

The background is a complex collage of financial and architectural imagery. In the top left, a bar chart shows data from 2009 to 2014 with values ranging from 0 to 150. The top right features a low-angle shot of a modern skyscraper. The bottom left contains a circular chart with concentric rings. The bottom right shows a line graph with an upward trend, labeled 'Annual Growth' and 'Average Growth' with values 10 and 2.50 respectively. The entire image is overlaid with a blue grid pattern.

# A&M Valuation Insights

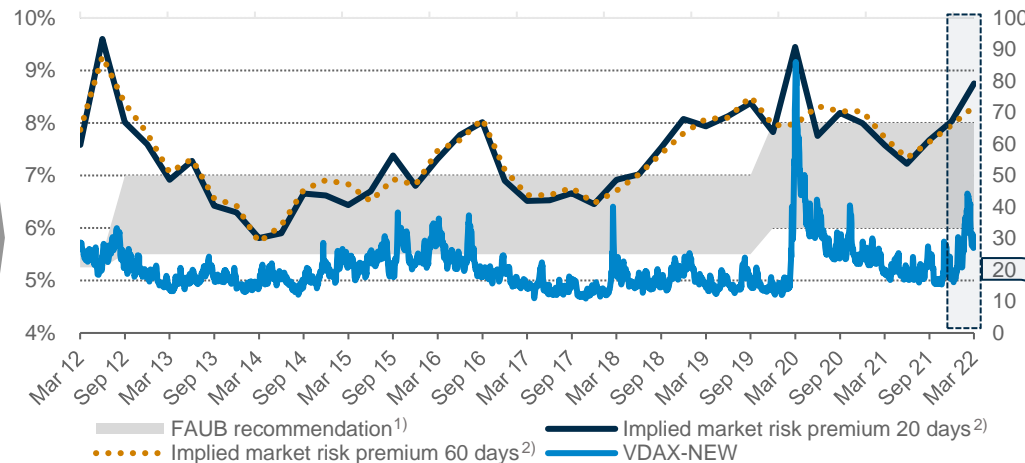
June 2022



# The price for taking equity risk in Germany continues to be on the rise with rising volatility is a major explaining factor

## 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.



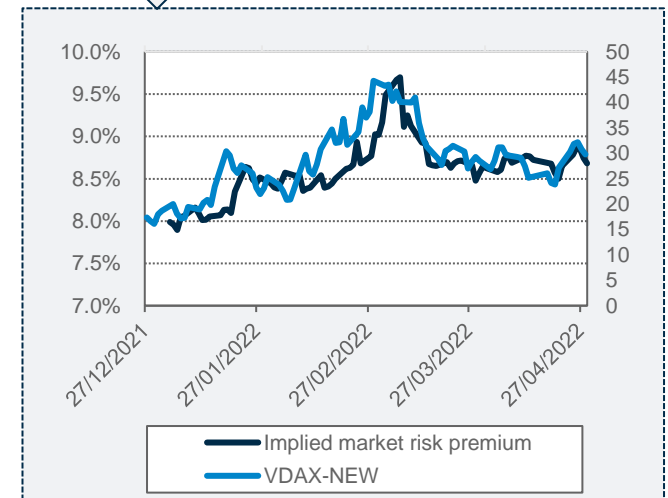
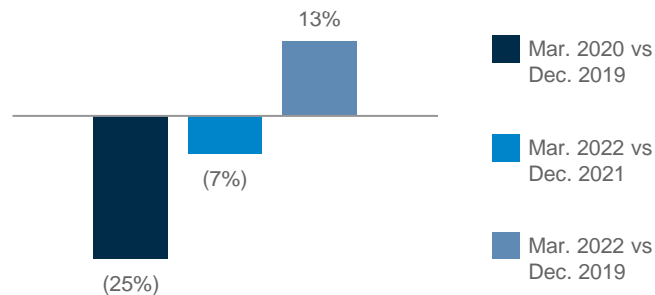
Results are subject to information deficiencies and capital market exaggerations:

- 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, has increased amid the Ukraine-crisis.

