

Cautious optimism as PE re-enters the market

Software sector report

August 2023



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Highlights of the report

Highlights

I **Valuations have stabilised, but bid-ask spread persists**

Carlsquare has observed a clear spread between seller and investor expectations. Buyers have realigned expectations after the fall in value across nearly all software segments, leading some PE buyers to hold back term sheets and thus contributing to the fall in deal flow. Similarly, investor sentiment for listed software companies has become more cautious amidst the macroenvironment. On the other hand, founders are adopting a reserved stance and management teams have deferred major investments or bridged with a debt round. As value expectations converge, many anticipate that H2 2023 will see an uptick in deal activity and aggregate deal value. For the remainder of 2023, the outlook for SaaS company valuations is largely tied to what happens with inflation, continued Federal Reserve rate hikes, and 2023 earnings performance and guidance.

II **Profitability and growth: A new paradigm**

The major correction in SaaS multiples during 2022 was primarily driven by a flight into equities in sectors with stronger free cash flow and less sensitivity to rising interest rates, as well as by reduced enterprise demand and IT budgets, slower earnings growth, and an uncertain economic outlook for 2023.

In the current interest rate environment, some software businesses are being forced to reverse overinvestment during low cost of capital periods and are further facing the need to painfully reducing headcount. For the first time since recording this data, profitable software companies are valued higher than their unprofitable but growing peers. This indicates that investors are prioritising profitability and favouring businesses with proven business models and strong market positions. The market is requiring management teams to achieve profitability sooner than historically expected, and that funds raised before the tech value fall in 2022 be used efficiently to grow companies into the valuations that investors have bestowed on them.

III **Europeans on the heels of Americans**

Since Carlsquare has recorded this data, American software businesses have delivered higher growth than their European peers. Though growth for both American and European software businesses is near a four-year low (9% and 12% respectively), profitability is at a four-year high (20% and 21% respectively). Despite European companies achieving better profitability levels, American companies still enjoy a valuation premium which has expanded marginally since the gap narrowed in 2022 when valuations fell. American acquirors are increasingly seeking value from European targets, which we observed across several transactions we have recently advised on, including Avrios (fleet management software sold to Battery Ventures) and Cimteq (industrial software sold to Underwriters Laboratories).

Digital transformation and AI integration providing opportunities for horizontally integrated SaaS despite economic slowdown

Market dynamics



1

Pandemic inspired **digital transformation** is driving companies across industries with **legacy technology to adopt various software** to strengthen competitive positions. However, **as the transformation process progresses** across the market, software **growth will decelerate**

2

Horizontal software is more consolidated and **insulated against recessionary pressures** relative to the fragmented vertical software market due to a larger total available market. **Inflation and interest rates** strain the market and **dampen prospects within certain verticals**

3

Software offering **supply chain and cost efficiencies** is experiencing **steady demand growth** while products supporting **capital intensive and fixed asset sectors** are seeing a **drawback in adoption and investment** due to macroenvironmental forces

4

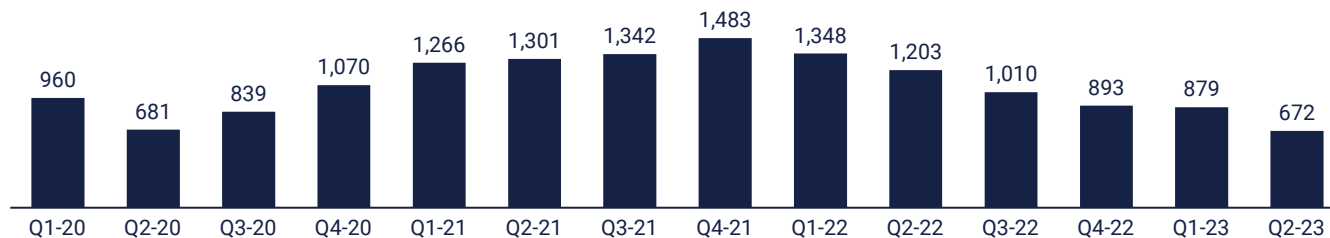
Digital transformation, AI and NLP are increasing demand for **robust analytical software** capable of handling data streams from new and old sources. **AI integrated software** is transforming into a **profitability driver and value-add investment**

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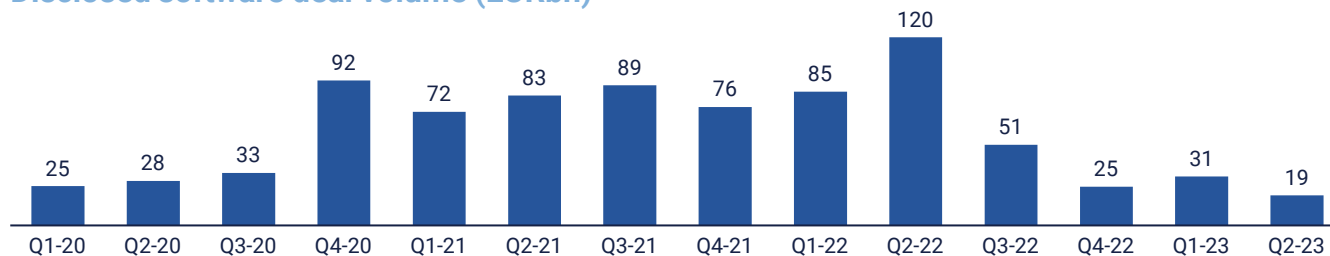
Enterprise software, notably customer data platforms such as CRM, that are **integrated with AI** are **increasing in value and demand**. **AI is evolving various software** previously considered to be cost items **into profitability drivers and value-add investments**

Software M&A has curtailed from late 2021 and early 2022 levels, reflecting a sector-wide slowdown after strong post-pandemic performance

