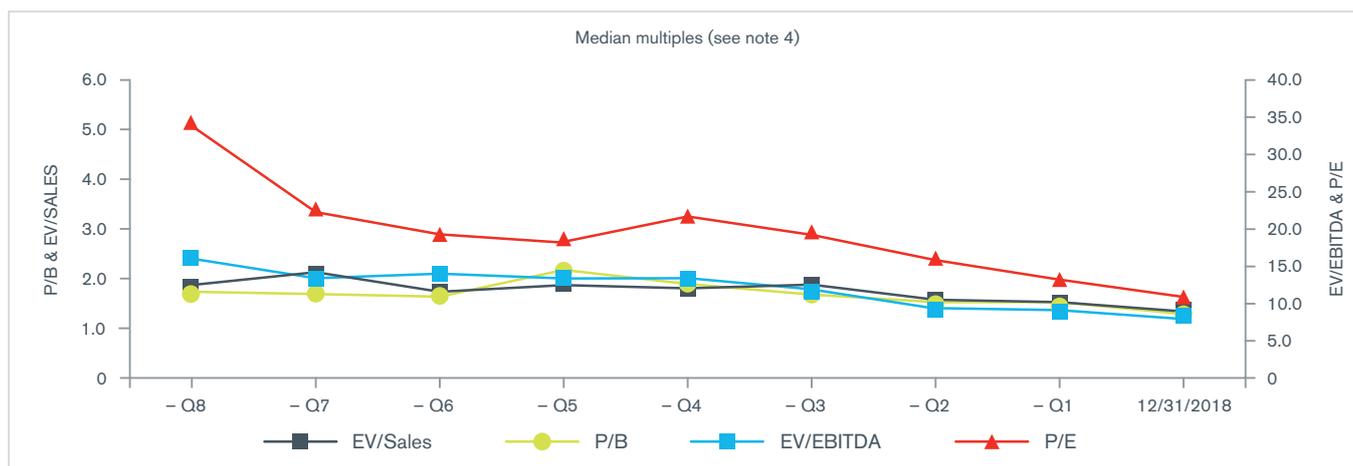
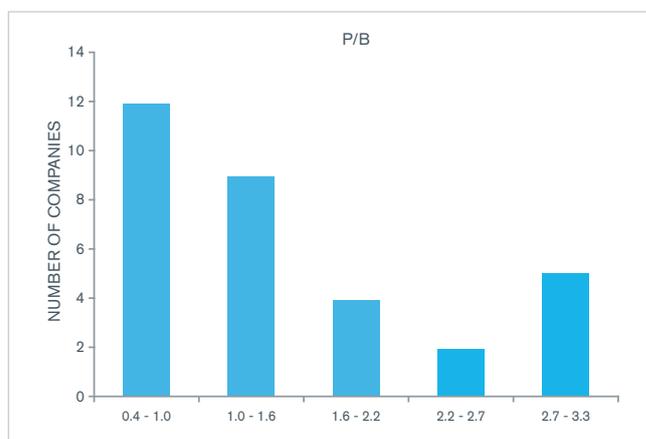
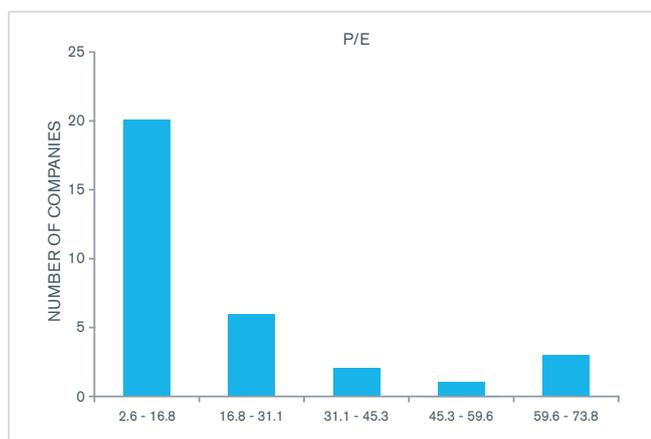
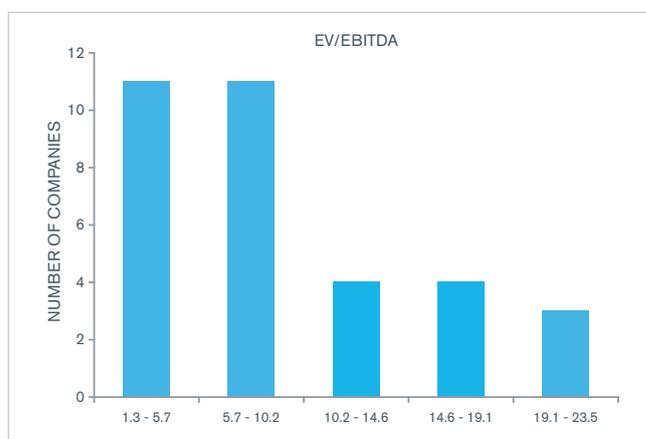
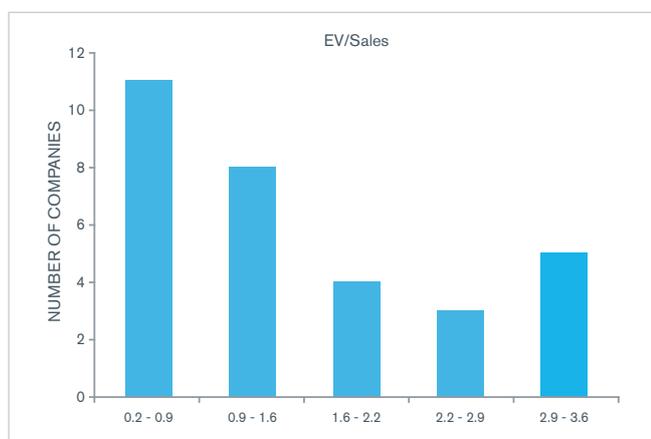
	EV/Sales	EV/EBITDA	P/E	P/B
Number of Observations	13	13	13	13
Number of Outliers	1	1	1	0
High	3.0x	13.8x	23.5x	1.5x
Mean	1.3x	5.4x	10.0x	1.0x
Median	1.3x	4.5x	8.4x	1.0x
Low	0.3x	3.1x	5.0x	0.6x
Lower Quartile	0.8x	3.9x	6.5x	0.8x
Upper Quartile	1.6x	6.1x	11.9x	1.1x