## Risk perception is affected by dropping asset prices at increased volatility levels

### Change in covered CDAX market cap<sup>3)</sup> | Covid-19 pandemic vs. Ukraine crisis

Despite a drop in the equity markets related to the war in the Ukraine, stock prices remain above pre-Covid levels.



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

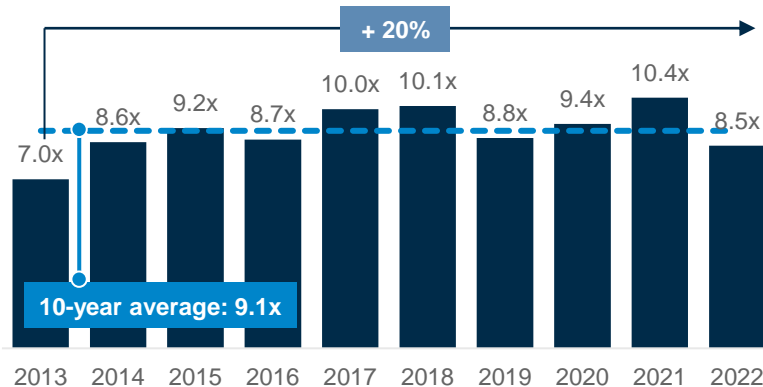
2) The A&M implied MRP model considers capital market data as well as consensus earnings estimates as of 31 March 2022 and is updated on a quarterly basis. The results might be affected by a timing lag with regards to updates of consensus estimates by the equity research community. The range of the MRP 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 Mar 2022 (31 Dec 2021, 31 Mar 2020, 31 Dec 2019), about 97% (97%, 94%, 96%) of the total market cap of CDAX is covered.

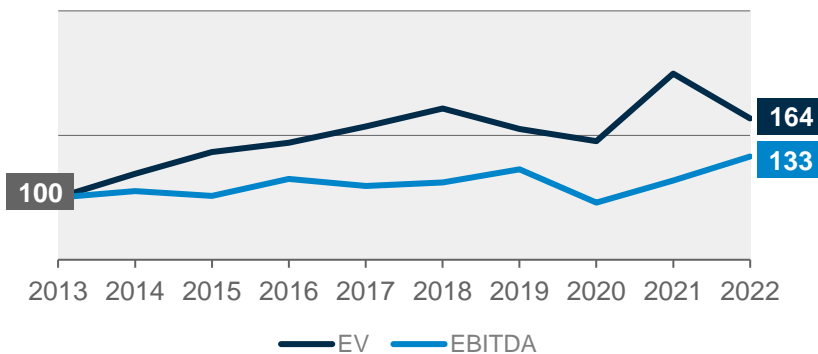
# In a 10-comparison, the recently observed trend of declining trading pricing levels gained large momentum