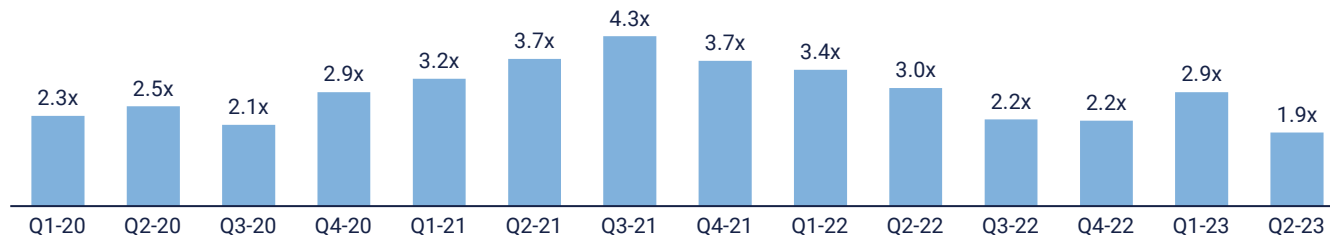
Software M&A activity (#)



Disclosed software deal volume (EURbn)



Disclosed software EV/Revenue multiples

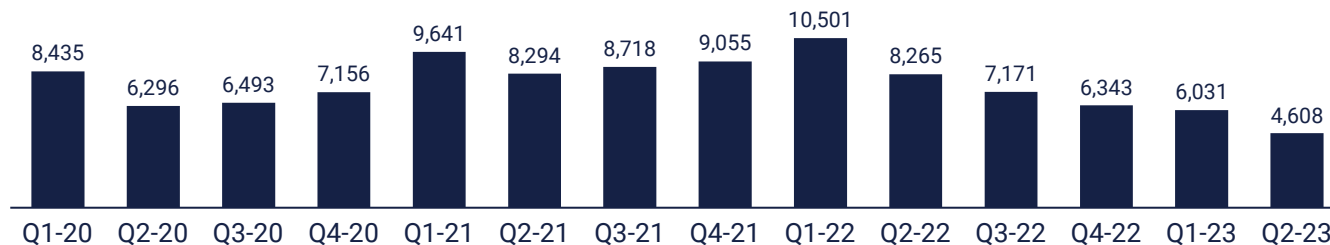


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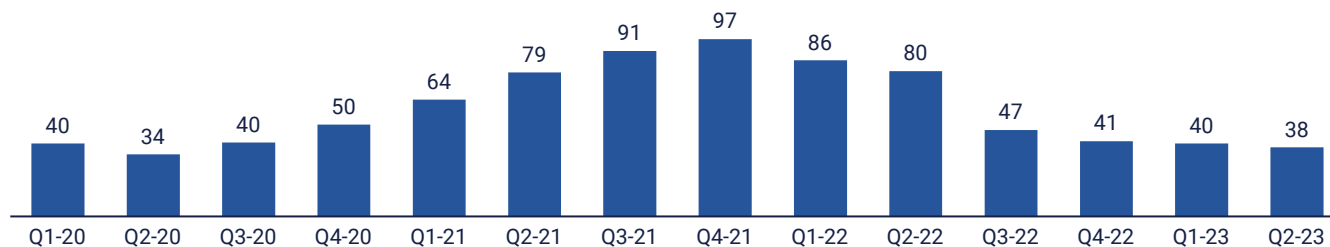
- With 672 software deals as of end-of-Q2 2023, M&A activity has decreased significantly compared to the Q2 2022 levels of 1,203 software deals
- June 2023 saw 205 software deals completed with a disclosed deal volume of c. EUR 2.1bn
- M&A activity in the software sector per end-of-Q2 2023 slowed significantly, with a 39% decrease compared to the number of deals per Q2 2022
- Disclosed deal volume in the software space receded in 2022 compared to the exceptional deal-making year 2021, but remains above 2020 levels per end-of-Q4 2022
- In Q2 2023, software company valuations are slightly below levels seen in 2020 implying investors' stable outlook on software companies despite macroeconomic uncertainties

Investor sentiment in the venture capital space has receded from peak 2021 and 2022 levels, with funding activity becoming constrained by macroeconomic trends

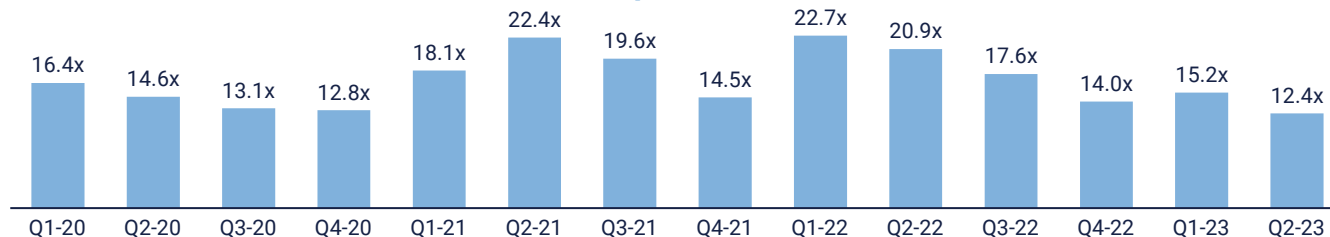
Software funding activity (#)



Disclosed software funding volume (EURbn)