Materials

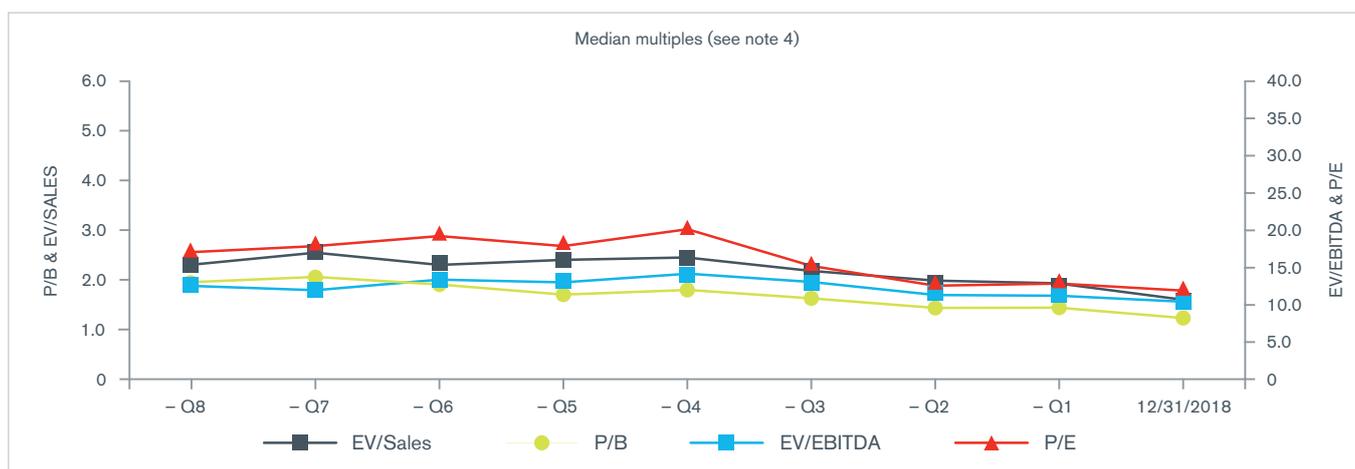
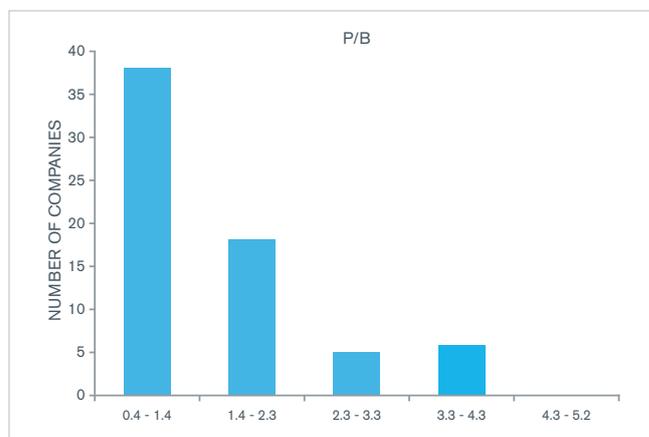
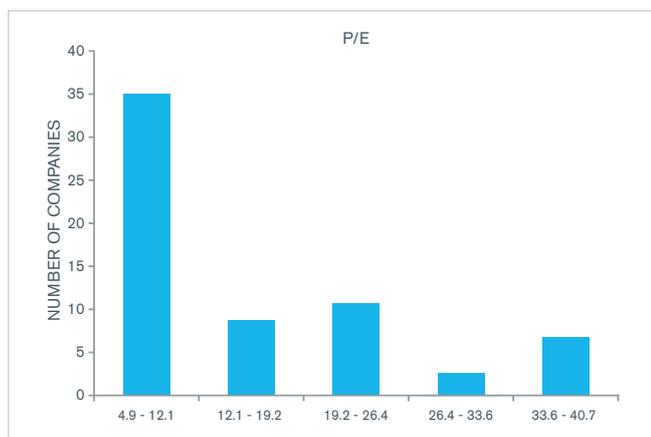
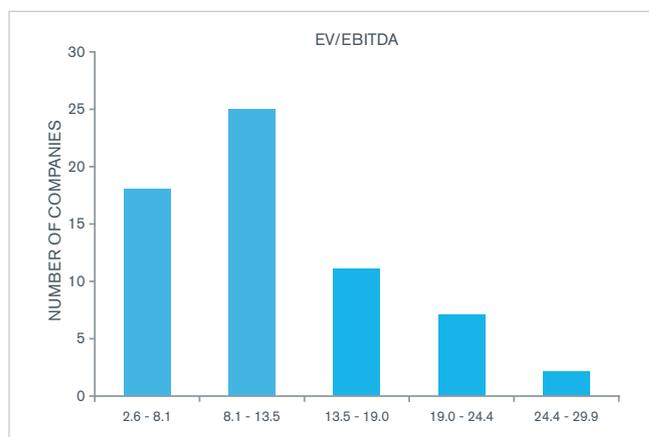
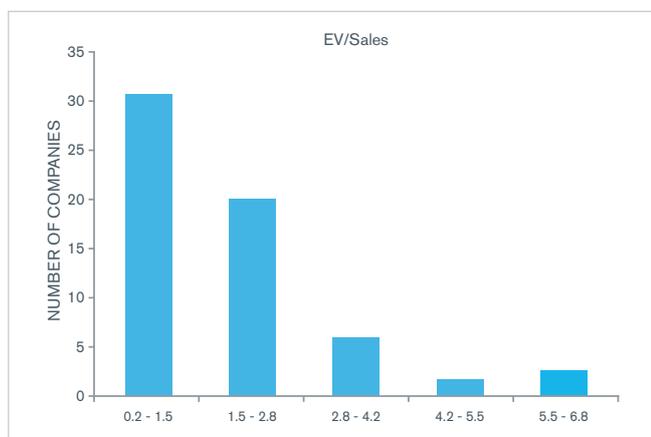
AS OF DECEMBER 31, 2018

	EV/Sales	EV/EBITDA	P/E	P/B
Number of Observations	34	34	34	34
Number of Outliers	3	1	1	0
High	3.6x	23.5x	73.8x	3.3x
Mean	1.6x	9.4x	19.5x	1.5x
Median	1.4x	8.8x	12.4x	1.3x
Low	0.2x	1.3x	2.6x	0.5x
Lower Quartile	0.8x	5.3x	6.2x	0.8x
Upper Quartile	2.2x	10.8x	23.5x	1.9x





	EV/Sales	EV/EBITDA	P/E	P/B
Number of Observations	70	70	70	70
Number of Outliers	4	7	0	0
High	6.8x	29.9x	40.7x	5.2x
Mean	2.0x	12.2x	16.1x	1.6x
Median	1.6x	10.9x	11.3x	1.2x
Low	0.2x	2.6x	4.9x	0.4x
Lower Quartile	0.9x	7.8x	8.6x	0.9x
Upper Quartile	2.6x	17.0x	21.9x	1.9x

