



Industry Multiples in Europe

Q4 2021

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Foreword



Michael Weaver

Managing Director and

EMEA Valuation Advisory
Services Leader

Dear Readers,

We are pleased to launch the first edition of our Industry Multiples in Europe quarterly report. This report provides a valuable insight into trading multiples for various key industries in Europe as of December 31, 2021. Our analysis uses constituents of the STOXX® Europe Total Market Index (“STOXX Europe TMI”), which covers about 95% of the free float in Europe, distributed among 20 different industries and sectors, following the definitions by the Global Industry Classification Standard (“GICS”).

In 2021, the STOXX Europe TMI increased by 22%. During the first semester of the year, the index reached pre-COVID-19 pandemic levels, recovering from the strong negative impact observed in March–April of 2020, when the index plummeted, as COVID-19 started to drive Europe’s economy into its sharpest decline since World War II.

According to the Organisation for Economic Co-operation and Development (“OECD”) in its Economic Outlook report released in December 2021, the global economy is expected to have grown 5.6% in 2021 and to grow 4.5% in 2022 and 3.2% in 2023, as a relaxation of pandemic-related lockdowns in many countries helped boost demand. The Eurozone’s economy is expected to have expanded by 5.2% in 2021 and to expand by 4.3% in 2022 and 2.5% in 2023. Likewise, the United Kingdom’s economy is expected to have expanded by 6.9% in 2021 and to expand by 4.7% in 2022 and 2.1% in 2023. Significant progress in vaccination against COVID-19 turns the European economy more resilient to new virus waves. According to data obtained from Our World in Data, Portugal, Spain, Denmark, Ireland and Italy are, as of the issue date of this report, within the top twenty countries with the highest percentage of fully vaccinated people.

However, the strong recovery seen in the first part of 2021 started to lose momentum, as resurgences of the Delta and Omicron variants of the COVID-19, global supply bottlenecks, and rising energy and commodities prices weighed appreciably on global activity in the second half of 2021. Core inflation in several advanced and emerging economies recorded decade highs in 2021.

According to the World Bank’s Global Economic Prospects report published in January 2022, growth in advanced economies is projected to moderate in 2022, as the Omicron variant weighs on activity, pent-up demand is gradually reduced, fiscal and monetary support is withdrawn, and supply strains ease only gradually. Despite this deceleration, advanced-economy output is projected to exceed its pre-pandemic trend next year

In terms of EV/EBITDA multiples, notwithstanding global headwinds, multiples generally increased across all industries/sectors shown in this report over the last eight quarters. Consumer Services was the industry/sector seeing the largest increases, going from 7.6x in the 1Q 2020, when the World Health Organization declared the COVID-19 outbreak a pandemic, to 18.5x in the 4Q 2021, followed by Semiconductors and Semiconductor Equipment (11.4x in the 1Q 2020 to 21.8x in the 4Q 2021). Electric, Gas and Water Utilities was the industry that had the lowest increase, going from 8.7x in the 1Q 2020 to 9.0x in the 4Q 2021.

Our report provides a detailed overview of the EV/Revenues, EV/EBITDA, P/E and P/B multiples of companies in the STOXX Europe TMI covering nonfinancial industries and Market Cap./Revenues, P/TBV, P/E and P/B multiples covering financial industries for which such data is available. We also provide an eight-quarter lookback at the trends of these multiples for the industries covered.

We hope you find this report helpful in understanding the range of trading multiples for major industries in Europe. If you would like to receive further information or discuss any of the findings, please contact us.

Summary: Median Multiples by Sector/Industry Groups

As of December 31, 2021

Sector/Industry Group	EV/Revenues	EV/EBITDA	P/E	P/B
Communication Services	2.7x	8.4x	21.0x	2.2x
Media and Entertainment	3.2x	10.8x	21.2x	2.9x
Telecommunication Services	2.2x	6.8x	20.5x	1.8x
Consumer Discretionary	1.6x	10.6x	20.3x	2.8x
Automobiles & Components	0.8x	7.0x	15.2x	1.6x
Consumer Durables & Apparel	1.7x	12.3x	23.7x	3.4x
Consumer Services	3.7x	18.5x	32.1x	3.6x
Retailing	1.3x	9.3x	19.6x	3.2x
Consumer Staples	1.6x	10.6x	20.3x	2.3x
Energy	1.7x	4.8x	11.4x	1.0x
Health Care	5.7x	18.8x	38.2x	5.4x
Industrials	1.5x	11.9x	23.4x	3.1x
Capital Goods	1.5x	12.4x	24.1x	3.2x
Commercial & Professional Services	1.4x	10.9x	23.8x	3.7x
Transportation	1.7x	8.3x	11.1x	2.0x
Information Technology	4.2x	19.6x	34.1x	5.4x
Semiconductors & Semiconductor Equipment	6.2x	21.8x	32.2x	7.0x
Software & Services	4.7x	21.1x	38.5x	6.0x
Technology Hardware & Equipment	2.7x	15.9x	29.4x	4.5x
Materials	1.2x	7.0x	13.9x	1.7x
Real Estate	17.1x	29.2x	26.1x	1.1x
Utilities	3.1x	10.2x	20.2x	2.2x
Electric, Gas and Water Utilities ¹	1.6x	9.0x	16.7x	1.9x
Independent Power & Renewable Electricity Producers ¹	9.7x	20.7x	56.3x	2.7x
Financials Sector/Industry Group	Market Cap./Revenues	P/TBV	P/E	P/B
Financials	2.5x	1.4x	11.1x	1.2x
Banks	2.5x	0.8x	9.5x	0.8x
Capital Markets ¹	4.2x	3.8x	14.3x	2.2x
Consumer Finance ¹	2.7x	1.7x	8.4x	1.3x
Diversified Financial Services ¹	3.4x	1.4x	12.9x	1.3x
Insurance	0.8x	2.2x	11.7x	1.2x

¹ According to GICS nomenclature, these are classified as "Industry," which is one level below "Industry Group."

Country Snapshot: France

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The CAC 40 index reflects the performance of the 40 largest and most actively traded shares listed on Euronext Paris and is the most widely used indicator of the Paris stock market. It is typically used as the benchmark stock market index in France. The percentage of French companies in the STOXX Europe TMI is 8%, with 98% of the constituents of the CAC 40 being comprised within the European index.






In 2021, the CAC 40 increased by 27.7% (in price terms), compared to the 22.1% rise in the STOXX Europe TMI. French real GDP growth is expected to have grown by 6.8% in 2021, and to grow 4.2% in 2022 and 2.1% in 2023, according to OECD's latest Economic Outlook (December 2021).

CAC 40 Spotlight

5Y Evolution: CAC 40 and STOXX Europe TMI



Top 5 Industries

Industry	Market Cap (€bn) ²	% of CAC 40	Number of Companies
 Consumer Durables and Apparel	691	30%	4
 Capital Goods	382	16%	9
 Household and Personal Products	233	10%	1
 Banks	138	6%	3
 Pharmaceuticals, Biotechnology and Life Sciences	132	6%	2

CAC 40
 Market Cap²

€2,339bn

¹ The first lockdown due to COVID-19 began on January 23, 2020, in Wuhan, China.
² As of the report reference date.

Sources: Capital IQ; Bloomberg; Kroll analysis.

Country Snapshot: Germany

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The DAX is a total return index of 40 selected German blue-chip stocks traded on the Frankfurt Stock Exchange and is typically used as the benchmark stock market index in Germany. The percentage of German companies in the STOXX Europe TMI is 10%, with 90% of the constituents of the DAX being comprised within the European index. In September 2021, the number of constituents in the DAX index increased from 30 to 40 companies.






In 2021, the DAX increased (in price terms) by 15.8%, compared to the 22.1% rise in the STOXX Europe TMI. German real GDP growth is expected to have grown by 2.9% in 2021, and to grow 4.1% in 2022 and 2.4% in 2023, according to OECD's latest Economic Outlook (December 2021).

DAX Spotlight

5Y Evolution: DAX and STOXX Europe TMI



Top 5 Industries

Industry	Market Cap (€bn) ²	% of DAX	Number of Companies
 Automobiles and Components	287	15%	5
 Materials	253	14%	5
 Capital Goods	249	13%	5
 Pharmaceuticals, Biotechnology and Life Sciences	156	8%	3
 Health Care Equip. & Svcs.	148	8%	4

DAX
Market Cap²

€1,873bn

¹ The first lockdown due to COVID-19 began on January 23, 2020, in Wuhan, China.
² As of the report reference date.

Sources: Capital IQ; Bloomberg; Kroll analysis.

Country Snapshot: Italy

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The FTSE MIB index consists of the 40 most liquid and capitalized stocks listed on the Borsa Italiana. It is typically used as the benchmark stock market index in Italy. The percentage of Italian companies in the STOXX Europe TMI is 6%, with 98% of the constituents of the FTSE MIB being comprised within the European index.






In 2021, the FTSE MIB increased (in price terms) by 23.0%, compared to the 22.1% rise in the STOXX Europe TMI. Italian real GDP growth is expected to have grown by 6.3% in 2021, and to grow 4.6% in 2022 and 2.6% in 2023, according to OECD's latest Economic Outlook (December 2021).

FTSE MIB Spotlight

5Y Evolution: FTSE MIB and STOXX Europe TMI



Top 5 Industries

Industry	Market Cap (€bn) ²	% of FTSE MIB	Number of Companies
 Utilities	119	18%	6
 Automobiles and Components	100	15%	3
 Banks	99	15%	6
 Energy	56	9%	3
 Insurance	48	7%	3

FTSE MIB
Market Cap²

€651bn

¹ The first lockdown due to COVID-19 began on January 23, 2020, in Wuhan, China.
² As of the report reference date.

Sources: Capital IQ; Bloomberg; Kroll analysis.

Country Snapshot: Spain

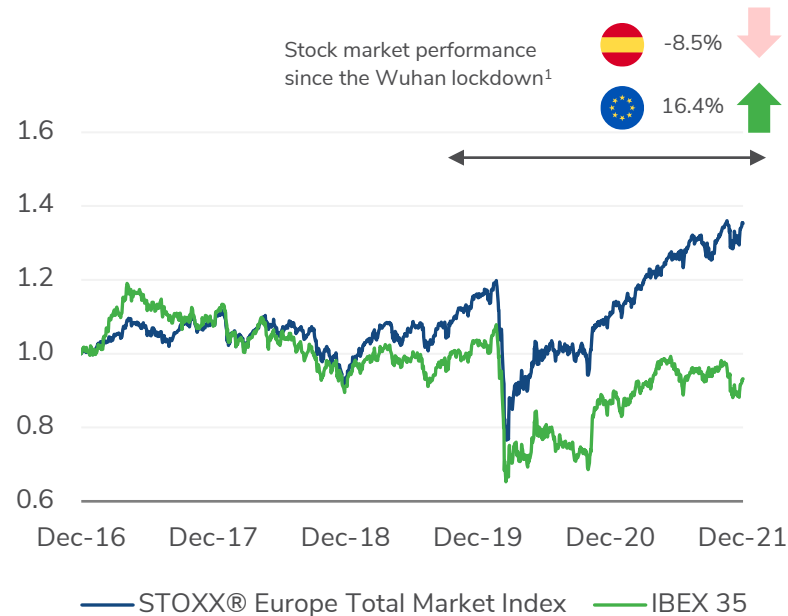
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The IBEX 35 is the official index of the Spanish Continuous Exchange. The index is comprised of the 35 most liquid stocks traded on the continuous market. It is typically used as the benchmark stock market index in Spain. The percentage of Spanish companies in the STOXX Europe TMI is 4%, with 94% of the constituents of the IBEX 35 being comprised within the European index.

In 2021, the IBEX 35 increased (in price terms) by 6.9%, compared to the 22.1% rise in the STOXX Europe TMI. Spanish real GDP growth is expected to have grown by 4.5% in 2021, and to grow 5.5% in 2022 and 3.8% in 2023, according to OECD's latest Economic Outlook (December 2021).

IBEX 35 Spotlight






5Y Evolution: IBEX 35 and STOXX Europe TMI



¹ The first lockdown due to COVID-19 began on January 23, 2020, in Wuhan, China.
² As of the report reference date.

Sources: Capital IQ; Bloomberg; Kroll analysis.

Top 5 Industries

Industry	Market Cap (€bn) ²	% of IBEX 35	Number of Companies
 Utilities	140	24%	7
 Banks	112	19%	5
 Retailing	89	15%	1
 Telecommun. Services	57	10%	2
 Capital Goods	48	8%	4

IBEX 35
 Market Cap²

€583bn

Country Snapshot: United Kingdom



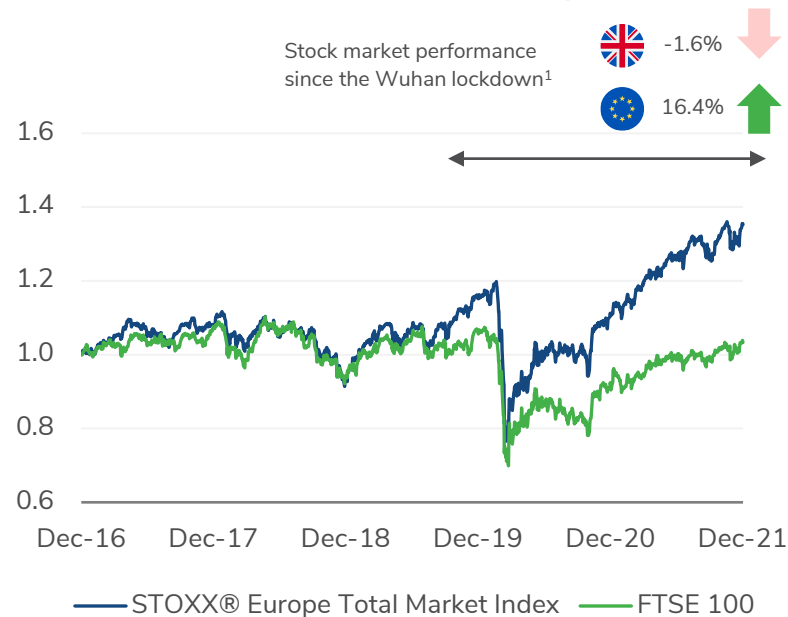
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The FTSE 100 index is a capitalization-weighted index of the 100 most highly capitalized companies traded on the London Stock Exchange. It is typically used as the benchmark stock market index in UK. The percentage of UK companies in the STOXX Europe TMI is 16%, with 93% of the constituents of the FTSE 100 being comprised within the European index.

In 2021, the FTSE 100 increased (in price terms) by 12.6%, compared to the 22.1% rise in the STOXX Europe TMI. UK real GDP growth is expected to have grown by 6.9% in 2021, and to grow 4.7% in 2022 and 2.1% in 2023, according to OECD's latest Economic Outlook (December 2021).

FTSE 100 Spotlight

5Y Evolution: FTSE 100 and STOXX Europe TMI



Top 5 Industries

Industry	Market Cap (€bn) ²	% of FTSE 100	Number of Companies
Materials	455	16%	13
Energy	373	13%	3
Pharmaceuticals, Biotechnology and Life Sciences	269	10%	4
Food, Beverage and Tobacco	243	9%	5
Banks	232	8%	5

FTSE 100
Market Cap²

€2,786bn

¹ The first lockdown due to COVID-19 began on January 23, 2020, in Wuhan, China.

² As of the report reference date, exchange rate as of December 31, 2021, provided by Capital IQ.

Sources: Capital IQ; Bloomberg; Kroll analysis

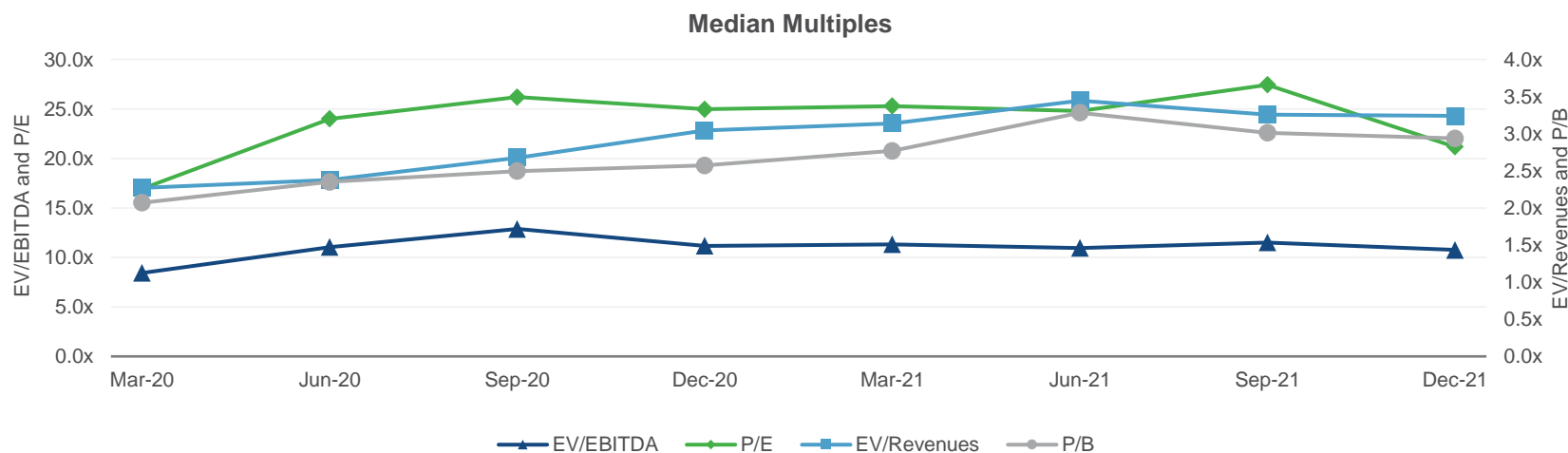
Media and Entertainment

Q4 2021

Media and Entertainment

As of December 31, 2021

	EV/Revenues	EV/EBITDA	P/E	P/B
Number of Observations ¹	55	55	55	55
Number of Outliers ²	8	9	19	12
High	21.9x	48.7x	285.4x	13.1x
3rd Quartile	5.9x	23.2x	53.9x	5.0x
Mean	4.8x	16.2x	49.1x	4.1x
Median	3.2x	10.8x	21.2x	2.9x
1st Quartile	1.4x	6.8x	13.8x	1.5x
Low	0.7x	4.0x	7.3x	1.0x



¹ A sector/industry group must have a minimum of five company participants to be calculated.

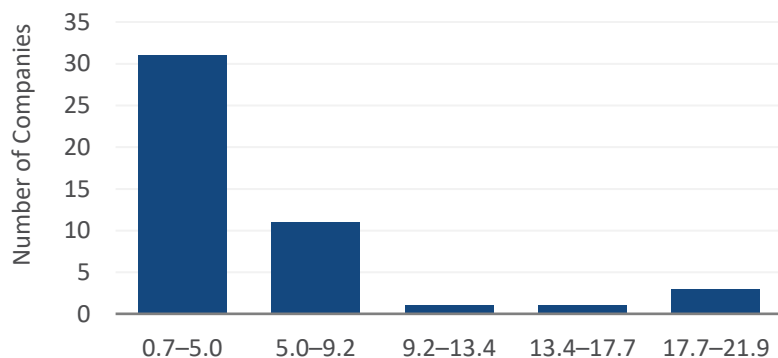
² Outliers have been excluded from the concluded multiples. Please refer to "Criteria" for outlier criteria and definitions.

Sources: Capital IQ; Bloomberg; Kroll analysis.