Disclosed software valuation/revenue multiples

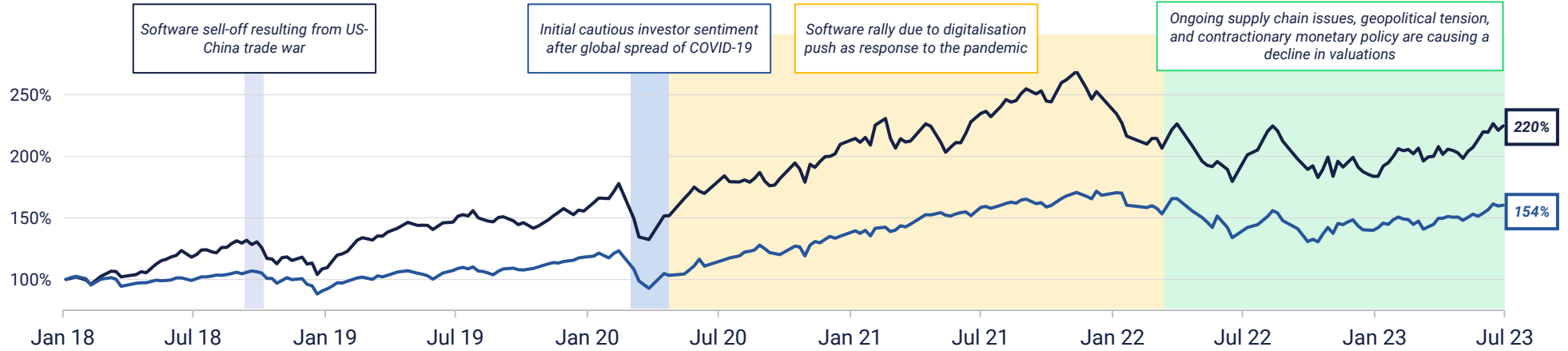


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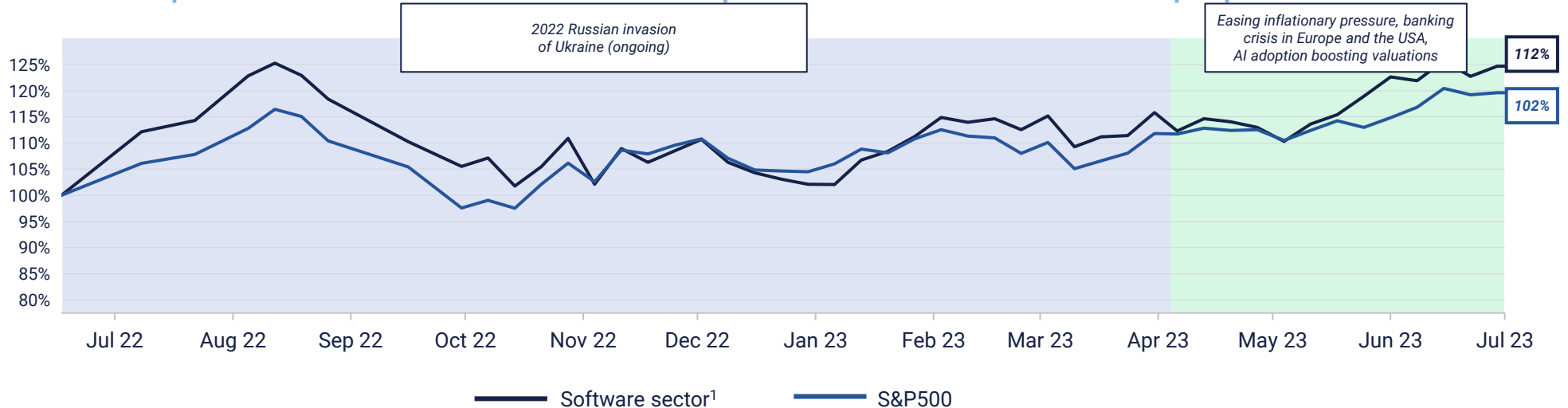
- In Q2 2023, software funding activity decreased by nearly 45% when compared to the Q2 2022 levels, and is the lowest in the past 3 years
- Funding activity in the software sector peaked in Q1 2022, with 10,501 fundings being recorded, representing a 24.5% increase compared to Q1 2020
- Similarly, disclosed funding volume in the software sector has taken a hit in Q2 2023 compared to Q2 2022, with c. EUR 78bn invested per end-of Q2 2023
- Valuation/revenue multiples peaked in Q1 2022 at 22.7x sales, but have since declined to 12.4x, representing the lowest in the past 3 years

Lower valuations as a result of recent market correction to pre-COVID-19 levels may serve as impetus for investors to acquire software companies at very reasonable valuations

Software stock performance since 2018 – overall positive development from a long-term perspective



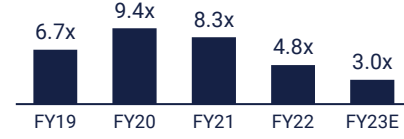
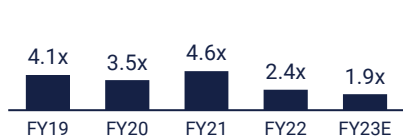
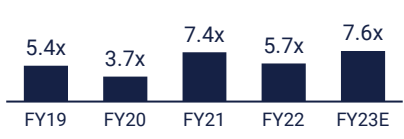
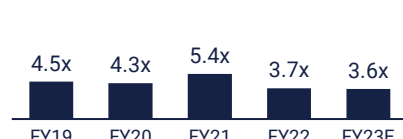
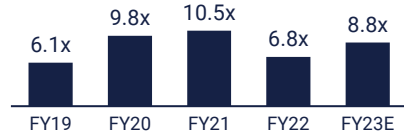
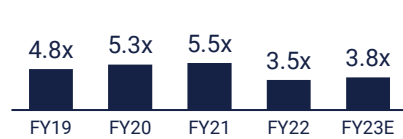
Software stock performance last twelve months – correction to pre-COVID-19 levels from a short-term perspective



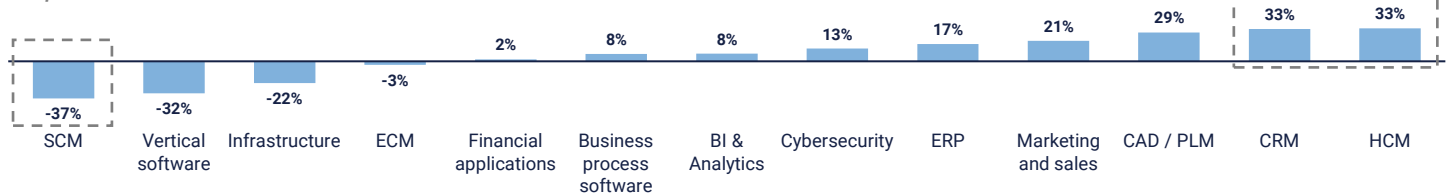
Source(s): S&P Capital IQ (as of 01.07.2023)