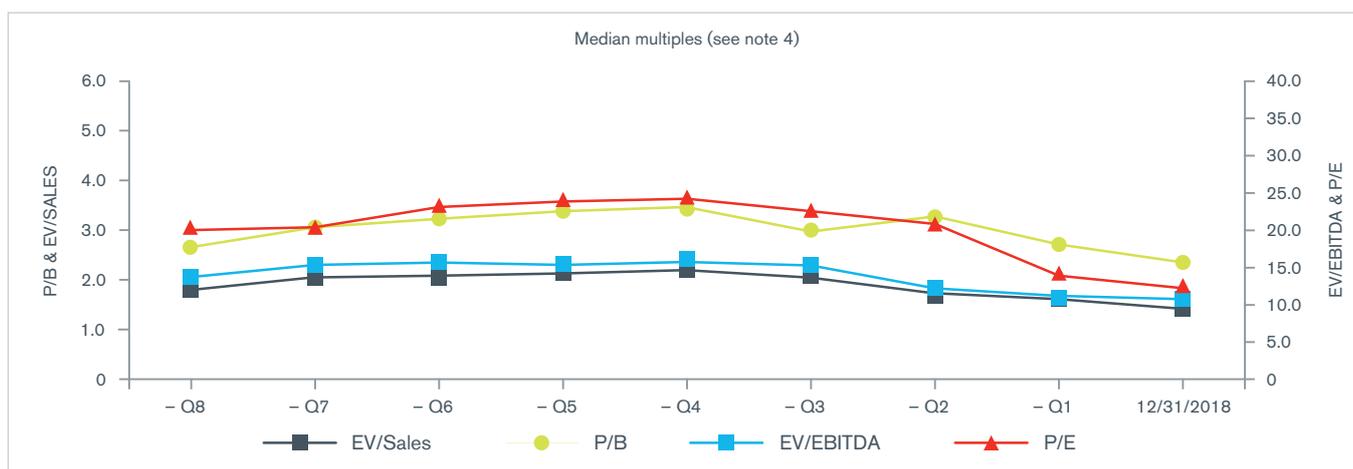
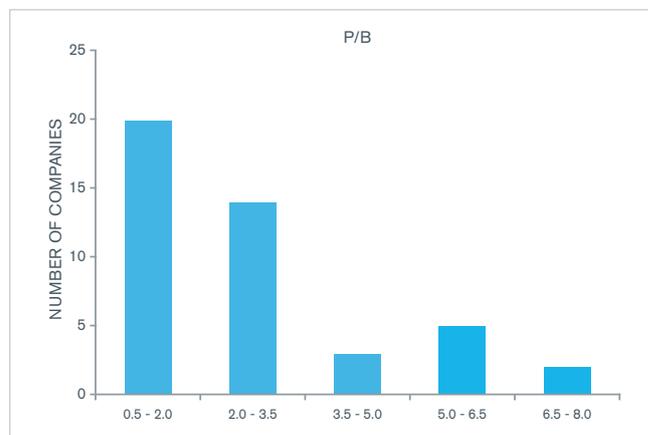
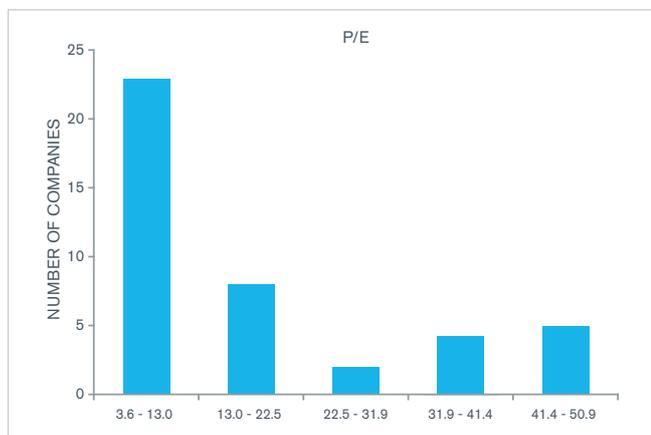
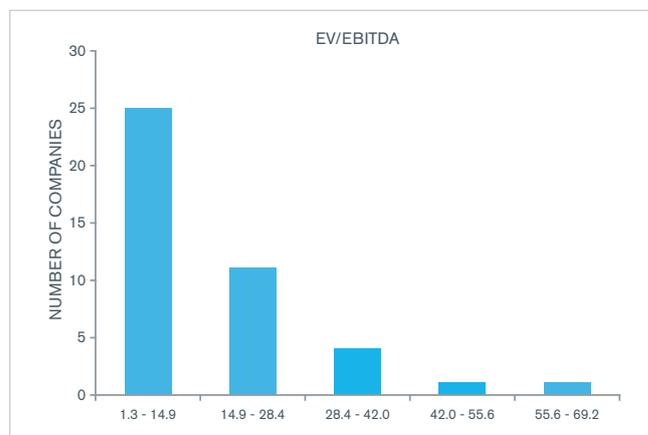
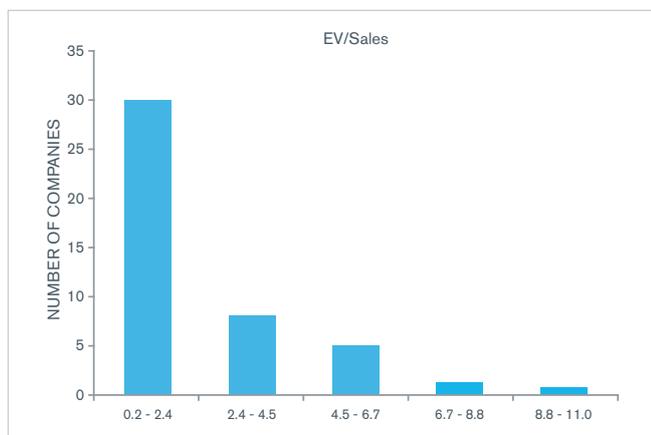




Consumer Discretionary

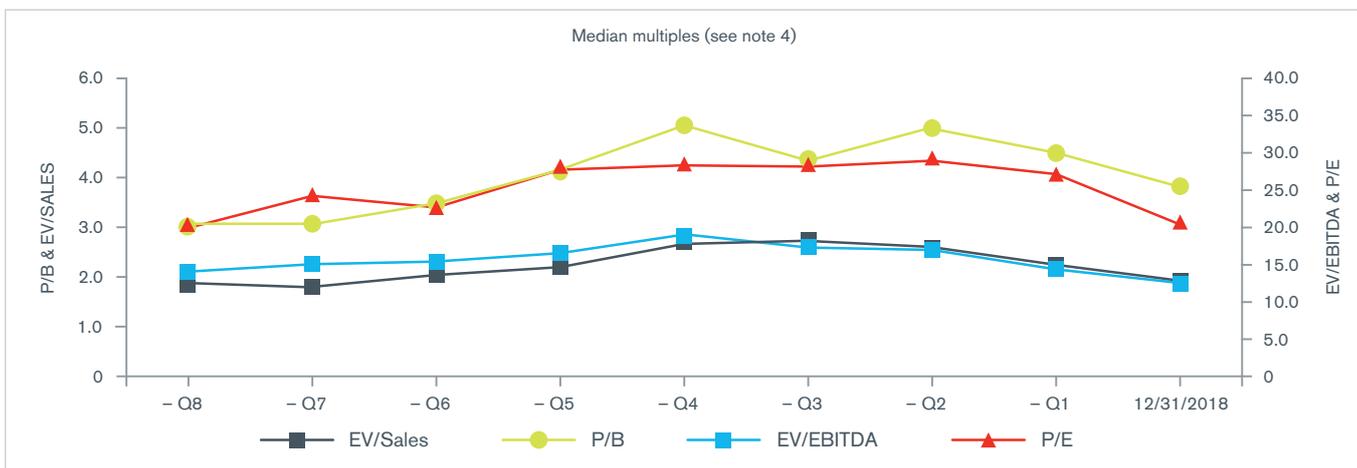
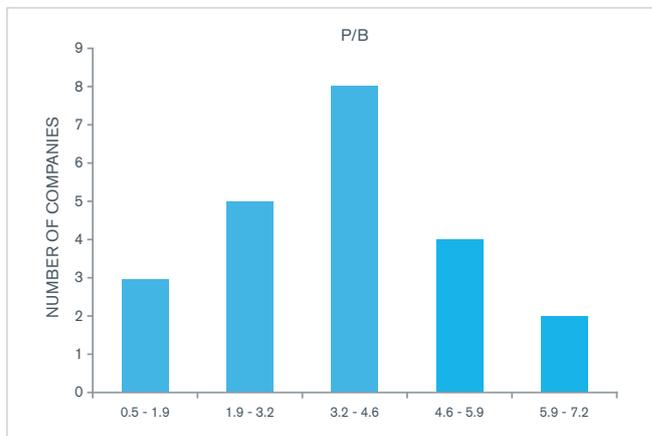
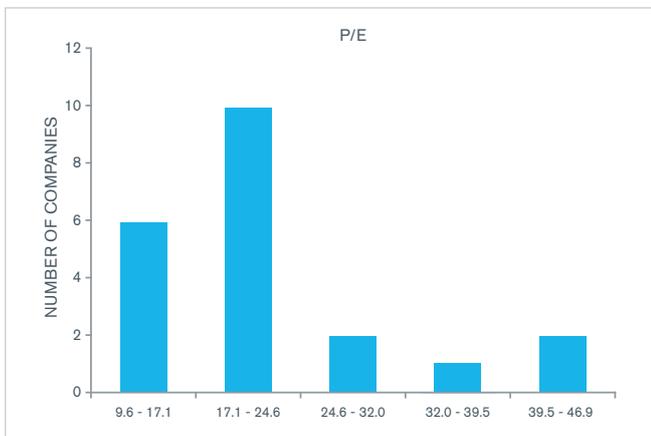
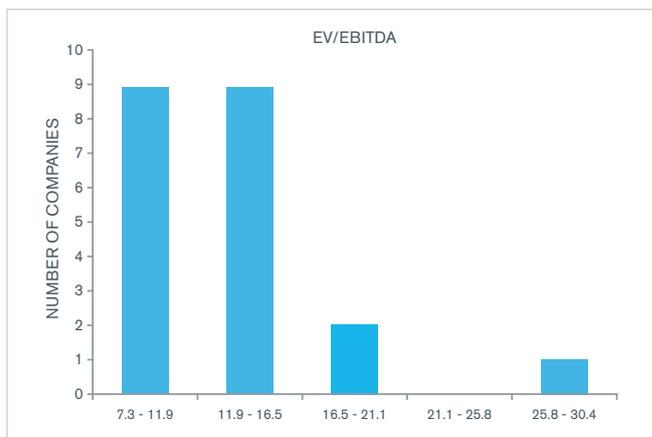
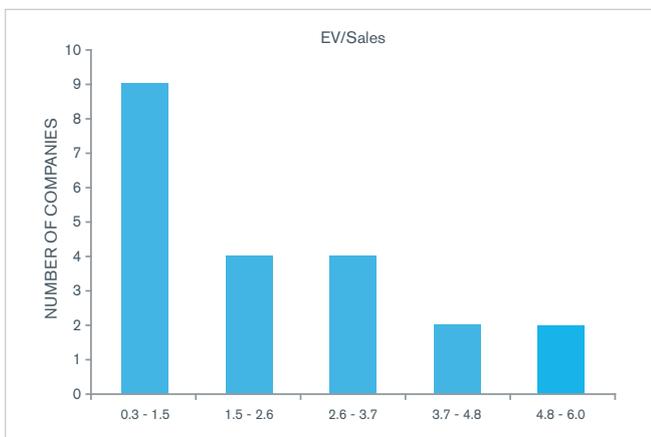
AS OF DECEMBER 31, 2018