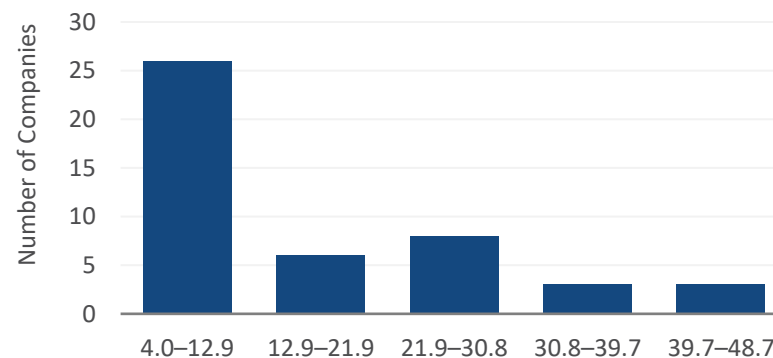
Media and Entertainment

As of December 31, 2021

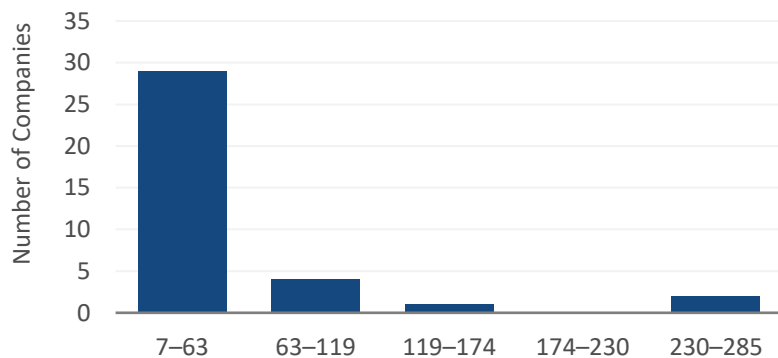
EV/Revenues



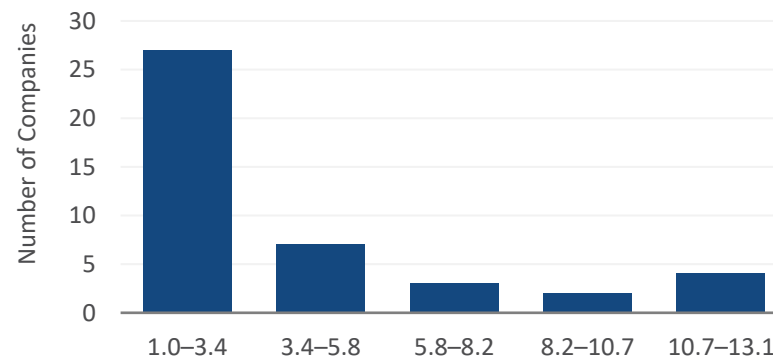
EV/EBITDA



P/E



P/B



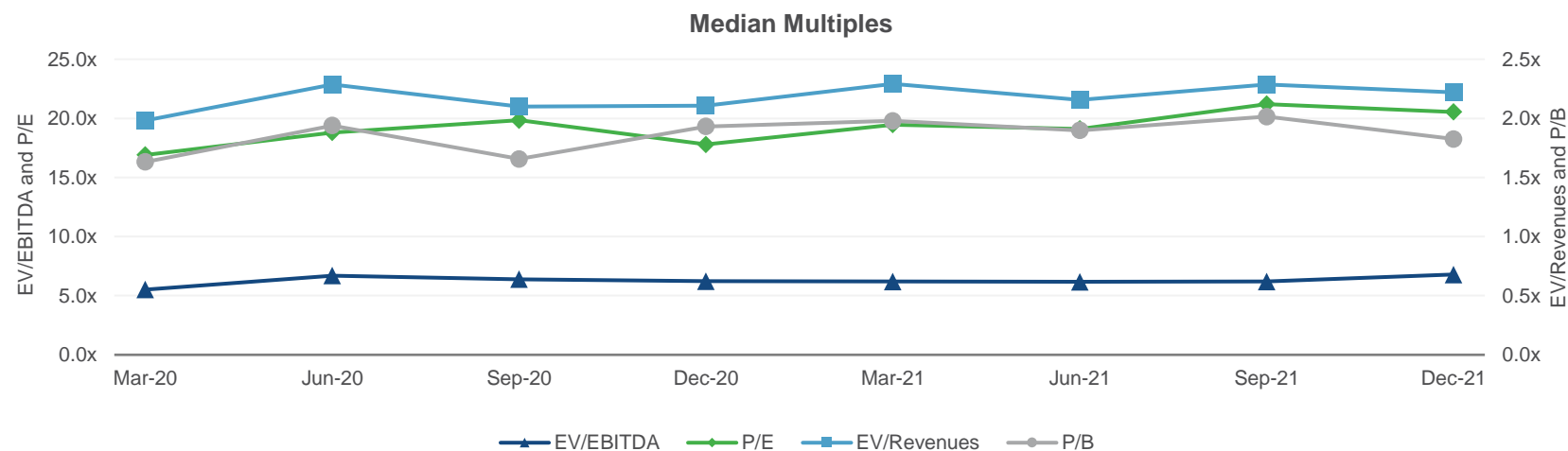
Telecommunication Services

Q4 2021

Telecommunication Services

As of December 31, 2021

	EV/Revenues	EV/EBITDA	P/E	P/B
Number of Observations ¹	21	21	21	21
Number of Outliers ²	2	2	8	3
High	18.2x	20.0x	52.8x	7.4x
3rd Quartile	3.1x	8.0x	24.1x	2.4x
Mean	3.5x	7.9x	22.2x	2.4x
Median	2.2x	6.8x	20.5x	1.8x
1st Quartile	1.5x	5.3x	16.1x	1.3x
Low	1.3x	4.1x	11.4x	0.7x



¹ A sector/industry group must have a minimum of five company participants to be calculated.

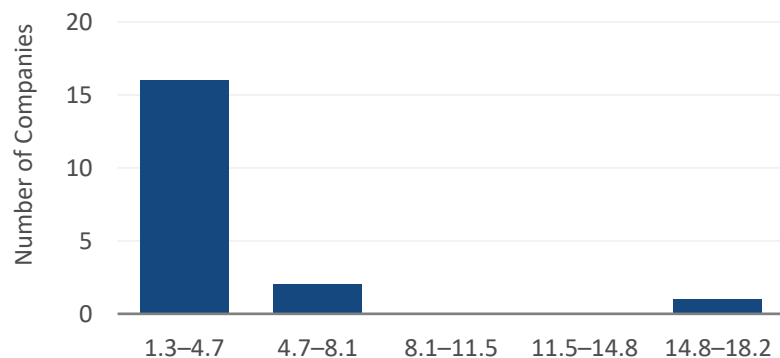
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Sources: Capital IQ; Bloomberg; Kroll analysis.

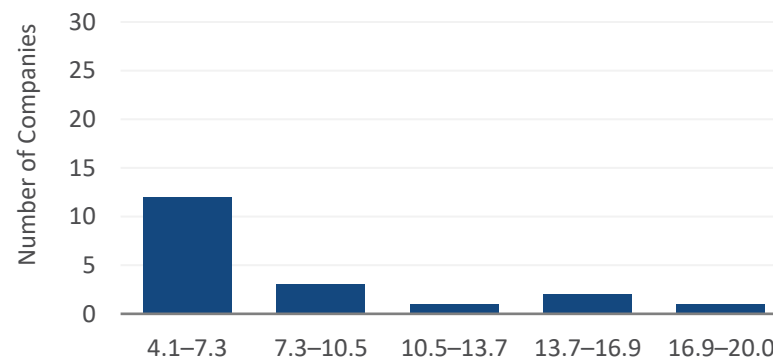
Telecommunication Services

As of December 31, 2021

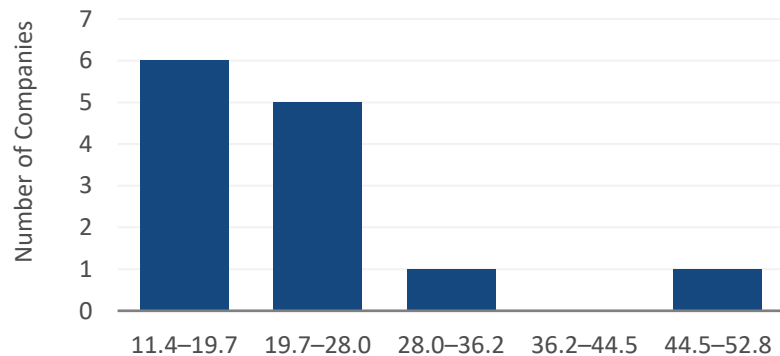
EV/Revenues



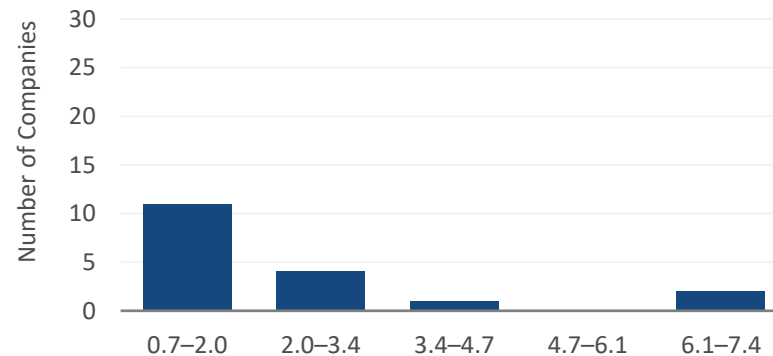
EV/EBITDA



P/E



P/B



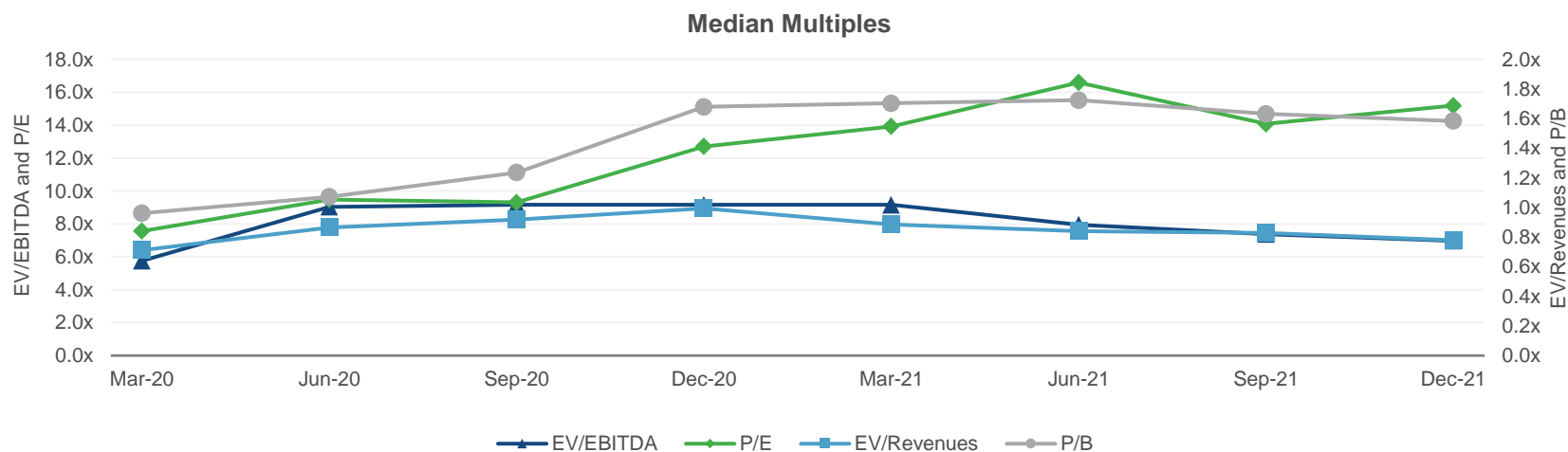
Automobiles and Components

Q4 2021

Automobiles and Components

As of December 31, 2021

	EV/Revenues	EV/EBITDA	P/E	P/B
Number of Observations ¹	29	29	29	29
Number of Outliers ²	5	5	9	7
High	2.4x	13.0x	50.9x	2.8x
3rd Quartile	1.2x	8.1x	20.5x	1.8x
Mean	1.0x	7.1x	18.8x	1.6x
Median	0.8x	7.0x	15.2x	1.6x
1st Quartile	0.6x	5.8x	13.1x	1.2x
Low	0.3x	3.2x	6.4x	0.8x



¹ A sector/industry group must have a minimum of five company participants to be calculated.

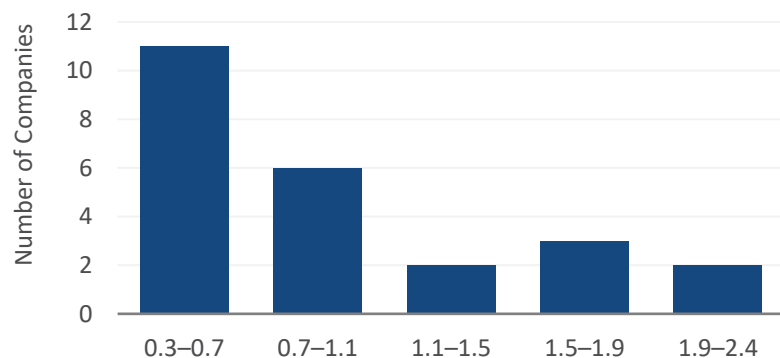
² Outliers have been excluded from the included multiples. Please refer to "Criteria" for outlier criteria and definitions.

Sources: Capital IQ; Bloomberg; Kroll analysis.

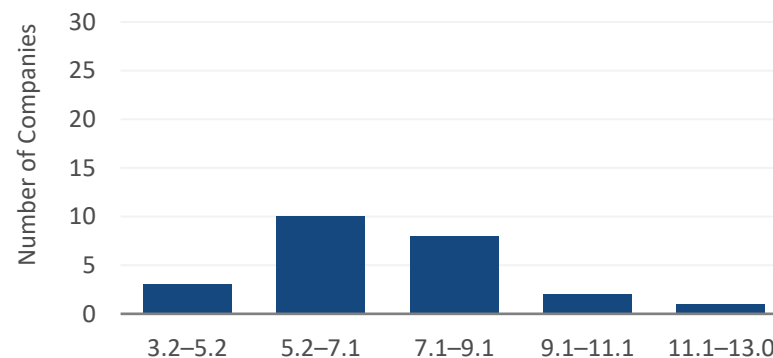
Automobiles and Components

As of December 31, 2021

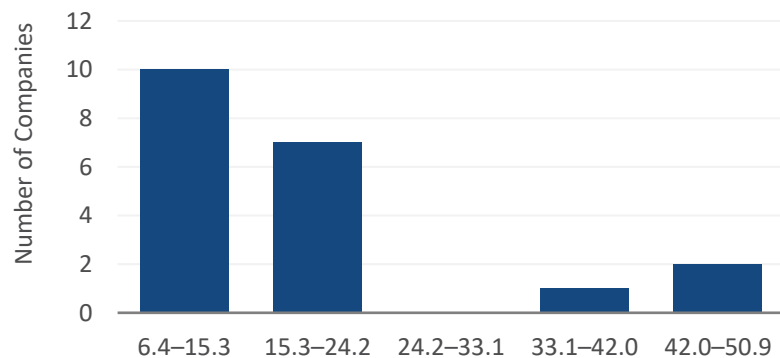
EV/Revenues



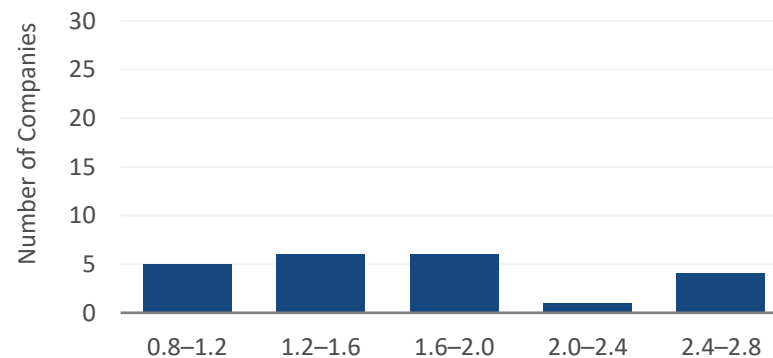
EV/EBITDA



P/E



P/B



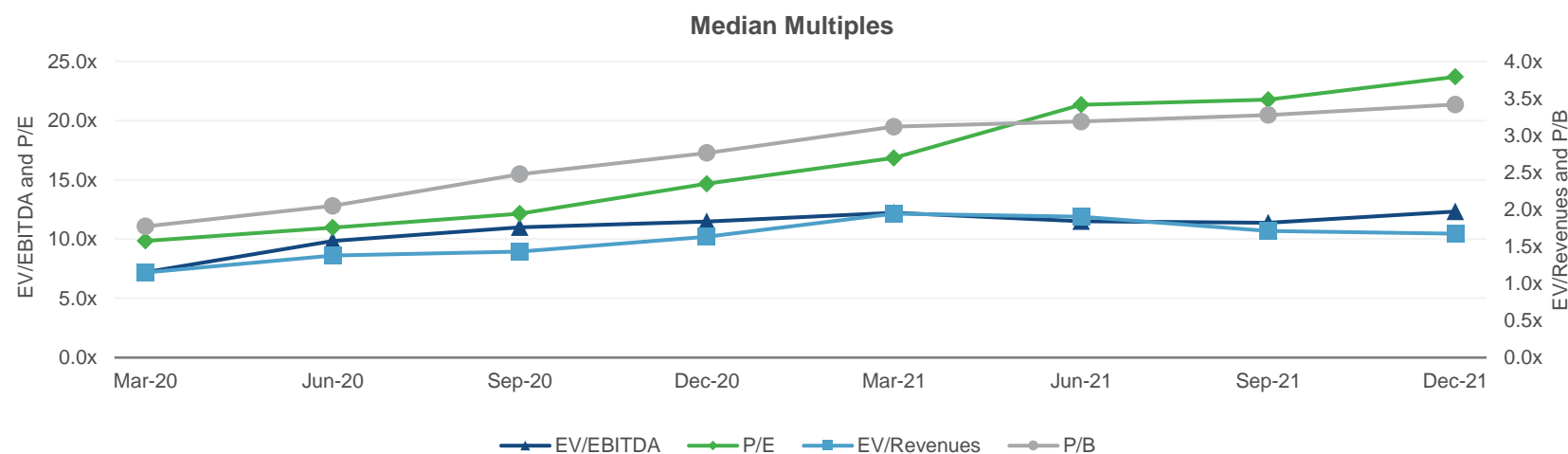
Consumer Durables and Apparel

Q4 2021

Consumer Durables and Apparel

As of December 31, 2021

	EV/Revenues	EV/EBITDA	P/E	P/B
Number of Observations ¹	57	57	57	57
Number of Outliers ²	6	6	14	12
High	8.4x	25.2x	67.9x	14.0x
3rd Quartile	3.2x	16.7x	32.1x	6.6x
Mean	2.5x	12.9x	25.1x	4.9x
Median	1.7x	12.3x	23.7x	3.4x
1st Quartile	1.2x	8.1x	12.4x	2.1x
Low	0.7x	6.0x	9.1x	1.0x



¹ A sector/industry group must have a minimum of five company participants to be calculated.

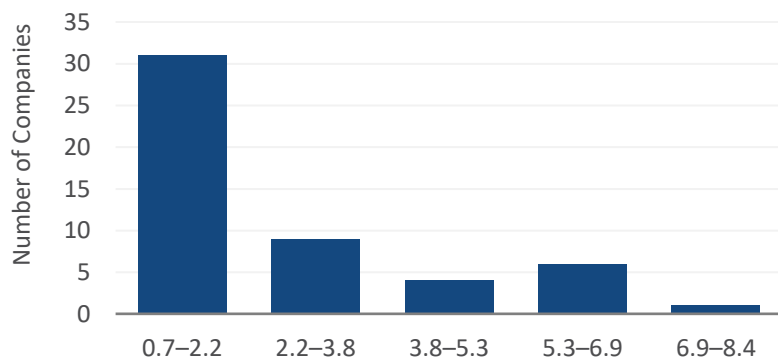
² Outliers have been excluded from the concluded multiples. Please refer to "Criteria" for outlier criteria and definitions.

