



Industry Multiples of China

November 2023

Contents

3–7	Foreword
8	Multiples by Industry
9–10	Energy
11–12	Materials
13–14	Industrials
15–16	Consumer Discretionary
17–18	Consumer Staples
19–20	Health Care
21–22	Financials
23–24	Information Technology
25–26	Communication Services
27–28	Utilities
29–30	Real Estate
31–33	Sector Definitions and Methodology

Foreword



Ricky Lee

Managing Director
Valuation Advisory Services

Dear Readers,

This report provides an overview of key trading multiples and other indices across key industrial sectors in China as of September 30, 2023. In the first nine months of 2023, China's economy expanded by 5.2%, a figure on track with the government's growth target of 5%. While this is a slower pace of growth than seen in recent decades, it nonetheless compares favorably with other major global economies—the International Monetary Fund has predicted increases of 2.1% for the U.S. economy, 2.0% for Japan and a meager 0.7% for the Euro area.

As we began 2023, the relaxation of COVID-19 measures fueled a rebound in economic activity across a variety of sectors, but momentum slowed as the year progressed. Weakening domestic demand as businesses and households paid down debt and challenges in the property market were among factors acting as a drag on growth. In response, the government has enacted several policy measures in recent months to stimulate growth, boost consumption and bolster investment. These initiatives seem to be having the desired effect in stabilizing the economy.

As of September 30, 2023, the Shanghai Composite Stock Market Index stood at 3,108 points, a marginal increase on where it started the year at 3,087. Over the same duration, the MSCI China Index decreased 6.49% to 2,649, and the Hong Kong Hang Seng Index fell by 12%, to 17,809.

Looking at China's economy and the performance of its listed companies, there are few consistent patterns or trends across the various sectors of economic activity.

In Consumer Discretionary, there was an increase in P/E trading multiples from 18.7x to 21.3x as the sector benefitted from the post-pandemic upswing. Sector profits were up by around 90%, while revenue and market capitalization recovered. We witnessed a similar resurgence in consumer staples with net income up by around 30%, although this dynamism failed to feed through to the sector's market capitalization, which meant that P/E trading multiples decreased to 24.9x.

After a tight domestic regulatory landscape in recent years, there were highlights among the data for the information technology vertical. While a fall in net earnings drove an increase in P/E trading multiples to 30.8x, total revenues in the industry experienced a slight recovery. Having addressed perceived antitrust issues, the government hopes to lay the foundations for a hungrier, more nimble IT sector with newcomers more able to compete against incumbents. In March of this year, the Hong Kong Stock Exchange introduced Chapter 18C, a new listing regime designed for specialist technology companies at the forefront of emerging fields, such as AI, advanced materials and renewable energy. A number of applications have already been submitted, and we anticipate further demand for the program.

Foreword

In the financials sector, distress in the property market continued to exert a negative influence but aggregate profits held firm. Despite market stresses, P/E trading multiples increased to 12.4x, suggesting resilience in the sector and confidence in its prospects. Recent news seems to underline growing optimism with government efforts to welcome foreign investors and create a more stable environment. We've also seen some notable M&A activities in the China asset management sector.

Despite the challenges in real estate, we find signs in the report data of the sector beginning to stabilize, with a slight recovery in net revenue. That said, the increase in P/E trading multiples to 8.0x reflects a fall in net earnings over the period rather than any bullishness among investors.

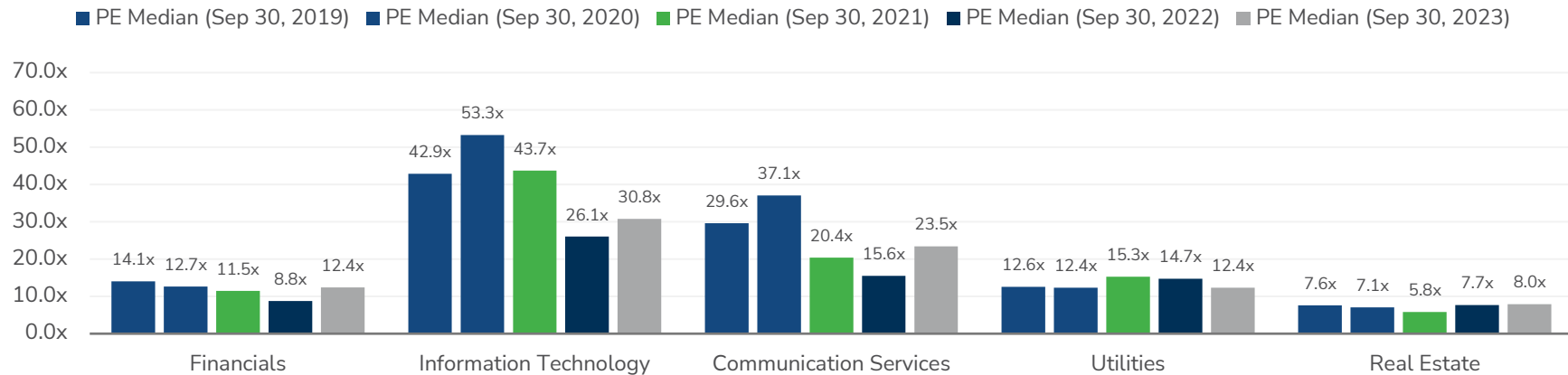
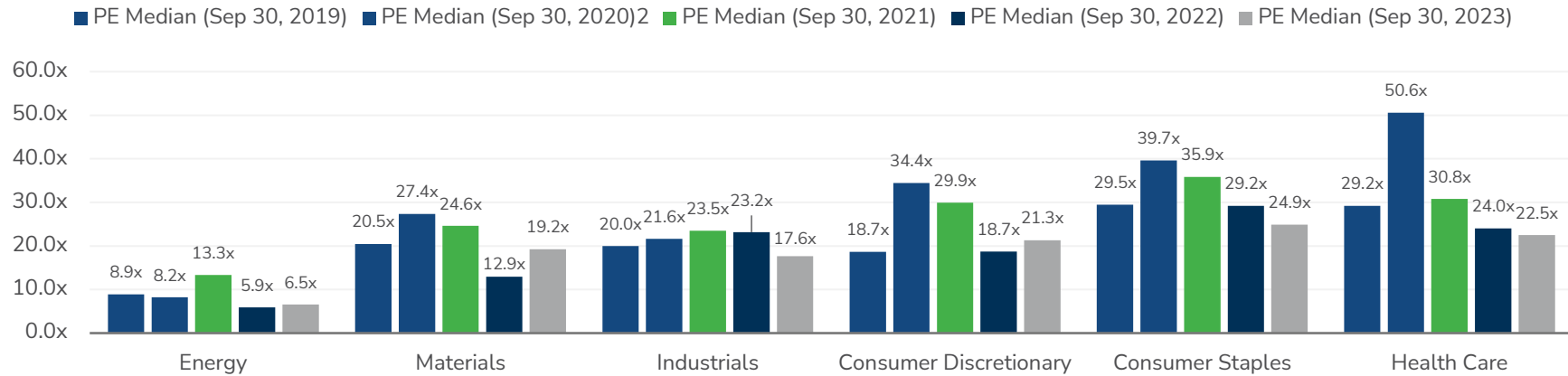
Elsewhere, the data yields mixed signals about the performance and prospects of individual categories. As we've seen in other sectors, P/E trading multiples rose in materials to 19.2x due to a sharper fall in net income than in market capitalization. In energy, total revenue dropped by 0.3% but profits plummeted by 5.6%. And in utilities, although there were increases in market capitalization, total revenue and profits, P/E trading multiples dropped to 12.4x.

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

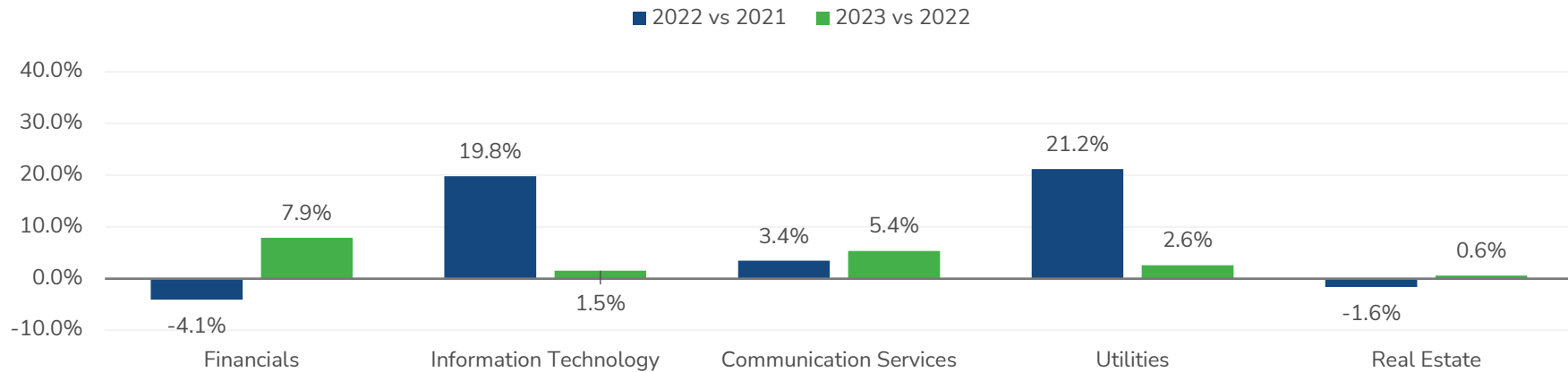
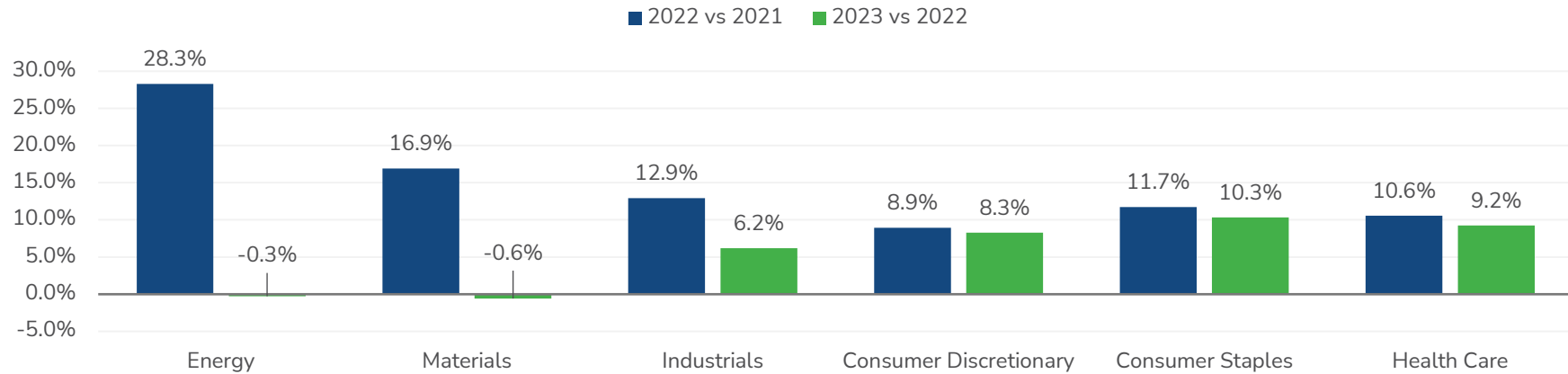
- Pre-IPO ESOP pricing or restructuring of China-based IPO candidates planning to go public in Hong Kong or the U.S.
- Fair-value measurement of equity investment in private companies in compliance with IFRS 9 and SFC's New Fund Manager Code of Conduct
- Indicators of potential impairment in the current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