	EV/Sales	EV/EBITDA	P/E	P/B
Number of Observations	46	46	46	46
Number of Outliers	1	4	2	0
High	11.0x	69.2x	50.9x	8.0x
Mean	2.2x	17.6x	18.5x	2.7x
Median	1.5x	11.3x	12.4x	2.3x
Low	0.2x	1.3x	3.6x	0.5x
Lower Quartile	0.5x	7.7x	8.2x	1.1x
Upper Quartile	2.8x	21.9x	26.3x	3.4x





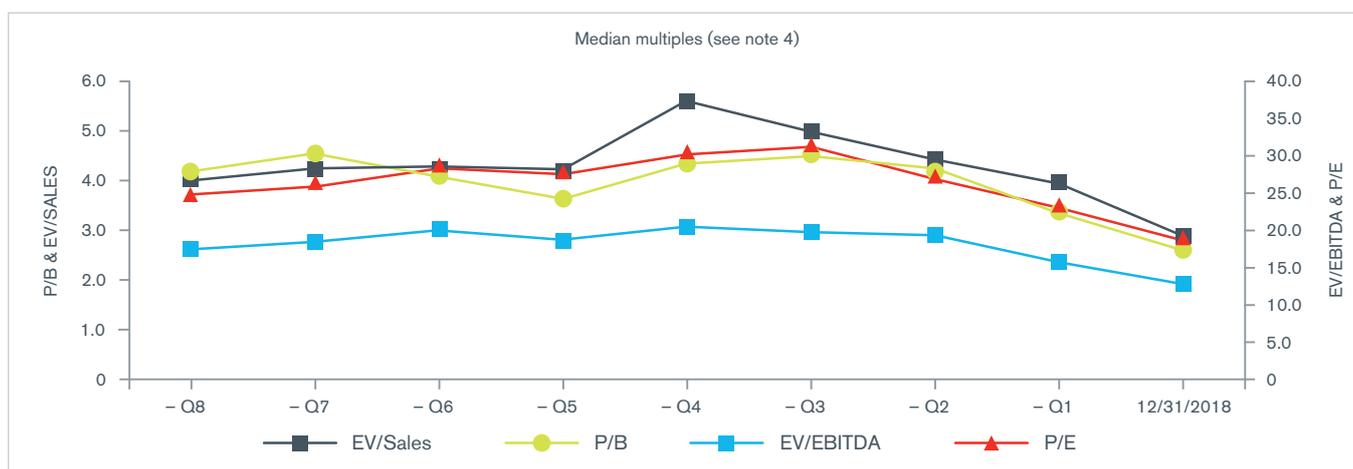
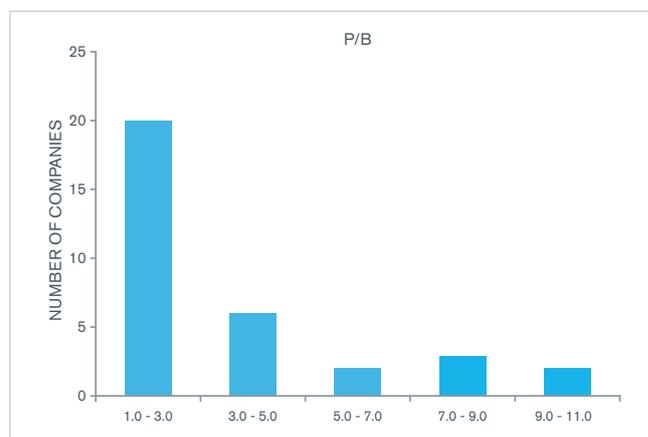
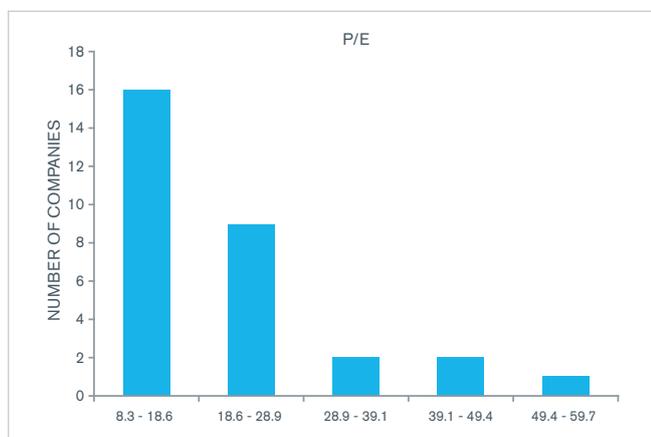
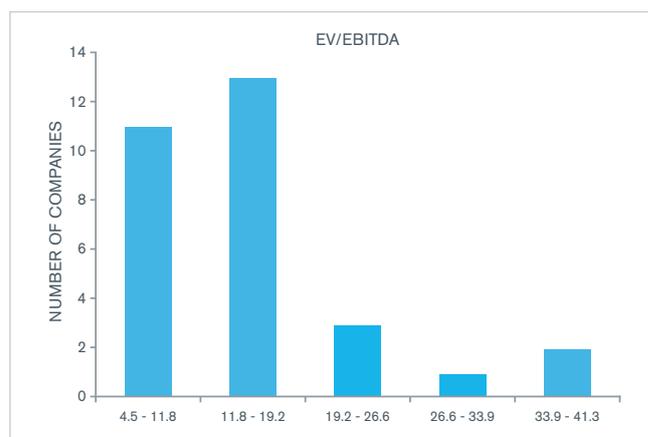
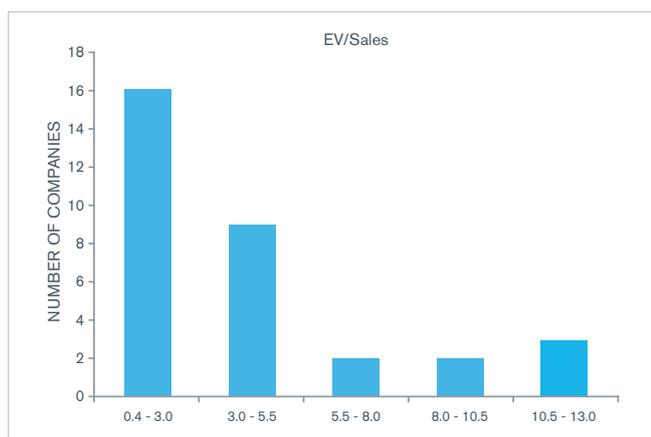
	EV/Sales	EV/EBITDA	P/E	P/B
Number of Observations	24	24	24	24
Number of Outliers	3	3	0	0
High	6.0x	30.4x	46.9x	7.2x
Mean	2.2x	13.4x	22.3x	3.6x
Median	1.5x	12.1x	18.8x	3.6x
Low	0.3x	7.3x	9.6x	0.5x
Lower Quartile	1.1x	11.0x	16.2x	2.3x
Upper Quartile	2.8x	15.6x	23.9x	4.7x