## Forward EV/EBITDA trading multiple analysis based on firm level data of CDAX firms<sup>1</sup>

### CDAX forward EV/EBITDA multiple | Apr 2013 to Apr 2022

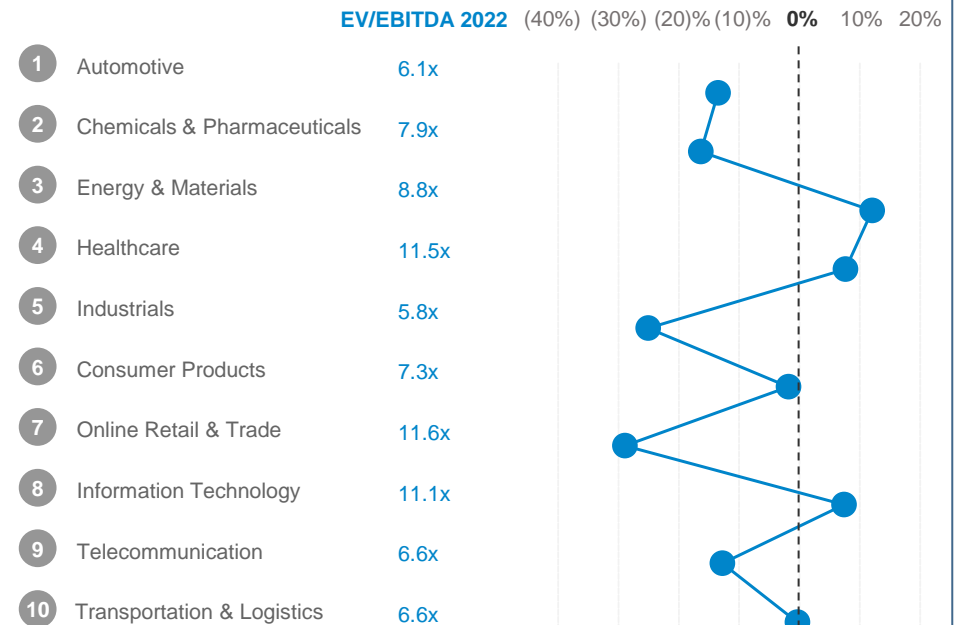


### EV and EBITDA Development | Apr 2013 to Apr 2022



- The CDAX forward EV/EBITDA multiple declined to 8.5x in April 2022, falling below the 10-year average of 9.1x EBITDA.
- In a 10-year comparison, Materials, Healthcare and IT continue to trade at a premium, while all remaining industries analysed lost momentum with the sharpest decline for Online Retail & Trade. This is mostly driven by the disproportionately high loss in asset prices compared to not updated earnings levels by the analyst community since the Russian aggression in the Ukraine.