1. Software sector defined as index of 271 listed companies across ERP, BI & analytics, infrastructure, vertical software and corresponding sub-sectors

Global EV/Revenue multiples of public companies saw a decrease across all subsectors due to overall macroeconomic and geopolitical uncertainties



Average EV/Revenue multiples YoY change (FY22 – FY23E)
Worst performer

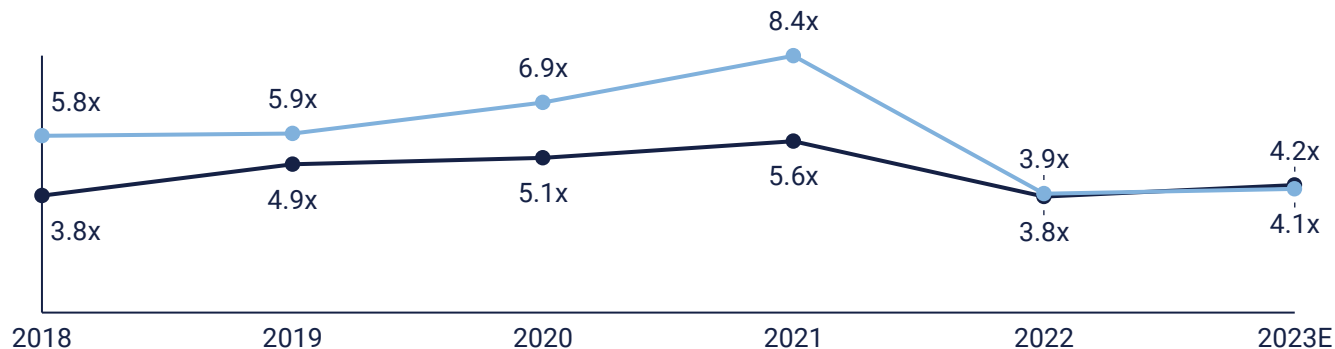


Note(s): Illustrative companies shown with their respective logos for each software subsector do not reflect the entire data set used for the shown analysis and average multiples for each subsector; Historical multiples are calculated with EVs as per the end of the respective year
Source(s): S&P Capital IQ

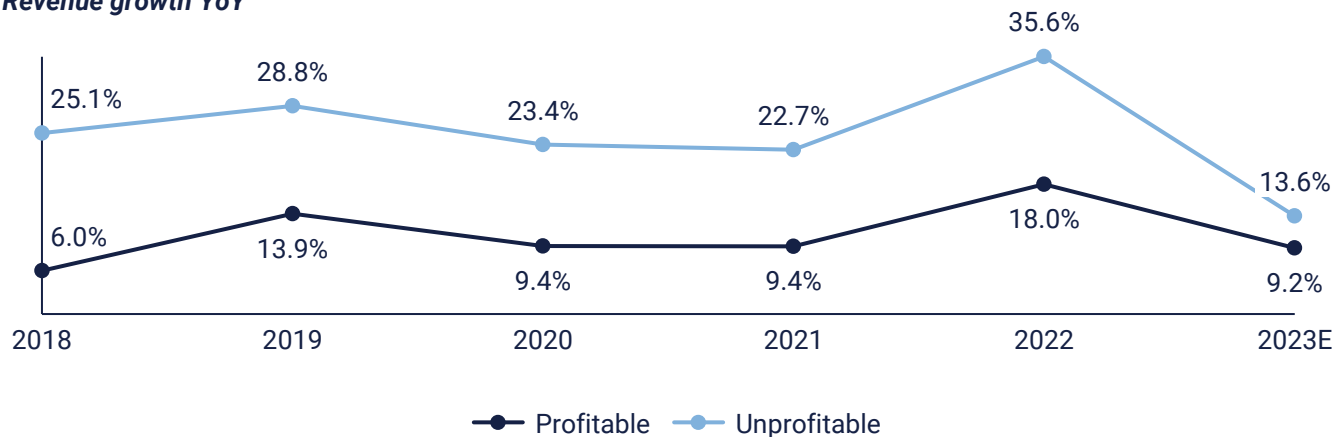
Profitable companies increase valuation gap to unprofitable counterparts in 2023E, after commanding higher multiples than growth peers for the first time in recent years in 2022

Unprofitable (growth) vs profitable (mature)