Healthcare

AS OF DECEMBER 31, 2018

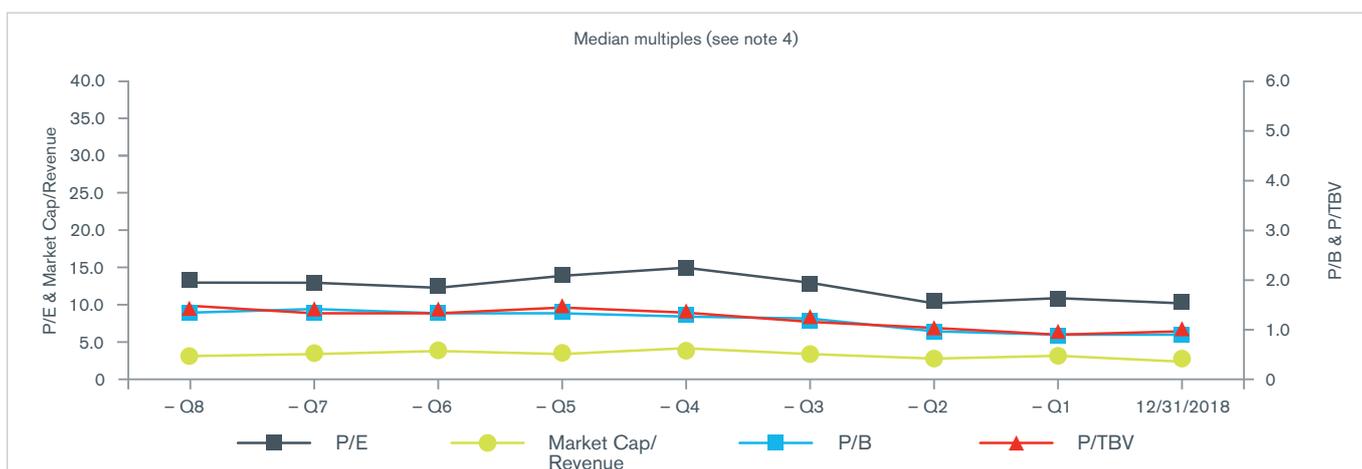
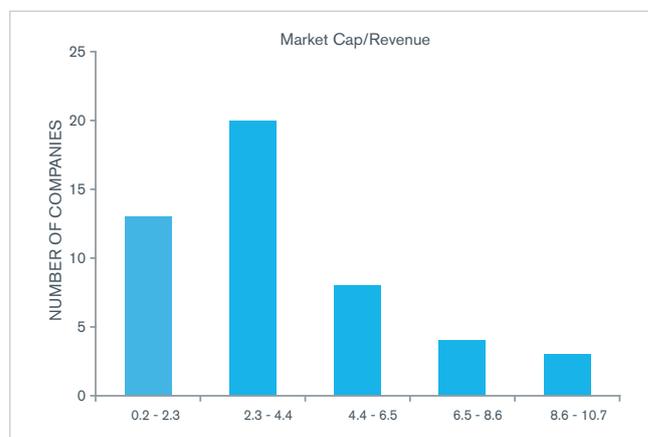
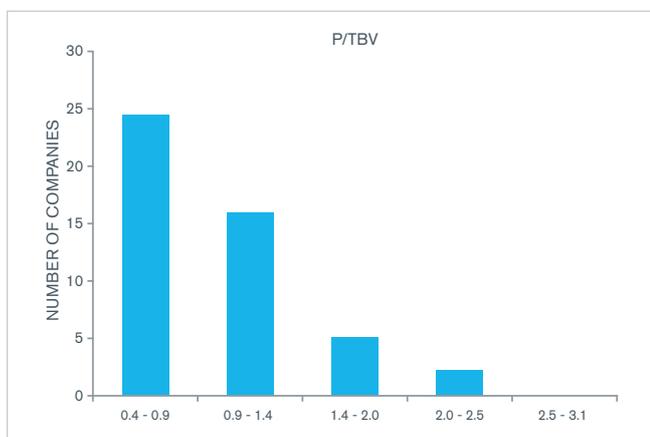
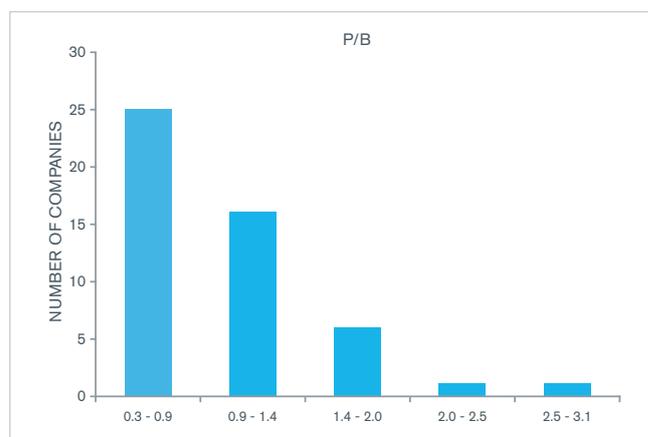
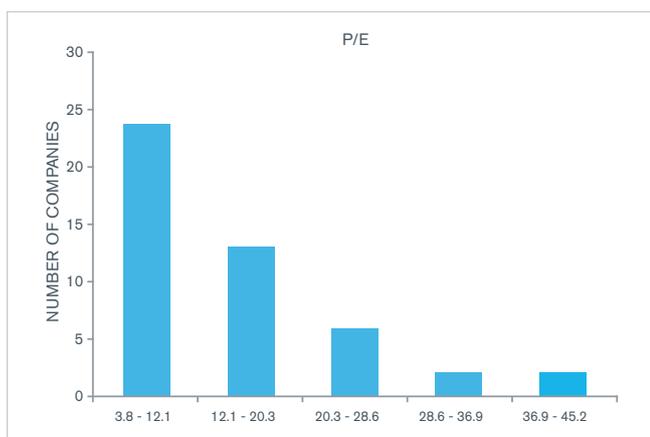
	EV/Sales	EV/EBITDA	P/E	P/B
Number of Observations	34	34	34	34
Number of Outliers	2	4	4	1
High	13.0x	41.3x	59.7x	11.0x
Mean	4.0x	15.7x	21.5x	3.6x
Median	2.9x	13.2x	18.2x	2.6x
Low	0.4x	4.5x	8.3x	1.0x
Lower Quartile	1.7x	10.7x	14.0x	2.0x
Upper Quartile	4.8x	16.7x	22.2x	4.5x