P/E Multiples Over Time

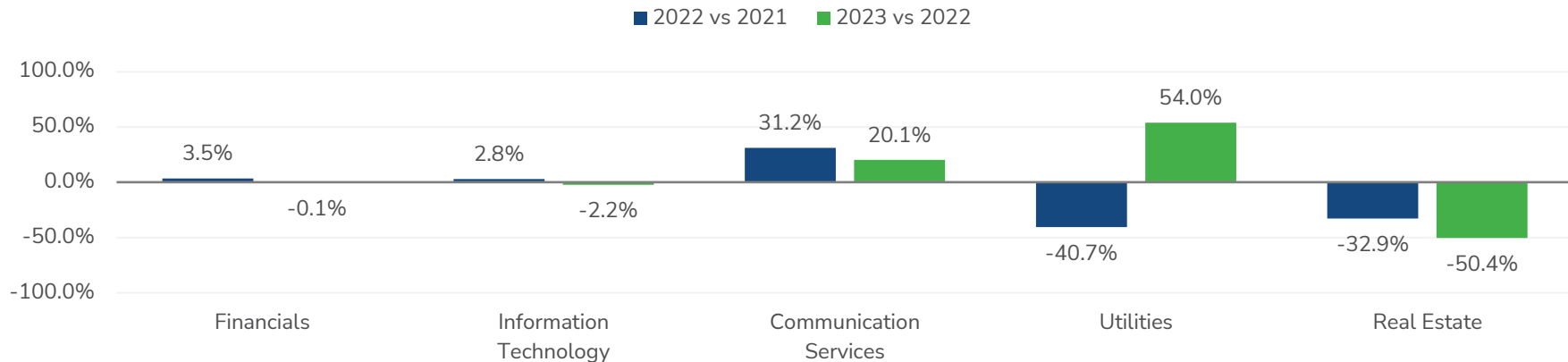
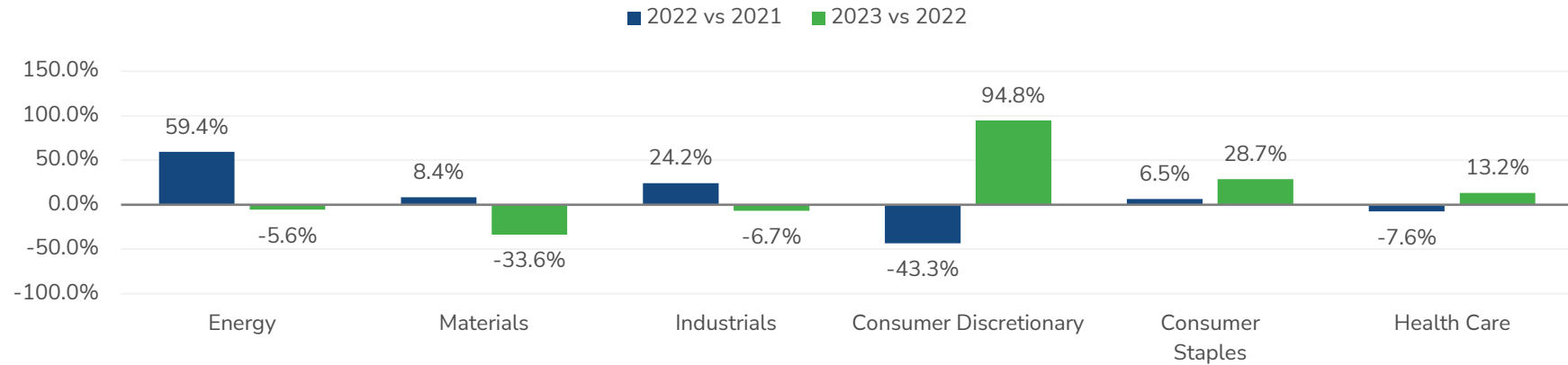
(Including Outliers)



Revenue Percentage Change Over Time



Net Income Percentage Change Over Time

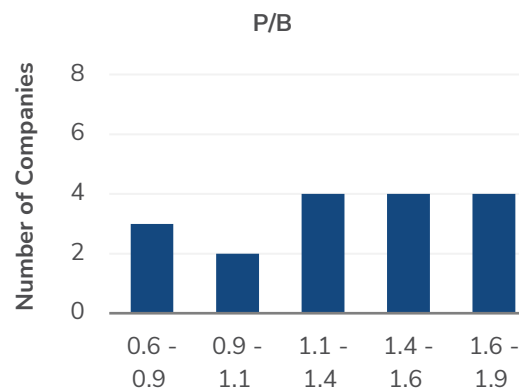
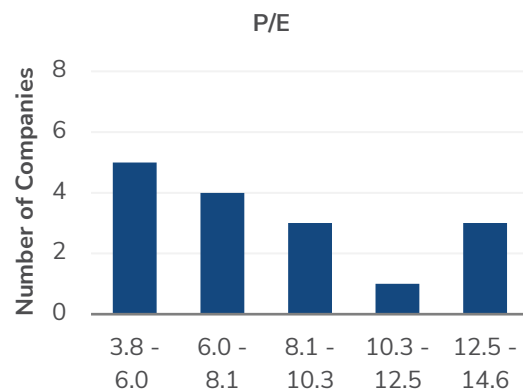
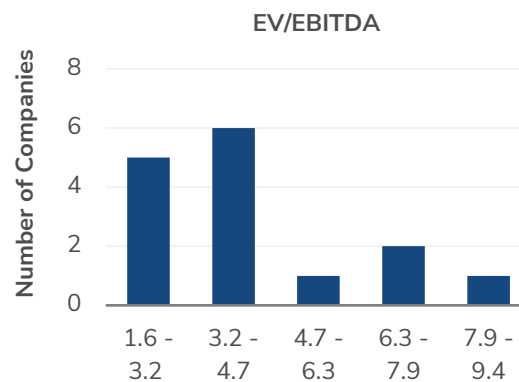
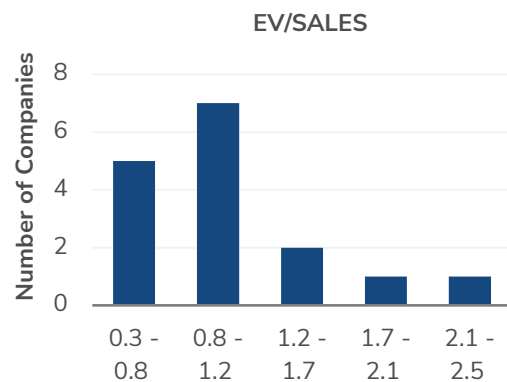


Multiples By Industry

Energy

As of September 30, 2023

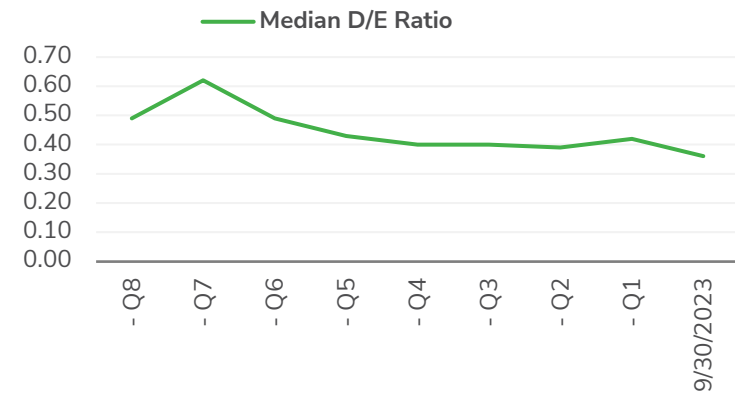
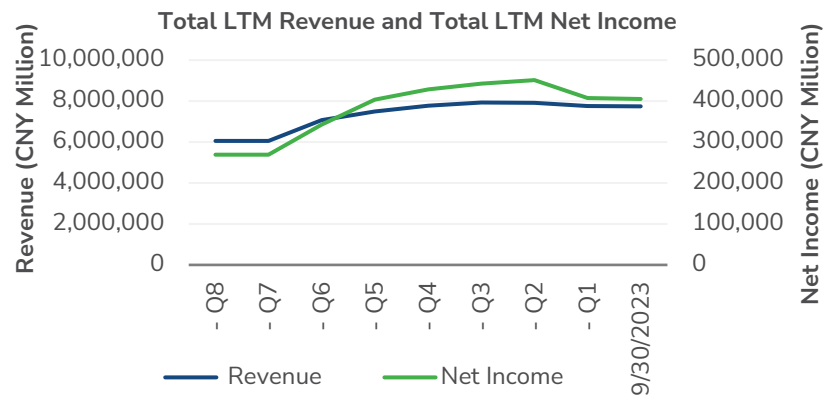
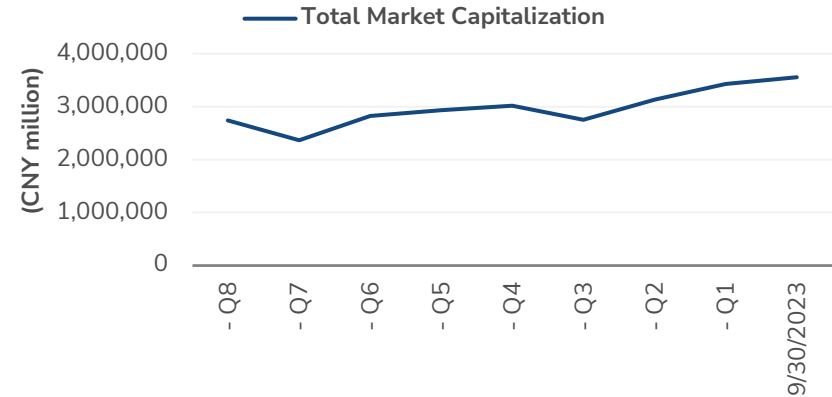
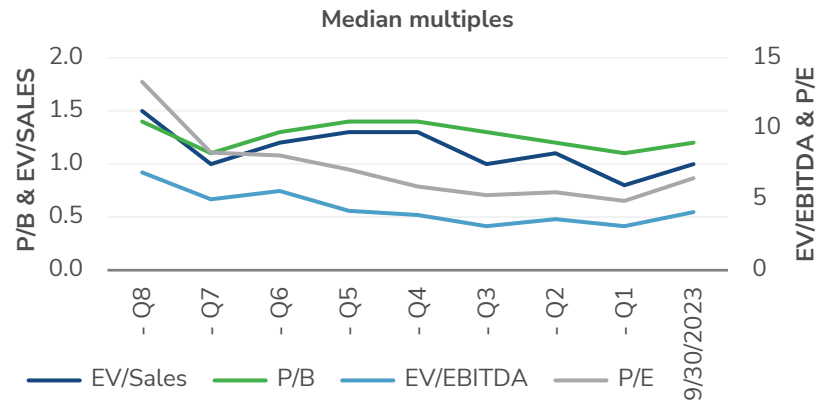
(Excluding Outliers)



	EV/ Sales	EV/ EBITDA	P/E	P/B
Number of Observations	17	17	17	17
Number of Outliers	1	2	1	0
Negative Multiples or Multiple Errors				
High	2.5x	9.4x	14.6x	1.9x
Mean	1.1x	4.2x	8.2x	1.3x
Median	1.0x	3.5x	7.0x	1.2x
Low	0.3x	1.6x	3.8x	0.6x
Low Quartile	0.6x	2.9x	5.5x	1.1x
Upper Quartile	1.3x	4.8x	9.8x	1.6x

Energy (cont'd)

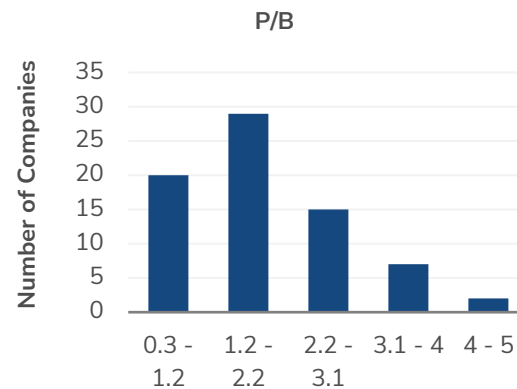
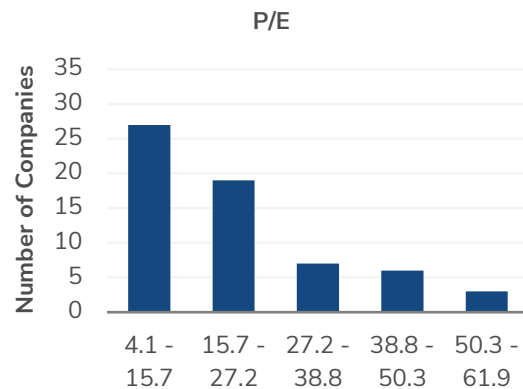
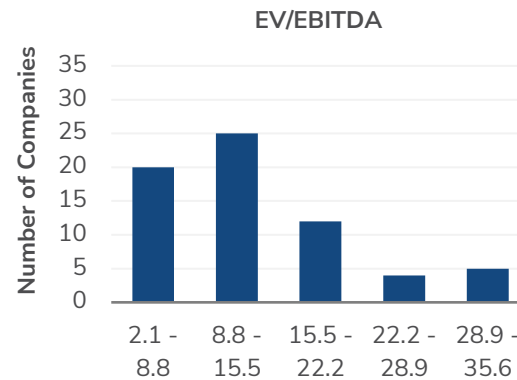
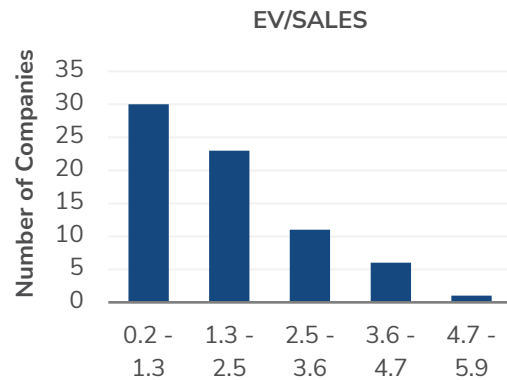
As of September 30, 2023



