



# European Software Sector Market Update

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Harris Williams | H1 2022

# H1 2022 Observations and Key Trends

Several dynamics are contributing towards a rapidly evolving European Software landscape

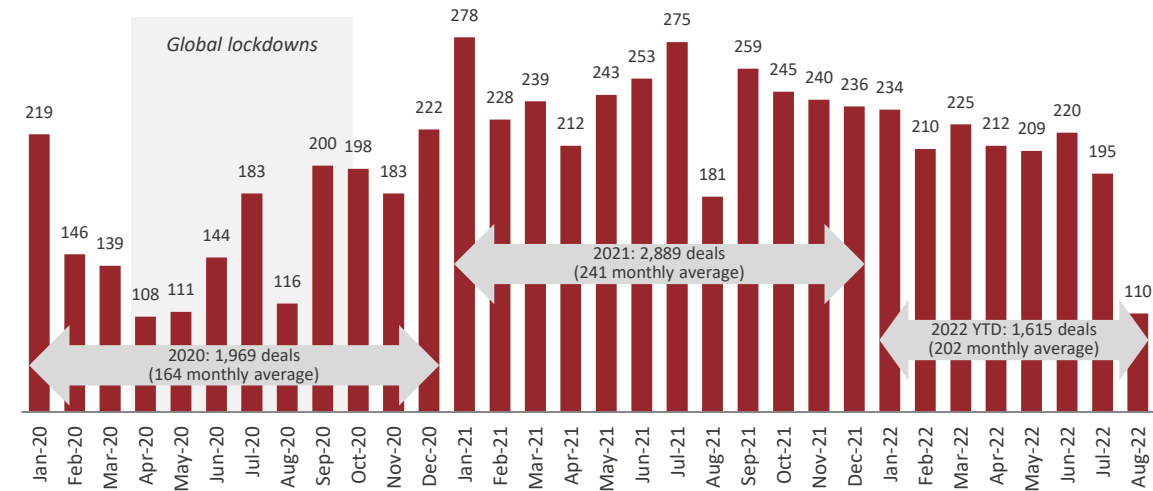


# Overall Macroeconomic Environment

European M&A volumes have seen a correction in recent months coming off the back of a buoyant 18 months throughout Covid-19

## Record M&A Activity in 2021...

European software M&A volume<sup>1</sup>



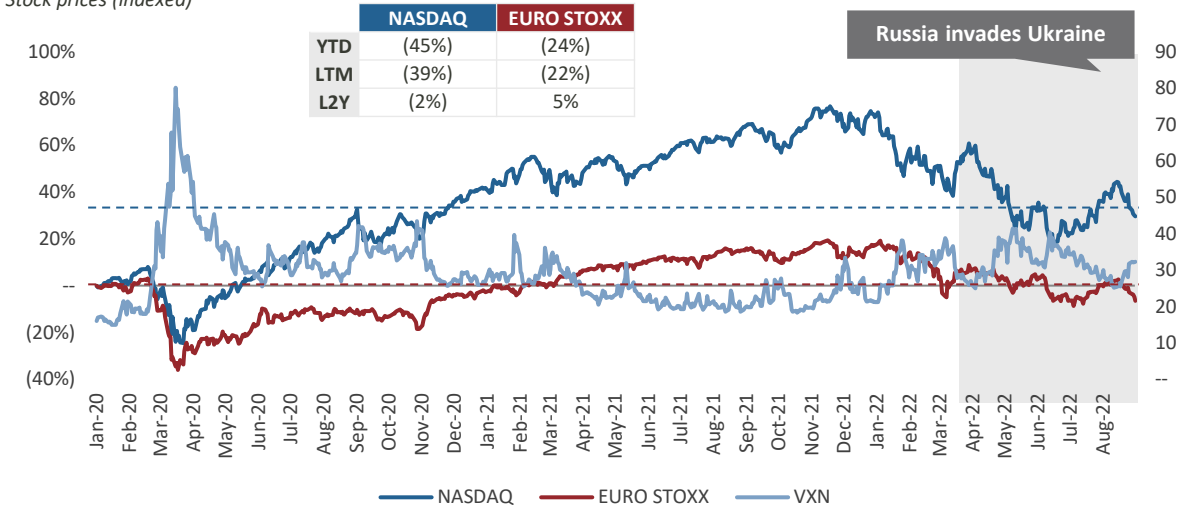
Total M&A deal value in 2022 is tailing off from an all-time high of \$5.9tn in 2021<sup>2</sup> driven by:

- › **Record volume of companies exploring a potential sale**, as sellers were taking advantage of the strong sellers' market; however, buyers are now adopting a more cautious approach
- › **Strategic buyers** looked to expand capabilities with "land grab" acquisitions to stay competitive, and are still increasingly using their treasure chest for acquisitions in 2022
- › **Cost of capital** slowly rising in H1 2022, now reducing the activity of high yield debt, however, is somewhat offset by an active private debt market

While the M&A market remains active, overall deal volume has moderated

## ...Followed by a Significant Downturn in Public Market Valuations in 2022

Stock prices (indexed)<sup>3</sup>



In the context of the macroeconomic environment:

- › **Volatility in public stock markets** is beginning to drive uncertainty in private markets
- › Concerns about **inflation and central banks' responses** have contributed to volatility in the market
- › **Supply chain friction** is causing challenges across the board

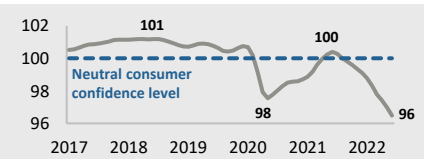
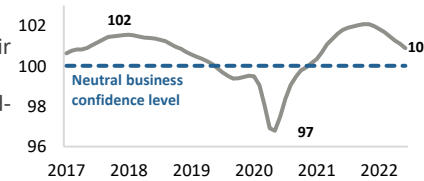
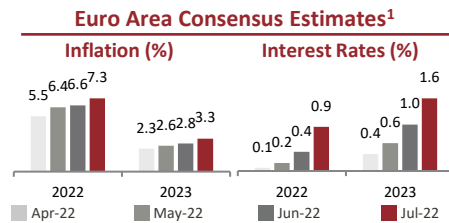
Despite various macro headwinds at play, the fundamental demand drivers that have been a tailwind for M&A continue to exist

# Macroeconomic Impact on Markets

Private equity firms are well-positioned to handle the complexities of the current macroenvironment and continue to deploy capital