Sources: Capital IQ; Bloomberg; Kroll analysis.

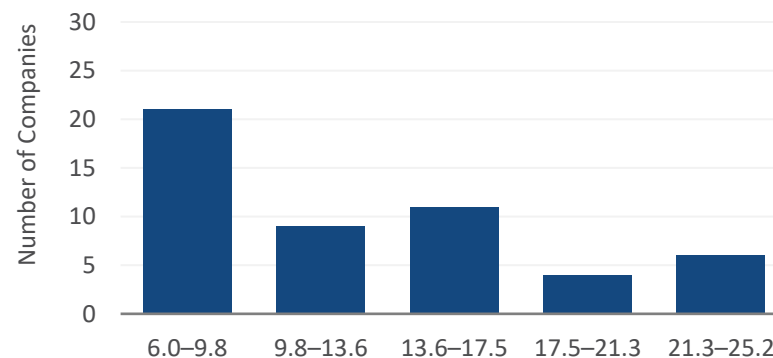
Consumer Durables and Apparel

As of December 31, 2021

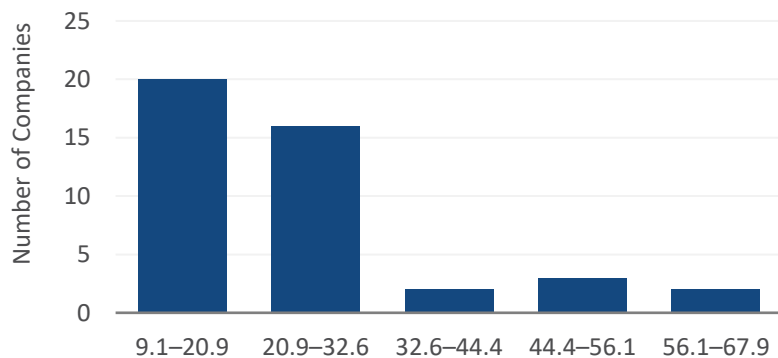
EV/Revenues



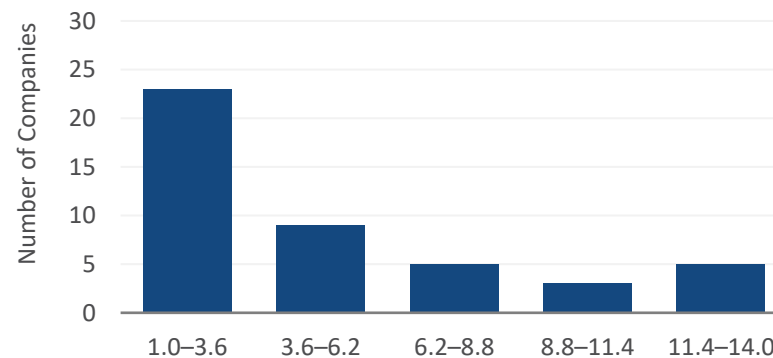
EV/EBITDA



P/E



P/B



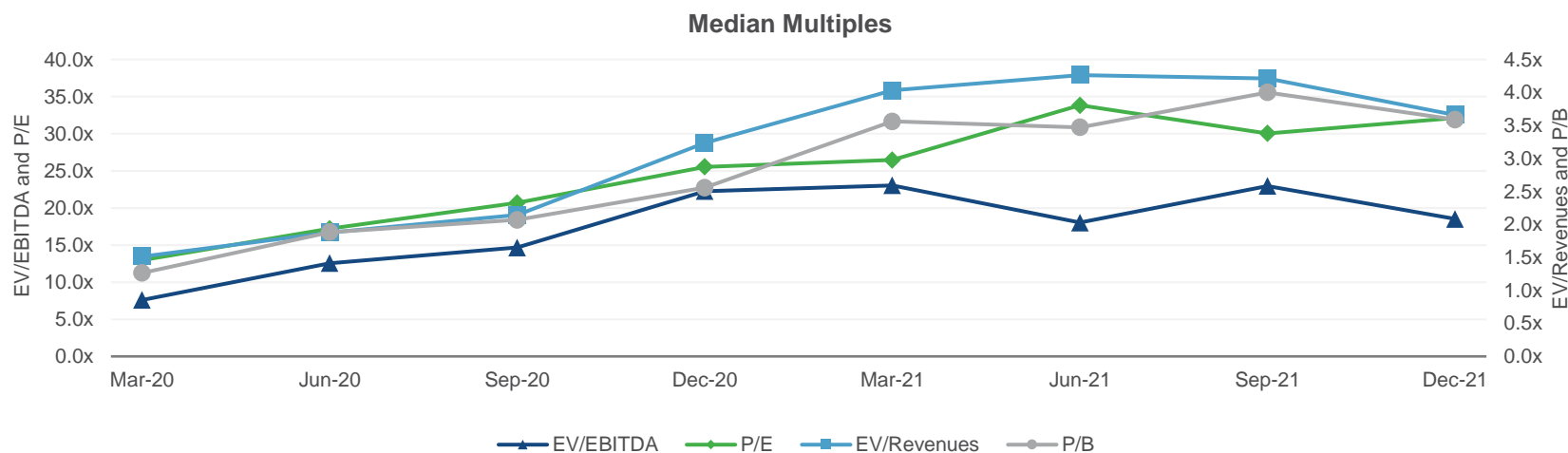
Consumer Services

Q4 2021

Consumer Services

As of December 31, 2021

	EV/Revenues	EV/EBITDA	P/E	P/B
Number of Observations ¹	37	37	37	37
Number of Outliers ²	4	11	21	8
High	13.6x	87.4x	102.0x	8.7x
3rd Quartile	5.5x	28.3x	45.5x	5.4x
Mean	4.4x	25.4x	35.3x	3.9x
Median	3.7x	18.5x	32.1x	3.6x
1st Quartile	1.8x	12.8x	18.2x	1.7x
Low	0.9x	6.7x	6.7x	0.9x



¹ A sector/industry group must have a minimum of five company participants to be calculated.

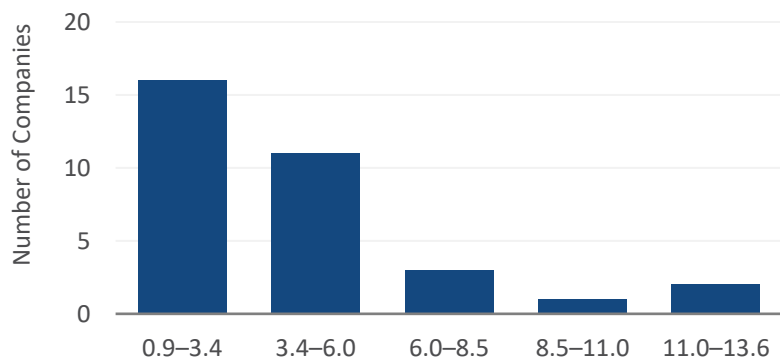
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Sources: Capital IQ; Bloomberg; Kroll analysis.

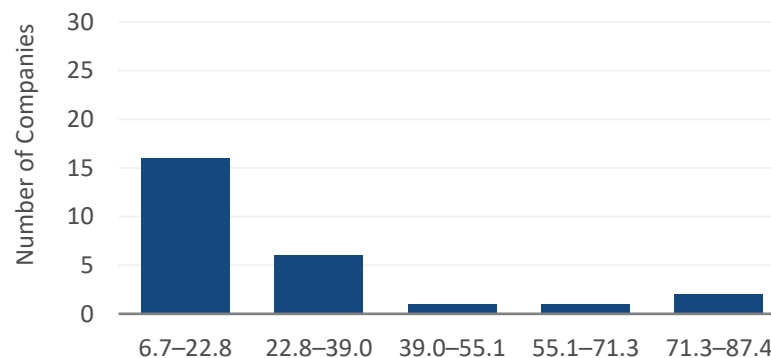
Consumer Services

As of December 31, 2021

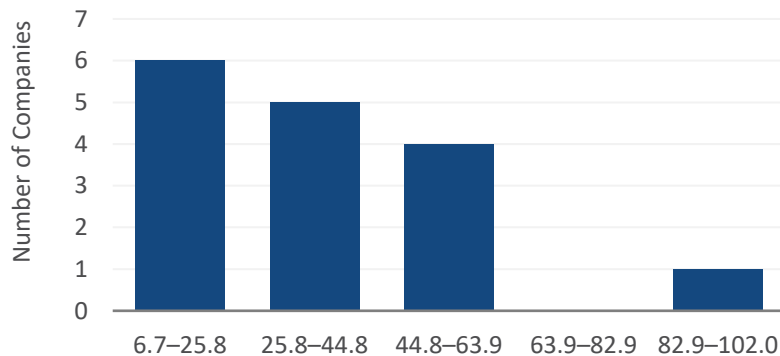
EV/Revenues



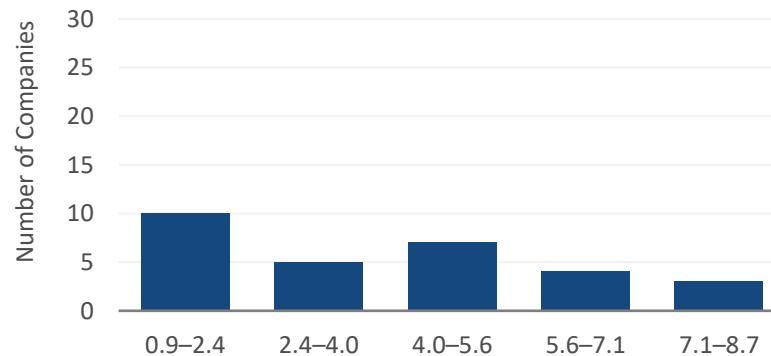
EV/EBITDA



P/E



P/B



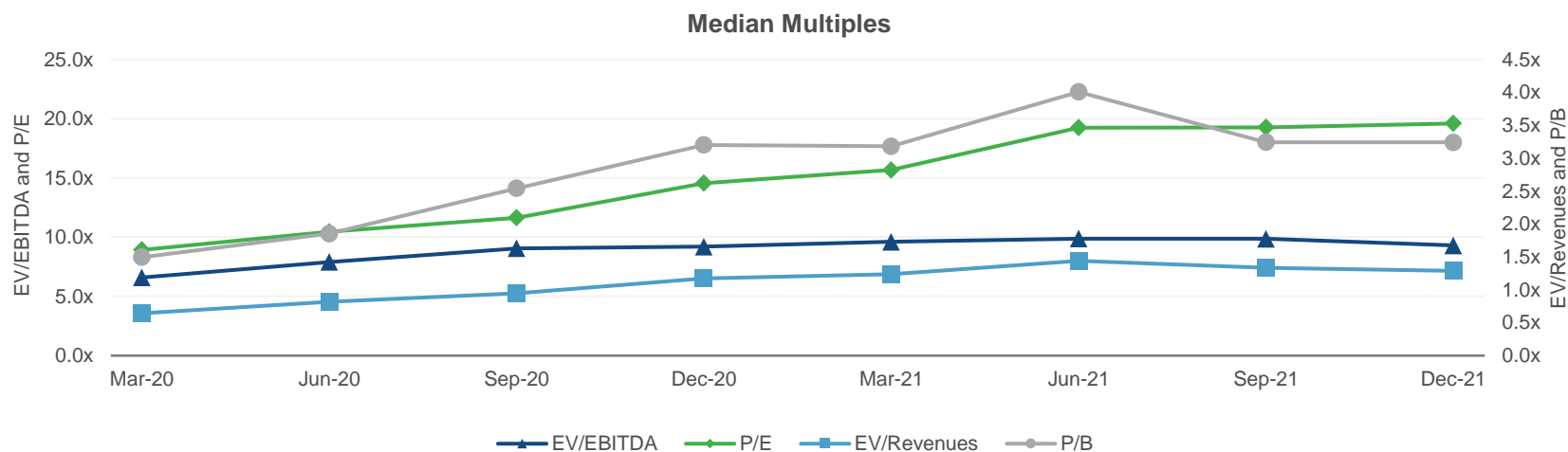
Retailing

Q4 2021

Retailing

As of December 31, 2021

	EV/Revenues	EV/EBITDA	P/E	P/B
Number of Observations ¹	63	63	63	63
Number of Outliers ²	8	14	21	10
High	6.2x	29.1x	52.4x	13.2x
3rd Quartile	2.1x	13.9x	25.9x	4.9x
Mean	1.6x	11.4x	21.3x	4.1x
Median	1.3x	9.3x	19.6x	3.2x
1st Quartile	0.7x	6.8x	13.3x	1.8x
Low	0.3x	4.6x	8.8x	1.0x



¹ A sector/industry group must have a minimum of five company participants to be calculated.

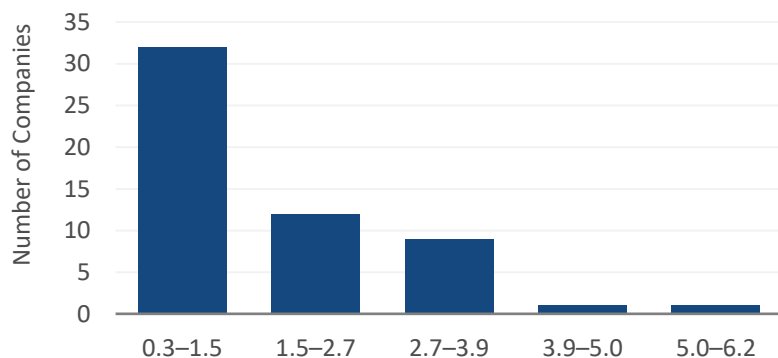
² Outliers have been excluded from the included multiples. Please refer to "Criteria" for outlier criteria and definitions.

Sources: Capital IQ; Bloomberg; Kroll analysis.

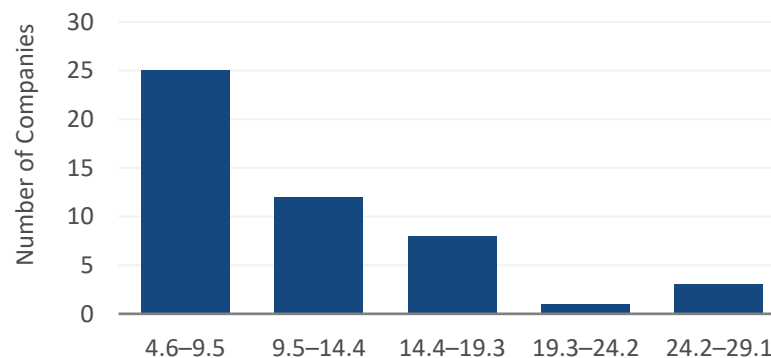
Retailing

As of December 31, 2021

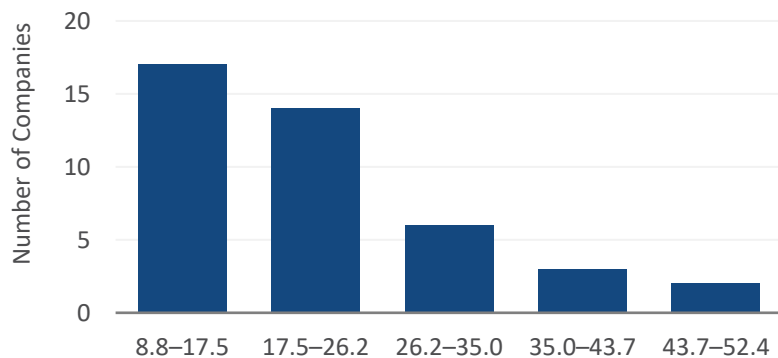
EV/Revenues



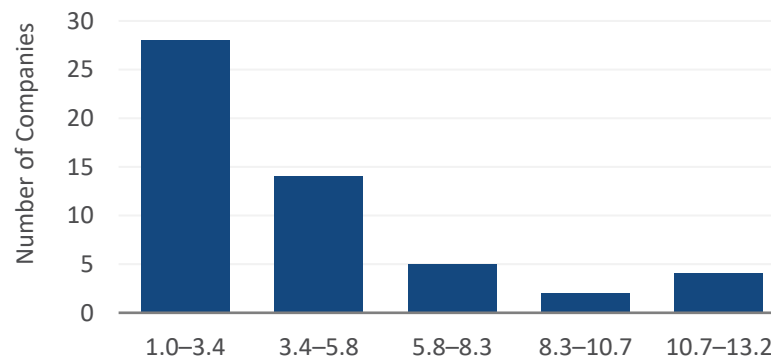
EV/EBITDA



P/E



P/B



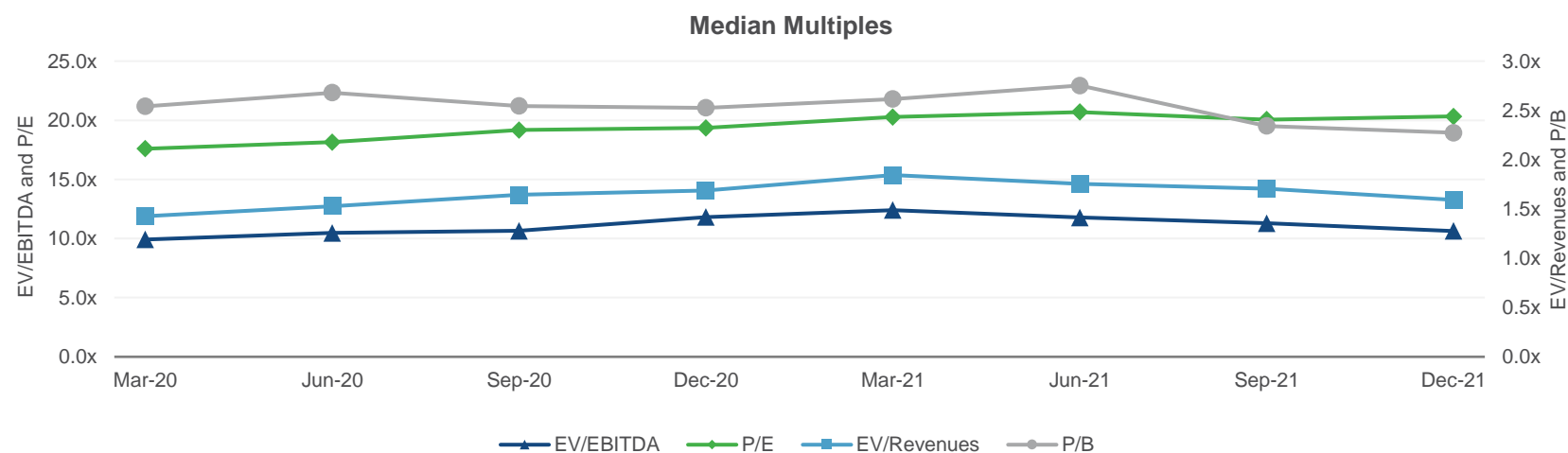
Consumer Staples

Q4 2021

Consumer Staples

As of December 31, 2021

	EV/Revenues	EV/EBITDA	P/E	P/B
Number of Observations ¹	84	84	84	84
Number of Outliers ²	10	14	20	12
High	7.2x	29.8x	48.7x	11.0x
3rd Quartile	2.8x	14.4x	28.1x	4.5x
Mean	2.2x	12.2x	23.2x	3.3x
Median	1.6x	10.6x	20.3x	2.3x
1st Quartile	0.9x	7.6x	15.7x	1.5x
Low	0.4x	5.2x	9.2x	0.8x



¹ A sector/industry group must have a minimum of five company participants to be calculated.