Materials

As of September 30, 2023

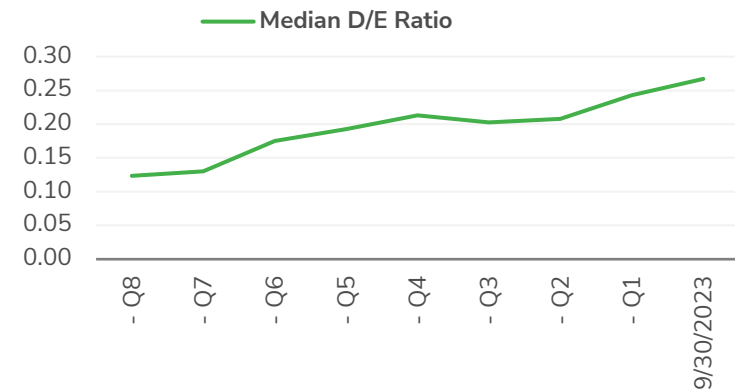
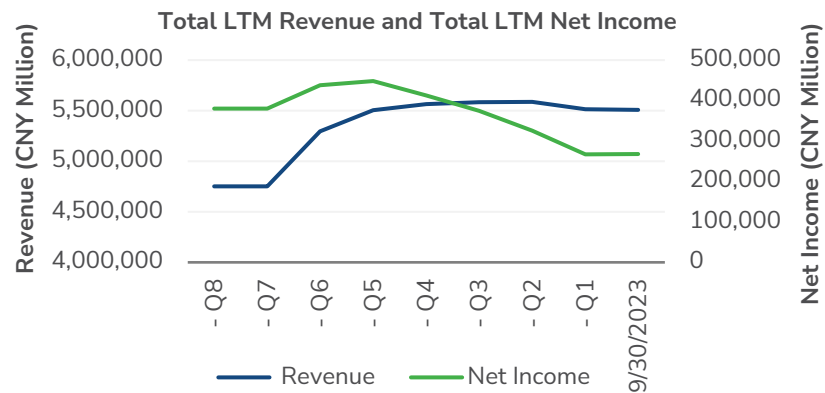
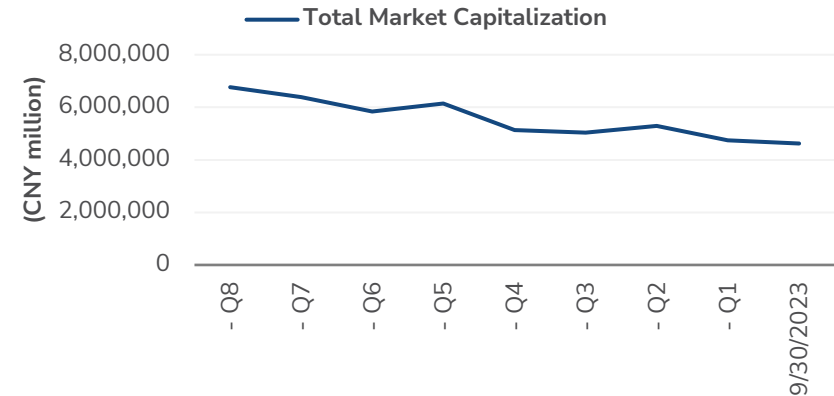
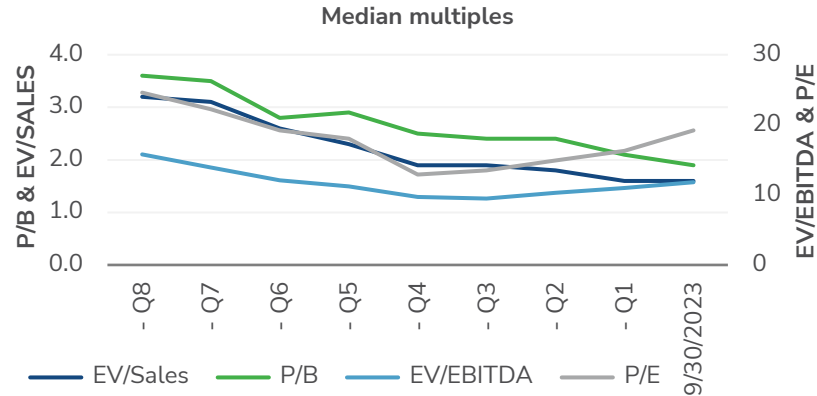
(Excluding Outliers)



	EV/ Sales	EV/ EBITDA	P/E	P/B
Number of Observations	97	97	97	97
Number of Outliers	8	9	16	3
Negative Multiples or Multiple Errors				
High	5.9x	35.6x	61.9x	5.0x
Mean	1.9x	13.4x	20.5x	2.0x
Median	1.6x	11.0x	17.7x	1.9x
Low	0.2x	2.1x	4.1x	0.3x
Low Quartile	1.0x	8.2x	12.2x	1.3x
Upper Quartile	2.3x	16.6x	17.8x	2.4x

Materials (cont'd)

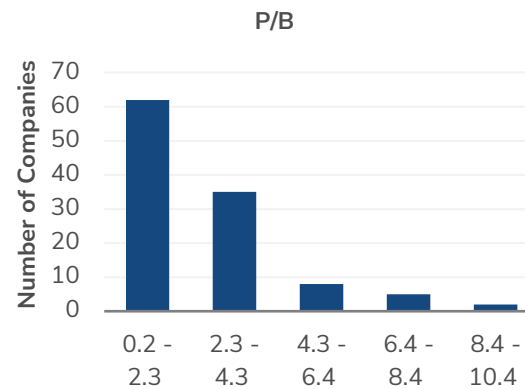
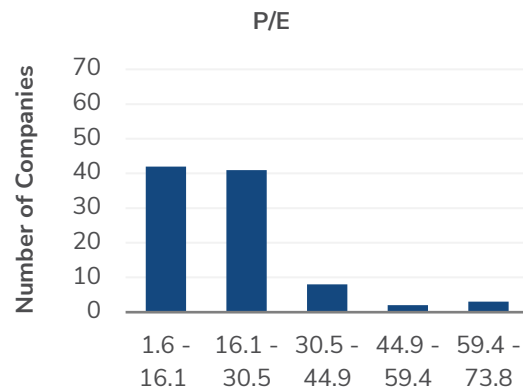
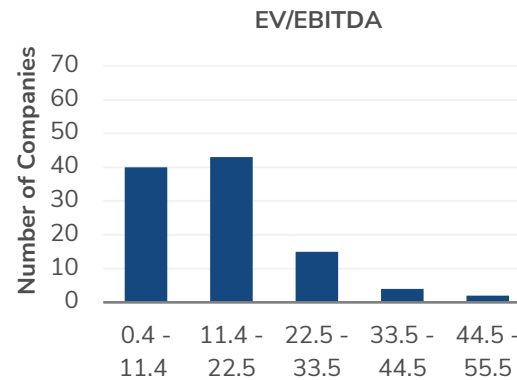
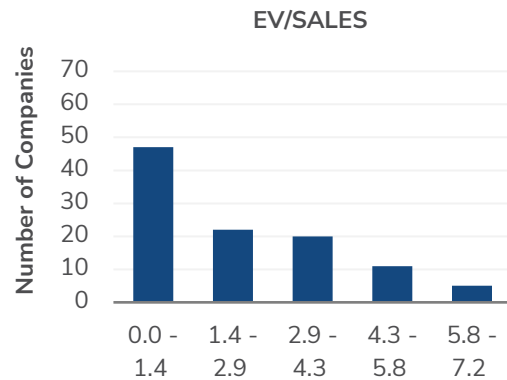
As of September 30, 2023



Industrials

As of September 30, 2023

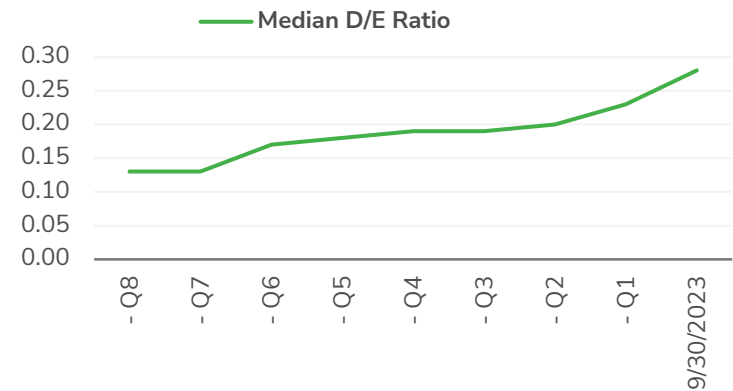
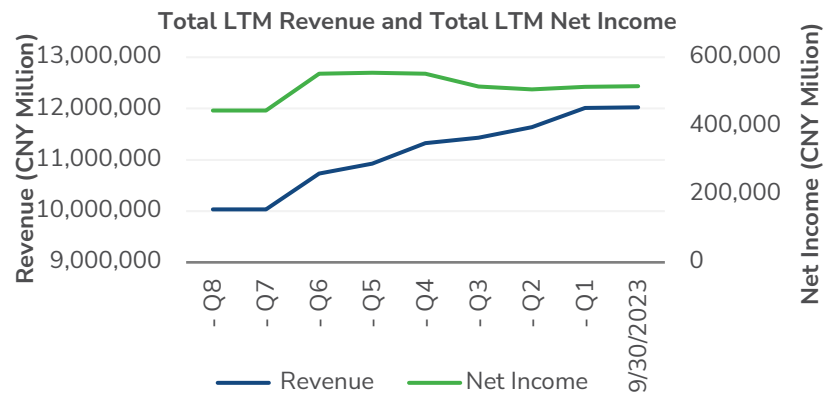
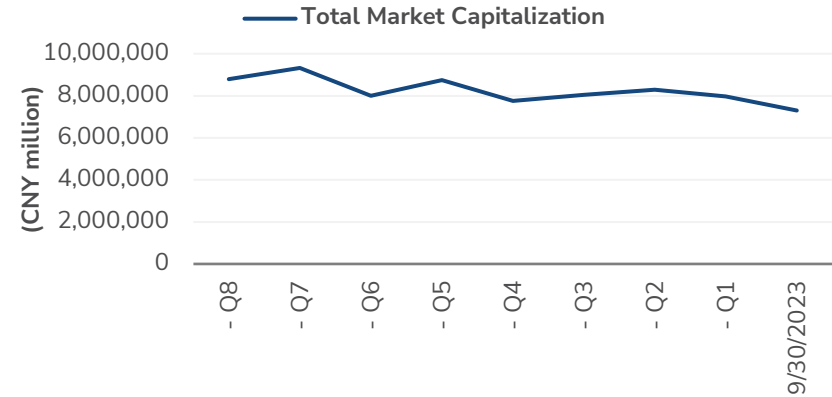
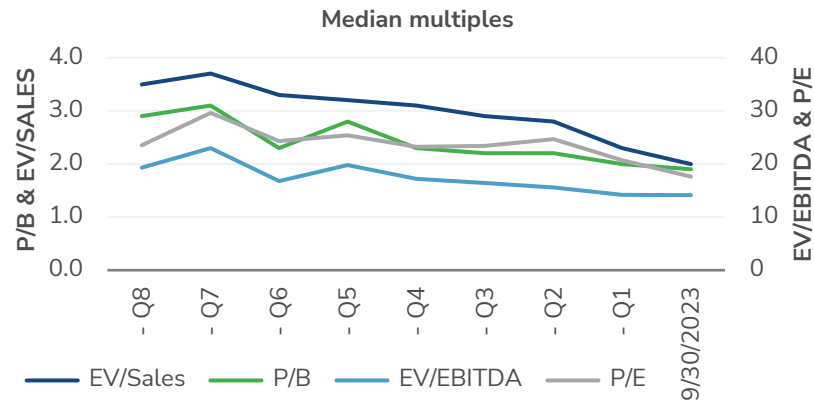
(Excluding Outliers)



	EV/ Sales	EV/ EBITDA	P/E	P/B
Number of Observations	113	113	113	113
Number of Outliers	8	9	17	1
Negative Multiples or Multiple Errors				
High	7.2x	55.5x	73.8x	10.4x
Mean	2.4x	15.9x	19.4x	2.5x
Median	1.8x	13.7x	17.1x	1.8x
Low	0.0x	0.4x	1.6x	0.2x
Low Quartile	0.9x	9.4x	9.6x	1.0x
Upper Quartile	3.7x	20.8x	25.5x	3.4x

Industrials (cont'd)

