

A&M Valuation Insights

February 2022

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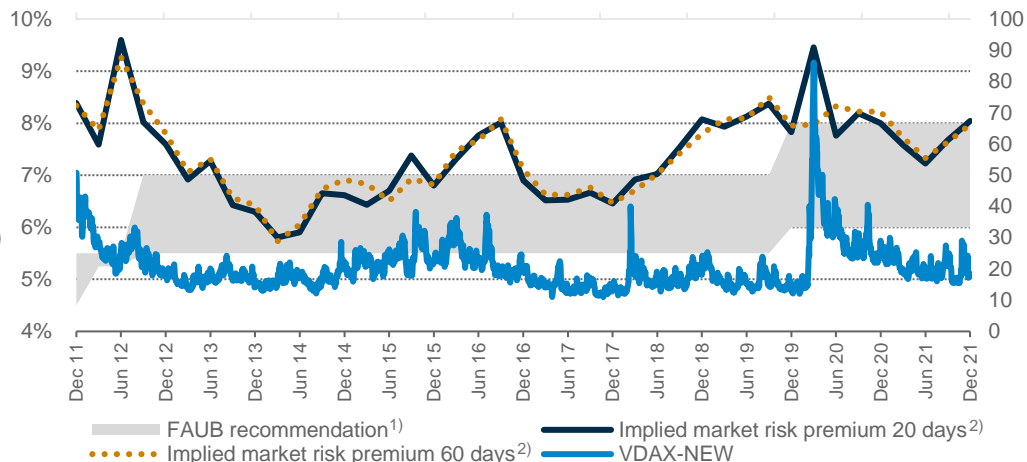
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The price for taking equity risk in Germany seems to be on the rise again

The price for taking the risk of equity investments in Germany

The calculated German market risk premium (MRP) represents a real-time illustration of investors' current risk appetite reflecting German capital market data and analyst forecasts.

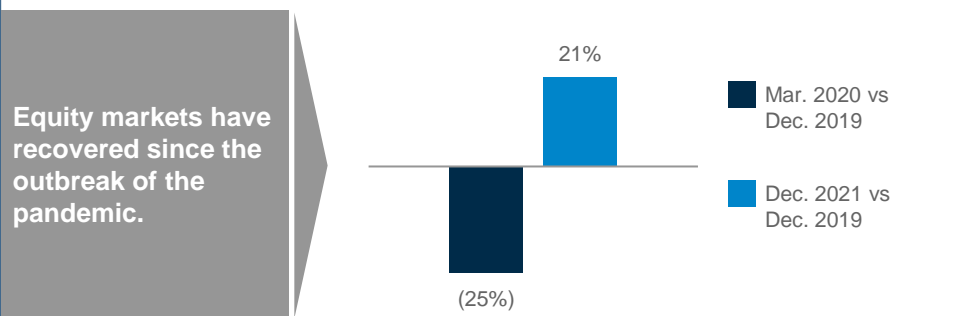


Results are subject to information deficiencies and capital market exaggerations:

- The MRP is calculated by relating the market capitalization of CDAX companies to analyst forecasts. Whereas stock prices are volatile, analyst forecasts are adjusted with a time lag.
- The use of MRP in corporate valuation needs to be judged against underlying risk profiles of cash flows, the overall cost of capital applied and other methods to obtain MRP estimates.
- Current market volatility, as measured by the VDAX-NEW index, almost decreased to the pre-corona level.

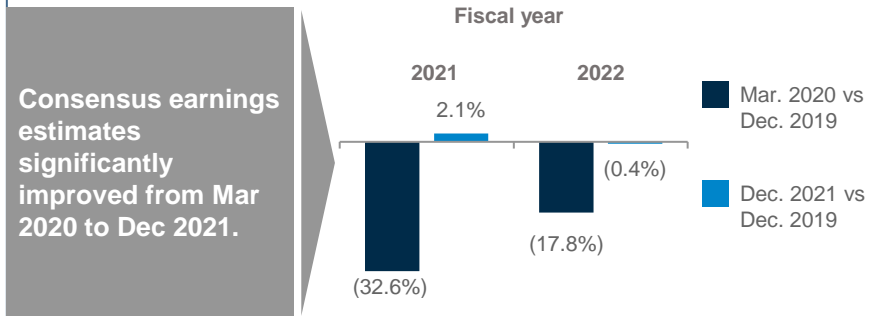
Risk perception is largely explained by the recovery of asset prices and earnings levels

Change in covered CDAX market cap³⁾ | Mar. 2020 & Dec 2021 vs Dec. 2019



Equity markets have recovered since the outbreak of the pandemic.