## Recent Challenges for H1 2022...

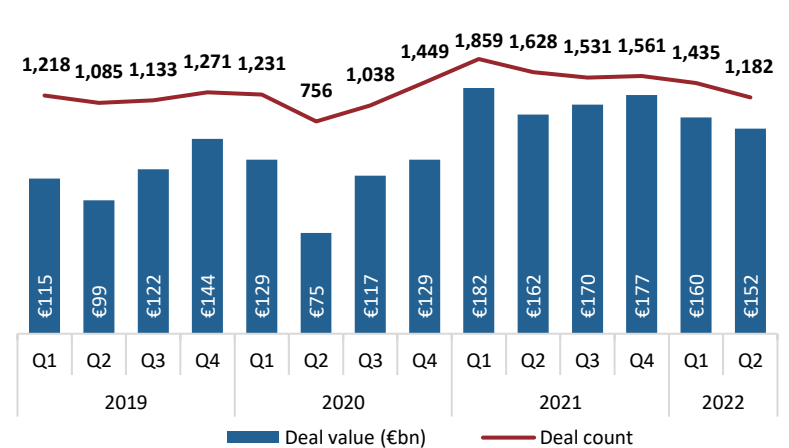
Key Challenges	Commentary
<b>Inflation and Rising Interest Rates</b>	<ul style="list-style-type: none"> <li>Large rounds of government borrowing and quantitative easing, followed by recent interest rate hikes, increase borrowing costs for companies, impacting their growth and profitability</li> <li>Higher raw material and commodity prices intensify the threat of long-lasting elevated levels of inflation which increases the risk of stagflation</li> </ul>
<b>Geopolitical Conflicts</b>	<ul style="list-style-type: none"> <li>The Russia-Ukraine conflict has triggered turmoil on financial and commodity markets, increasing uncertainty about the recovery of the global economy post-Covid</li> <li>A further prolongation of the conflict increases the likelihood that commodity prices remain high in the medium-term</li> <li>Increasing international tensions on the political status of Taiwan inject further uncertainty into the market</li> </ul>
<b>Business Confidence</b>	<ul style="list-style-type: none"> <li>The OECD business confidence index remains largely positive, indicating that companies in OECD countries are confident in their near-term outlook<sup>2</sup></li> <li>Generally speaking, Europe and the US have emerged from Covid-19 with business carrying on as usual, albeit with confidence impacted due to the general macroeconomic environment</li> </ul>
<b>Consumer Confidence &amp; Covid-19 Aftermath</b>	<ul style="list-style-type: none"> <li>Consumer confidence levels continue to decrease amidst rising inflation rates, geopolitical uncertainty and rising interest rates<sup>2</sup></li> <li>Recent lockdowns in China raise concerns that the consumer sentiment in the world's largest buyer country may not recover until late 2022</li> </ul>
<b>Supply Chain Disruptions</b>	<ul style="list-style-type: none"> <li>Pressure on supply chains is leading to slower adoption rates of third-party products and services</li> <li>Shortages of raw materials are exacerbated through international conflicts and Covid-19</li> <li>Semi-conductor crisis and general global chip shortages have impacted the global tech industry</li> </ul>



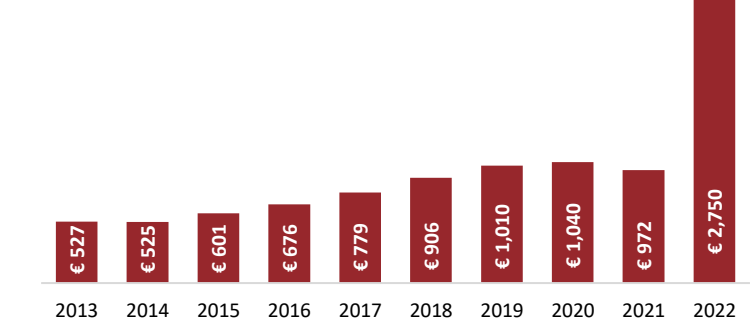
## ...With Opportunities for Private Equity

- 1** Inflation and interest rate regime will be broadly negative for fund performance and portfolio company valuations
- 2** Deal activity is expected to slow down but not stop
- 3** Focus on A / A+ assets
- 4** Increasing focus on take-privates and corporate carveouts
- 5** Holding times are expected to push upwards

European Private Equity Deal Activity by Quarter<sup>3</sup>



Private Equity Dry Powder Over Time (€bn)<sup>3</sup>



Despite the challenging macroeconomic backdrop, private equity groups are keen to deploy capital, with an increased focus on A+ assets – for which, the valuation impact is expected to be less severe

# European Software is Shaping Industries and the Economy

## Reversal of Fortune: How European Software Can Play to Its Strengths

### McKinsey

While the public sector can help European companies (...) entrepreneurs, investors, and private-sector companies have an important and urgent role to play too. They cannot wait for conditions to change before taking action. To prevent software gnawing away at the competitiveness of many of its industries and its economy, Europe must aspire to generate global software and software-enabled companies within the next decade by taking a new, bold approach that builds on its strengths rather than trying to make up for its weaknesses.

Read the full article [here](#).