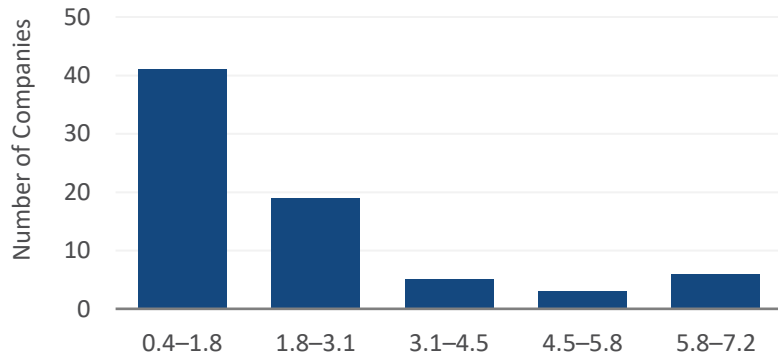
² Outliers have been excluded from the concluded multiples. Please refer to "Criteria" for outlier criteria and definitions.

Sources: Capital IQ; Bloomberg; Kroll analysis.

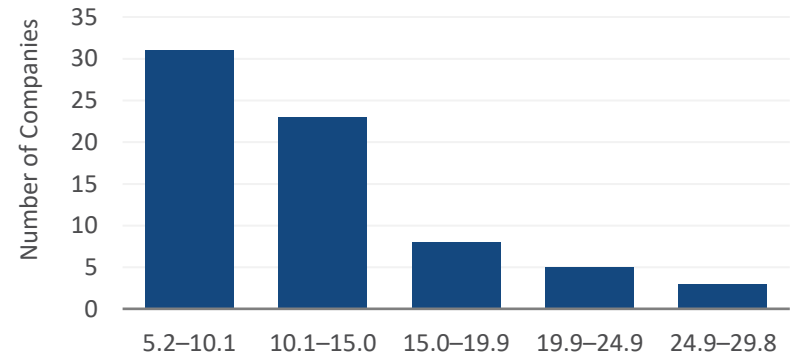
Consumer Staples

As of December 31, 2021

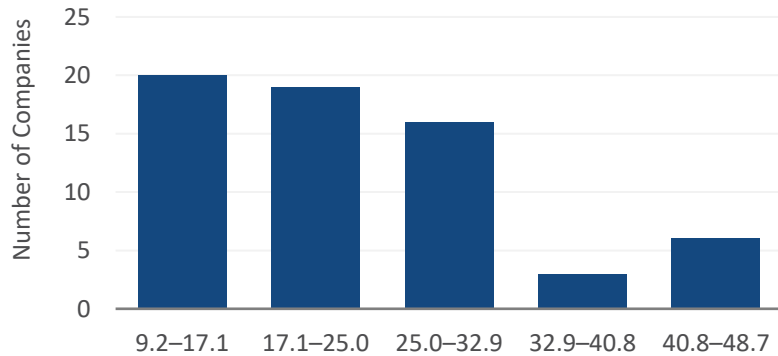
EV/Revenues



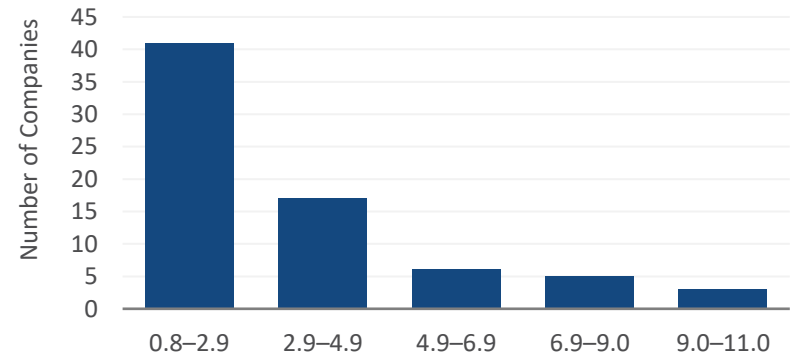
EV/EBITDA



P/E



P/B



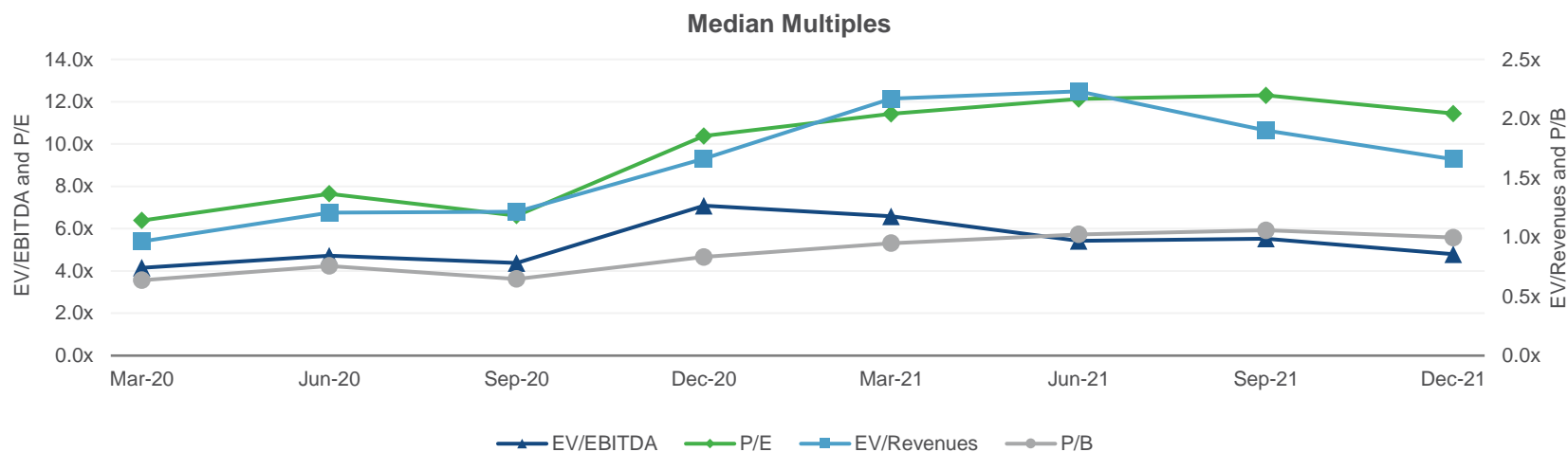
Energy

Q4 2021

Energy

As of December 31, 2021

	EV/Revenues	EV/EBITDA	P/E	P/B
Number of Observations ¹	49	49	49	49
Number of Outliers ²	8	9	19	9
High	8.9x	23.3x	45.5x	6.1x
3rd Quartile	2.6x	8.3x	18.8x	1.2x
Mean	2.1x	6.7x	15.6x	1.3x
Median	1.7x	4.8x	11.4x	1.0x
1st Quartile	0.7x	3.6x	7.9x	0.7x
Low	0.4x	2.1x	4.3x	0.4x



¹ A sector/industry group must have a minimum of five company participants to be calculated.

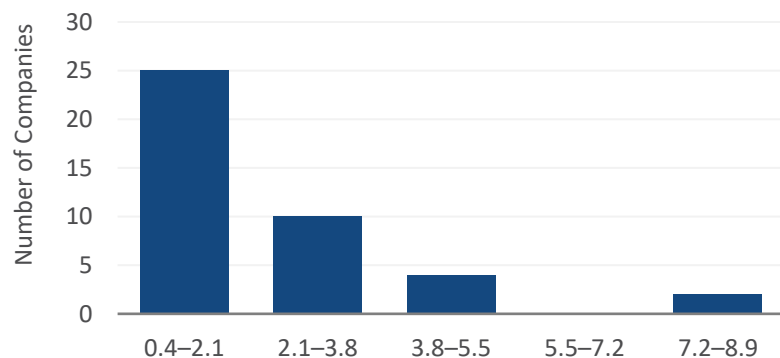
² Outliers have been excluded from the included multiples. Please refer to "Criteria" for outlier criteria and definitions.

Sources: Capital IQ; Bloomberg; Kroll analysis.

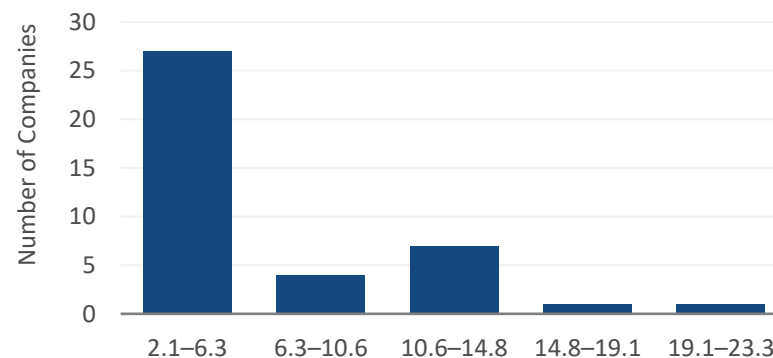
Energy

As of December 31, 2021

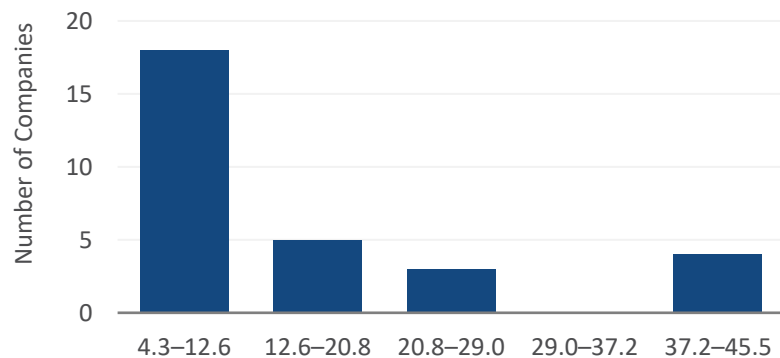
EV/Revenues



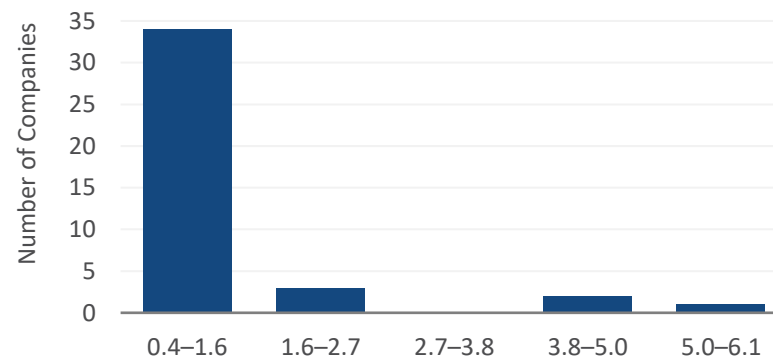
EV/EBITDA



P/E



P/B



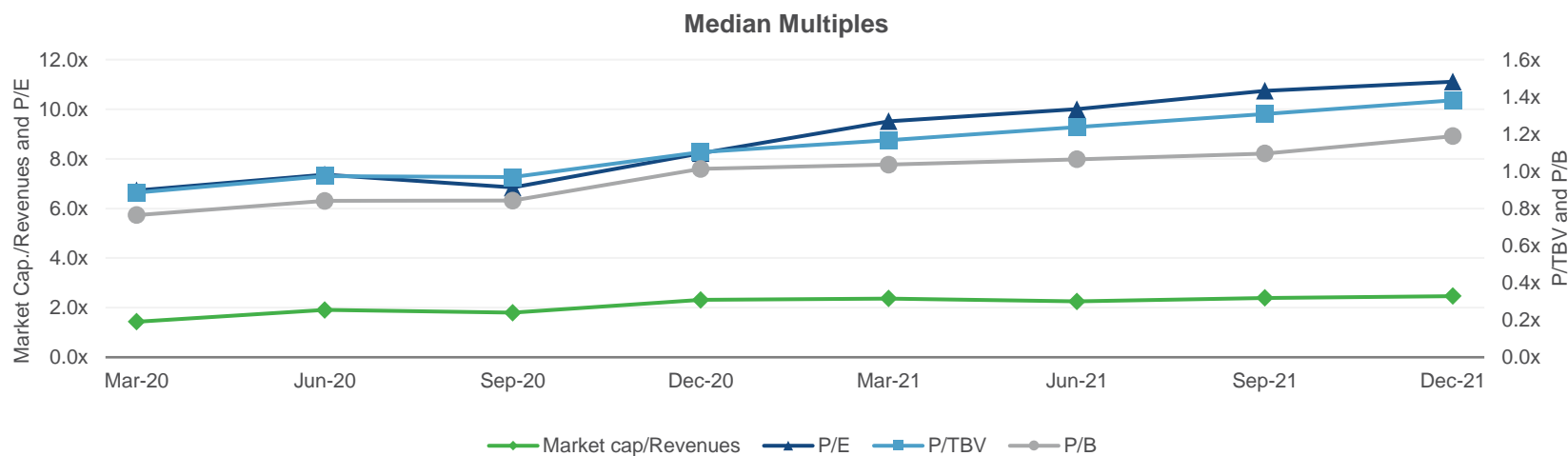
Financials

Q4 2021

Financials

As of December 31, 2021

	Market Cap./Revenues	P/TBV	P/E	P/B
Number of Observations ¹	187	187	187	187
Number of Outliers ²	21	38	39	31
High	10.3x	12.9x	52.6x	7.3x
3rd Quartile	4.3x	2.5x	15.7x	1.7x
Mean	2.9x	2.2x	14.2x	1.6x
Median	2.5x	1.4x	11.1x	1.2x
1st Quartile	1.3x	0.9x	8.1x	0.8x
Low	0.3x	0.4x	4.7x	0.4x



¹ A sector/industry group must have a minimum of five company participants to be calculated.

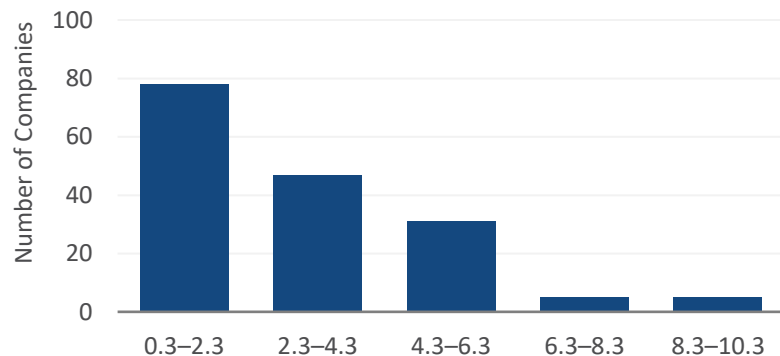
² Outliers have been excluded from the concluded multiples. Please refer to "Criteria" for outlier criteria and definitions.

Sources: Capital IQ; Bloomberg; Kroll analysis.

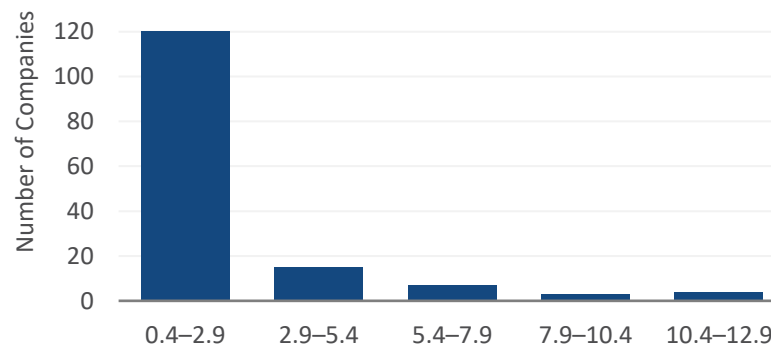
Financials

As of December 31, 2021

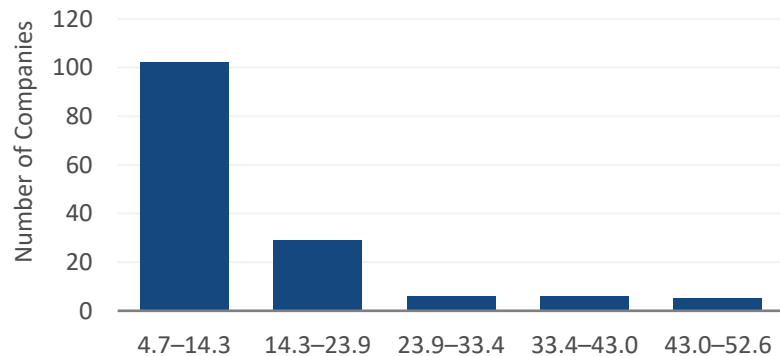
Market Cap./Revenues



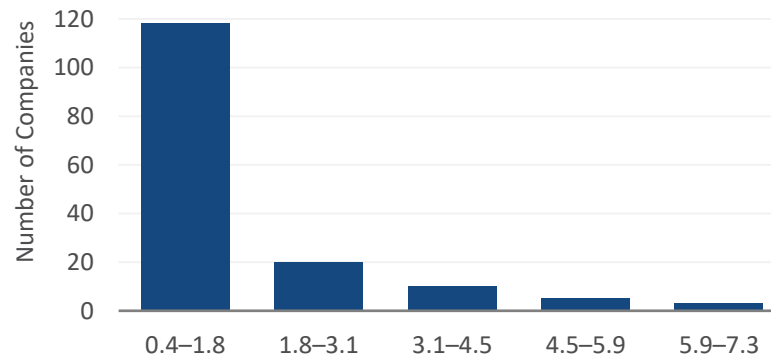
P/TBV



P/E



P/B



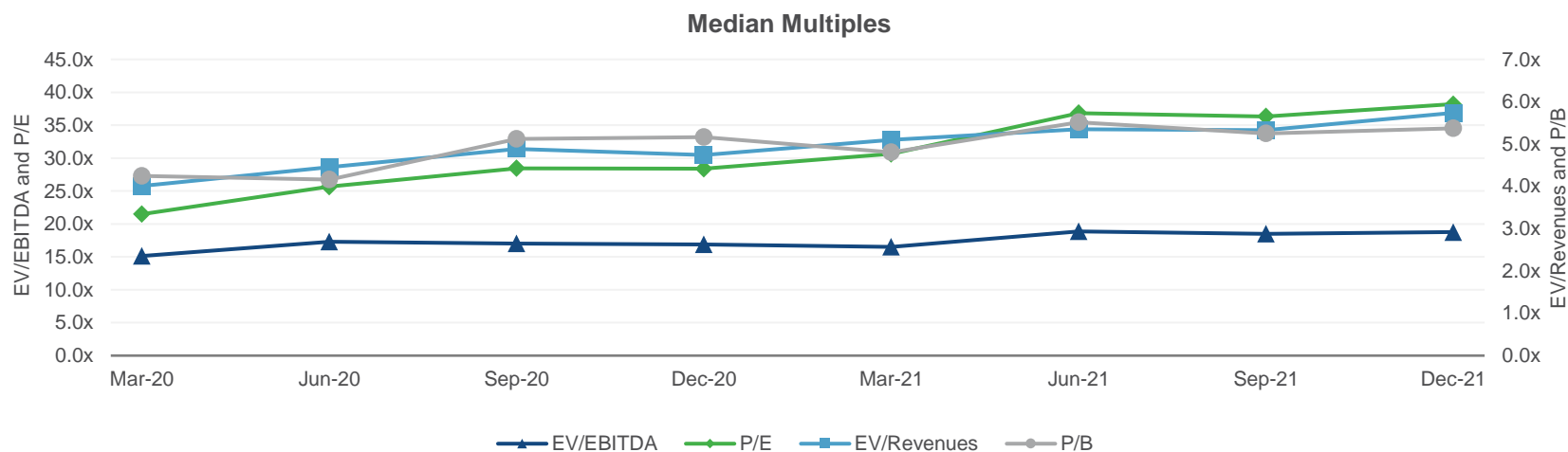
Health Care

Q4 2021

Health Care

As of December 31, 2021

	EV/Revenues	EV/EBITDA	P/E	P/B
Number of Observations ¹	133	133	133	133
Number of Outliers ²	20	40	48	22
High	96.9x	78.5x	154.2x	23.9x
3rd Quartile	12.6x	32.7x	59.5x	9.2x
Mean	11.8x	25.3x	44.8x	6.7x
Median	5.7x	18.8x	38.2x	5.4x
1st Quartile	3.1x	12.6x	24.6x	2.8x
Low	1.0x	7.7x	10.9x	1.3x



¹ A sector/industry group must have a minimum of five company participants to be calculated.