Change in EPS forecast | Mar. 2020 & Dec 2021 vs Dec. 2019



Consensus earnings estimates significantly improved from Mar 2020 to Dec 2021.

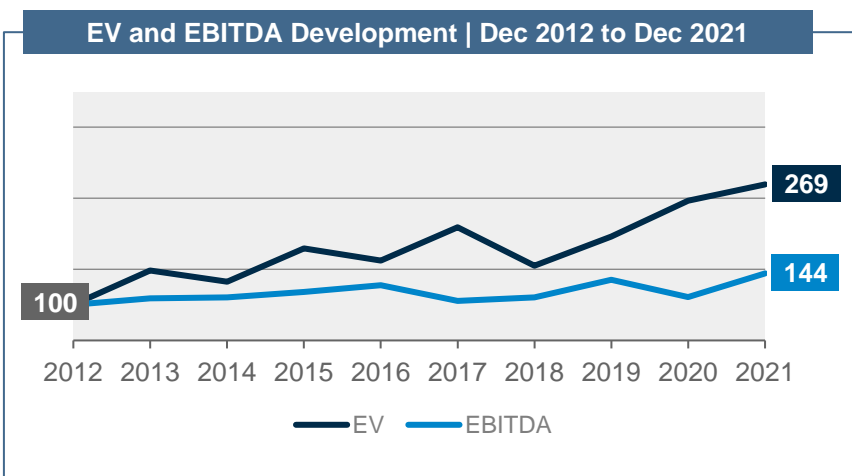
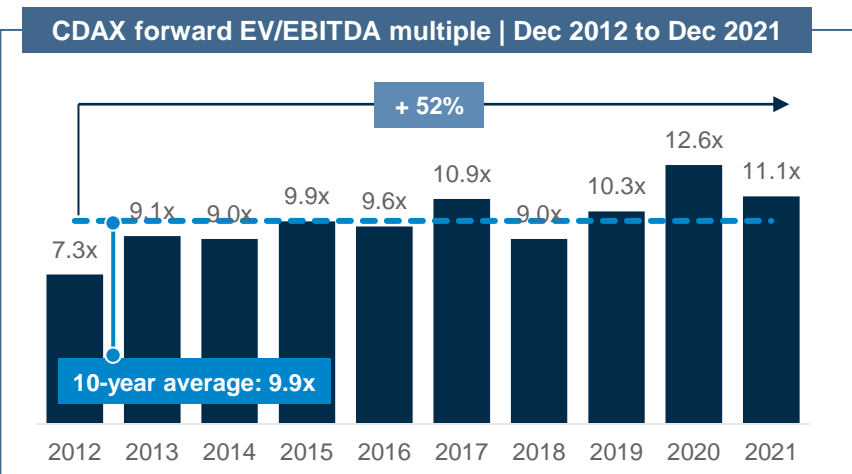
1) Fachausschuss für Unternehmensbewertung und Betriebswirtschaft (FAUB) of the German Institute of Chartered Accountants (IDW).

2) The A&M implied MRP model considers capital market data as well as consensus earnings estimates as of 31 December 2021 and is updated on a quarterly basis. The results might be affected by a timing lag with regards to updates of consensus estimates by the equity research community. The range of the MRP shown is derived by varying stock price data from 60 trading days to 20 trading days.

3) The A&M implied MRP model generally analyses firm level data for all CDAX firms with sufficient data availability. As of 31 Dec 2021 (31 Mar 2020), about 97% (94%) of the total market cap of CDAX is covered.