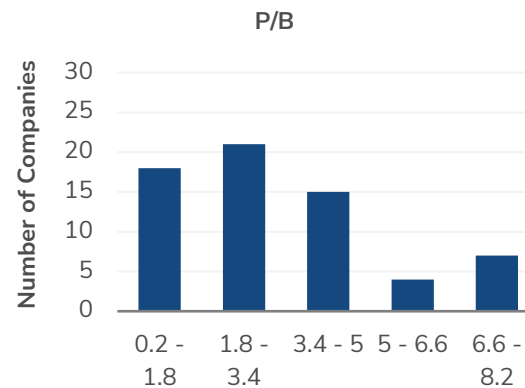
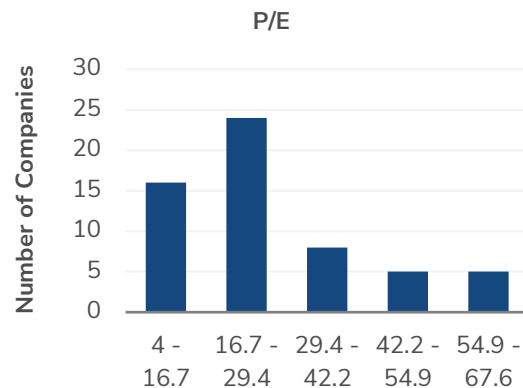
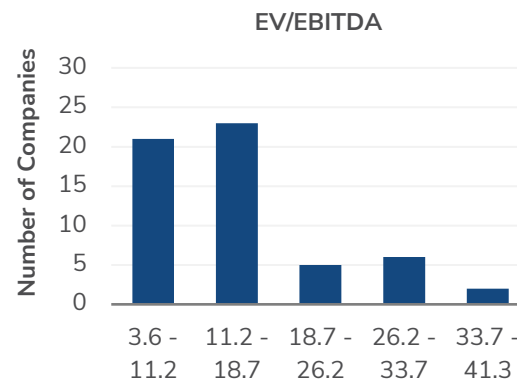
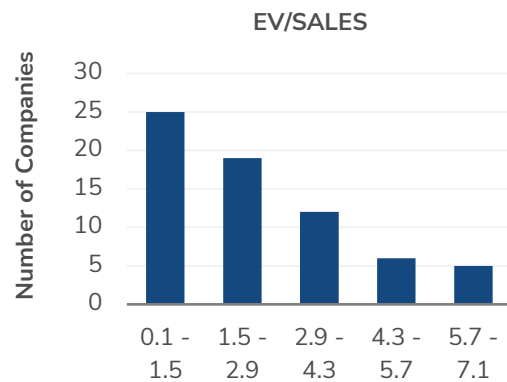
As of September 30, 2023



Consumer Discretionary

As of September 30, 2023

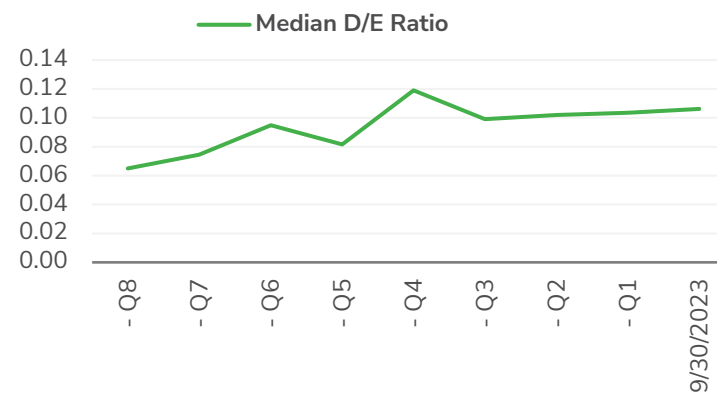
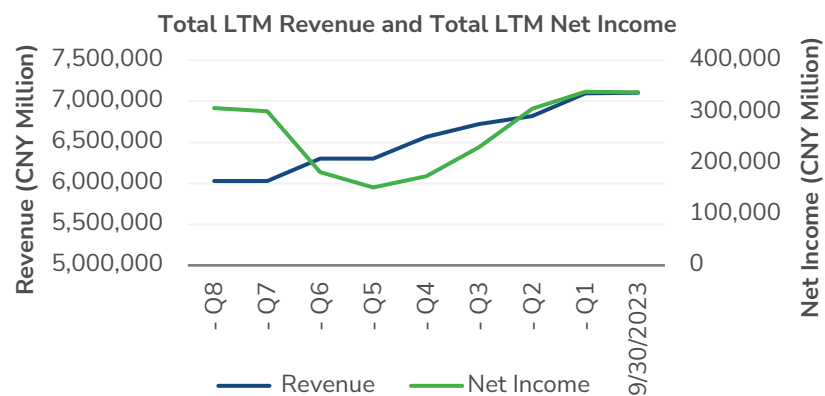
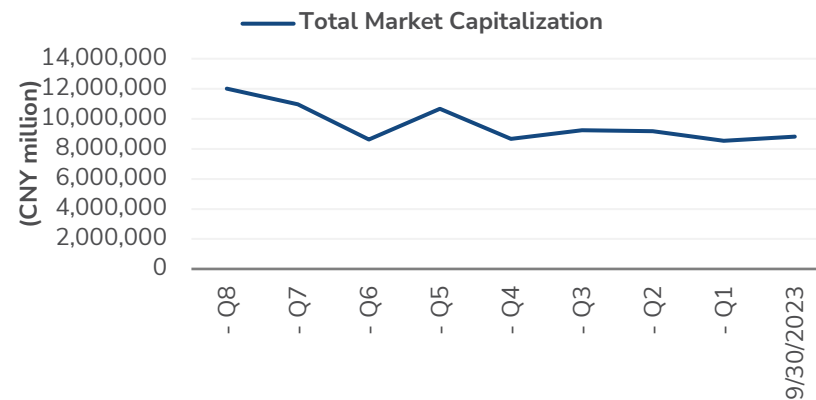
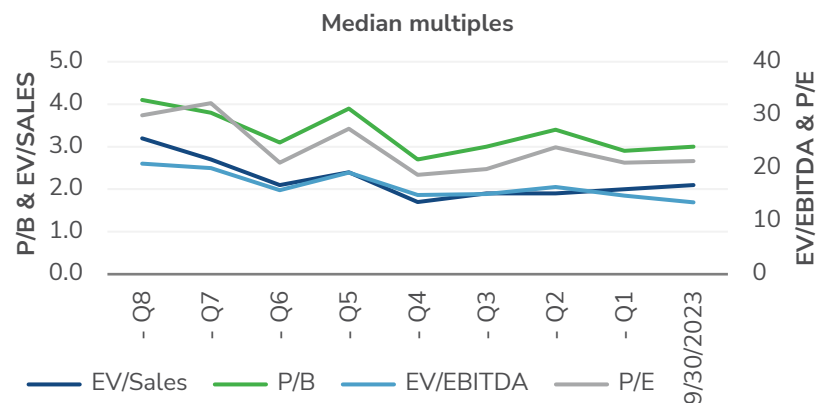
(Excluding Outliers)



	EV/ Sales	EV/ EBITDA	P/E	P/B
Number of Observations	70	70	70	70
Number of Outliers	3	13	12	5
Negative Multiples or Multiple Errors				
High	7.1x	41.3x	67.6x	8.2x
Mean	2.4x	15.0x	25.8x	3.2x
Median	2.2x	12.8x	22.7x	2.9x
Low	0.1x	3.6x	4.0x	0.2x
Low Quartile	0.8x	9.4x	16.1x	1.7x
Upper Quartile	3.9x	18.5x	32.7x	4.1x

Consumer Discretionary (cont'd)

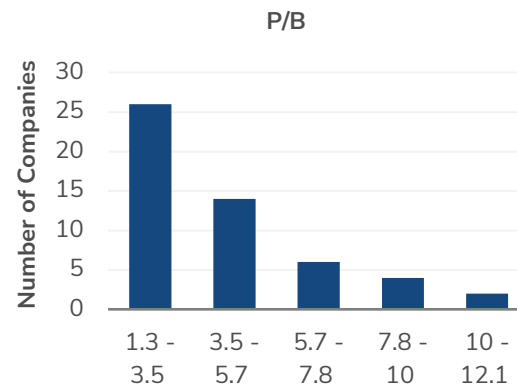
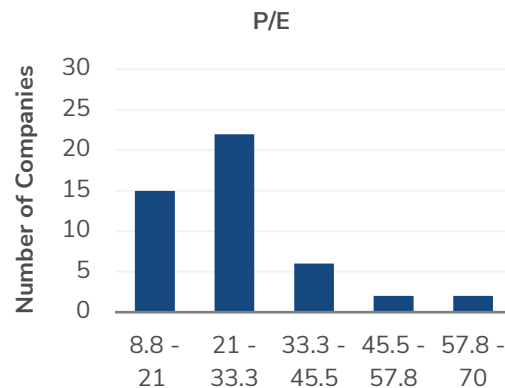
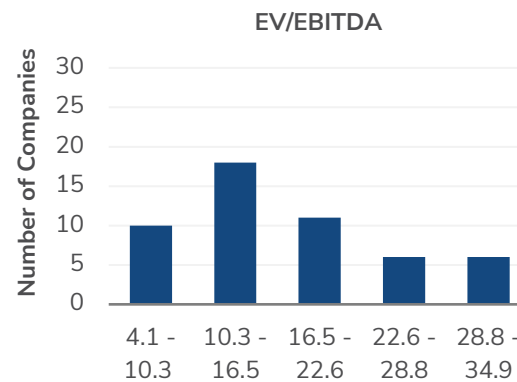
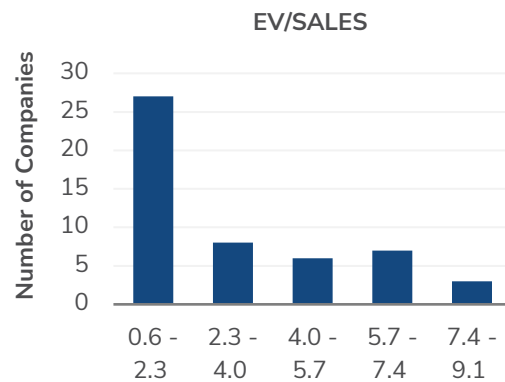
As of September 30, 2023



Consumer Staples

As of September 30, 2023

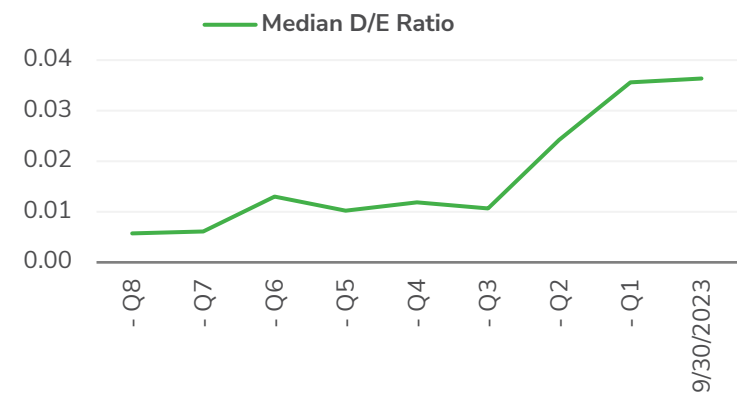
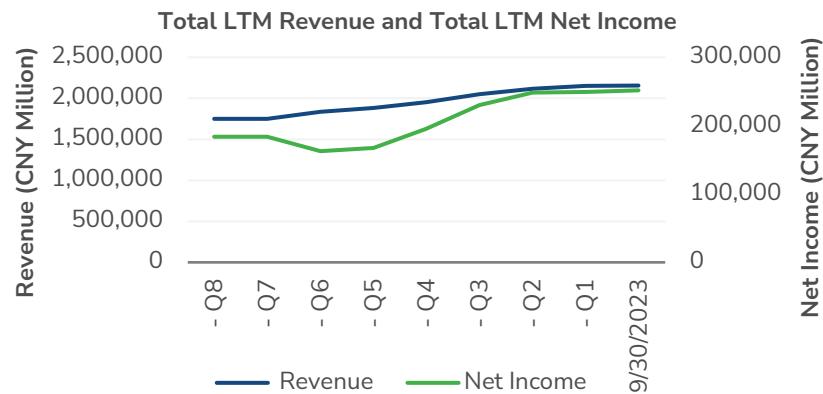
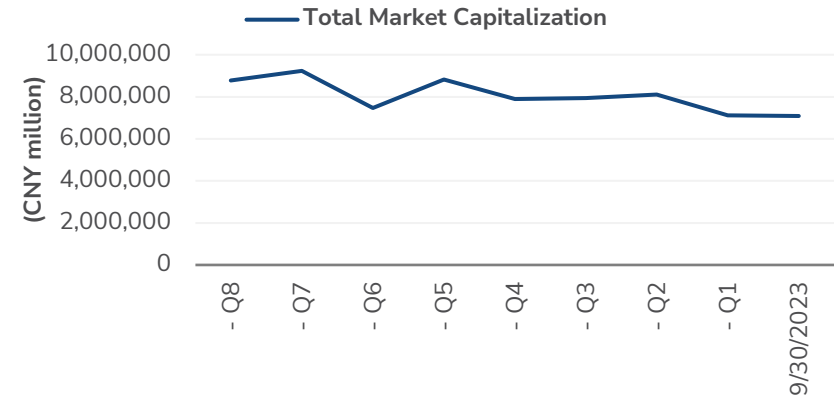
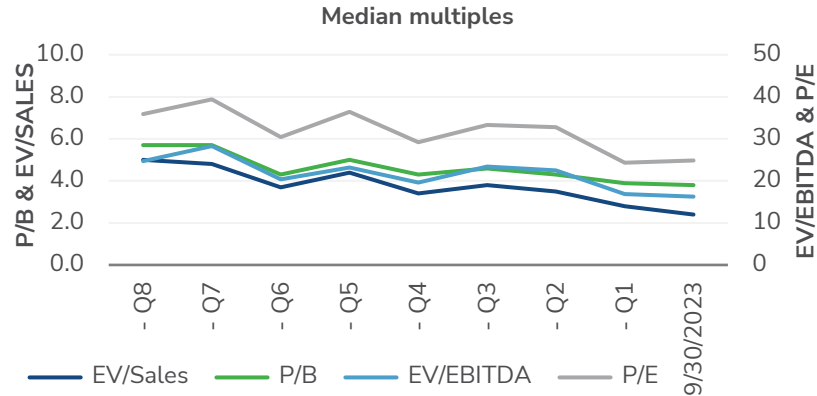
(Excluding Outliers)