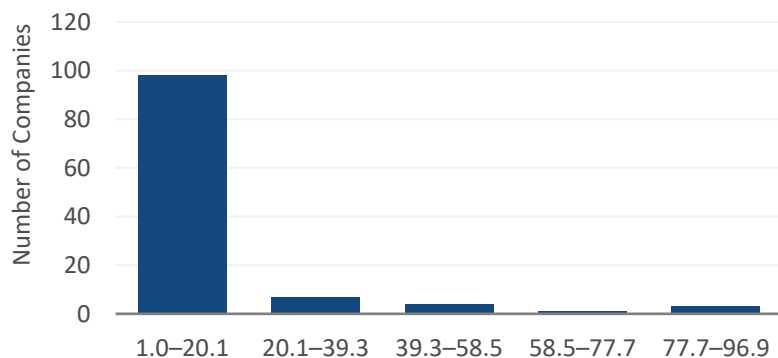
² Outliers have been excluded from the concluded multiples. Please refer to "Criteria" for outlier criteria and definitions.

Sources: Capital IQ; Bloomberg; Kroll analysis.

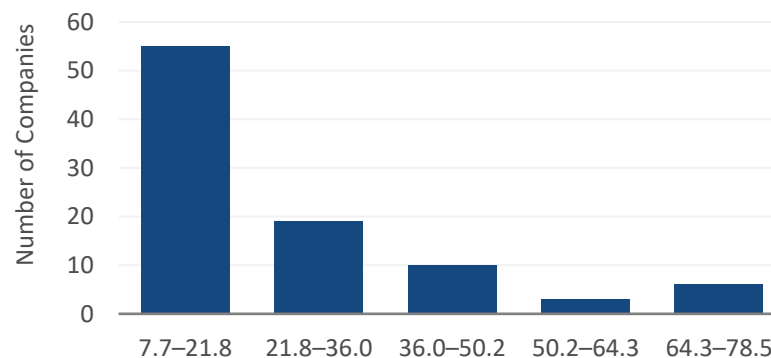
Health Care

As of December 31, 2021

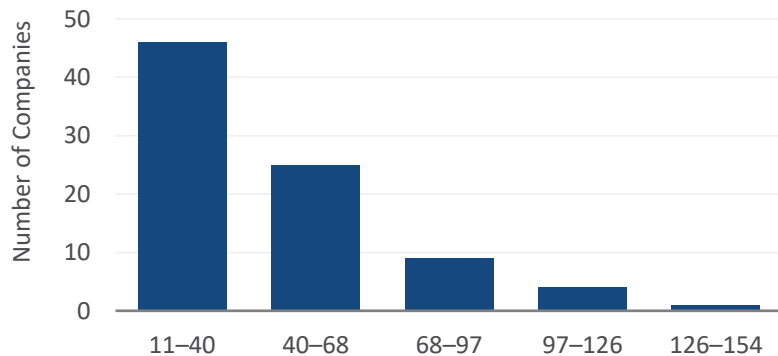
EV/Revenues



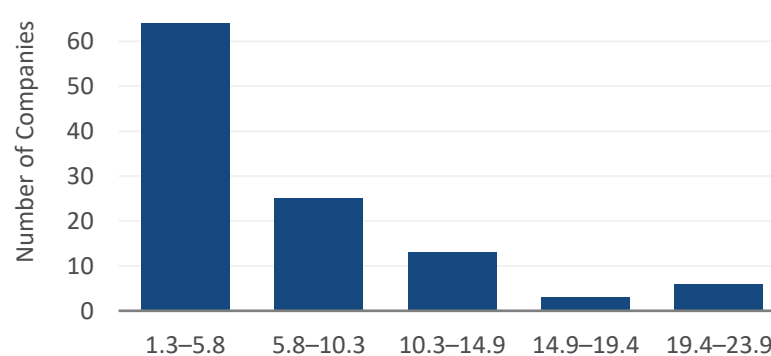
EV/EBITDA



P/E



P/B



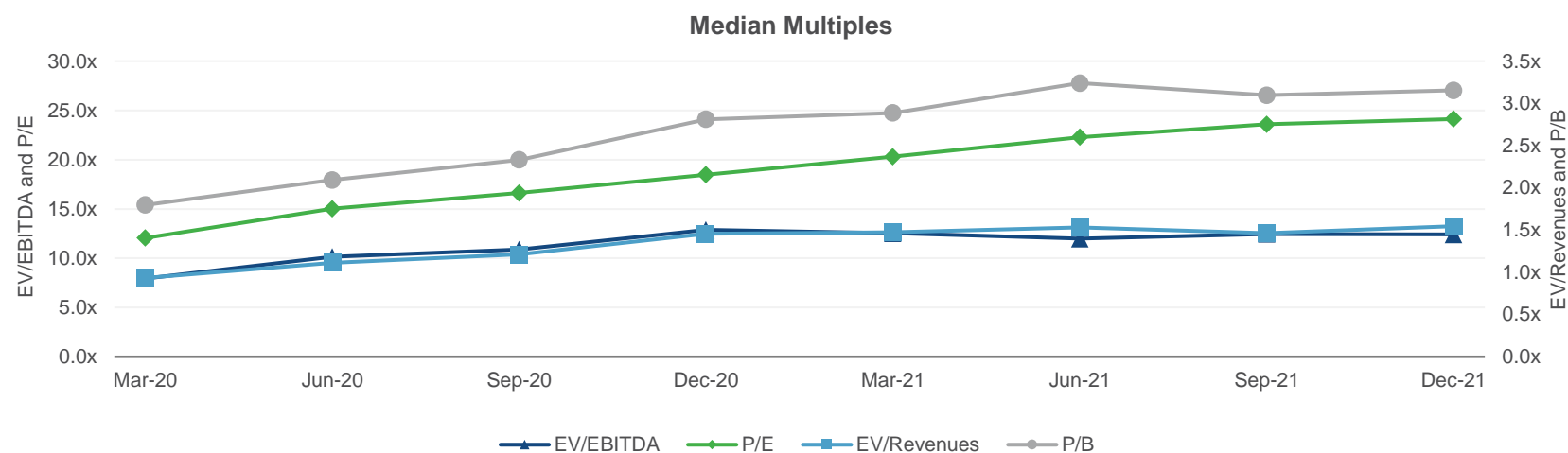
Capital Goods

Q4 2021

Capital Goods

As of December 31, 2021

	EV/Revenues	EV/EBITDA	P/E	P/B
Number of Observations ¹	221	221	221	221
Number of Outliers ²	23	30	50	29
High	10.2x	49.0x	94.2x	13.6x
3rd Quartile	2.8x	18.7x	35.9x	5.0x
Mean	2.3x	15.6x	29.6x	4.0x
Median	1.5x	12.4x	24.1x	3.2x
1st Quartile	1.0x	9.0x	17.7x	2.1x
Low	0.4x	4.3x	11.3x	1.1x



¹ A sector/industry group must have a minimum of five company participants to be calculated.

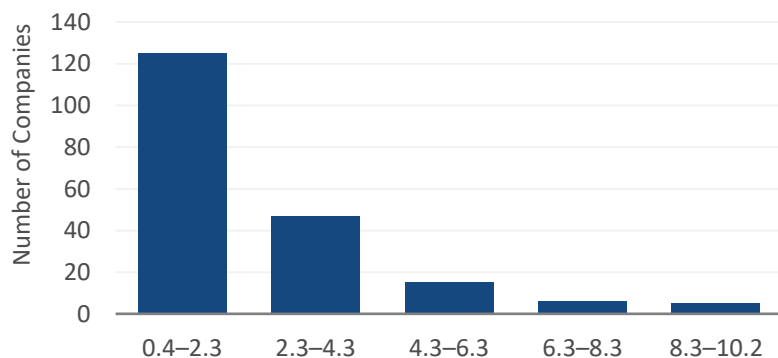
² Outliers have been excluded from the concluded multiples. Please refer to "Criteria" for outlier criteria and definitions.

Sources: Capital IQ; Bloomberg; Kroll analysis.

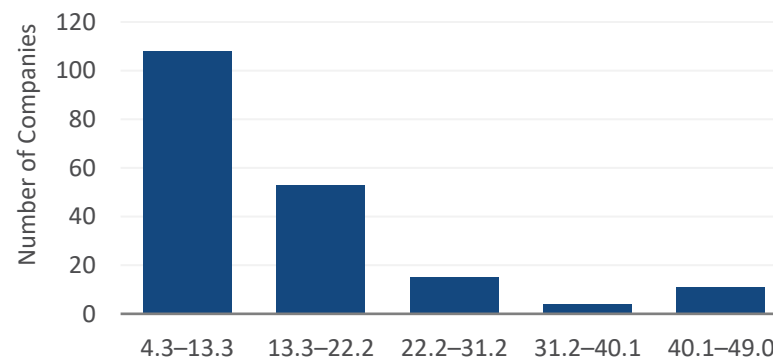
Capital Goods

As of December 31, 2021

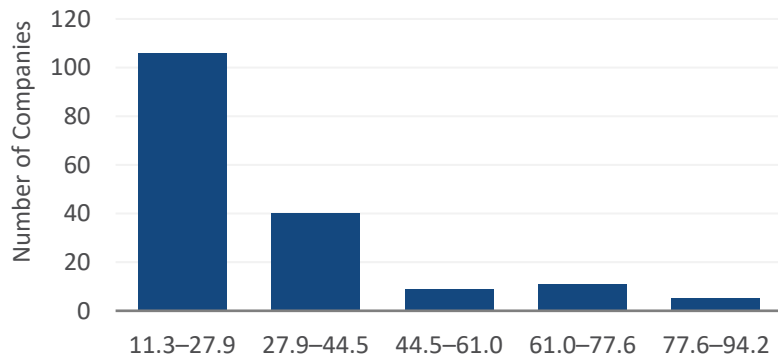
EV/Revenues



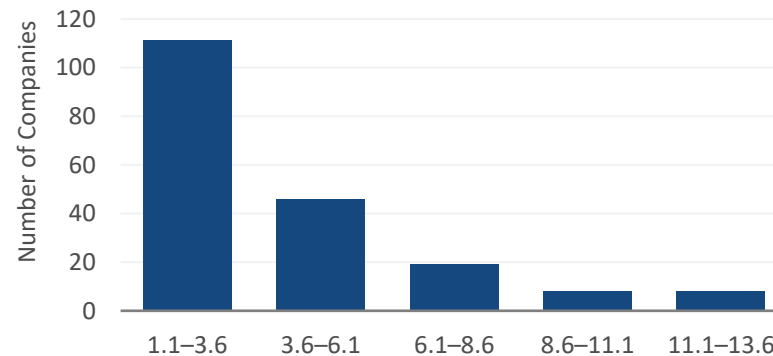
EV/EBITDA



P/E



P/B



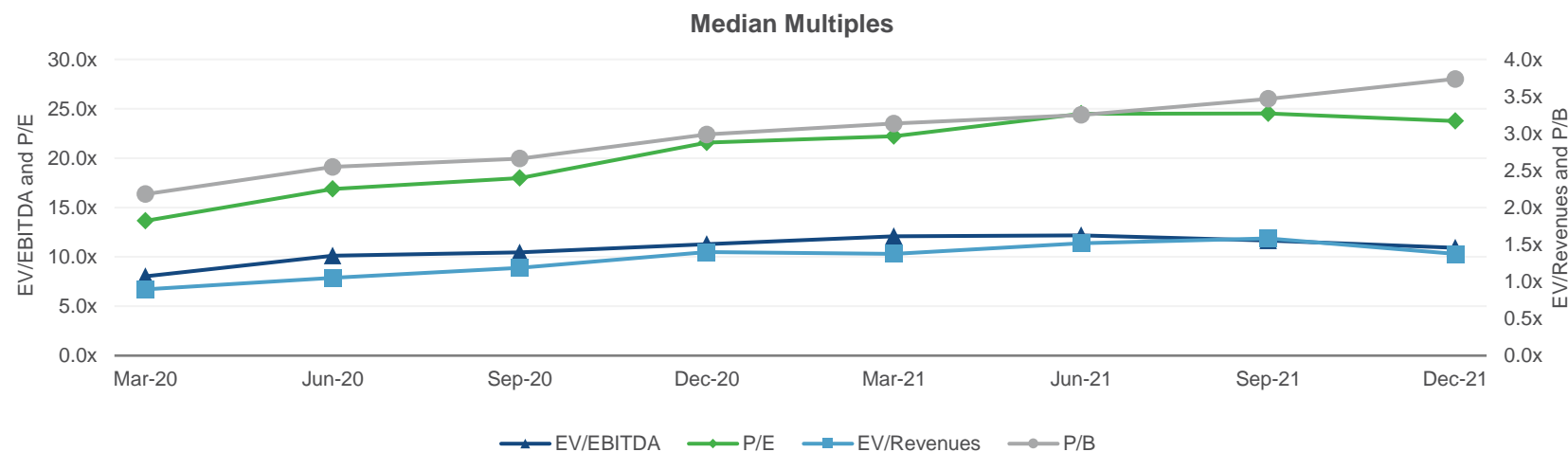
Commercial and Professional Services

Q4 2021

Commercial and Professional Services

As of December 31, 2021

	EV/Revenues	EV/EBITDA	P/E	P/B
Number of Observations ¹	53	53	53	53
Number of Outliers ²	6	7	9	6
High	8.2x	37.2x	68.1x	15.4x
3rd Quartile	3.8x	16.1x	31.4x	7.0x
Mean	2.5x	12.5x	26.0x	5.0x
Median	1.4x	10.9x	23.8x	3.7x
1st Quartile	0.8x	7.5x	16.3x	2.3x
Low	0.4x	5.0x	9.3x	1.3x



¹ A sector/industry group must have a minimum of five company participants to be calculated.

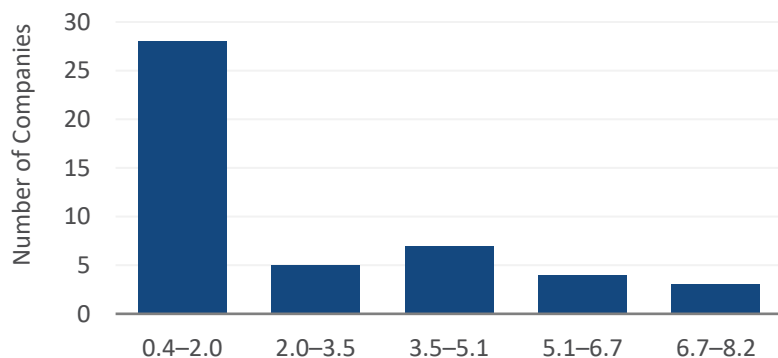
² Outliers have been excluded from the included multiples. Please refer to "Criteria" for outlier criteria and definitions.

Sources: Capital IQ; Bloomberg; Kroll analysis.

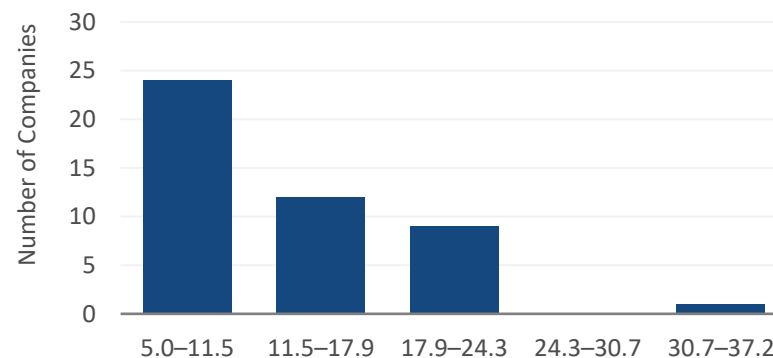
Commercial and Professional Services

As of December 31, 2021

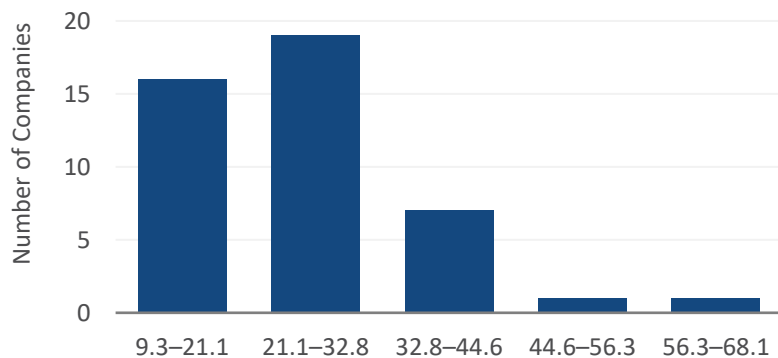
EV/Revenues



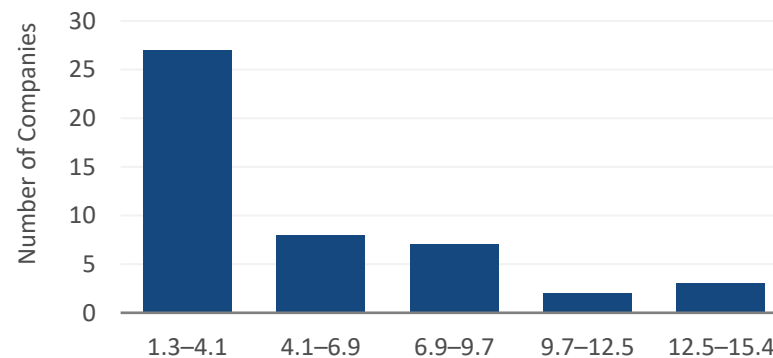
EV/EBITDA



P/E



P/B



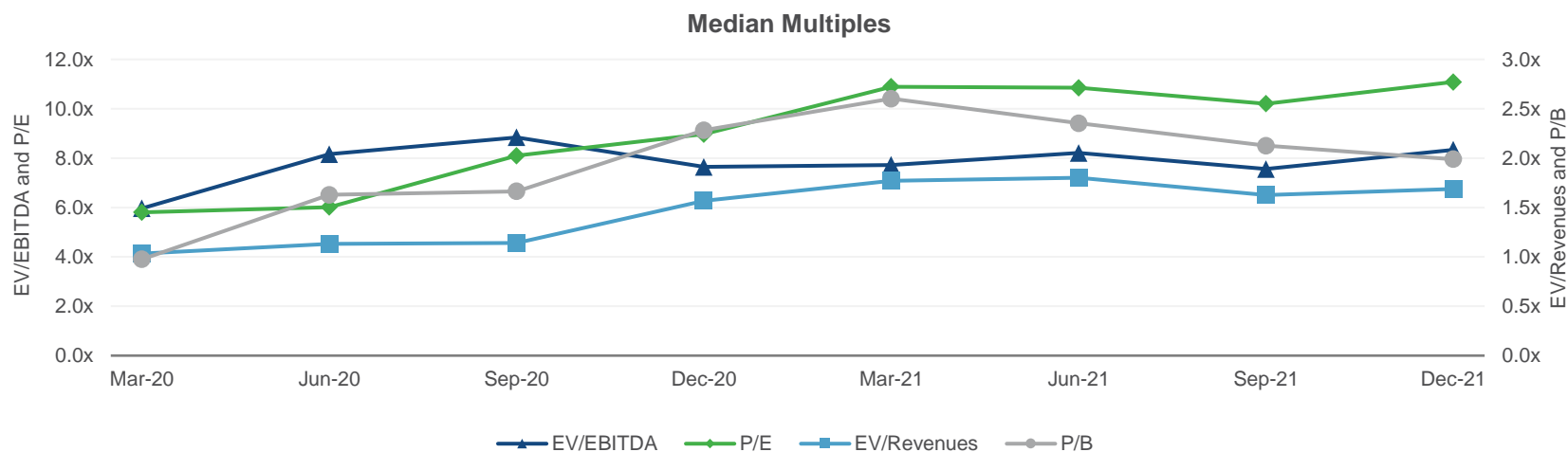
Transportation

Q4 2021

Transportation

As of December 31, 2021

	EV/Revenues	EV/EBITDA	P/E	P/B
Number of Observations ¹	45	45	45	45
Number of Outliers ²	8	12	24	9
High	8.1x	34.1x	35.9x	11.1x
3rd Quartile	3.3x	16.6x	17.0x	3.9x
Mean	2.5x	11.9x	13.5x	3.0x
Median	1.7x	8.3x	11.1x	2.0x
1st Quartile	1.1x	5.2x	8.4x	1.3x
Low	0.5x	2.6x	4.0x	1.0x



¹ A sector/industry group must have a minimum of five company participants to be calculated.