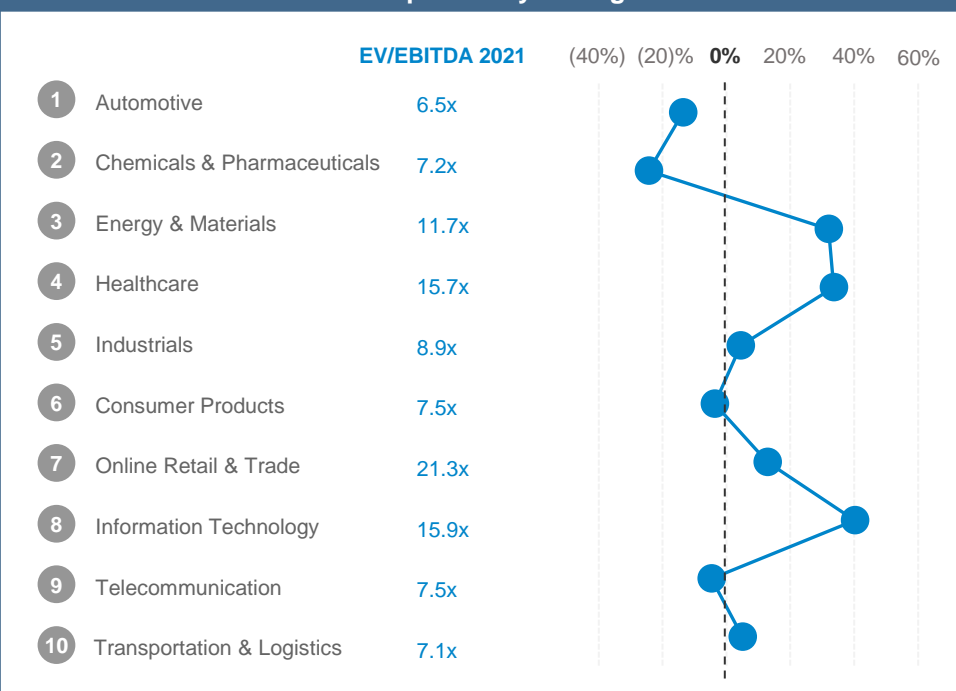
In a 10-year comparison, only pandemic resilient industries continue to trade at a premium

Forward EV/EBITDA trading multiple analysis based on firm level data of CDAX firms¹



- After the record high in 2020, the CDAX forward EV/EBITDA multiple declined to 11.1x in 2021, still being at an historically high level.
- In a 10-year comparison, Materials, Healthcare, Online Retail & Trade and IT rank highest among industries, while Automotive, Chemicals & Pharma (mostly due to the disproportionately high catch-up in growth and earnings level compared to stock prices) trade at a discount. Hence, at still high stock prices, multiples seem to adjust to recovered growth and earnings levels.