EV/Revenue



Revenue growth YoY

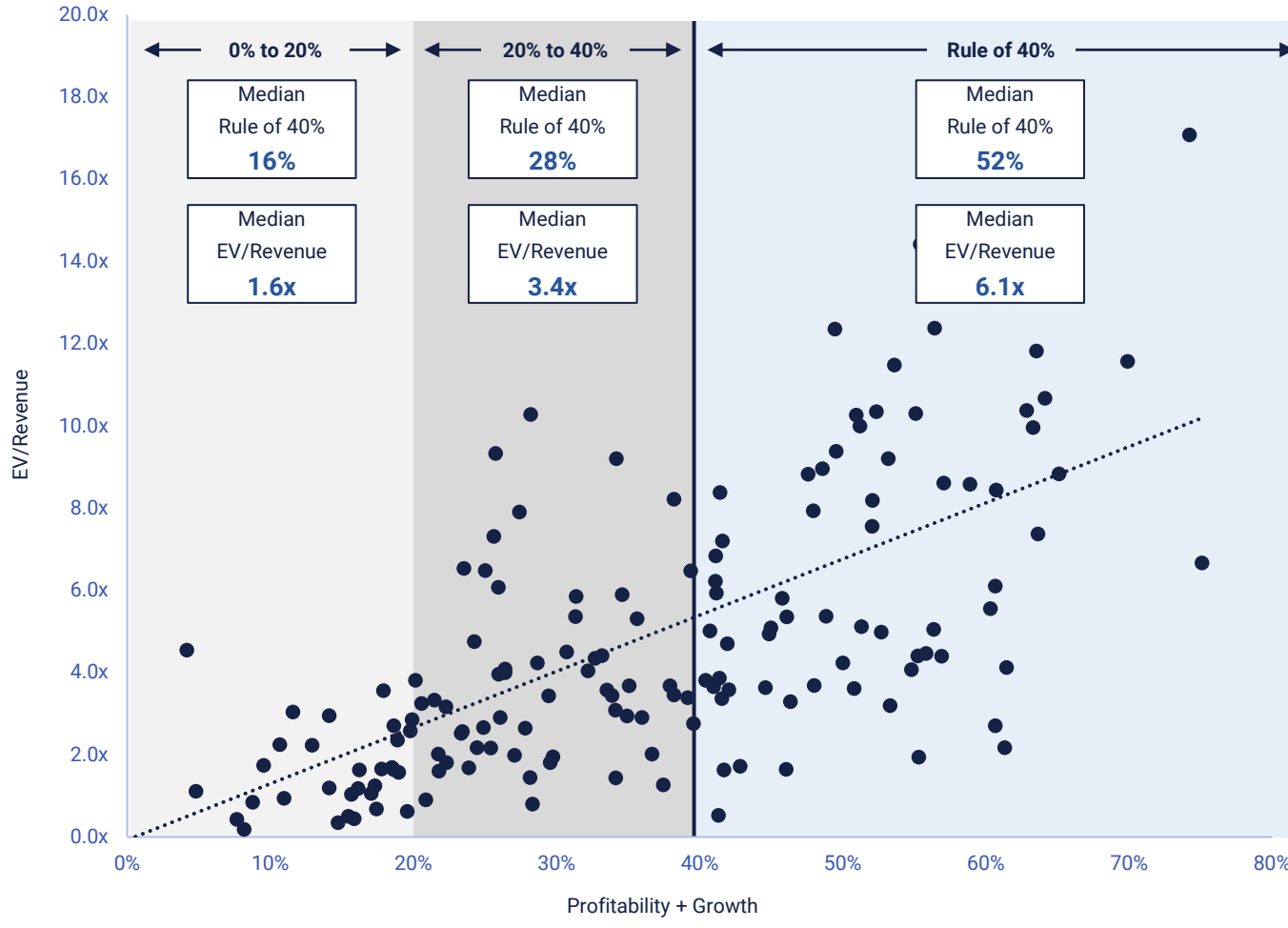


Comments

- Unprofitable software companies have shown higher top-line growth than their profitable peers implying a sacrifice of profitability in favour of growth. While growth lends to higher multiples historically, 2022 and 2023E multiples for unprofitable companies are expected to align with those of profitable peers
- The pattern of unprofitable companies outperforming their profitable peers in terms of growth has not changed during or since COVID-19, however, 2023 expects the growth gap to narrow to its lowest level since 2018 after its largest gap experienced in 2022. This signals a returning importance to balancing profitability against growth for software companies
- While unprofitable software businesses have consistently grown at rates of 10-15% more than profitable peers, investors have traditionally rewarded this growth with higher multiples. The gap between these two cohorts, since diverging during the COVID-19 pandemic, has now narrowed considerably and is expected to reverse course in 2023, with profitable companies experiencing marginally higher multiples than unprofitable counterparts

Recent public software companies' financials imply that the Rule of 40% continues to hold, despite current macroeconomic trends

Rule of 40% to EV/Revenue



Comments

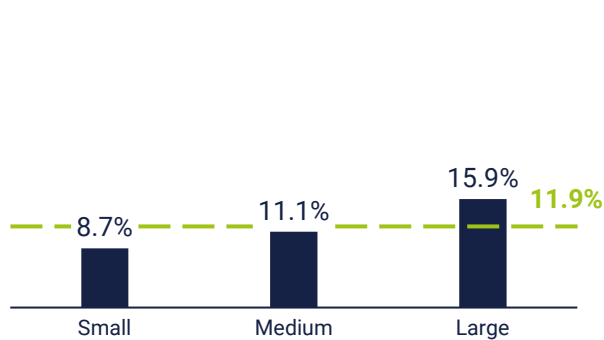
- The Rule of 40% is a performance rule-of-thumb metric that states that a software company's growth rate in addition to its EBITDA margin should exceed 40% and represents the trade-off between profitability and growth
- The gauge was initially used by investors to quickly assess the performance of software companies
- Despite the current macroeconomic and political uncertainty, the Rule of 40% still holds, with higher EV/Revenue multiples being attributed to companies that confirm the metric

Note(s): Selection of 168 software companies, $R^2 = 0.434$; Profitability is defined as the EBITDA margin of a company in FY23E; Growth is defined as YoY growth between FY22 and FY23E
 Source(s): S&P Capital IQ, Carlsquare analysis

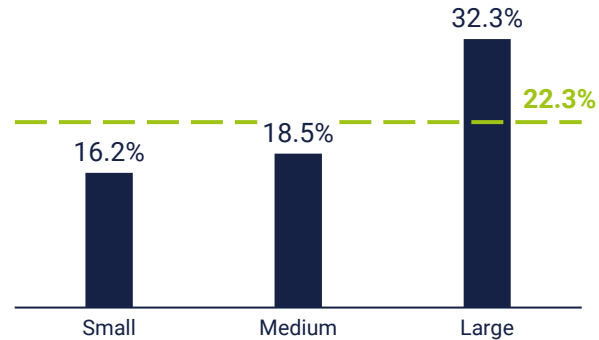
Large players are realising economies of scale, showing more resilient business performance and higher profitability, in turn yielding higher valuations