Financials

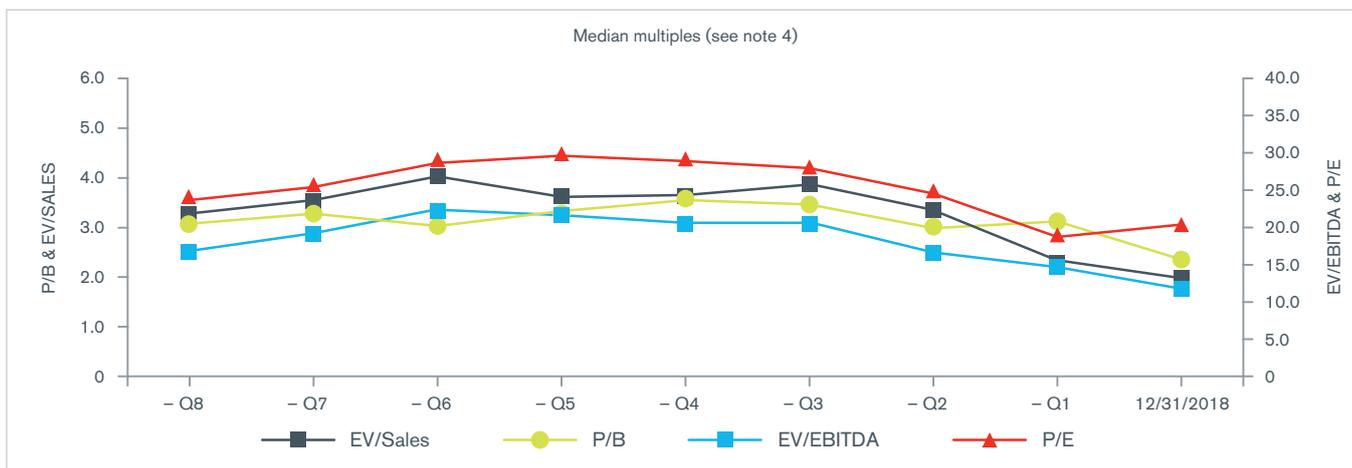
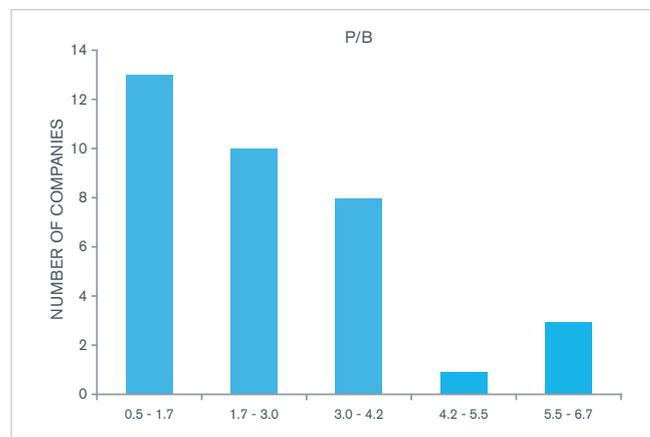
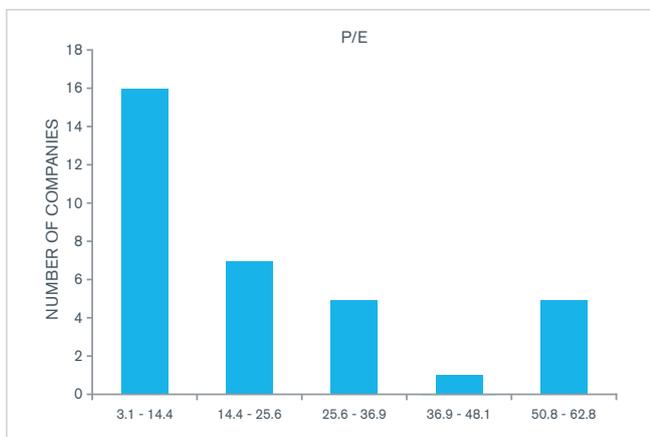
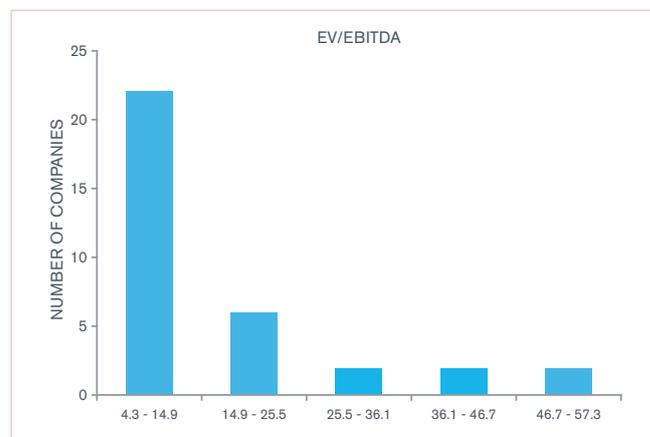
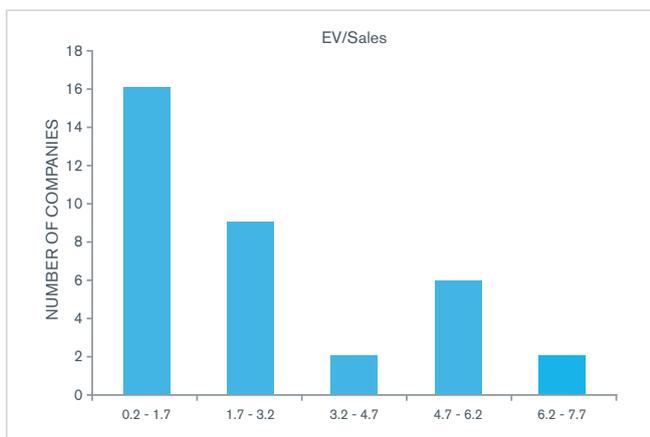
AS OF DECEMBER 31, 2018

	P/E	P/B	P/TBV	Market Cap/ Revenue
Number of Observations	63	63	63	63
Number of Outliers	7	1	0	0
High	45.2x	3.1x	3.1x	10.7x
Mean	13.4x	1.1x	1.1x	4.0x
Median	8.6x	1.0x	1.0x	3.5x
Low	3.8x	0.3x	0.4x	0.2x
Lower Quartile	5.7x	0.8x	0.8x	2.2x
Upper Quartile	18.9x	1.3x	1.3x	5.5x





	EV/Sales	EV/EBITDA	P/E	P/B
Number of Observations	39	39	39	39
Number of Outliers	3	5	3	0
High	7.7x	57.3x	59.4x	6.7x
Mean	2.7x	16.6x	22.8x	2.5x
Median	1.9x	11.6x	16.0x	2.2x
Low	0.2x	4.3x	3.1x	0.5x
Lower Quartile	1.1x	7.5x	12.5x	1.4x
Upper Quartile	4.4x	19.1x	30.4x	3.3x

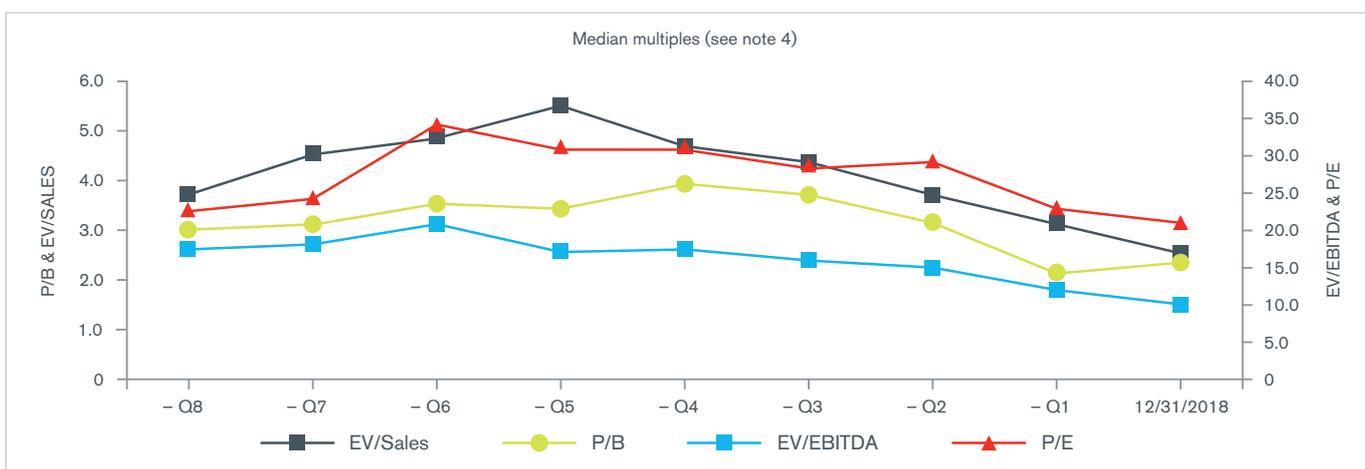
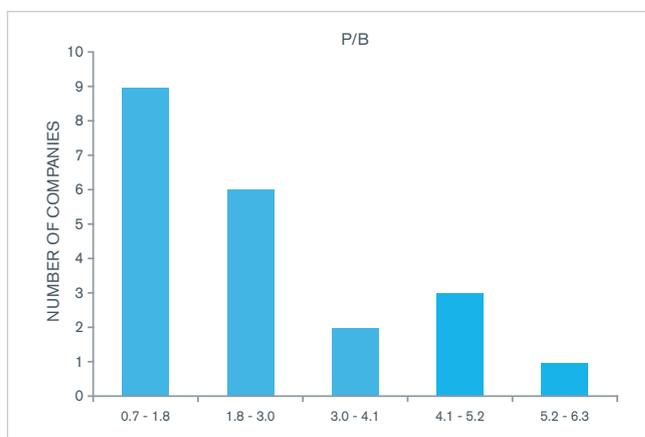
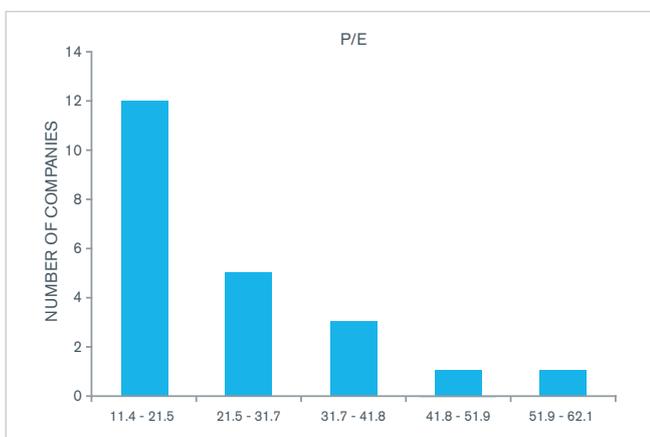
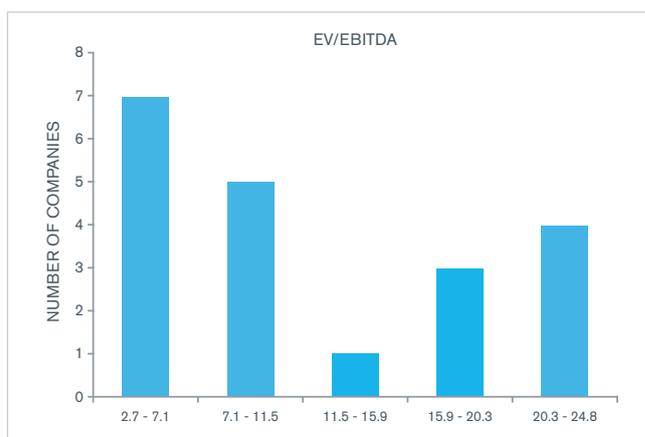
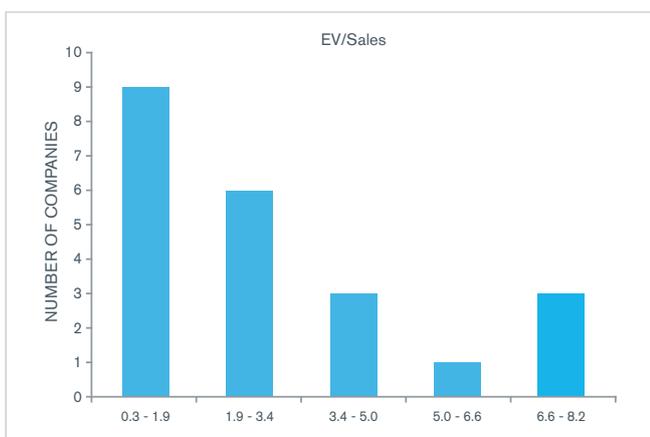