Forward EV/EBITDA 2021 multiple vs 10y average deviation as of Dec 2021

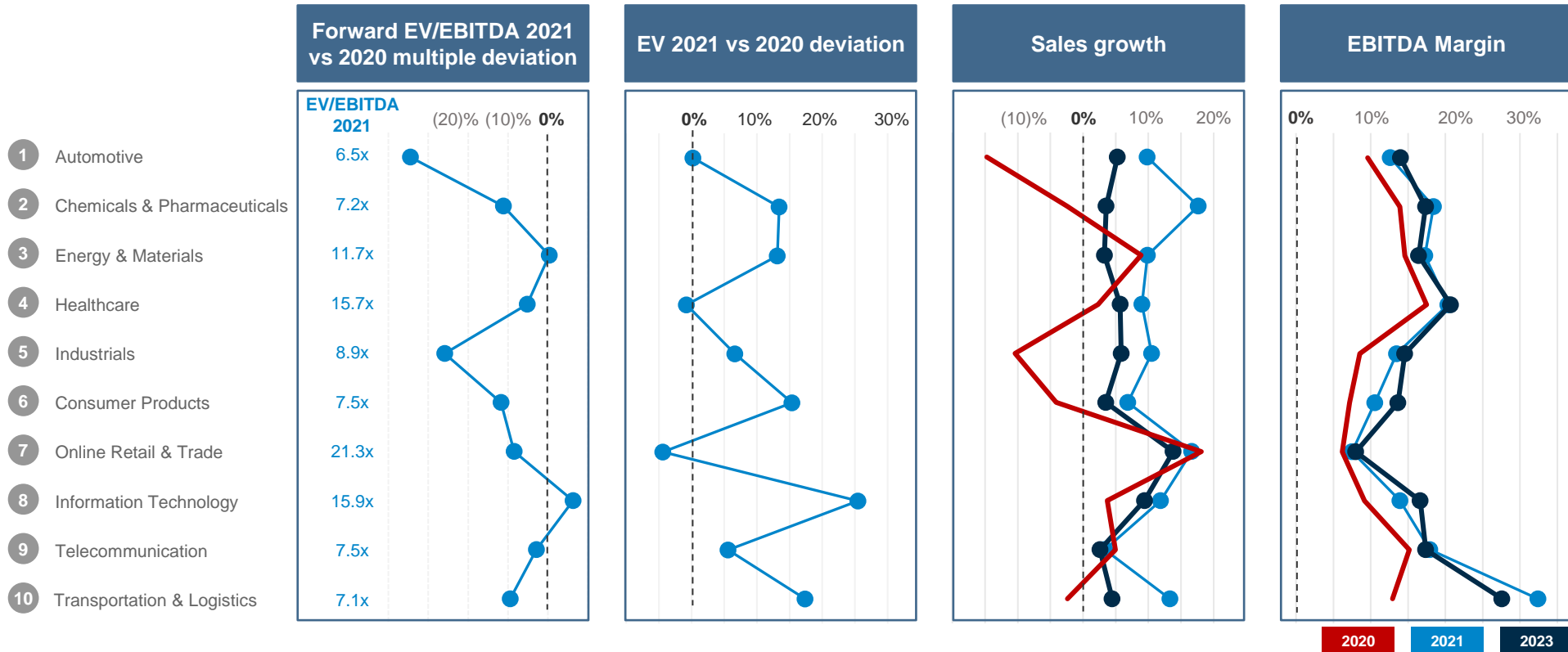


1) The analysis of forward EV/EBITDA trading multiple levels is based on all CDAX firms and compares median EV/EBITDA trading multiple levels by industry as of December 31, 2021. Only firm years considered for which consistent data was available across analysed variables. The 10-year average EV/EBITDA multiple was derived by analysing the CDAX on firm level data as at December 31 for each year going back to 2012. Source: S&P Capital IQ, A&M Analysis.

In a one-year comparison, pricing levels decreased across all industries, except for IT

One-year comparison of forward 2021 EV/EBITDA trading multiple by industry (CDAX)

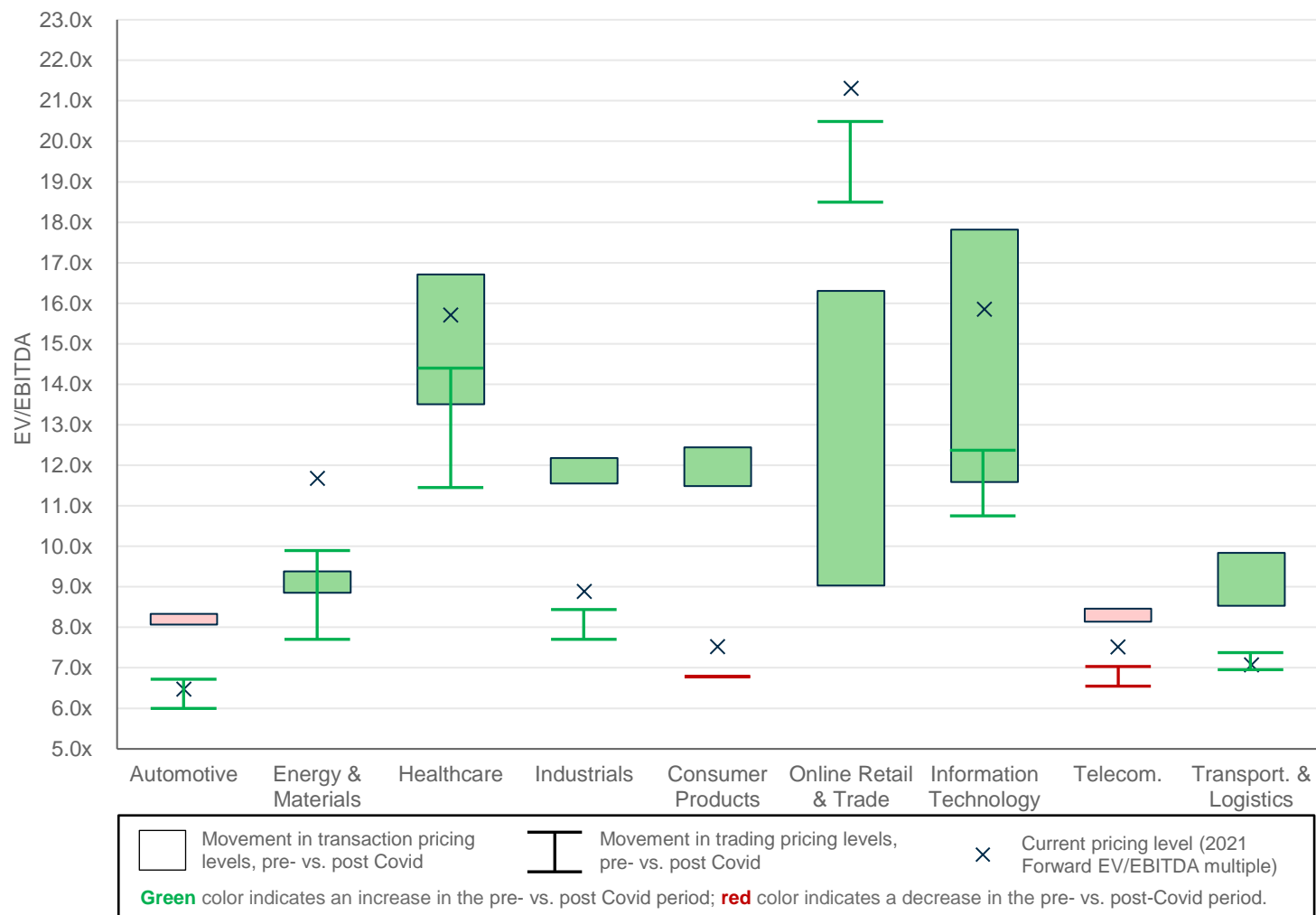
- A one-year comparison shows declining pricing levels across all industries, except for IT.
- While EV's are still rising by a combination of stock price increases and higher debt burdens, previously suppressed growth and earnings levels seem to have recovered and largely factored into trading multiple pricing levels compared to a year ago.
- As such, 2020 trading multiple pricing levels were inflated by the hit in growth and earnings levels (red lines below) depending upon the resilience level of each industry to the pandemic shock. The catch-up effect in growth and profitability levels, however, is evident across all industries, and remains key in delivering projected profitability improvement levels, thereby explaining the normalization of pricing tags.