Scale comparison

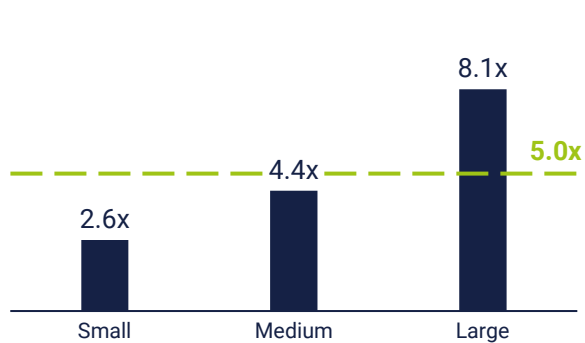
Revenue growth between 2022 and 2023E



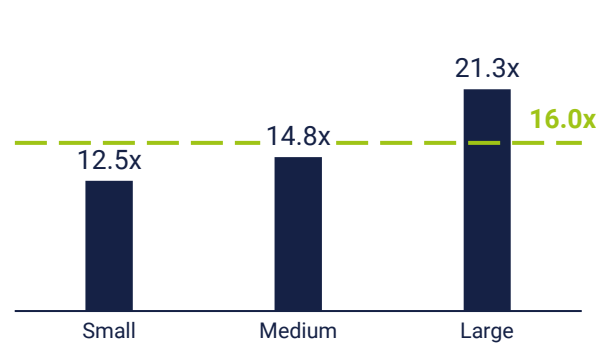
EBITDA margin in 2023E



EV/Revenue in 2023E



EV/EBITDA in 2023E



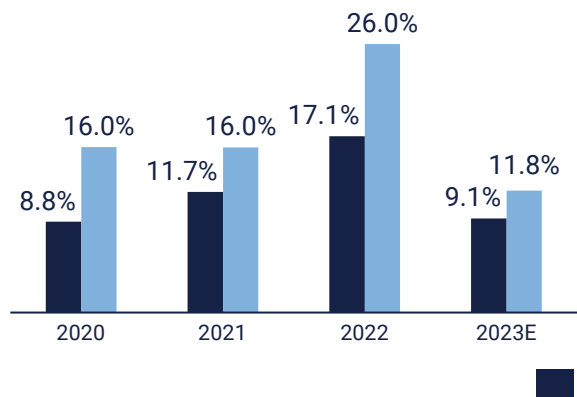
Comments

- A positive relationship between company size and both financial performance and valuation is observable in the ongoing year 2023
- Large software companies have been more profitable than their smaller peers achieving a median EBITDA margin of 32.3% in 2023E while medium-sized companies and small companies achieved 18.5% and 16.2%, respectively
- Investors value large companies at both higher sales and EBITDA multiples with valuation gaps between large and small companies amounting to 5.5x and 8.8x for EV/Revenue and EV/EBITDA multiples, respectively

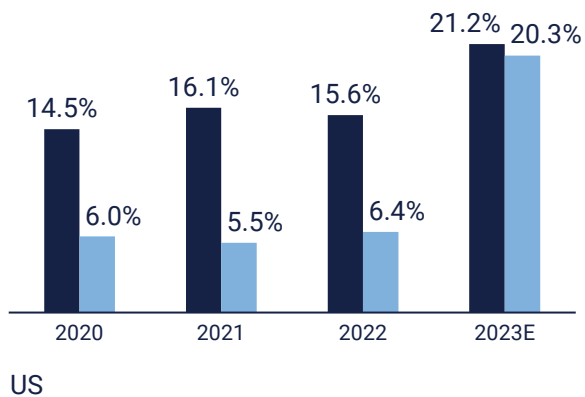
American software companies on average achieved higher growth and outperformed their European peers in terms of valuation in 2023E despite consistently lower profitability

Regional comparison

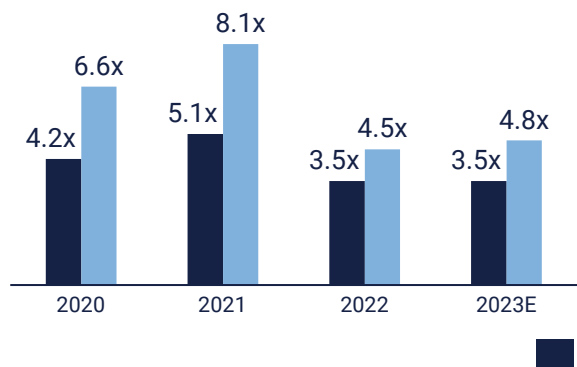
Revenue growth development



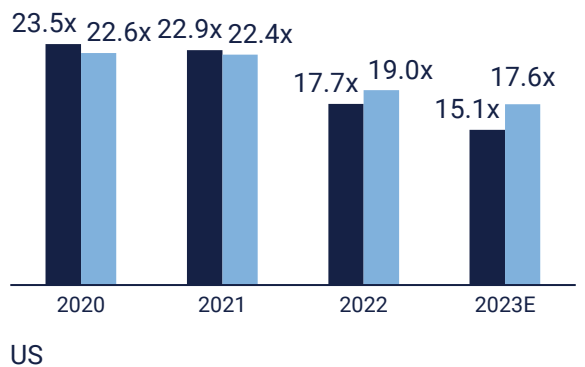
EBITDA margin development



EV/Revenue development



EV/EBITDA development



Comments

- Software companies in the US have outperformed their European peers both in terms of revenue growth and EV/Revenue valuations
- While American software companies achieved YoY top-line growth of 11.8% between 2022 and 2023E, their European peers grew at a slower rate of 9.1%
- In 2023E, with a median EBITDA margin of 21.2%, European software companies are more profitable than their American peers
- American software companies are ahead of their European peers in terms of valuation, achieving an EV/Revenue premium of 1.3x in 2023E
- Despite American software companies exhibiting a lower EBITDA margin, the pattern of US companies enjoying a valuation premium continues to hold

Carlsquare currently sees EV/Revenue multiples between 4.0x and 7.0x, with a shift towards profitability multiples at lower levels of growth