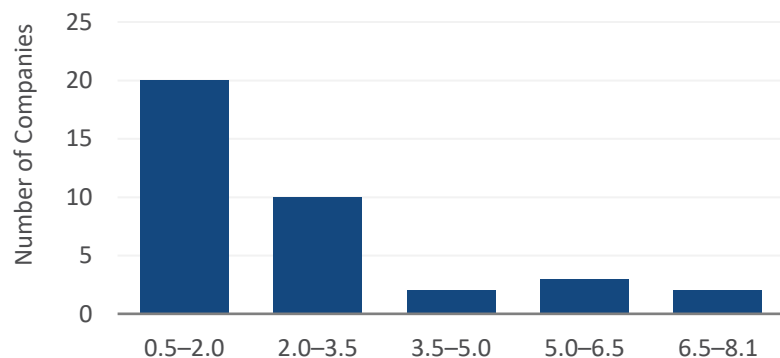
² Outliers have been excluded from the concluded multiples. Please refer to "Criteria" for outlier criteria and definitions.

Sources: Capital IQ; Bloomberg; Kroll analysis.

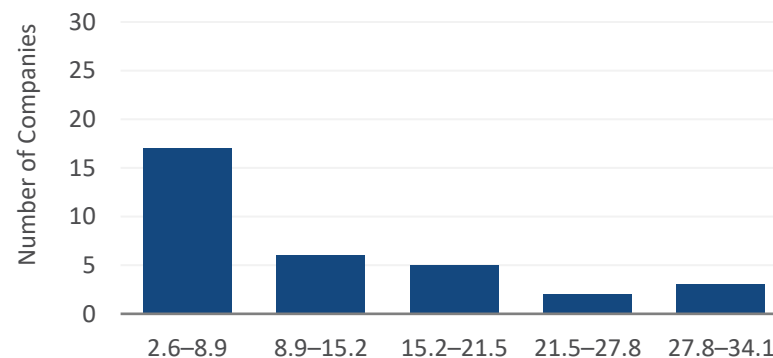
Transportation

As of December 31, 2021

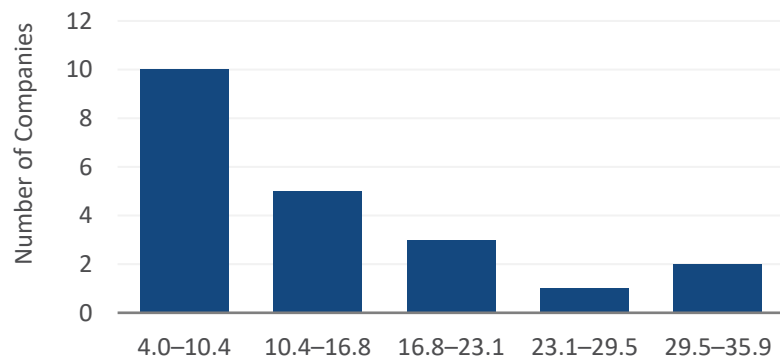
EV/Revenues



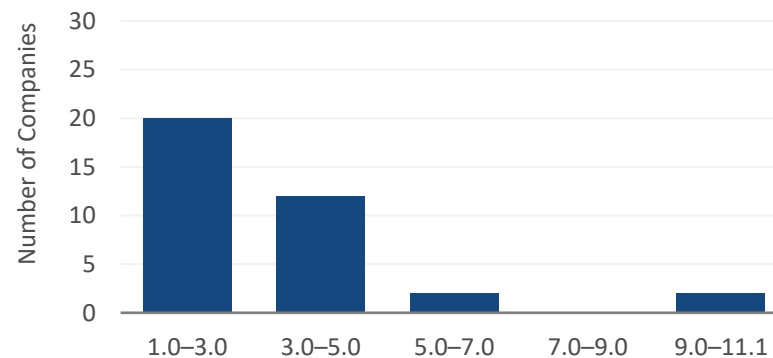
EV/EBITDA



P/E



P/B



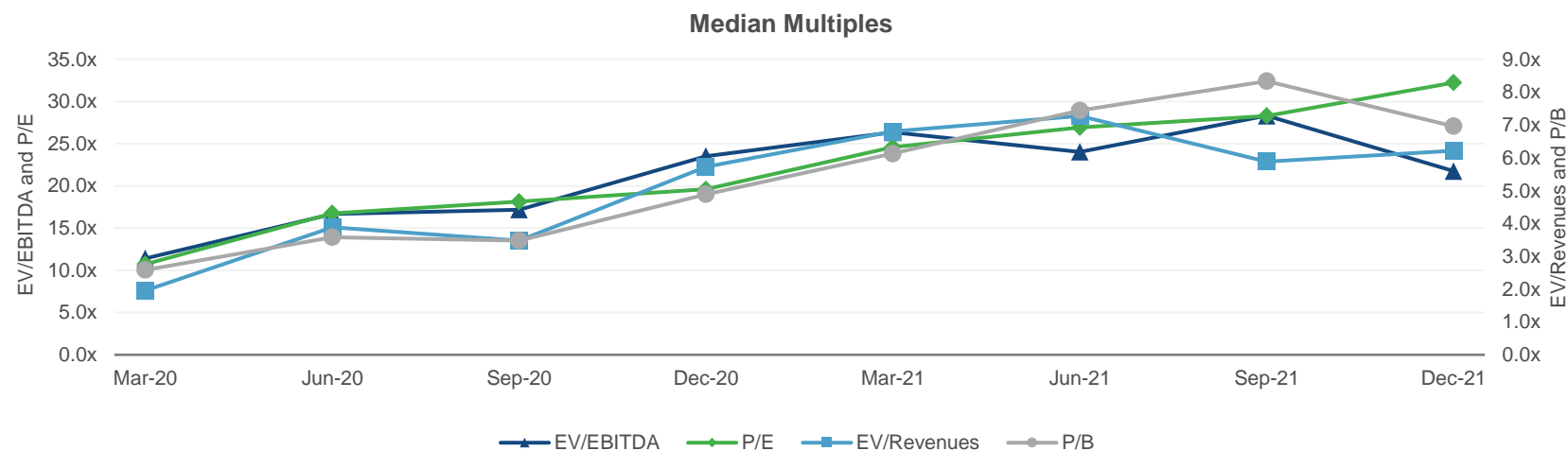
Semiconductors and Semiconductor Equipment

Q4 2021

Semiconductors and Semiconductor Equipment

As of December 31, 2021

	EV/Revenues	EV/EBITDA	P/E	P/B
Number of Observations ¹	18	18	18	18
Number of Outliers ²	2	5	7	2
High	21.3x	49.7x	67.8x	28.6x
3rd Quartile	10.3x	38.9x	44.7x	11.0x
Mean	8.0x	25.6x	35.8x	9.2x
Median	6.2x	21.8x	32.2x	7.0x
1st Quartile	3.8x	14.8x	22.8x	3.8x
Low	1.2x	7.8x	17.0x	1.8x



¹ A sector/industry group must have a minimum of five company participants to be calculated.

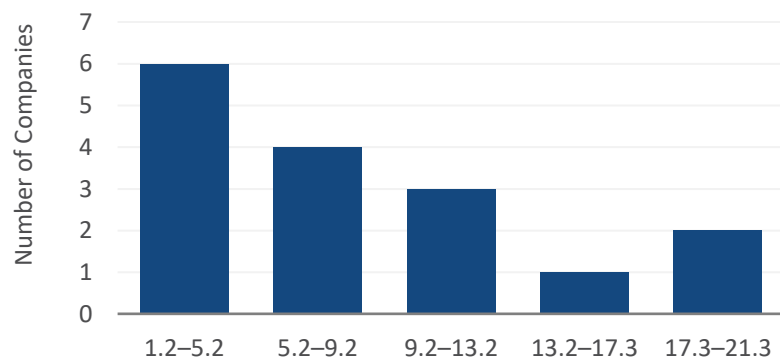
² Outliers have been excluded from the concluded multiples. Please refer to "Criteria" for outlier criteria and definitions.

Sources: Capital IQ; Bloomberg; Kroll analysis.

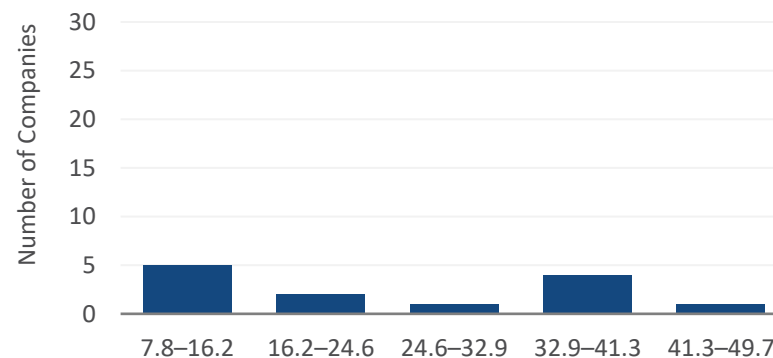
Semiconductors and Semiconductor Equipment

As of December 31, 2021

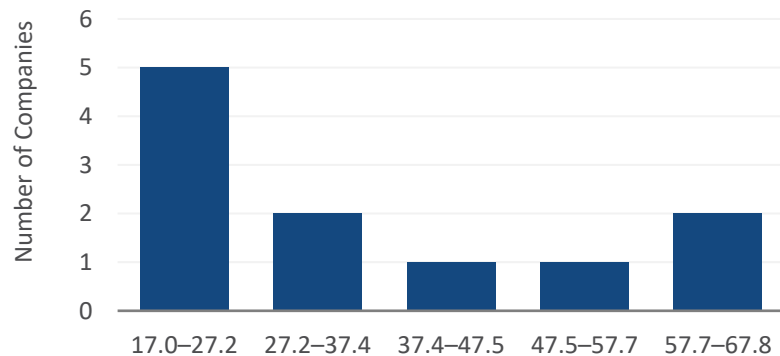
EV/Revenues



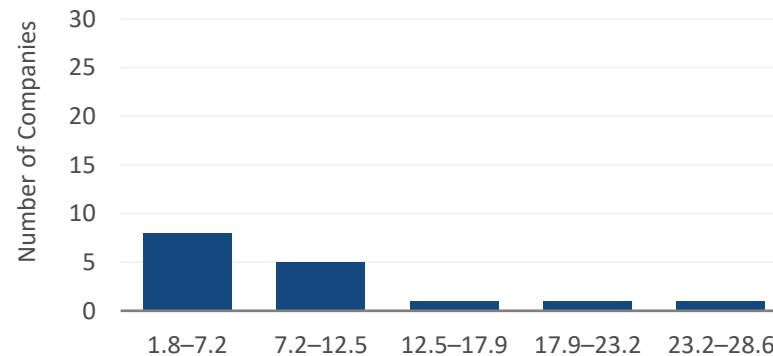
EV/EBITDA



P/E



P/B



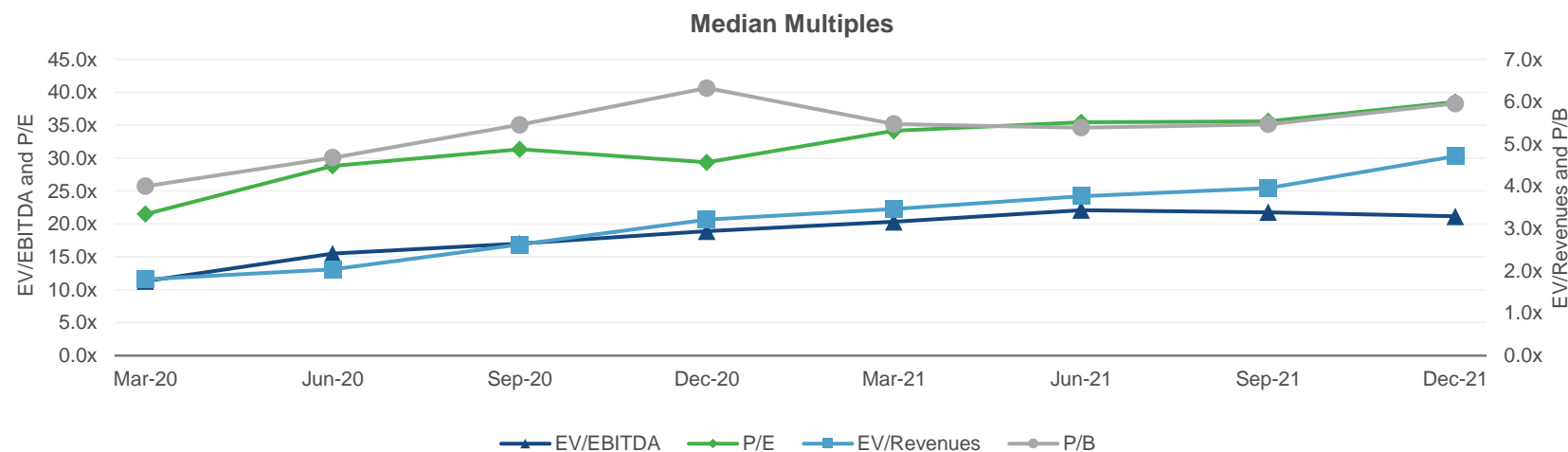
Software and Services

Q4 2021

Software and Services

As of December 31, 2021

	EV/Revenues	EV/EBITDA	P/E	P/B
Number of Observations ¹	72	72	72	72
Number of Outliers ²	8	11	22	13
High	27.4x	99.4x	157.6x	39.2x
3rd Quartile	9.5x	34.8x	65.2x	11.7x
Mean	6.2x	27.1x	52.8x	9.4x
Median	4.7x	21.1x	38.5x	6.0x
1st Quartile	2.1x	14.5x	26.0x	2.3x
Low	0.5x	5.9x	14.2x	1.1x



¹ A sector/industry group must have a minimum of five company participants to be calculated.

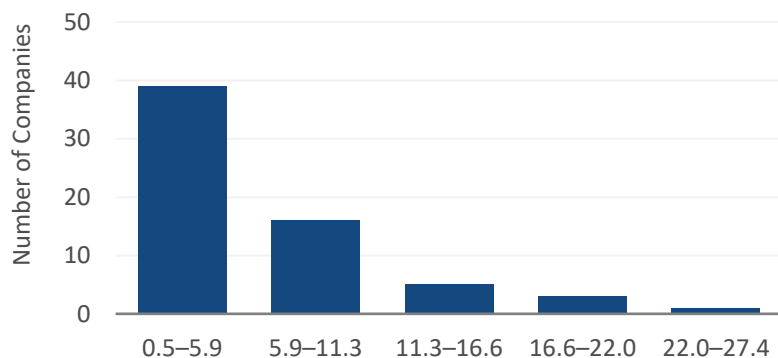
² Outliers have been excluded from the concluded multiples. Please refer to "Criteria" for outlier criteria and definitions.

Sources: Capital IQ; Bloomberg; Kroll analysis.

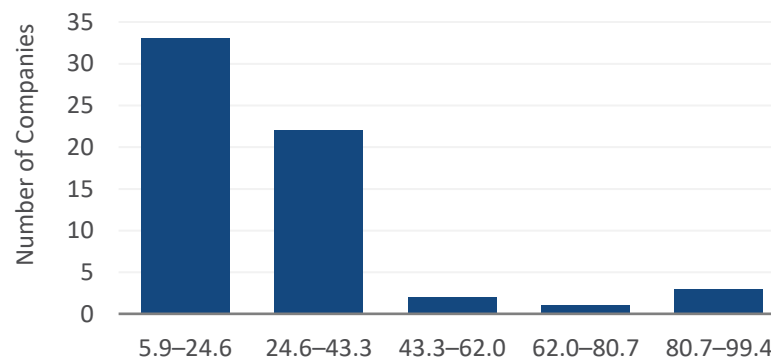
Software and Services

As of December 31, 2021

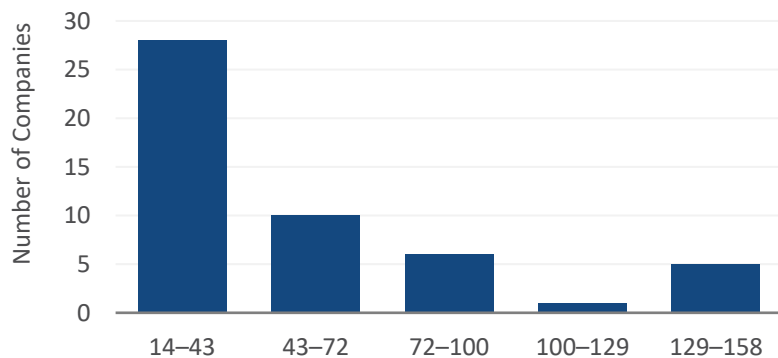
EV/Revenues



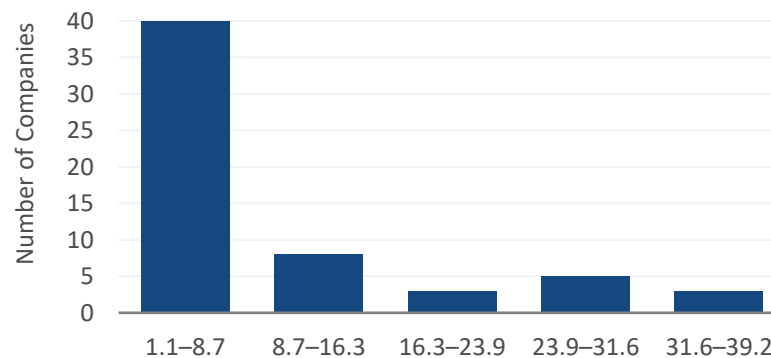
EV/EBITDA



P/E



P/B



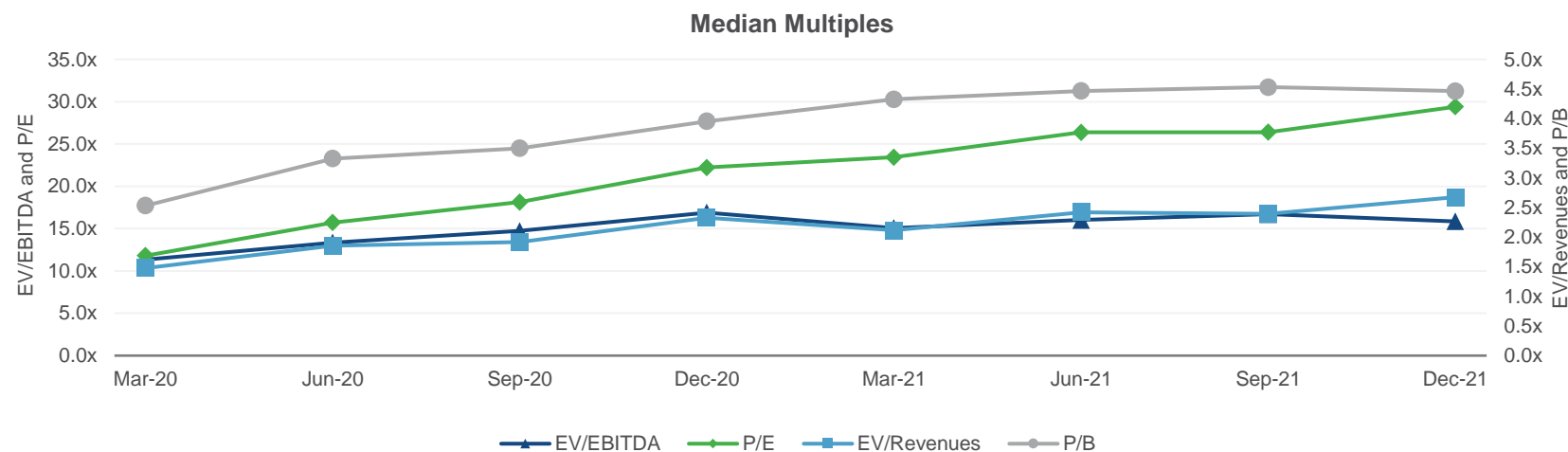
Technology Hardware and Equipment

Q4 2021

Technology Hardware and Equipment

As of December 31, 2021

	EV/Revenues	EV/EBITDA	P/E	P/B
Number of Observations ¹	41	41	41	41
Number of Outliers ²	4	8	11	5
High	9.3x	39.9x	73.7x	21.2x
3rd Quartile	5.0x	22.1x	38.0x	7.9x
Mean	3.4x	18.4x	31.7x	5.7x
Median	2.7x	15.9x	29.4x	4.5x
1st Quartile	1.6x	12.4x	22.4x	2.4x
Low	0.8x	5.2x	11.8x	1.5x



¹ A sector/industry group must have a minimum of five company participants to be calculated.