Note: The analysis of forward EV/EBITDA trading multiple levels is based on all CDAX firms and compares median EV/EBITDA trading multiple levels by industry as of December 31, 2021. Only firm years considered for which consistent data was available across analyzed variables.
Source: S&P Capital IQ, A&M Analysis.

Prices paid in European M&A transactions increased significantly since the outbreak of the pandemic

Comparison of transaction and trading multiple pricing levels 2-years prior to Covid and since the outbreak of the pandemic by industry



- EV/EBITDA multiples paid in European M&A transactions increased significantly in a pre-Covid (March 2018 to Feb 2020) and post-Covid (March 2020 to Dec 2021) comparison, except for Automotive and Telecoms:
- Highest increases are evident for Online Retail & Trade (pre-Covid 9.0x vs. post Covid 16.3x), IT (pre-Covid 11.6x vs. post Covid 17.8x) and Healthcare (pre-Covid 13.5x vs. post Covid 16.7x).
- Trading pricing levels also increased in a pre- vs. post Covid comparison, except for Consumer Products and Telecoms.
- When comparing European transactions with German trading pricing levels, it appears that the trading multiple level of German Online Retail & Trade stocks is inflated, likely an indication for a high demand for those assets.
- Current trading multiples, further indicate inflated pricing levels for Materials, Healthcare and IT.

Note: Transaction pricing levels consist of all closed M&A transactions in Europe with a transaction value greater than EUR 25 Mio., data clustered by industry into the pre-Covid (March 2018 to Feb 2020) and post-Covid (March 2020 to Dec 2021) period. The trading pricing level is based on NTM trailing EV/EBITDA trading multiple derived on a quarterly basis for all CDAX firms and shows median NTM EV/EBITDA trading multiple levels by industry; data clustered by industry into the pre-Covid (March 2018 to Feb 2020) and post-Covid (March 2020 to Dec 2021) period. The current pricing level (2021 Forward EV/EBITDA trading multiple) is based on all CDAX firms and shows median EV/EBITDA trading multiple levels by industry as of December 31, 2021. Only firm years considered for which consistent data was available across analyzed variables.

Source: S&P Capital IQ, A&M Analysis.


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