Communication Services

AS OF DECEMBER 31, 2018

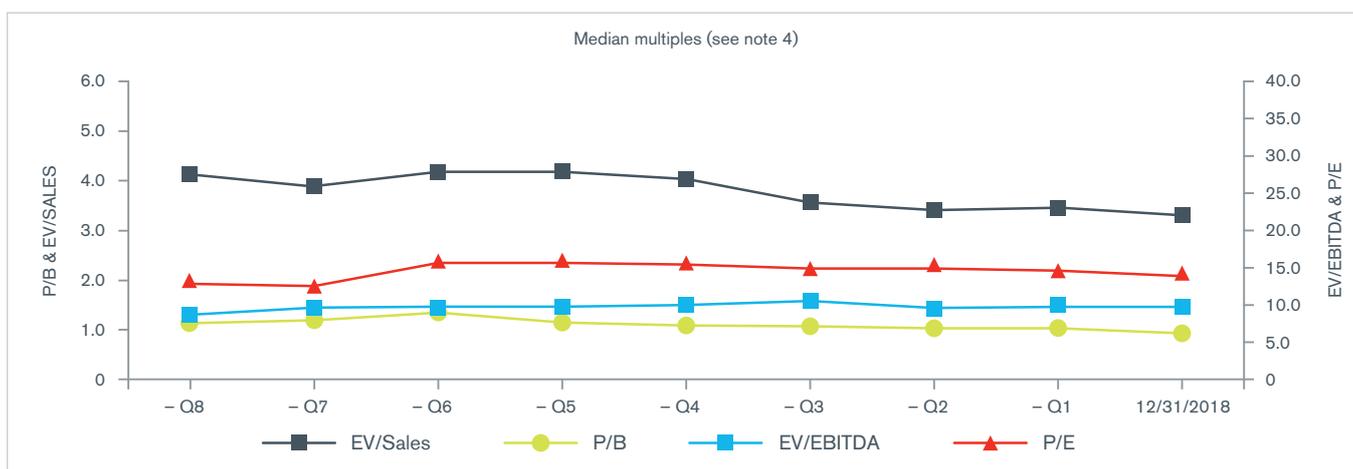
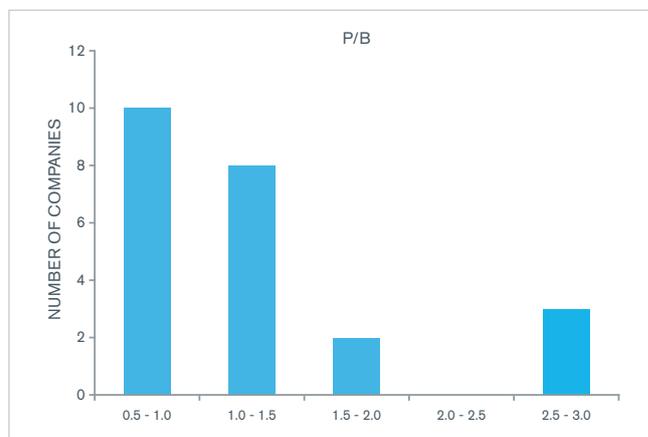
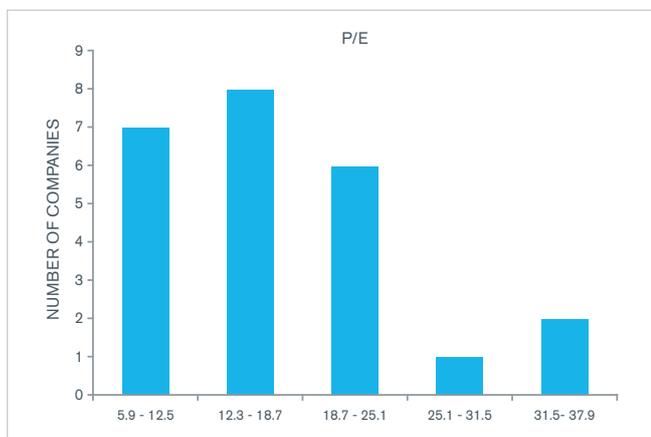
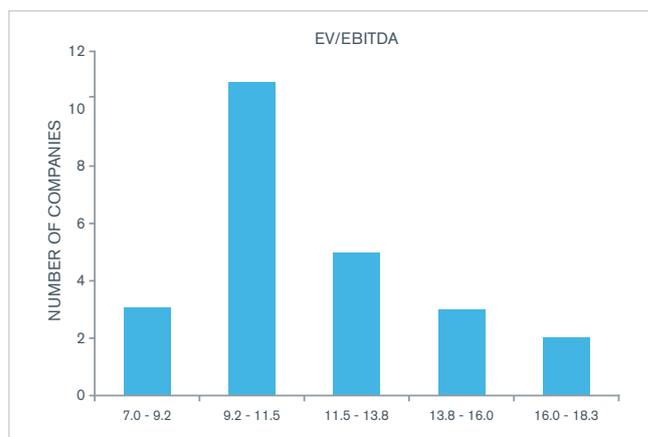
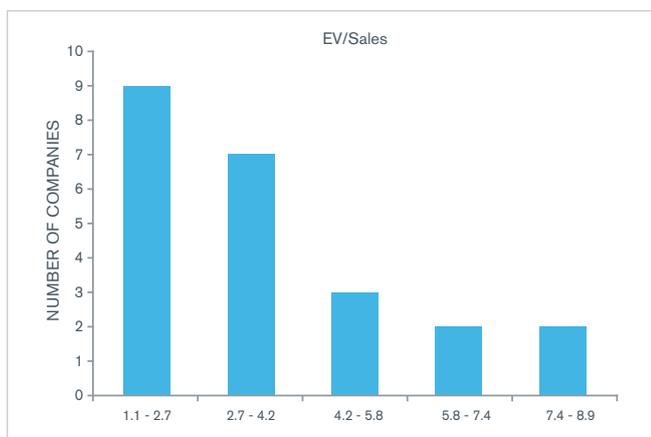