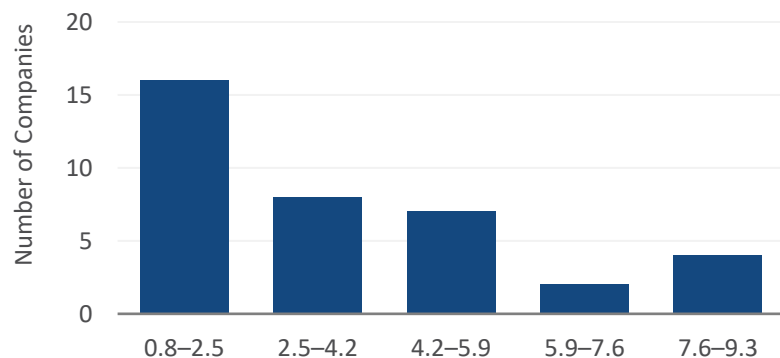
² Outliers have been excluded from the included multiples. Please refer to "Criteria" for outlier criteria and definitions.

Sources: Capital IQ; Bloomberg; Kroll analysis.

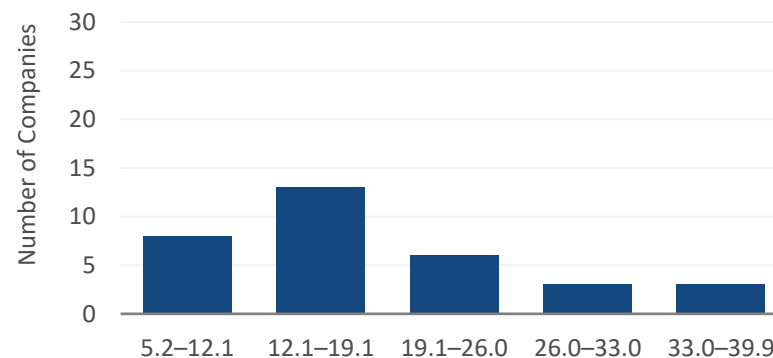
Technology Hardware and Equipment

As of December 31, 2021

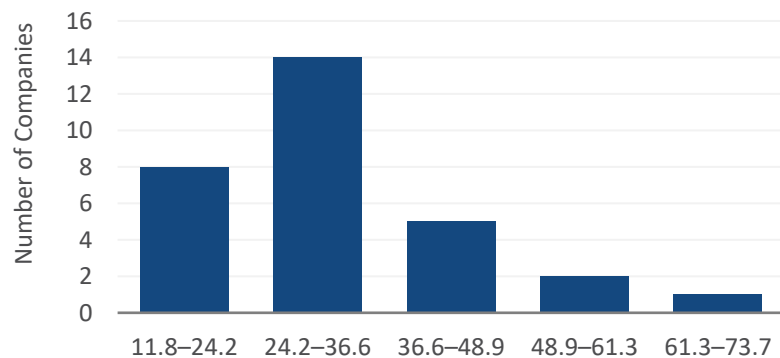
EV/Revenues



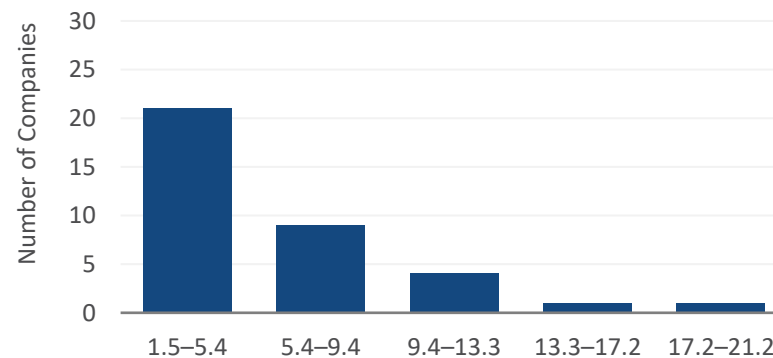
EV/EBITDA



P/E



P/B



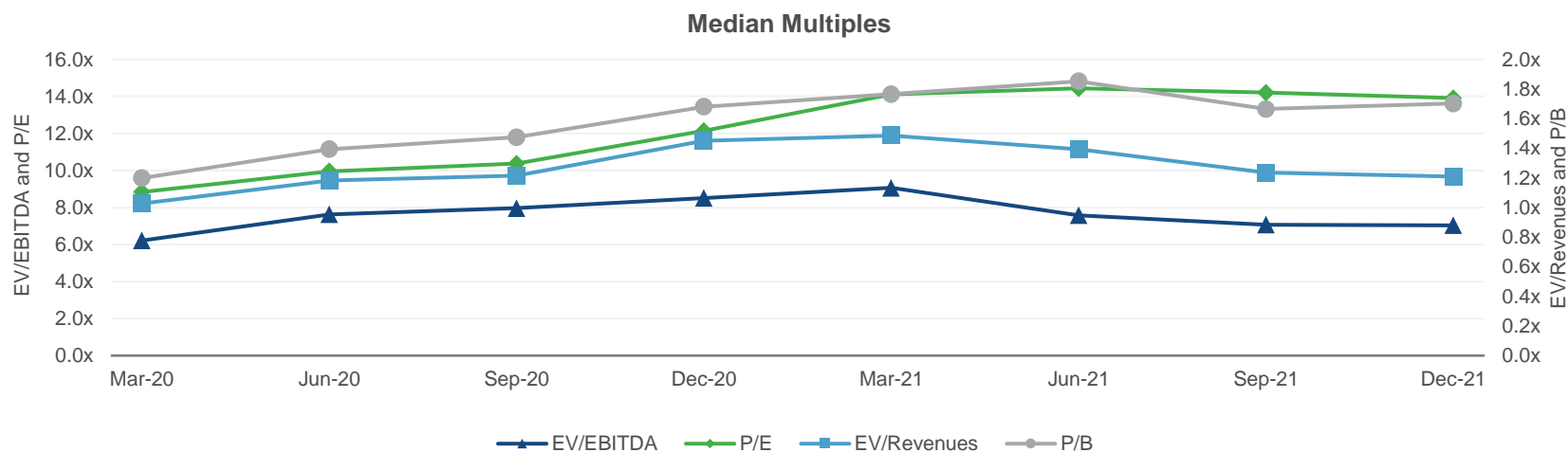
Materials

Q4 2021

Materials

As of December 31, 2021

	EV/Revenues	EV/EBITDA	P/E	P/B
Number of Observations ¹	106	106	106	106
Number of Outliers ²	12	12	16	14
High	6.3x	25.1x	49.1x	5.8x
3rd Quartile	1.9x	10.5x	24.1x	2.7x
Mean	1.7x	8.5x	17.5x	2.1x
Median	1.2x	7.0x	13.9x	1.7x
1st Quartile	0.9x	4.5x	8.4x	1.3x
Low	0.3x	2.4x	3.4x	0.6x



¹ A sector/industry group must have a minimum of five company participants to be calculated.

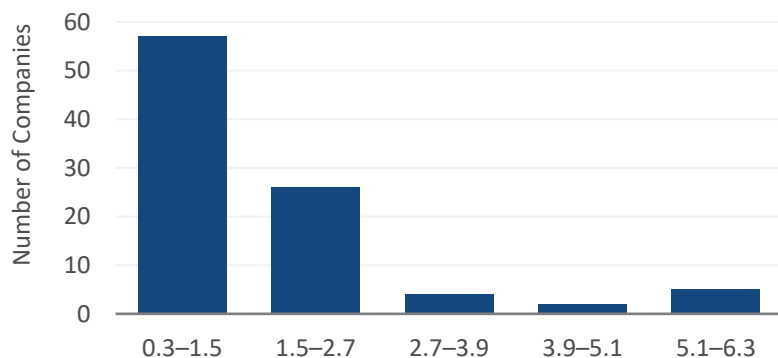
² Outliers have been excluded from the included multiples. Please refer to "Criteria" for outlier criteria and definitions.

Sources: Capital IQ; Bloomberg; Kroll analysis.

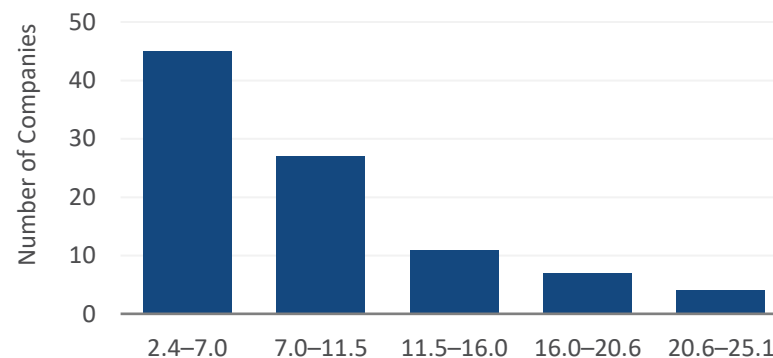
Materials

As of December 31, 2021

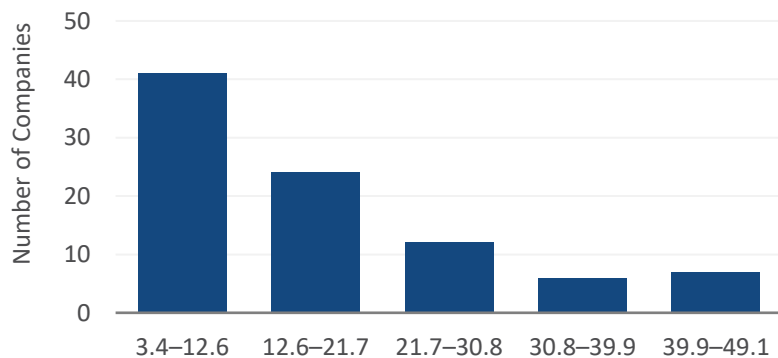
EV/Revenues



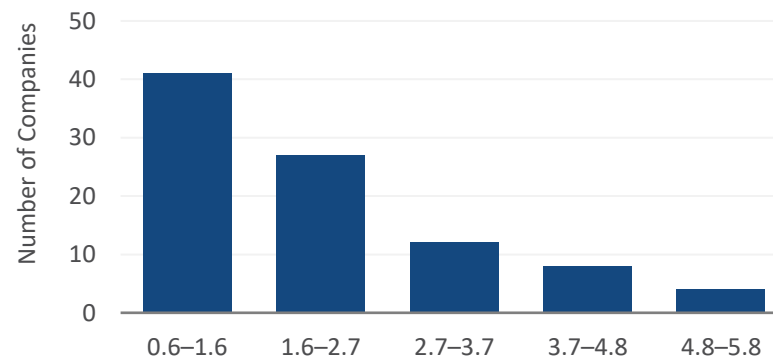
EV/EBITDA



P/E



P/B



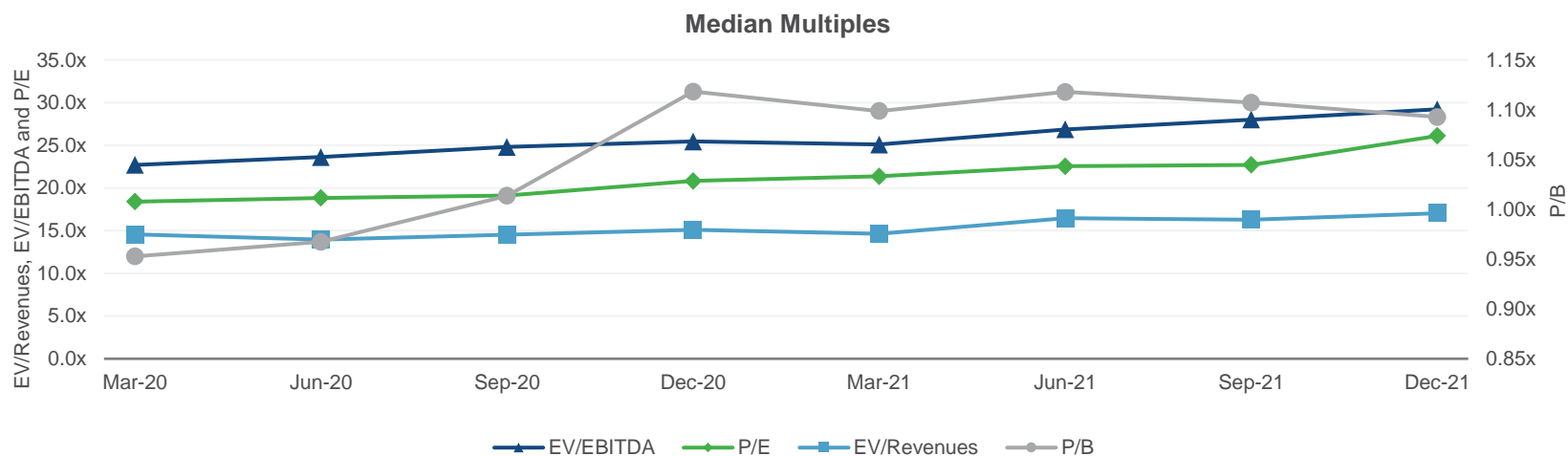
Real Estate

Q4 2021

Real Estate

As of December 31, 2021

	EV/Revenues	EV/EBITDA	P/E	P/B
Number of Observations ¹	88	88	88	88
Number of Outliers ²	10	15	16	11
High	31.1x	60.3x	50.8x	2.2x
3rd Quartile	22.3x	34.1x	33.2x	1.4x
Mean	17.6x	29.3x	26.9x	1.2x
Median	17.1x	29.2x	26.1x	1.1x
1st Quartile	13.3x	24.3x	19.4x	0.9x
Low	2.1x	8.5x	9.4x	0.5x



¹ A sector/industry group must have a minimum of five company participants to be calculated.

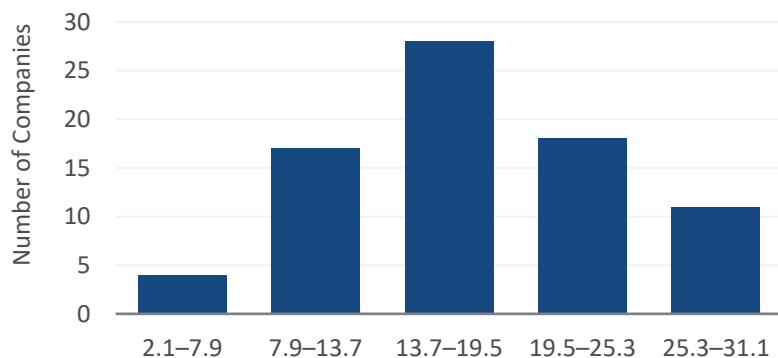
² Outliers have been excluded from the concluded multiples. Please refer to "Criteria" for outlier criteria and definitions.

Sources: Capital IQ; Bloomberg; Kroll analysis.

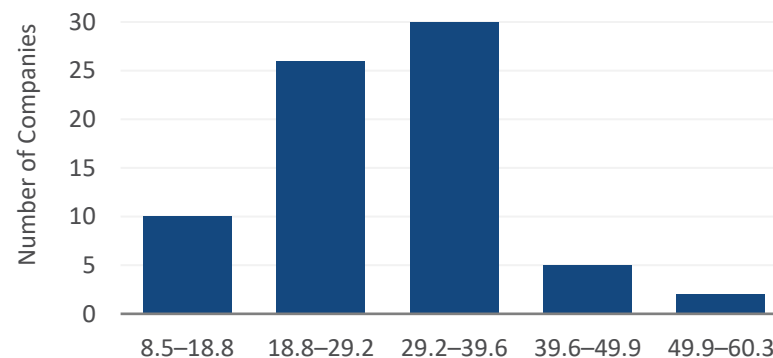
Real Estate

As of December 31, 2021

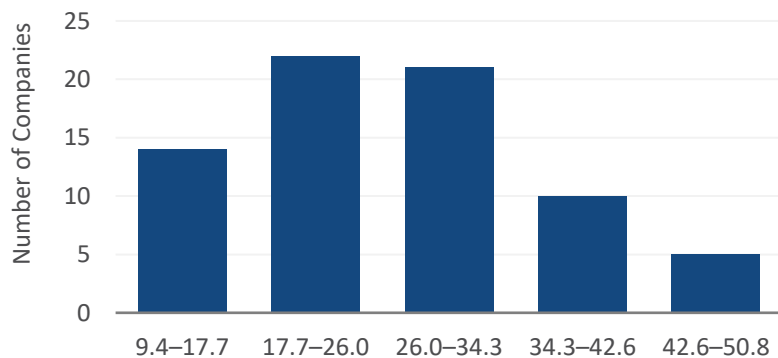
EV/Revenues



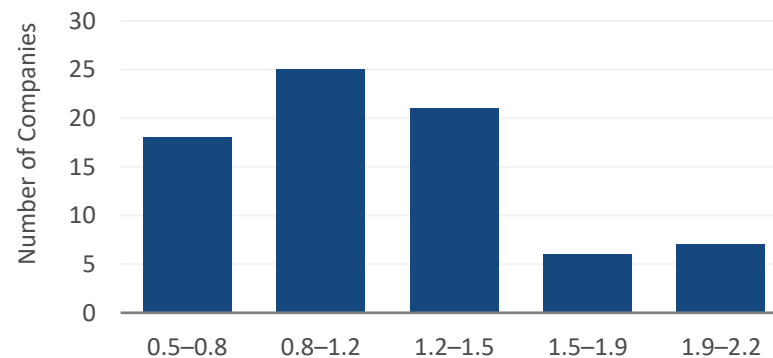
EV/EBITDA



P/E



P/B



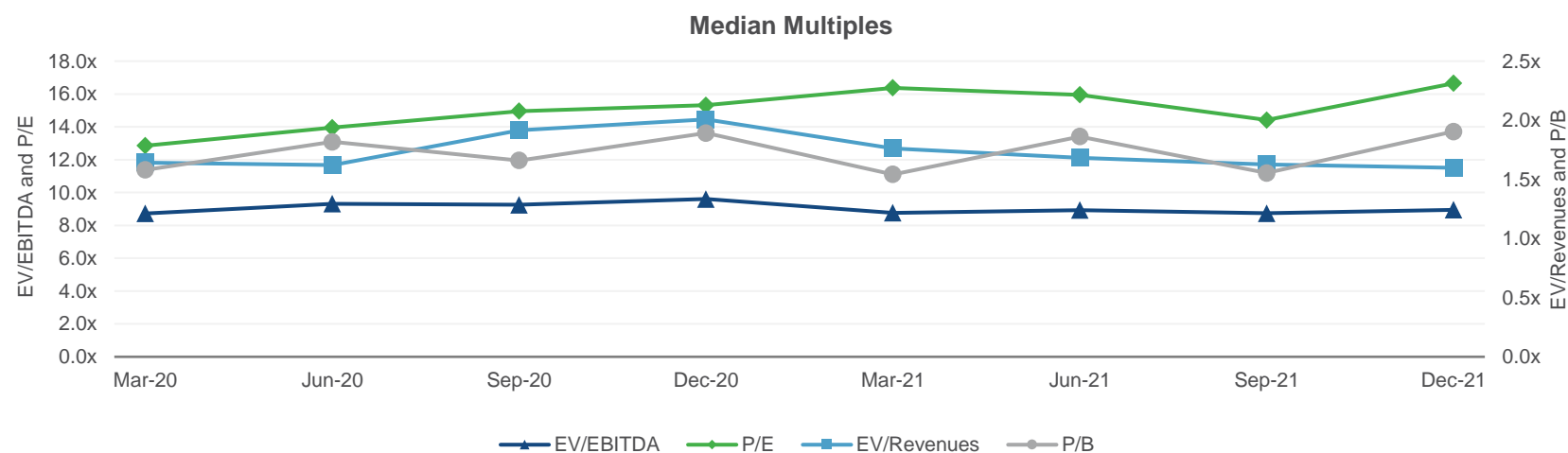
Electric, Gas and Water Utilities

Q4 2021

Electric, Gas and Water Utilities

As of December 31, 2021

	EV/Revenues	EV/EBITDA	P/E	P/B
Number of Observations ¹	36	36	36	36
Number of Outliers ²	4	5	8	6
High	8.4x	16.7x	54.9x	4.7x
3rd Quartile	5.0x	13.0x	23.2x	2.7x
Mean	2.9x	9.7x	20.3x	2.2x
Median	1.6x	9.0x	16.7x	1.9x
1st Quartile	0.9x	7.6x	10.3x	1.6x
Low	0.3x	2.4x	4.3x	0.3x



¹ A sector/industry group must have a minimum of five company participants to be calculated.