	EV/ Sales	EV/ EBITDA	P/E	P/B
Number of Observations	56	56	56	56
Number of Outliers	5	5	9	4
Negative Multiples or Multiple Errors				
High	9.1x	34.9x	70.0x	12.1x
Mean	3.2x	17.2x	27.0x	4.3x
Median	2.2x	15.6x	24.0x	3.6x
Low	0.6x	4.1x	8.8x	1.3x
Low Quartile	1.4x	12.0x	18.7x	2.4x
Upper Quartile	5.0x	20.8x	30.5x	5.0x

Consumer Staples (cont'd)

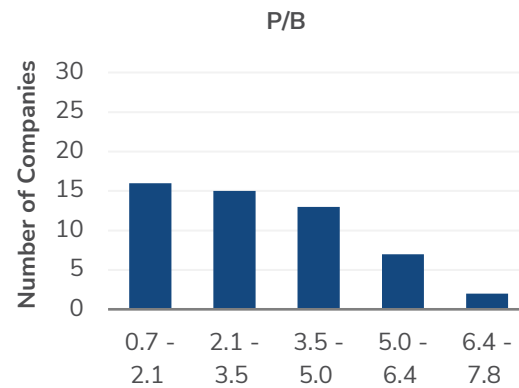
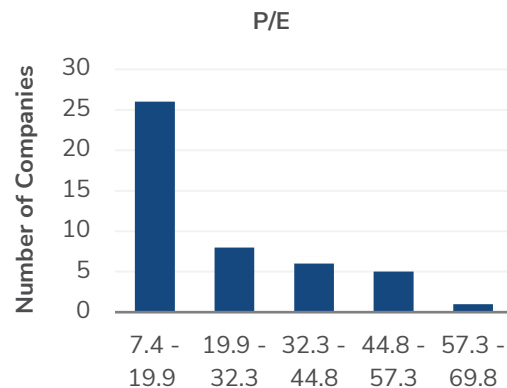
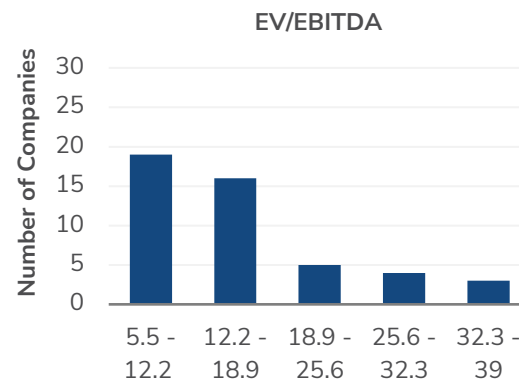
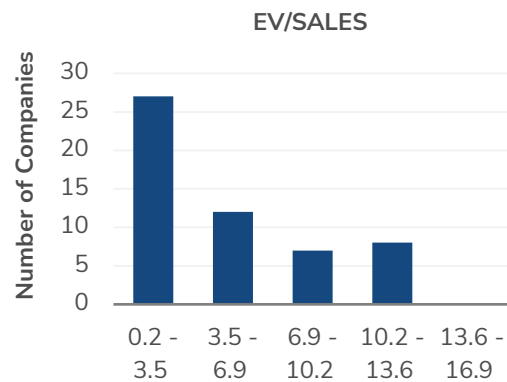
As of September 30, 2023



Health Care

As of September 30, 2023

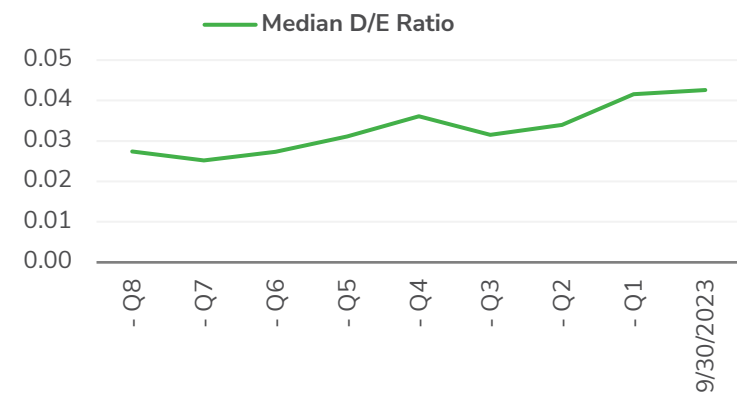
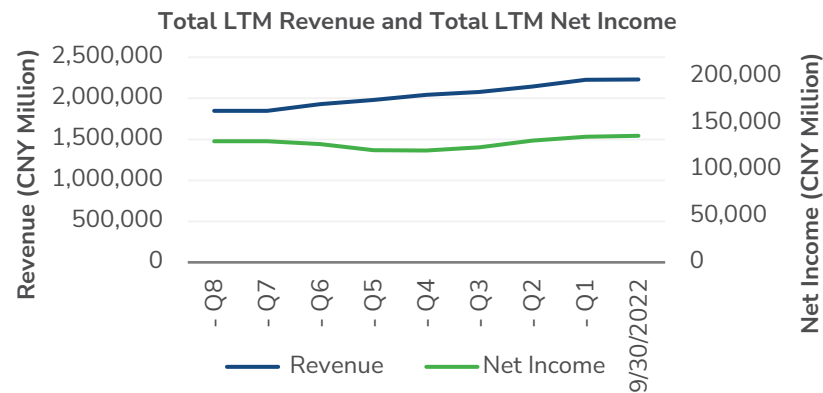
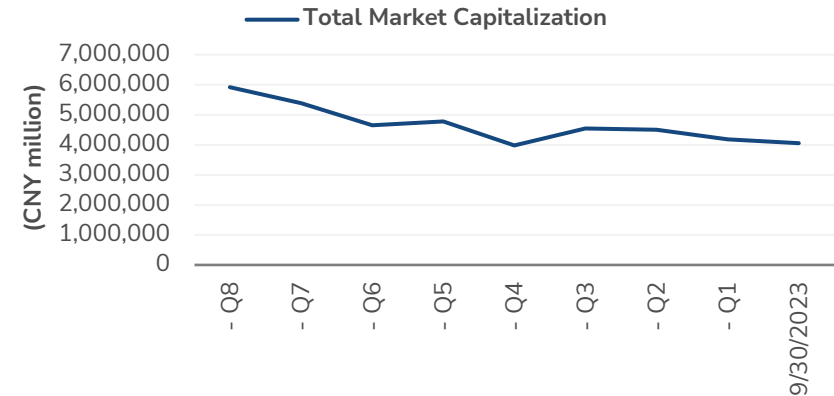
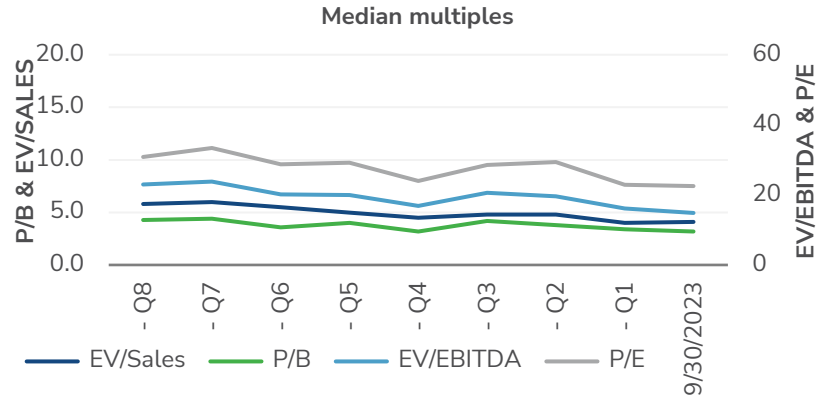
(Excluding Outliers)



	EV/ Sales	EV/ EBITDA	P/E	P/B
Number of Observations	71	71	71	71
Number of Outliers	3	11	11	4
Negative Multiples or Multiple Errors				
High	16.9x	39.0x	69.8x	7.8x
Mean	5.0x	16.4x	25.8x	3.4x
Median	3.9x	14.0x	21.1x	3.2x
Low	0.2x	5.5x	7.4x	0.7x
Low Quartile	1.9x	9.5x	14.7x	2.0x
Upper Quartile	7.5x	20.6x	33.3x	4.4x

Health Care (cont'd)

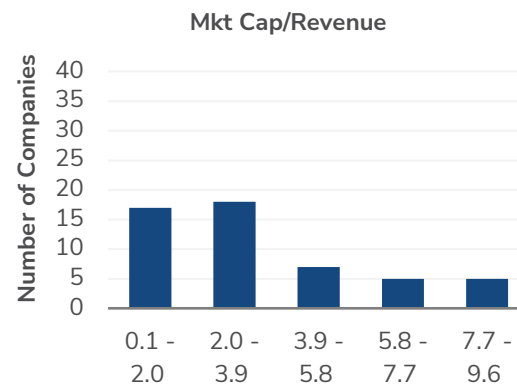
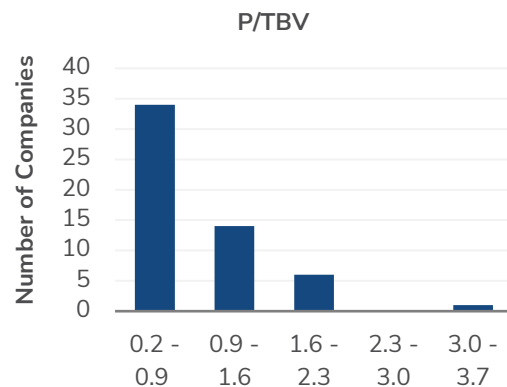
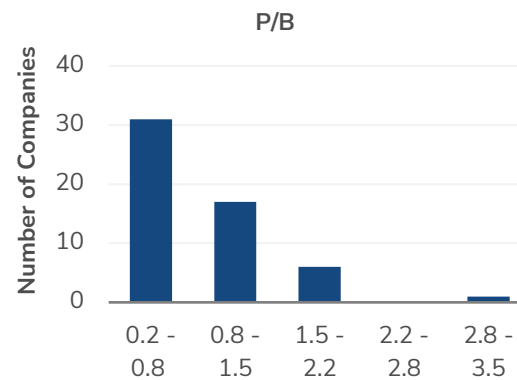
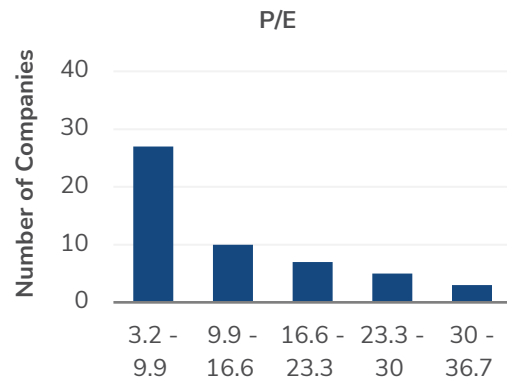
As of September 30, 2023



Financials

As of September 30, 2023

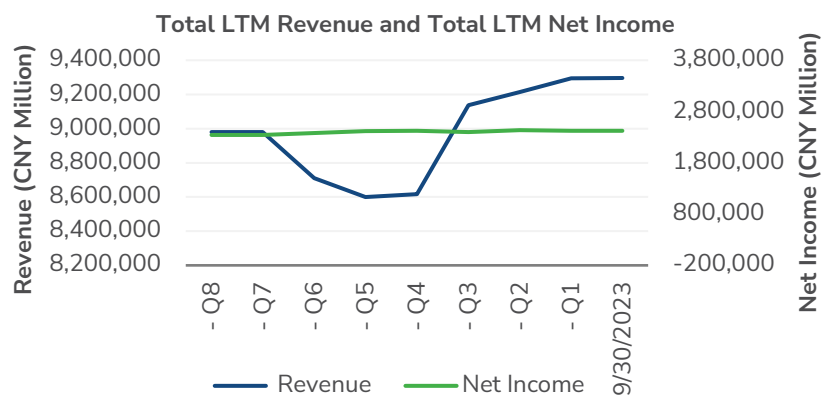
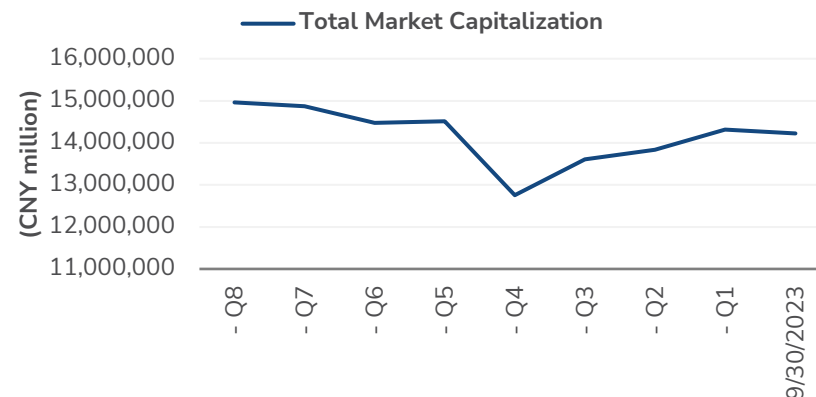
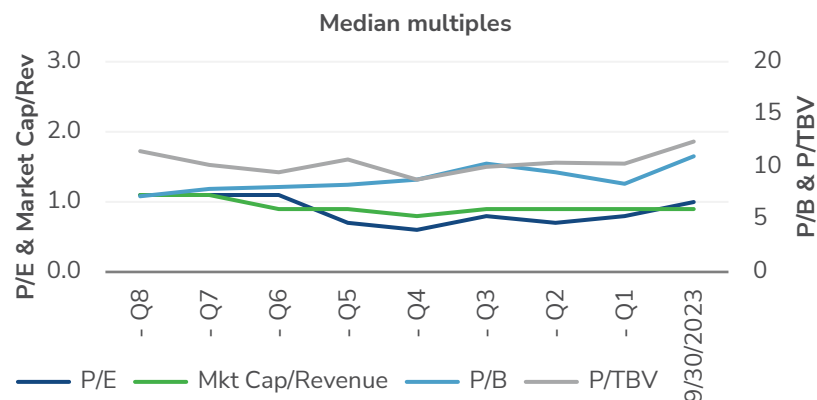
(Excluding Outliers)