## 3 Strategies for Developing More Accessible Software

### Harvard Business Review

In the same way that developers wouldn't create a new feature using only one tool, they should have multiple inputs to guide them through accessibility. The more robust developers' accessibility checkers are, the better they'll serve people with diverse needs. (...) The main accessible frameworks that developers use can't be taken as all encompassing.

Read the full article [here](#).

## Why the Software-Defined World is Key to Organisational Transformation

### Forbes

Software engineering is central to creating value in the modern business. (...) In the post-pandemic world, software engineering will be critical for delivering the high-quality services consumers demand, as well as providing reliable tools that enable teams to work remotely without constraints. Software engineering tailored by industry is the key to keeping up with the pace of innovation.

Read the full article [here](#).

## Private Equity's Search for the Next Big Thing in Software

### BCG

The often opaque nature of software companies and products can make it difficult to choose suitable investment targets. We outline a combination of public business data and growth archetypes that can help guide these decisions for private equity firms. (...) Software holds rewards for any investor who can find advantages in the mass of solutions, products, and services that will continue to power business for years.

Read the full article [here](#).

## Select Recent Harris Williams Industry Updates



Architecture, Engineering, & Construction

[Link to Read](#)



Compliance Technology: EHS and SCRM

[Link to Read](#)



Compliance Technology: GRC

[Link to Read](#)



Healthcare IT

[Link to Read](#)



Infrastructure and Cybersecurity Software

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Legal Technology

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Professional Education and Learning Technology

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Real Estate & Property Technology

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Technology Services

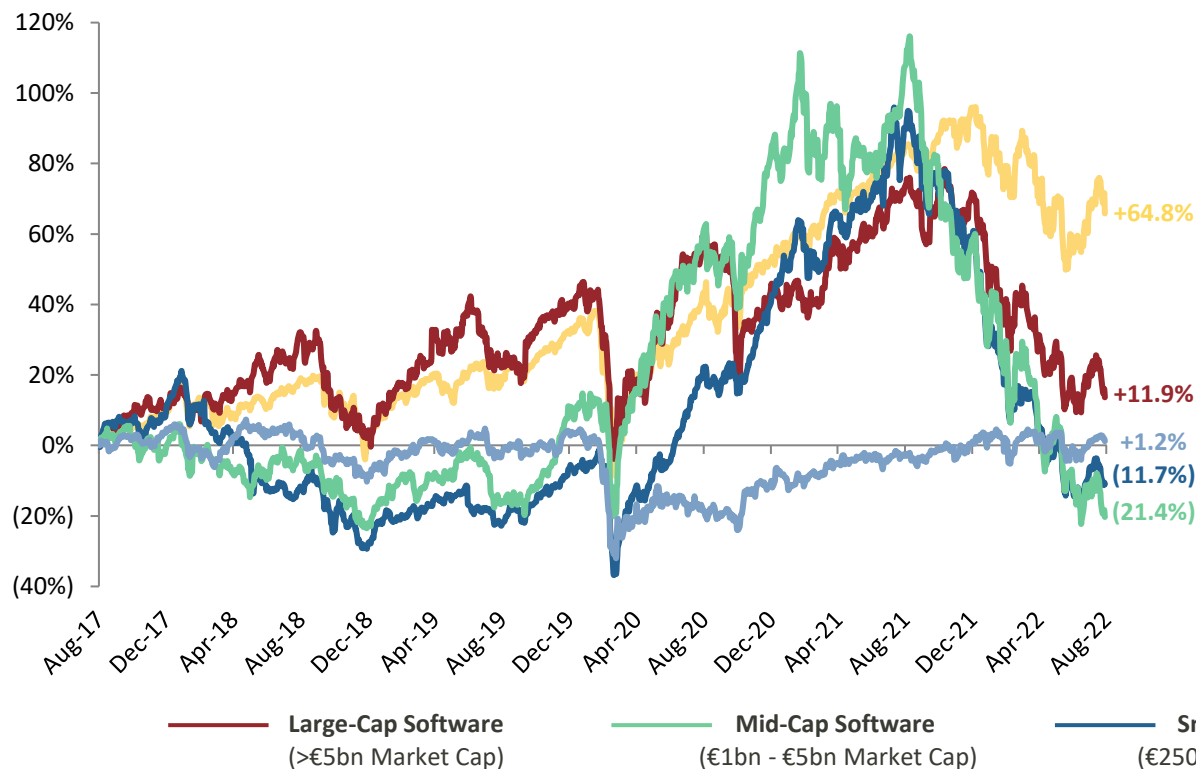
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[Access All Harris Williams Insights Here](#)