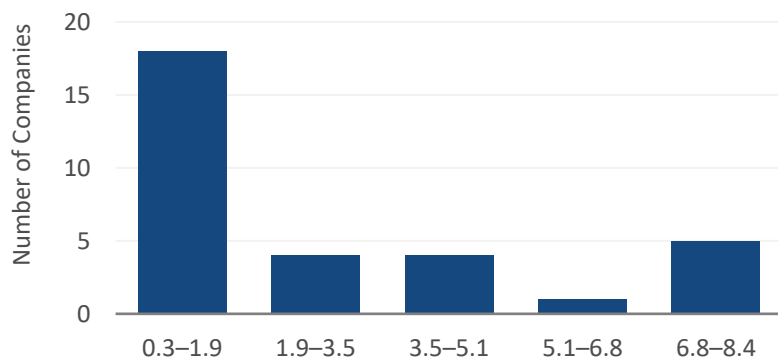
² Outliers have been excluded from the concluded multiples. Please refer to "Criteria" for outlier criteria and definitions.

Sources: Capital IQ; Bloomberg; Kroll analysis.

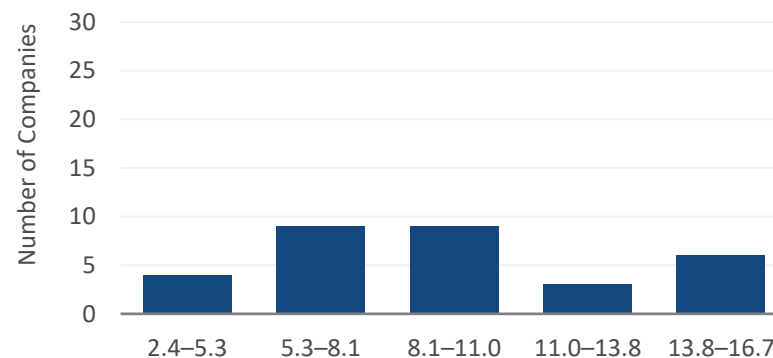
Electric, Gas and Water Utilities

As of December 31, 2021

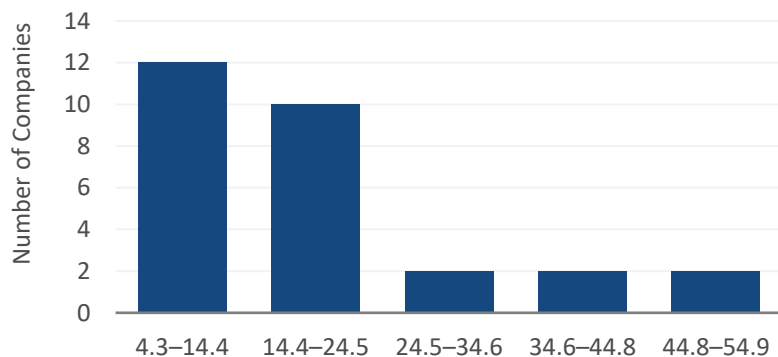
EV/Revenues



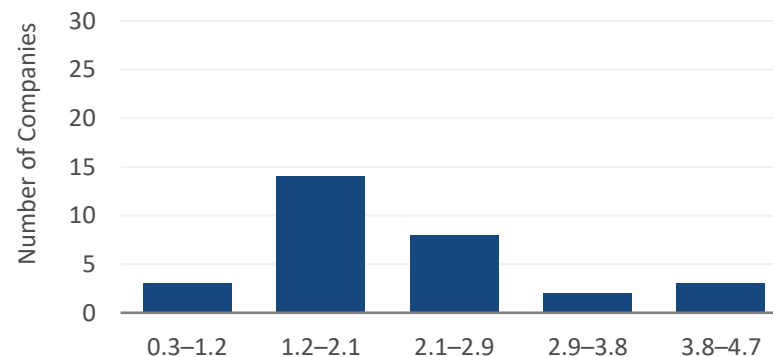
EV/EBITDA



P/E



P/B



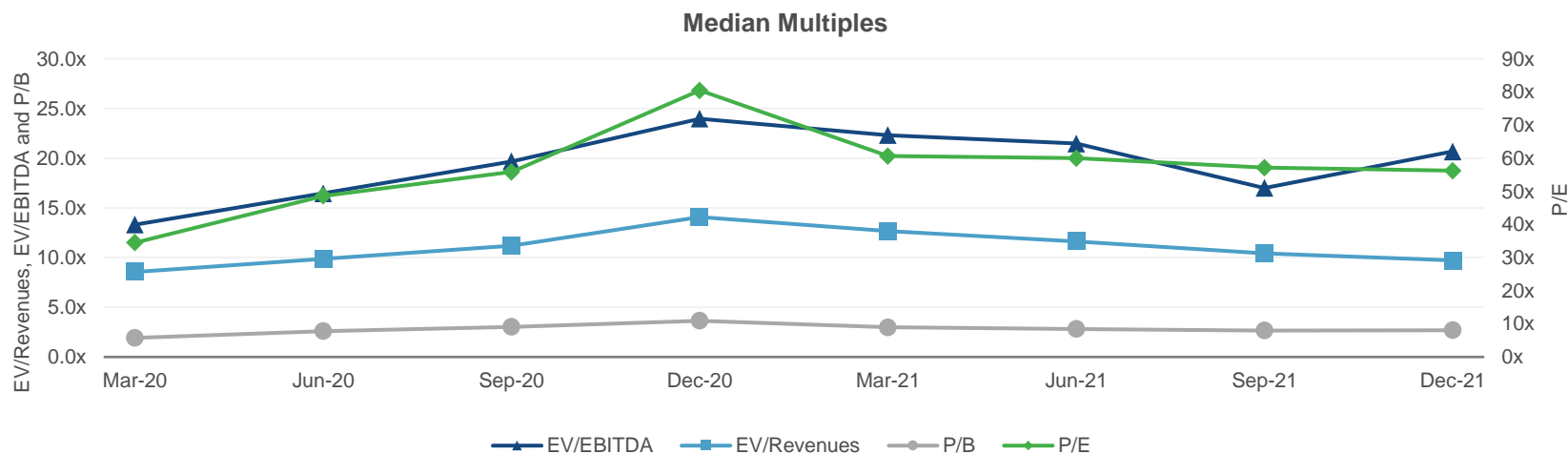
Independent Power and Renewable Producers

Q4 2021

Independent Power and Renewable Producers

As of December 31, 2021

	EV/Revenues	EV/EBITDA	P/E	P/B
Number of Observations ¹	12	12	12	12
Number of Outliers ²	2	3	5	4
High	25.4x	26.5x	98.0x	5.0x
3rd Quartile	15.2x	23.7x	70.2x	2.9x
Mean	11.3x	19.0x	59.4x	2.9x
Median	9.7x	20.7x	56.3x	2.7x
1st Quartile	5.4x	14.6x	44.6x	2.3x
Low	3.6x	9.8x	32.3x	1.9x



¹ A sector/industry group must have a minimum of five company participants to be calculated.

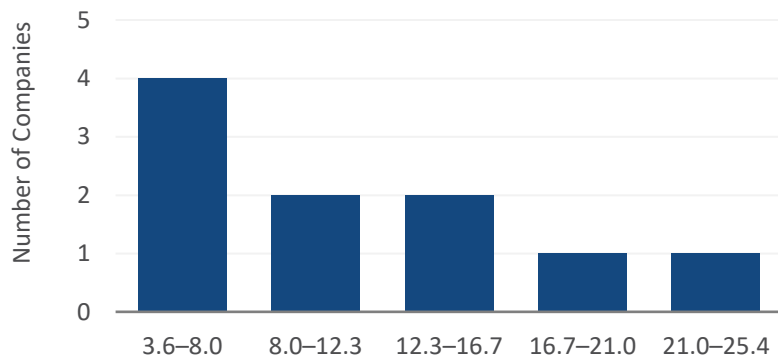
² Outliers have been excluded from the included multiples. Please refer to "Criteria" for outlier criteria and definitions.

Sources: Capital IQ; Bloomberg; Kroll analysis.

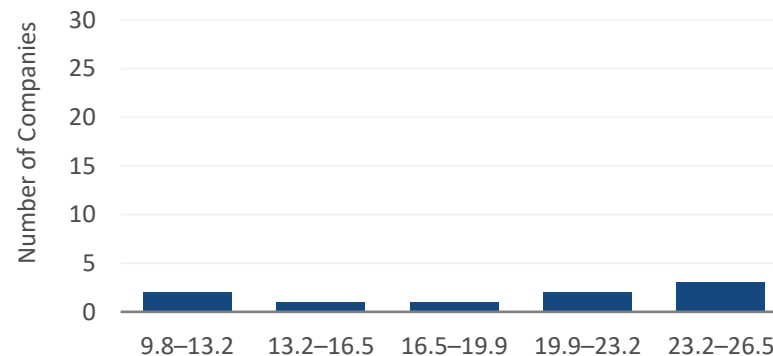
Independent Power and Renewable Producers

As of December 31, 2021

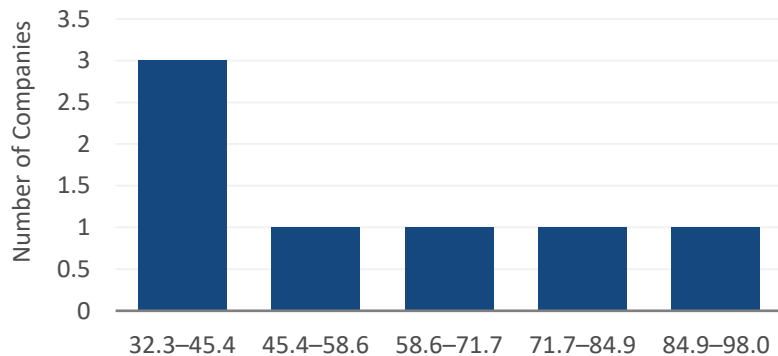
EV/Revenues



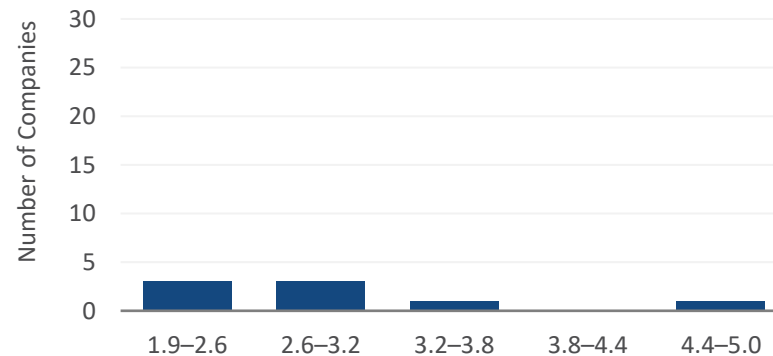
EV/EBITDA



P/E



P/B



Criteria

- For all reported multiples, we have considered the constituents of the STOXX Europe TMI as of the report reference date. The STOXX Europe TMI represents approximately 95% of the free float market capitalization across 18 European countries¹. Companies were grouped by sectors, industry groups or industries, as defined by the Global Industry Classification Standard,² considering that each grouping would have enough constituents and granularity to attain the objective of this report.
- Companies are only considered in the computation of the different multiples if the following criteria are met: market capitalization is above the 5th percentile, at least 25% free float, and average daily volume is above 0.1% of the float (data derived from Standard & Poor's Capital IQ and Bloomberg databases).
- Observations deemed to be outliers have been excluded from the above analysis. Outlier criteria include: (i) negative multiples, (ii) multiples below the 5th percentile and (iii) multiples above the 95th percentile.
- EV = Enterprise Value = Market value of equity plus book value of debt,³ minority interests, preferred stock, less cash and cash equivalents, loans and notes receivables, and long- and short-term investments. Revenues = Revenue for latest 12 months. EBITDA = Earnings before interest, taxes, depreciation and amortization for latest 12 months (provided by Capital IQ, adjusted for non-recurring items). P/E = Share price divided by earnings per share on a diluted basis. P/B = Share price/book value per share on a diluted basis where book value per share equals total book value of equity divided by diluted number of shares. P/TBV = Share price/book value minus intangible assets, per share on a diluted basis.
- Multiples have been computed in companies' filing currencies.

¹ Although most of the companies in the STOXX Europe TMI Index prepare financial statements in accordance with IFRS, some use other accounting standards, such as U.S. GAAP and other local standards. Generally, since only a small proportion of the companies in the index do not use IFRS, the inclusion of those companies did not have a material impact on the statistics reported. Companies filing in accordance with U.S. GAAP accounted for approximately 1% of the total number of companies in the index. Companies following other reporting standards were treated using a similar approach as those filing in accordance with IFRS. Companies filing in accordance with Belgium, Denmark, Luxembourg, Poland and Switzerland GAAP represented approximately 3% of the total number of companies in the index.

² The GICS structure is comprised of 11 sectors, 24 industry groups, 69 industries and 158 sub-industries.

³ Book value of debt includes lease liabilities.

Industry Definitions

The industry classification for the companies represented in this report is based on the GICS. A summary of the sectors, as well as a brief description of those relevant industry groups that are part of a particular sector, according to the GICS guidelines, is found below:

Communication Services	
Media and Entertainment	Companies providing advertising, marketing or public relations services. Owners and operators of television or radio broadcasting systems, including programming and services. Publishers of newspapers, magazines and books in print or electronic formats. Companies that engage in producing and selling entertainment products and services, including gaming products and mobile applications.
Telecommunication Services	Providers of primarily cellular or wireless telecommunication services and operators of primarily fixed-line telecommunications networks.
Consumer Discretionary	
Automobiles and Components	Companies related to the production of passenger automobiles and light trucks, motorcycles, scooters or three-wheelers, as well as companies manufacturing parts and components for those vehicles, including tires and rubber.
Consumer Durables and Apparel	Manufacturers of electric household appliances and related products. Includes manufacturers of durable household products, power and hand tools, including garden improvement tools, but excludes TVs and other audio and video products. Manufacturers of apparel, accessories and luxury goods. Includes companies primarily producing designer handbags, wallets, luggage, jewelry and watches and manufacturers of textile and related products.
Consumer Services	Owners and operators of leisure and accommodation activities such as hotels, bars and restaurants, cruise ships, leisure facilities, casinos and gaming facilities, among others.
Retailing	Companies involved in owning and operating department stores, general merchandise stores and specialty stores. It also includes companies providing retail services primarily through the internet, mail order and TV home shopping retailers.

Industry Definitions

Consumer Staples	
Consumer Staples	Companies whose businesses are less sensitive to economic cycles. It includes manufacturers and distributors of food, beverages, and tobacco and producers of nondurable household goods and personal products. It also includes food and drug retailing companies as well as hypermarkets and consumer super centers.
Energy	
Energy	Companies engaged in exploration and production, refining and marketing, and storage and transportation of oil and gas and coal and consumable fuels. It also includes companies that offer oil and gas equipment and services.
Financials	
Banks	Commercial diverse with a national footprint whose revenues are derived primarily from conventional banking operations, have significant business activity in retail banking and small and medium corporate lending, and provide a diverse range of financial services. This also includes regional banks that tend to operate in limited geographic regions and excludes investment banks.
Diversified Financial Services	Financial exchanges for securities, commodities, derivatives and other financial instruments, and providers of financial decision support tools and products including ratings agencies. Providers of a diverse range of financial services and/or with some interest in a wide range of financial services including banking, insurance, and capital markets, but with no dominant business line.
Consumer Finance	Providers of consumer finance services, including personal credit, credit cards, lease financing, travel-related money services and pawn shops.
Capital Markets	Financial institutions primarily engaged in diversified capital markets activities, including a significant presence in at least two of the following areas: large/major corporate lending, investment banking, brokerage and asset management. Includes financial exchanges for securities, commodities, derivatives and other financial instruments.
Insurance	Companies providing insurance and reinsurance services of any kind as well as insurance and reinsurance brokerage firms.

Industry Definitions

Health Care	
Health Care	Companies including 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.
Industrials	
Capital Goods	Companies related to the manufacturing or distribution of goods. The sector is diverse, containing companies that manufacture machinery used to create capital goods, electrical equipment, aerospace and defense, engineering, and construction projects.
Commercial and Professional Services	Companies involved in supporting businesses with specialized skills such as human capital management, research and consulting services, office services, security and protection services, environmental and maintenance services.
Transportation	Companies involved in providing mainly goods and passenger transportation through air, sea or land. Companies owning and operating the infrastructures needed for transportation, such as airports, ports, railtracks or roads.
Information Technology	
Semiconductors and Semiconductor Equipment	Manufacturers of semiconductors, semiconductor equipment and related products including manufacturers of solar modules and cells as well as manufacturers of the raw material and equipment used in the solar power industry.
Software and Services	Companies offering software and information technology services as well as infrastructure for the internet including data centers, cloud networking and storage infrastructure.
Technology Hardware and Equipment	Companies involved in manufacturing communication equipment, cellular phones, personal computers, computer components, peripherals, electronic equipment and components as well as technology distributors.

Industry Definitions

Materials	
Materials	Companies that manufacture chemicals, construction materials, glass, paper, forest products and related packaging products, and metals, minerals and mining companies, including producers of steel.
Real Estate	
Real Estate	Companies engaged in real estate development and operation. It also includes companies offering real estate-related services and Equity Real Estate Investment Trusts (REITs).
Utilities	
Electric, Gas and Water Utilities	Companies involved in producing or distributing electricity, in the distribution of gas, in redistributing water to the end-consumer, as well as utility companies with significantly diversified activities in addition to core electric utility, gas utility and/or water utility operations.
Independent Power and Renewable Electricity Producers	Independent power producers and energy traders and companies that engage in generation and distribution of electricity using renewable sources.



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