	P/E	P/B	P/TBV	Mkt Cap/ Revenue
Number of Observations	76	76	76	76
Number of Outliers	7	1	1	6
Negative Multiples or Multiple Errors				
High	36.7x	3.5x	3.7x	9.6x
Mean	13.2x	0.9x	0.9x	3.3x
Median	10.0x	0.8x	0.9x	2.6x
Low	3.2x	0.2x	0.2x	0.1x
Low Quartile	4.8x	0.5x	0.5x	1.7x
Upper Quartile	19.0x	1.1x	1.1x	4.6x

Financials (cont'd)

As of September 30, 2023

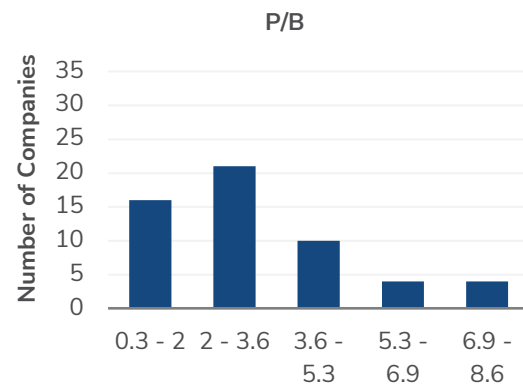
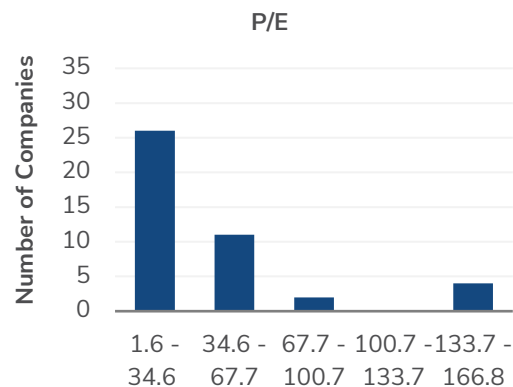
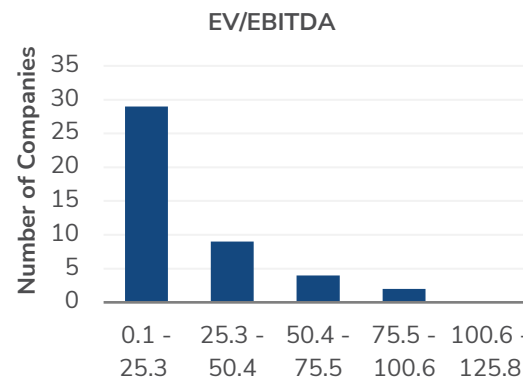
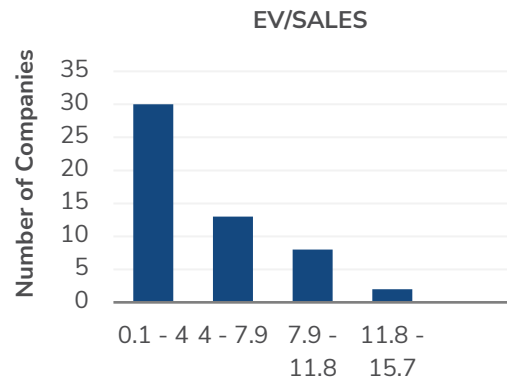


Note: 1. D/E Ratio analysis is not applicable for the financial sector.

Information Technology

As of September 30, 2023

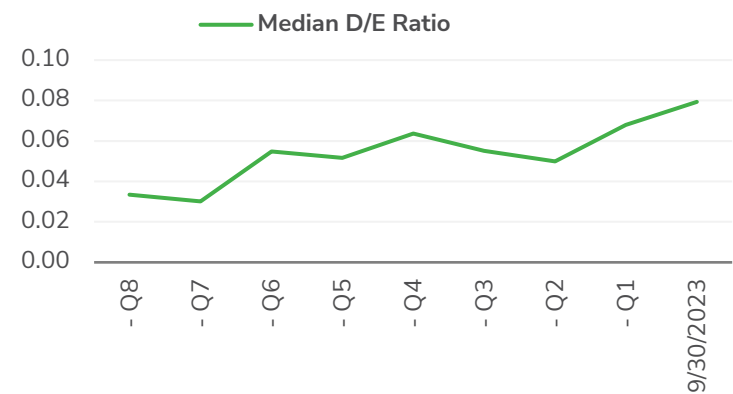
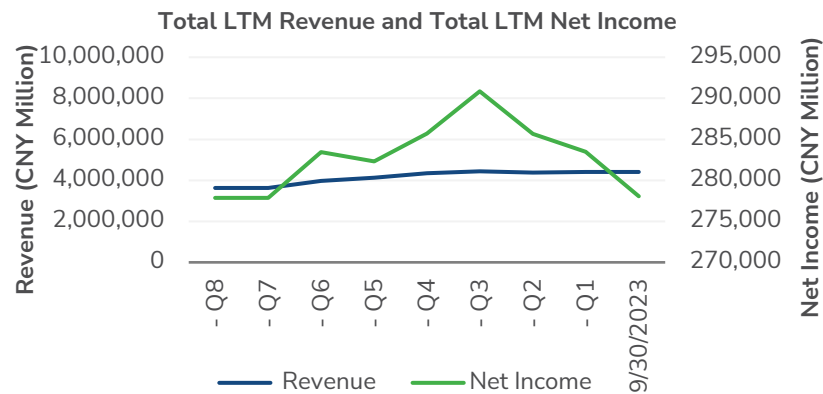
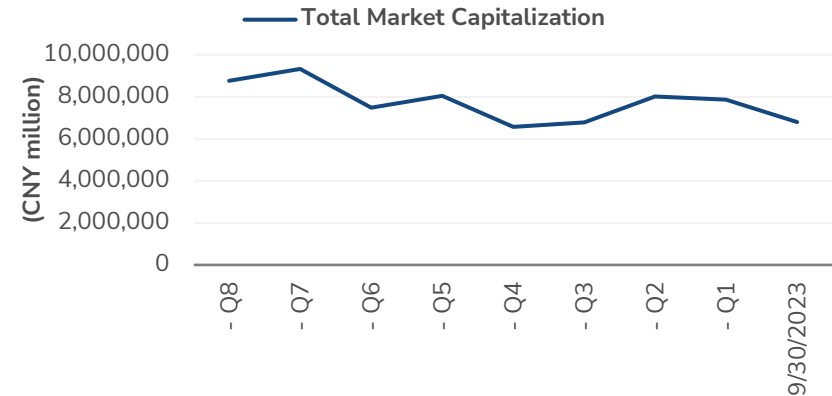
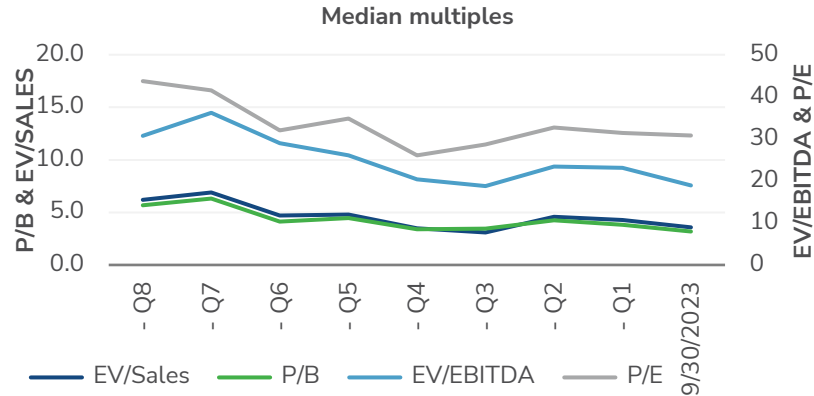
(Excluding Outliers)



	EV/ Sales	EV/ EBITDA	P/E	P/B
Number of Observations	121	121	121	121
Number of Outliers	5	22	26	6
Negative Multiples or Multiple Errors				
High	19.6x	125.8x	166.8x	8.6x
Mean	4.8x	27.1x	40.2x	3.5x
Median	3.2x	17.5x	29.6x	3.1x
Low	0.1x	0.1x	1.6x	0.3x
Low Quartile	1.2x	10.0x	16.8x	2.1x
Upper Quartile	6.3x	35.1x	46.3x	4.8x

Information Technology (cont'd)

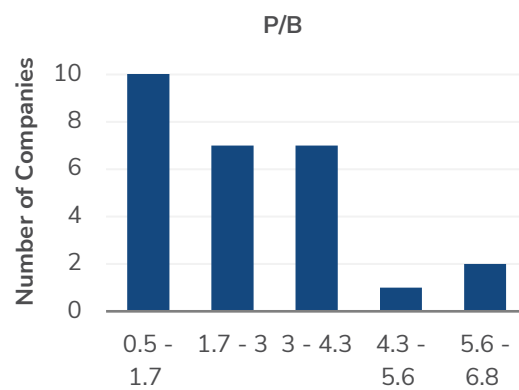
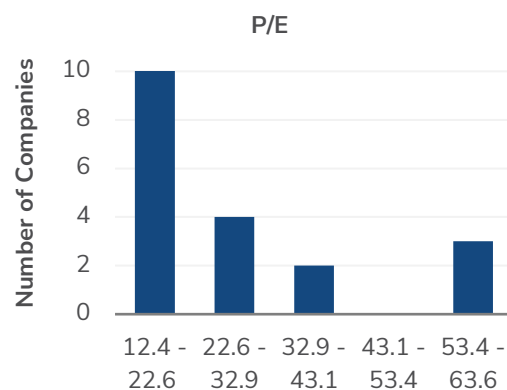
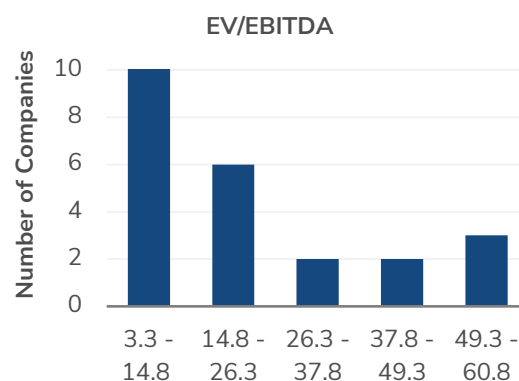
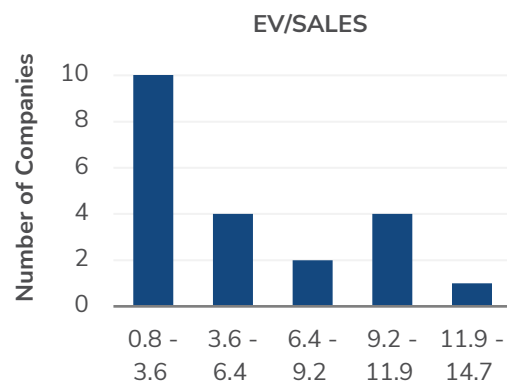
As of September 30, 2023