### Forward EV/EBITDA 2021 multiple vs 10y average deviation as of Apr 2022

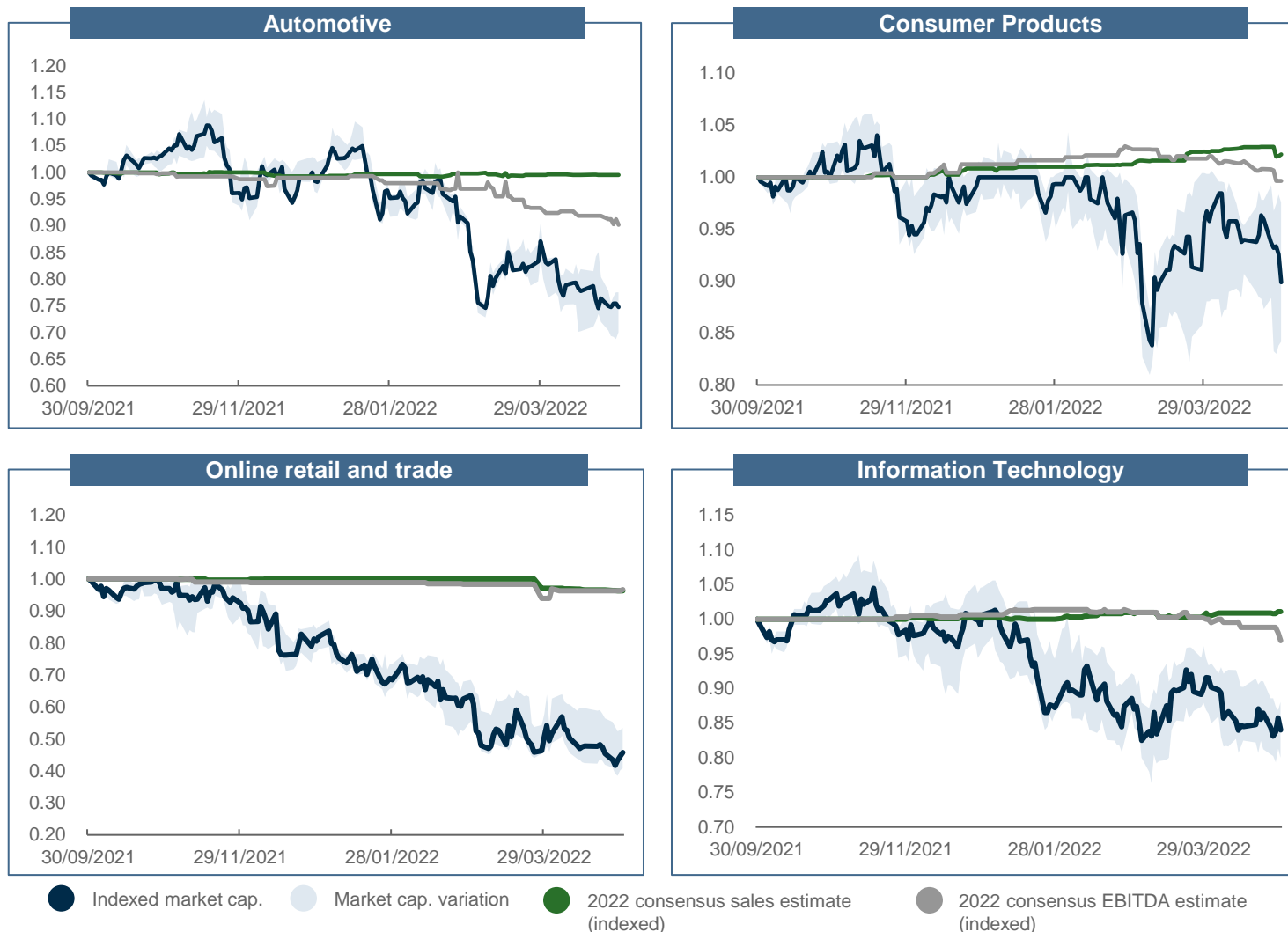


<sup>1)</sup> The analysis of forward EV/EBITDA trading multiple levels is based on all CDAX firms and compares median EV/EBITDA trading multiple levels by industry as of April 30, 2022. Only firm years considered for which consistent data was available across analysed variables. The 10-year average EV/EBITDA multiple was derived by analysing the CDAX on firm level data as at April 30 for each year going back to 2013.  
Source: S&P Capital IQ, A&M Analysis.



# Stocks declined since the war in the Ukraine. Updates in consensus earnings estimates are clearly lagging behind.

## Analysis of the timing lag with regards to consensus earnings estimates and stock price movements by industry (CDAX)<sup>1</sup>