Investors consider a broad basket of criteria to determine the right value

Revenue multiple	<4.0x	4.0x – 7.0x	>7.0x
Revenue growth	<20%	←→	>50%
% recurring revenue	<50%	←→	>75%
EBITDA margin	<20%	←→	>20%
Rule of 40%	No	←→	Yes
Customer churn	>10%	←→	<6%
Region	International/regional	←→	>50% US sales
Market size	Small	←→	Large

- Despite the current macroeconomic uncertainties, high quality software businesses continue to achieve premium valuations approaching and in excess of 7.0x
- Several factors can lead to premium valuations and can guide sellers in improving relevant metrics to improve their potential to achieve stellar exits
- Carlsquare has observed that with growth levels below 10-20%, even with medium to high levels (50-60%) of recurring revenue, investors are increasingly framing valuation around a profit multiple

We are one of Europe's most active mid-market software M&A advisors and can guide you through the current climate to an excellent result on a transformative transaction

Average deal size c. EUR 100m

SaaS, Vertical Software and others

 acquired 	 a subsidiary of HAUFE . Group sold to 	 sold to 	 a portfolio company of Foresight FOR A SMARTER FUTURE sold to 	 a portfolio company of MAIN CAPITAL PARTNERS sold to MANAGING TECHNOLOGIES BY QUANTUM 	 sold to 	 sold to 	 sold to
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Ambitious targets are best achieved with the right advisors

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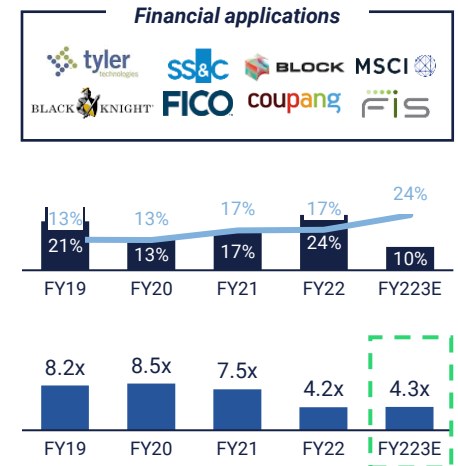
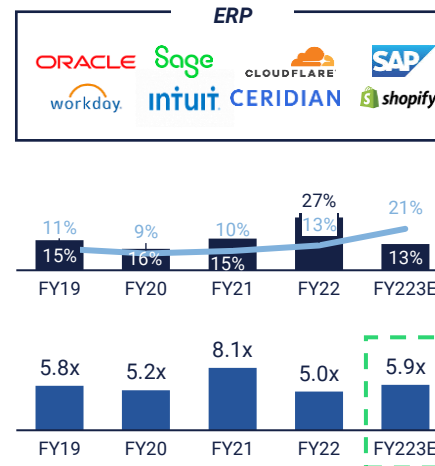
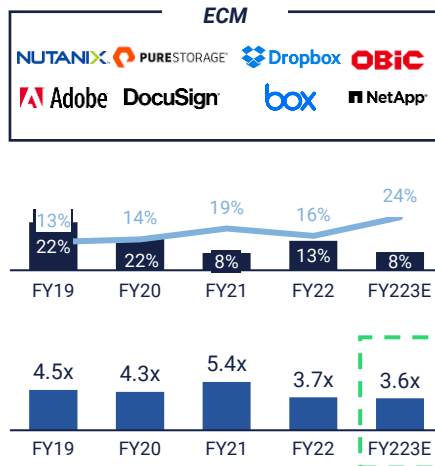
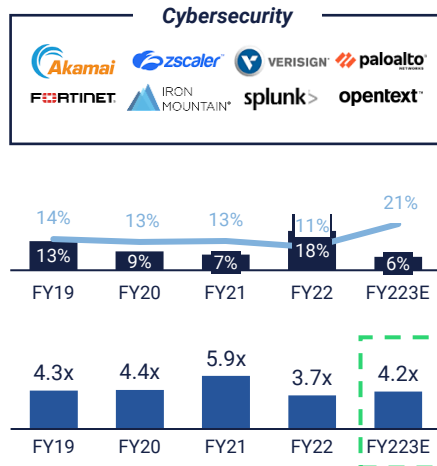
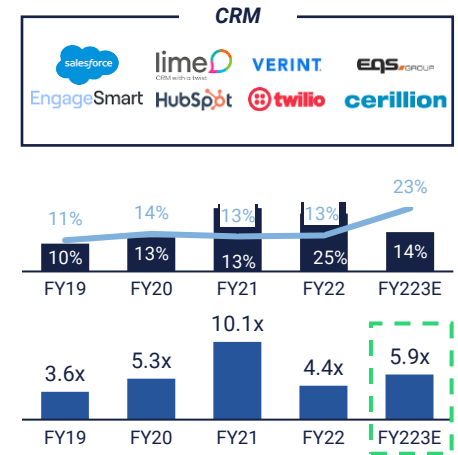
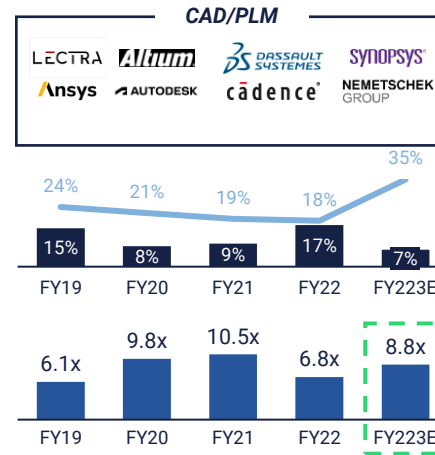
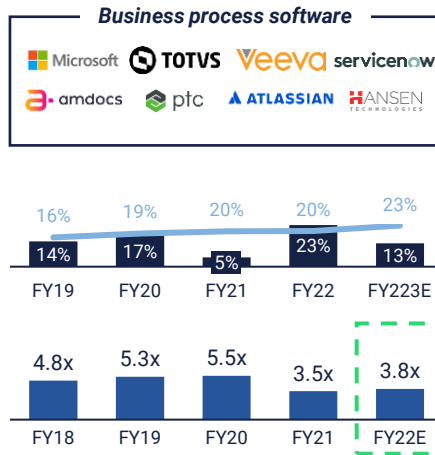
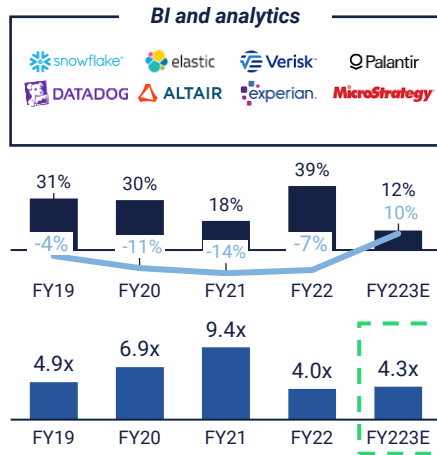
Erik Lundberg
Partner
Sweden
Stockholm