Communication Services

As of September 30, 2023

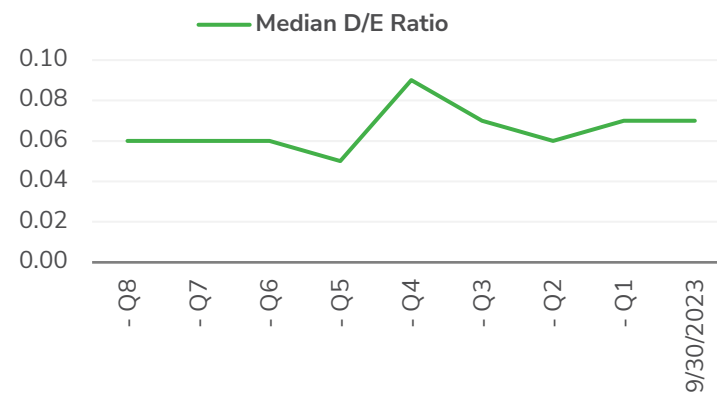
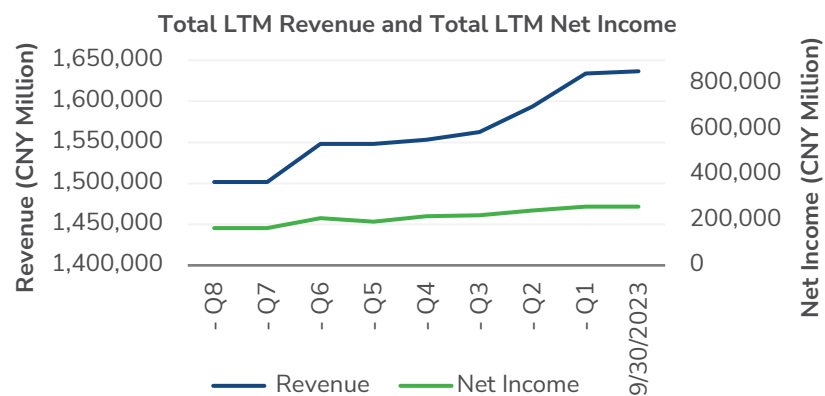
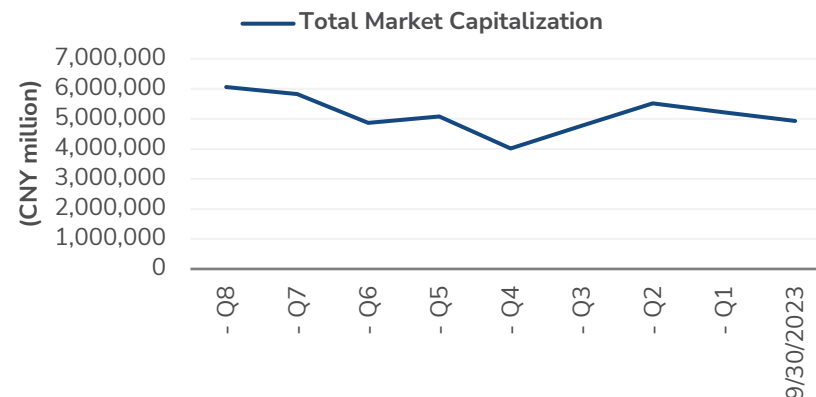
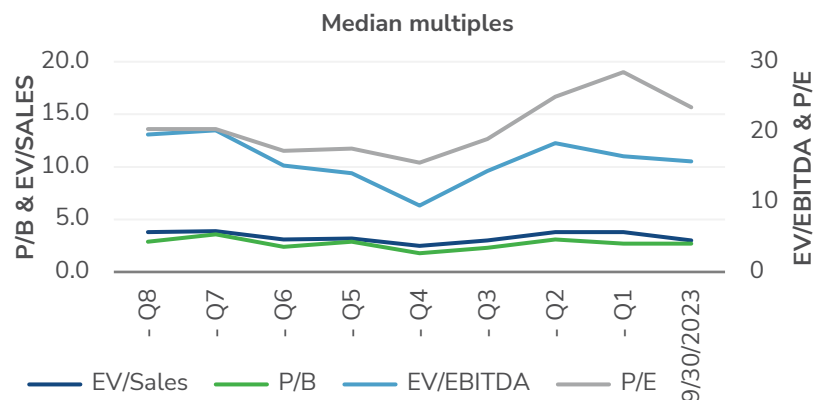
(Excluding Outliers)



	EV/ Sales	EV/ EBITDA	P/E	P/B
Number of Observations	31	31	31	31
Number of Outliers	3	6	10	1
Negative Multiples or Multiple Errors				
High	14.7x	60.8x	63.6x	6.8x
Mean	4.4x	20.1x	26.7x	2.7x
Median	3.1x	14.8x	20.9x	2.6x
Low	0.8x	3.3x	12.4x	0.5x
Low Quartile	2.1x	7.8x	18.2x	1.5x
Upper Quartile	5.2x	28.4x	28.5x	3.6x

Communication Services (cont'd)

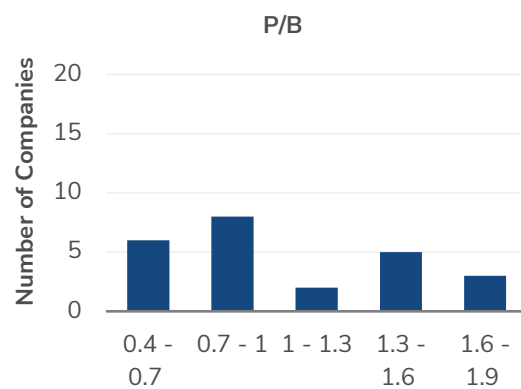
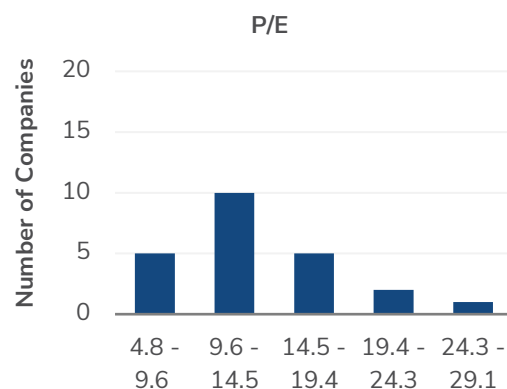
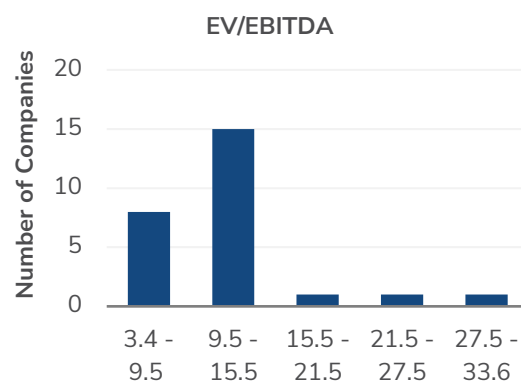
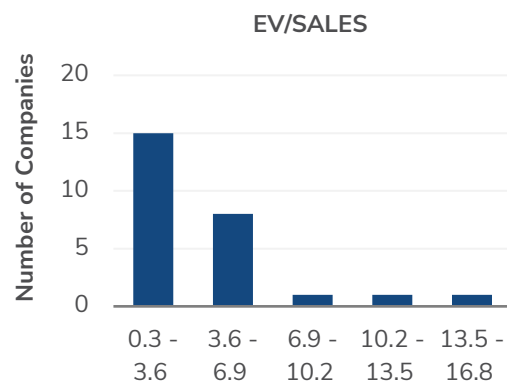
As of September 30, 2023



Utilities

As of September 30, 2023

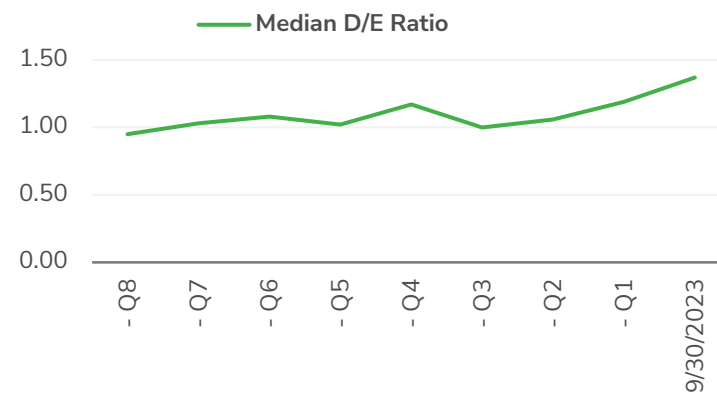
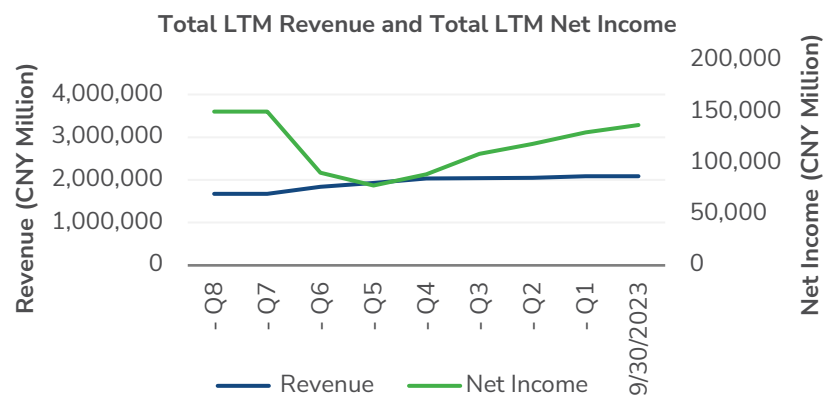
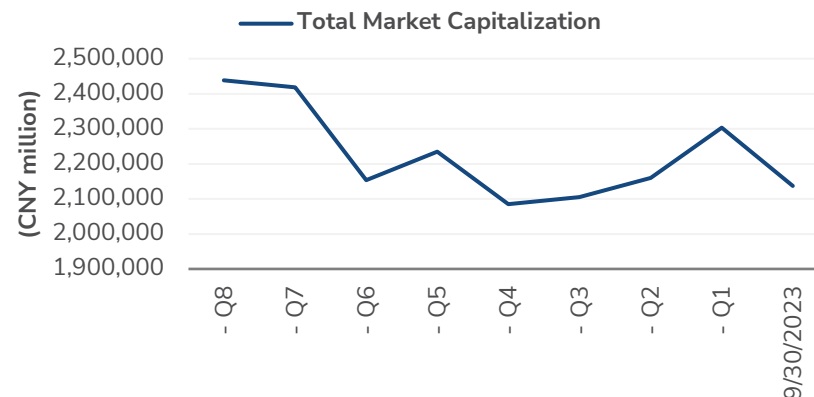
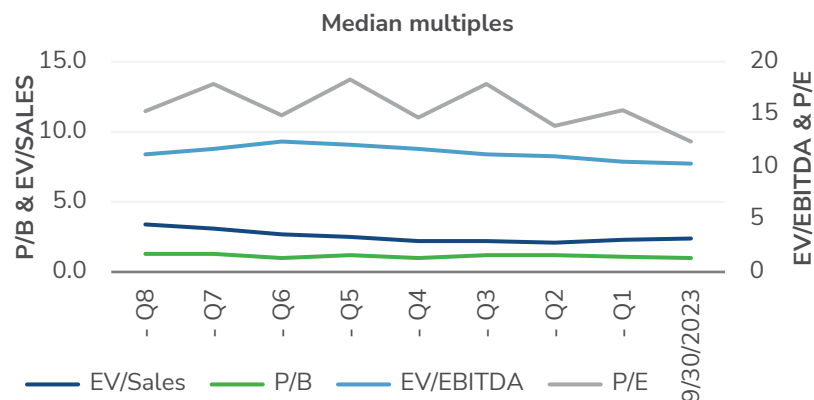
(Excluding Outliers)



	EV/ Sales	EV/ EBITDA	P/E	P/B
Number of Observations	27	27	27	27
Number of Outliers	1	1	4	2
Negative Multiples or Multiple Errors				
High	16.8x	33.6x	29.1x	1.9x
Mean	3.6x	11.5x	13.6x	1.1x
Median	2.3x	10.5x	13.6x	0.9x
Low	0.3x	3.4x	4.8x	0.4x
Low Quartile	1.3x	9.1x	9.8x	0.7x
Upper Quartile	4.3x	11.7x	15.7x	1.4x