	EV/Sales	EV/EBITDA	P/E	P/B
Number of Observations	24	24	24	24
Number of Outliers	2	4	1	1
High	8.2x	24.8x	62.1x	6.3x
Mean	3.1x	11.5x	23.6x	2.5x
Median	2.3x	9.5x	19.8x	2.1x
Low	0.3x	2.7x	11.4x	0.7x
Lower Quartile	1.2x	6.1x	13.1x	1.4x
Upper Quartile	4.5x	18.1x	30.6x	3.2x





	EV/Sales	EV/EBITDA	P/E	P/B
Number of Observations	25	25	25	25
Number of Outliers	1	1	0	0
High	8.9x	18.3x	37.9x	3.0x
Mean	3.9x	11.4x	16.8x	1.3x
Median	3.3x	10.5x	15.2x	1.0x
Low	1.1x	7.0x	5.9x	0.5x
Lower Quartile	2.1x	10.0x	12.0x	0.9x
Upper Quartile	5.1x	13.0x	20.5x	1.5x

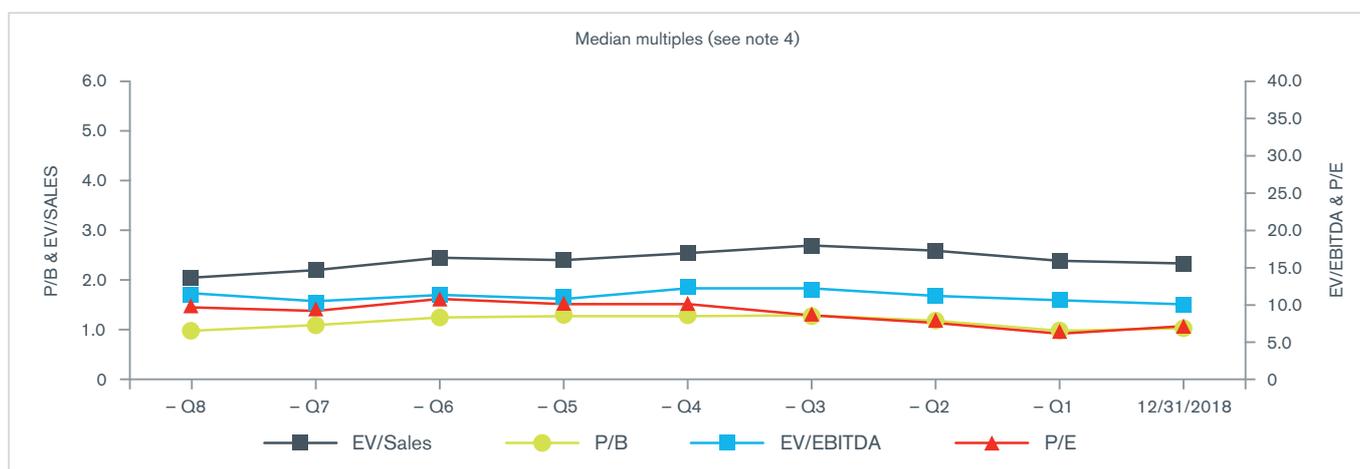
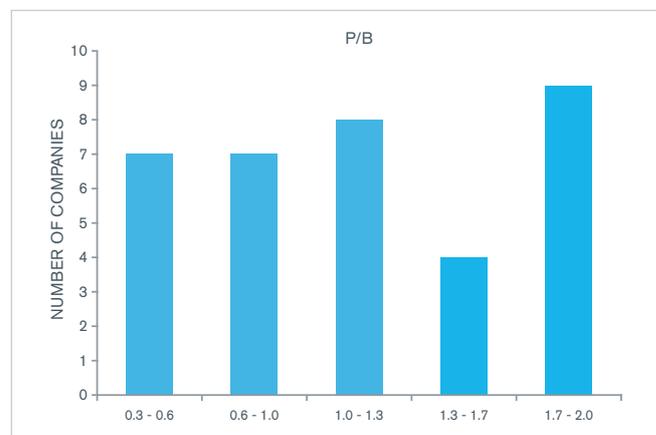
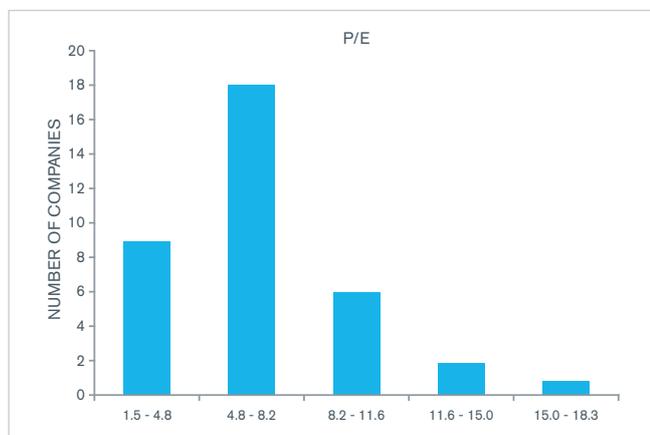
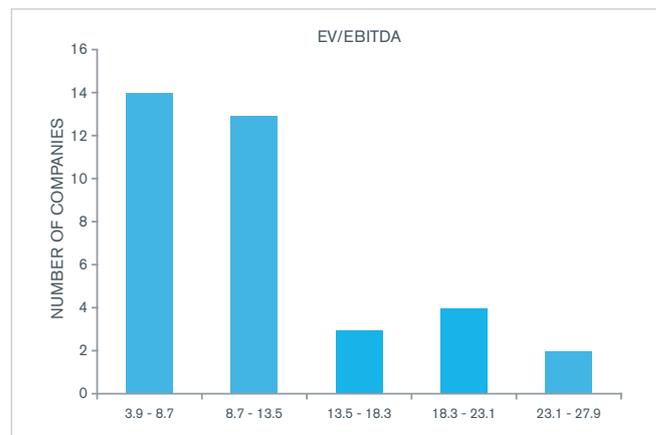
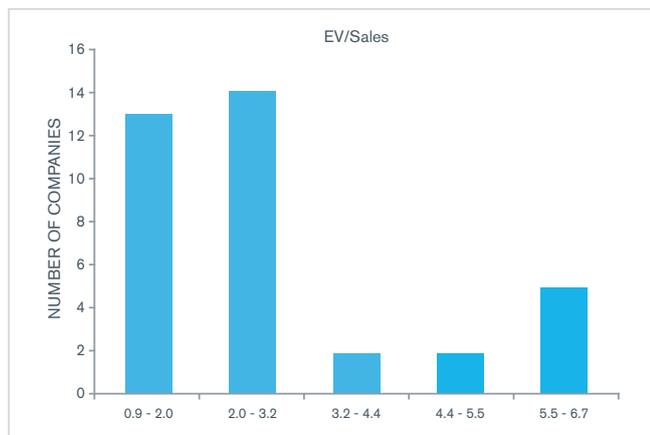




Real Estate

AS OF DECEMBER 31, 2018

	EV/Sales	EV/EBITDA	P/E	P/B
Number of Observations	38	38	38	38
Number of Outliers	2	2	1	0
High	6.7x	27.9x	18.3x	2.0x
Mean	2.9x	11.8x	7.1x	1.1x
Median	2.4x	10.8x	7.0x	1.0x
Low	0.9x	3.9x	1.5x	0.3x
Lower Quartile	1.9x	8.0x	5.0x	0.7x
Upper Quartile	3.1x	13.1x	7.8x	1.7x



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 December 31, 2018. 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 December 31, 2018

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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