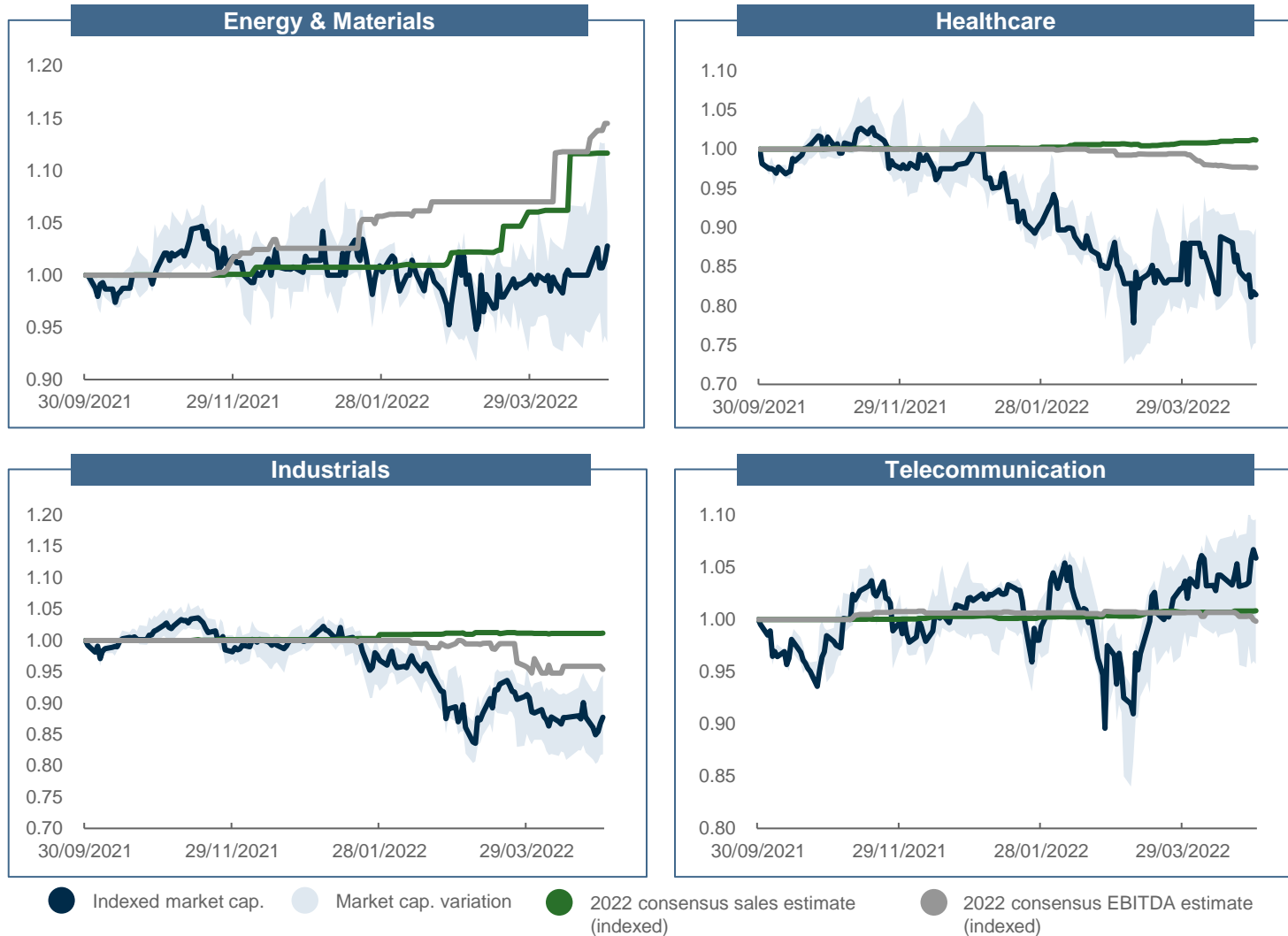
- We contrast stock price movements by industry with changes in consensus growth (sales) and profitability (EBITDA) estimates by the equity research community.
- The drop in asset prices since the start of the Russian aggression in the Ukraine is evident across most industries.
- Consensus estimates did so far not change significantly on an industry level.
- We interpret this as evidence of a timing lag in updates of consensus estimates since the start of the Russian invasion in the Ukraine.
- Hence, it appears that the significant drop in current trading pricing levels might not be sustainable given outdated consensus earnings estimates.

<sup>1)</sup> The analysis of the timing lag with regards consensus earnings estimates and stock price movements by industry is based on all CDAX firms and compares indexed median sales and EBITDA estimates in the period September 30, 2021 to April 30, 2022 with the indexed stock price movement by industry. Only firm years considered for which consistent data was available across analysed variables.

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

# At first sight, the timing lag does not affect industries evenly. Can there be resilience against shocks like war in Europe?

## Analysis of the timing lag with regards consensus earnings estimates and stock price movements by industry (CDAX)<sup>1</sup>



- While the timing lag in updated growth and profitability estimates is visible for most industries, this does not hold for Energy & Materials.
- As such, while stock prices did drop at the time of the Russian invasion, asset prices quickly recovered at increased consensus sales and EBITDA forecast levels.
- Clearly the industry Energy & Materials plays a crucial role for the German economy in times of war, thus justifying the focus of analysts on this sector.
- Also, analysts seem to have reacted rather quickly in updating EBITDA estimates in the sector Industrials. Whether that is truly already capturing the impact of the war is rather speculative in nature.
- Telecommunication appears to be the only industry with asset prices at a higher current level compared to level before the war.

<sup>1)</sup> The analysis of the timing lag with regards consensus earnings estimates and stock price movements by industry is based on all CDAX firms and compares indexed median sales and EBITDA estimates in the period September 30, 2021 to April 30, 2022 with the indexed stock price movement by industry. Only firm years considered for which consistent data was available across analysed variables.

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

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