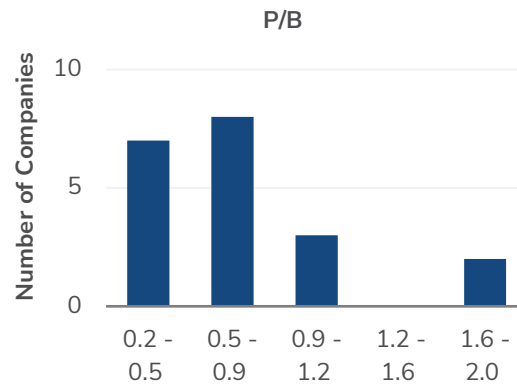
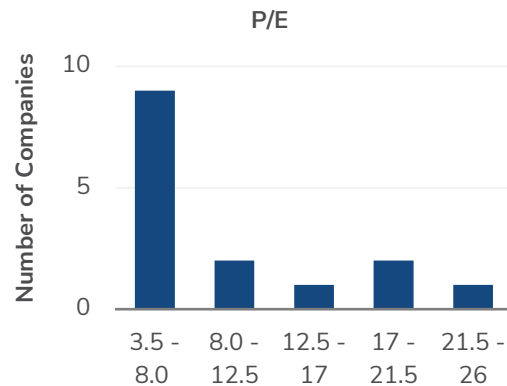
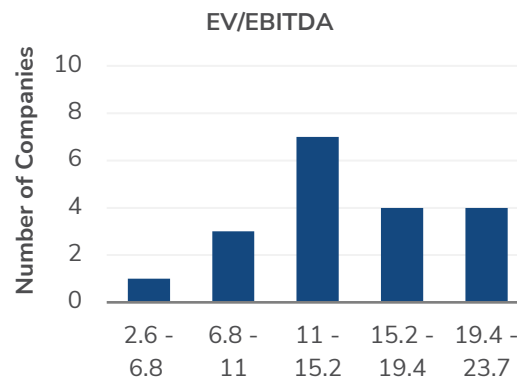
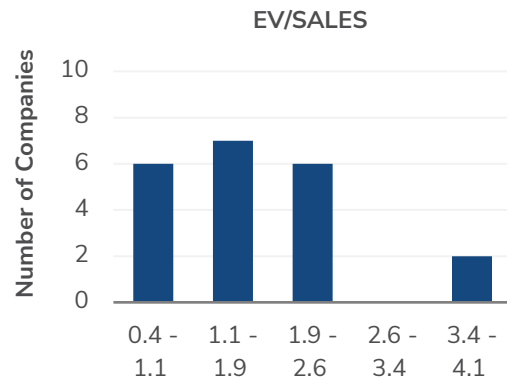
Utilities (cont'd)

As of September 30, 2023



Real Estate

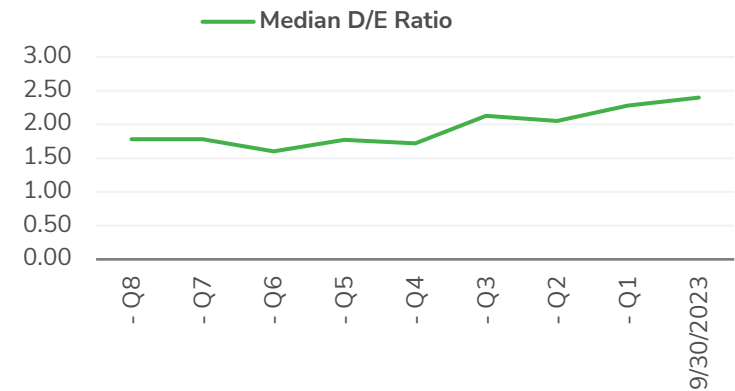
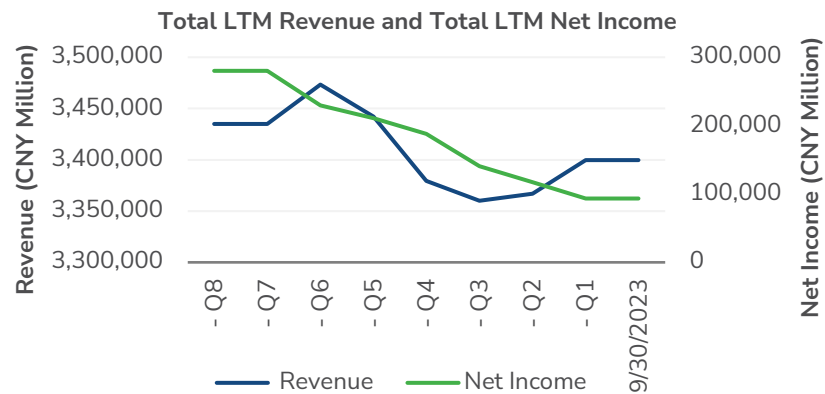
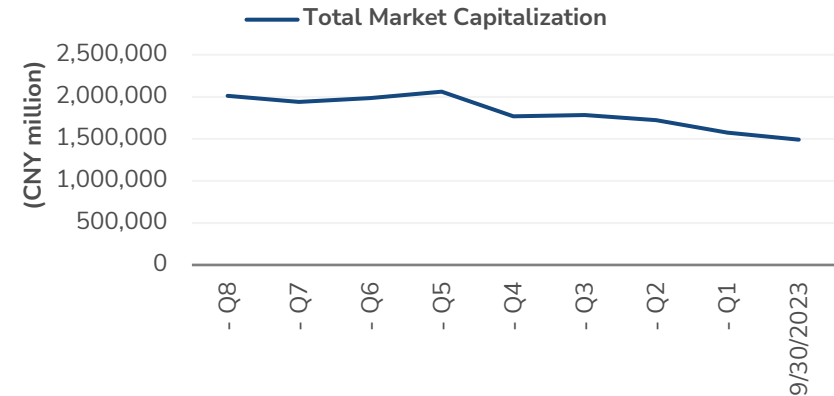
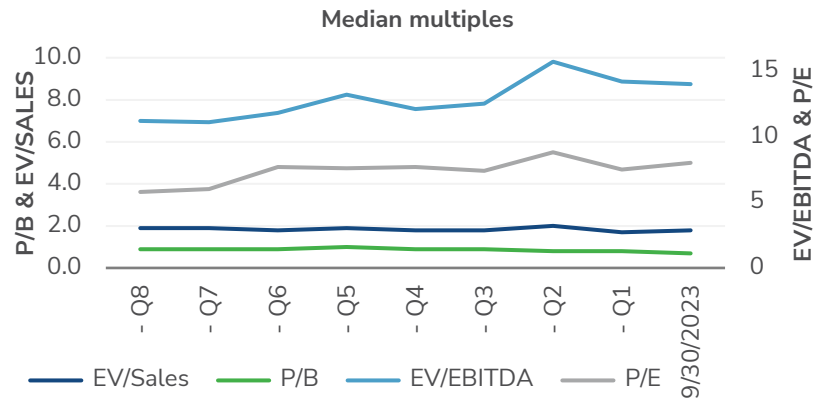
As of September 30, 2023
(Excluding Outliers)



	EV/ Sales	EV/ EBITDA	P/E	P/B
Number of Observations	23	23	23	23
Number of Outliers	2	4	8	2
Negative Multiples or Multiple Errors				
High	4.1x	23.7x	26.0x	2.0x
Mean	1.7x	14.5x	10.3x	0.8x
Median	1.6x	13.6x	7.7x	0.6x
Low	0.4x	2.6x	3.5x	0.2x
Low Quartile	1.1x	11.7x	6.8x	0.5x
Upper Quartile	2.0x	17.2x	11.5x	1.0x

Real Estate (cont'd)

As of September 30, 2023



Sector Definitions

The industry classification for the companies represented in this report is based on the Global Industry Classification Sector (GICS®), effective close of March 17, 2023, published by MSCI Inc.

Sector	
Energy	The energy sector comprises companies engaged in exploration and production, refining and marketing, and storage and transportation of oil, gas, coal and consumable fuels. It also includes companies that offer oil and gas equipment and services.
Materials	The materials sector includes mining companies, including producers of steel, and companies that manufacture chemicals, construction materials, forest products, glass, paper and related packaging products, metals and minerals.
Industrials	The industrials sector includes manufacturers and distributors of capital goods, such as aerospace and defense, building products, electrical equipment and machinery and companies that offer construction and engineering services. It includes providers of commercial and professional services, including printing, environmental and facilities services, office services and supplies, security and alarm services, human resource and employment services, research and consulting services. It also includes companies that provide transportation services.
Consumer Discretionary	The consumer discretionary sector encompasses businesses that tend to be the most sensitive to economic cycles. Its manufacturing segment includes automobiles and components, household durable goods, leisure products, and textiles and apparel. The services segment includes hotels, restaurants and other leisure facilities. It also includes distributors and retailers of consumer discretionary products.
Consumer Staples	The Consumer Discretionary Sector encompasses those businesses that tend to be the most sensitive to economic cycles. Its manufacturing segment includes automobiles and components, household durable goods, leisure products and textiles and apparel. The services segment includes hotels, restaurants, and other leisure facilities. It also includes distributors and retailers of consumer discretionary products.
Health Care	The health care sector includes health care providers and services, companies that manufacture and distribute health care equipment and supplies, and health care technology companies. It also includes companies involved in the research, development, production and marketing of pharmaceuticals and biotechnology products.
Financials	The financials sector contains companies engaged in banking, financial services, consumer finance, capital markets and insurance activities. It also includes financial exchanges and data and mortgage real estate investment trusts (REITs).

Sector Definitions (cont'd)

Sector	
Information Technology	The information technology sector comprises companies that offer software and information technology services, manufacturers and distributors of technology hardware and equipment, such as communications equipment, cellular phones, computers and peripherals, electronic equipment and related instruments, and semiconductors and related equipment and materials.
Communication Services	The communication services sector includes companies that facilitate communication and offer related content and information through various mediums. It includes telecom and media and entertainment companies, such as producers of interactive gaming products and companies engaged in content and information creation or distribution through proprietary platforms.
Utilities	The utilities sector comprises utility companies, such as electric, gas and water utilities. It also includes independent power producers, energy traders and companies that engage in generation and distribution of electricity using renewable sources.
Real Estate	The real estate sector contains companies engaged in real estate development and operation. It also includes companies offering real estate related services and equity REITs.

Methodology

The multiples in this report are based on the MSCI China Index, which aims to cover 85% of the free float market cap across H-shares, A-shares, B-shares, red chips, P chips and foreign listed shares.

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 nonfinancial industries and P/B, P/E, P/TBV and market cap/revenue multiples covering financial industries for which such data is available.

In previous years, comparisons covered a period of two years. This year's report provides a five-year comparison of P/E multiples, revenue, net income, market capitalization, and debt-to-equity ratio trends for most of the industries covered, so that the evaluation can weigh performance against pre-pandemic data.

Note:

1) GICS® was used as the basis for industry definitions. An industry must have a minimum of five company participants to be considered for analysis. For all reported multiples in China, we have considered all companies in the MSCI China Index as of September 30, 2023. 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 represent the performance of large- and mid-cap segments with H-shares, B-shares, red chips, P chips and foreign listings (e.g., ADRs) of Chinese stocks. 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 (S&P) Capital IQ database.

2) Any outliers in the industry have been excluded from the above analysis. Outlier selection criteria: 1) Negative multiples; 2) multiples at 200 or above; 3) the first highest multiple of an individual industry is above 100 and different from the second highest by more than 60%; 4) multiples that exceed 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 = lease-adjusted 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. Market cap/revenue = market capitalization/total revenue. P/TBV = market capitalization/tangible book value. Financial information of companies reflects the latest available information based on company filings as of September 30, 2023.

4) Outliers are excluded in the histograms presented in "Multiples by Industry" session: "EV/Sales," "EV/EBITDA," "P/E," "P/B,," "Mkt Cap/Revenue" and "P/TBV." Outliers are not excluded for time series analysis "P/E Multiples Over Time" in order to meaningfully assess the change in multiples across time.

Kroll is not rendering legal, accounting or any other professional advice through the presentation of this material. Kroll expressly disclaims any liability, of any type, including direct, indirect, incidental, special or consequential damages, arising from or relating to the use of this information or any errors or omissions that may be contained herein. All definitions, formulas and calculations presented have been created by Kroll for publication in its quarterly newsletter *Valuation Insights* and are based on data derived from S&P Capital IQ.



For more information, please contact:

Hong Kong

Patrick Wu

Vice Chairman and Head of Valuation
Advisory, Greater China
+852 2281 0100
patrick.wu@kroll.com

Ricky Lee

Managing Director, Valuation Advisory
+852 2281 0133
ricky.lee@kroll.com

William Leung

Managing Director, Valuation Advisory
+852 2281 0134
william.leung@kroll.com

Priscilla Cheng

Managing Director, Valuation Advisory
+852 2281 0137
priscilla.cheng@kroll.com

Beijing

Kevin Leung

Managing Director, Valuation Advisory
+86 10 5835 7000
kevin.leung@kroll.com

Shanghai

David Lu

Managing Director
+86 21 6032 0600
david.lu@kroll.com

Simon Tsang

Managing Director
+86 21 6032 0600
simon.tsang@kroll.com

Shenzhen and Guangzhou

Joe Zhou

Managing Director
SZ: +86 755 82173210
GZ: +86 20 38912300
joe.zhou@kroll.com

Taipei

Vincent Tsang

Managing Director
+866 2 6632 2010
vincent.tsang@kroll.com

About Kroll

As the leading independent provider of risk and financial advisory solutions, Kroll leverages our unique insights, data and technology to help clients stay ahead of complex demands. Kroll's global team continues the firm's nearly 100-year history of trusted expertise spanning risk, governance, transactions and valuation. Our advanced solutions and intelligence provide clients the foresight they need to create an enduring competitive advantage. At Kroll, our values define who we are and how we partner with clients and communities. Learn more at www.kroll.com.

M&A advisory, capital raising and secondary market advisory services in the United States are provided by Kroll Securities, LLC (member FINRA/SIPC). M&A advisory, capital raising and secondary market advisory services in the United Kingdom are provided by Kroll Securities Ltd., which is authorized and regulated by the Financial Conduct Authority (FCA). Valuation Advisory Services in India are provided by Kroll Advisory Private Limited (formerly, Duff & Phelps India Private Limited), under a category 1 merchant banker license issued by the Securities and Exchange Board of India.

© 2023 Kroll, LLC. All rights reserved.