While revenue multiples have fallen across all groups, nearly every subsector shows both accelerating growth and profitability (I/II)

Selected public software companies (I/II)

— EBITDA margin ■ Revenue growth ■ EV/Revenue

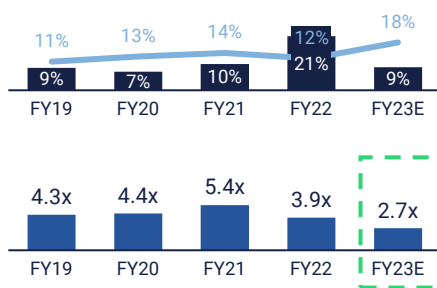
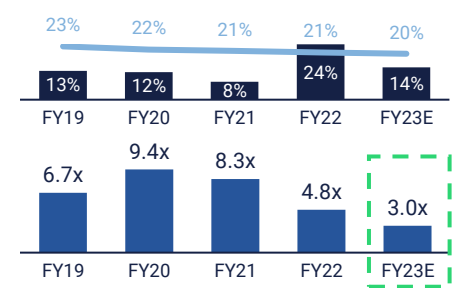
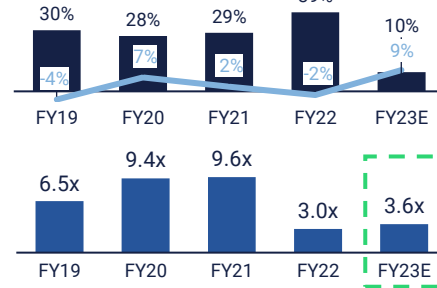
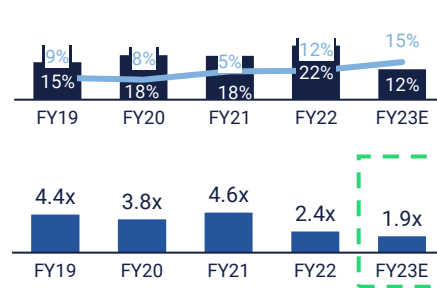
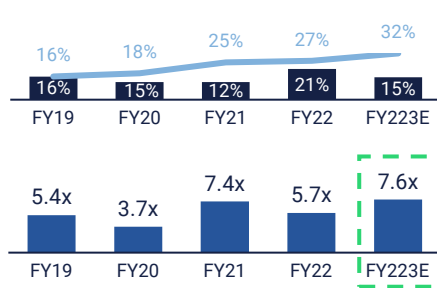


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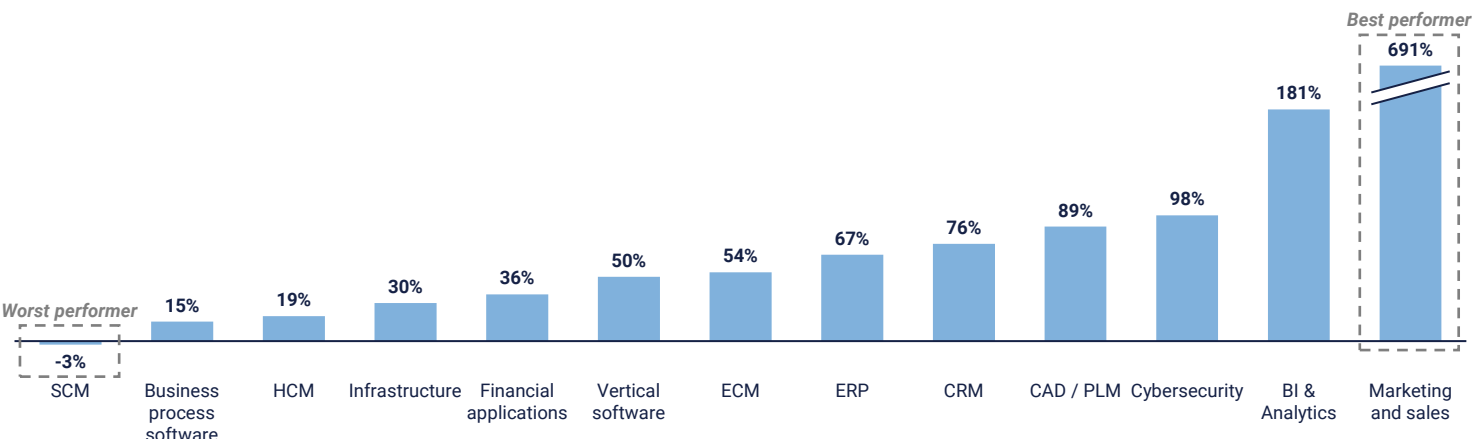
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Selected public software companies (II/II)

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EBITDA margin YoY change (FY22 – FY23E)



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 Source(s): S&P Capital IQ

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