# Trended European Stock Performance

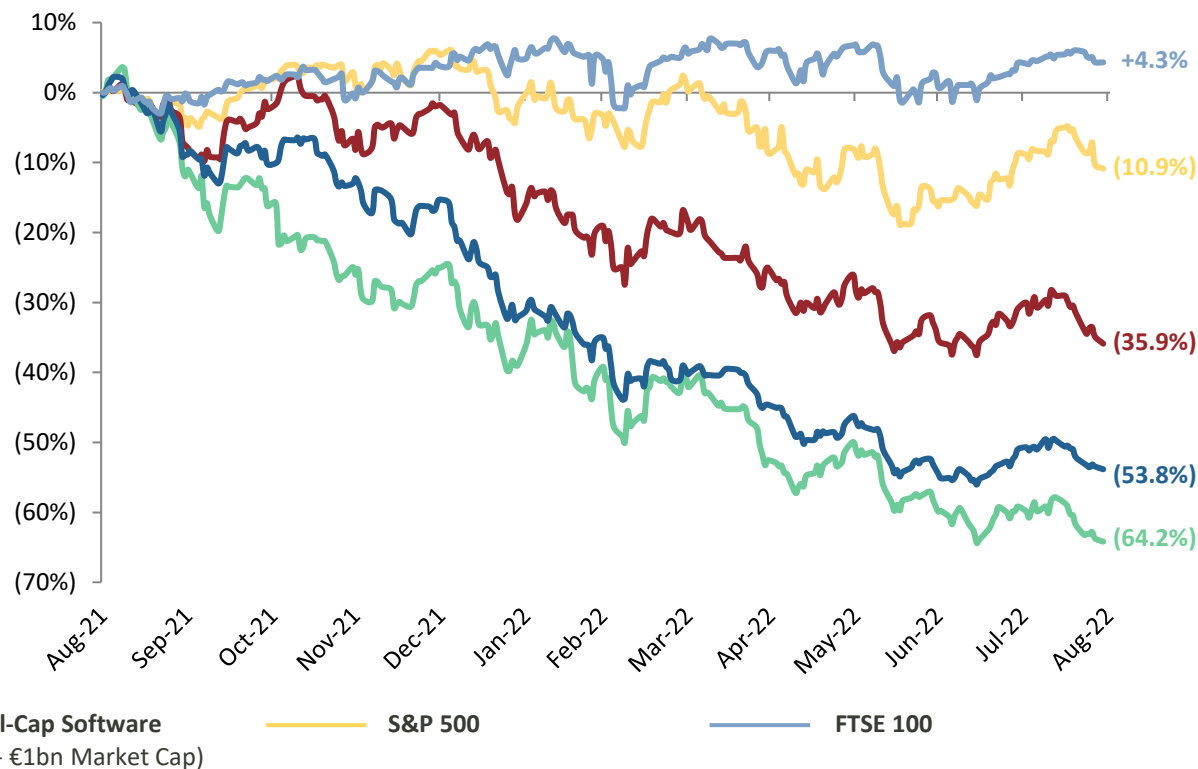
## Public Company Stock Performance – Last 5 Years

Indexed Stock Price Performance for the period August 2017 – August 2022

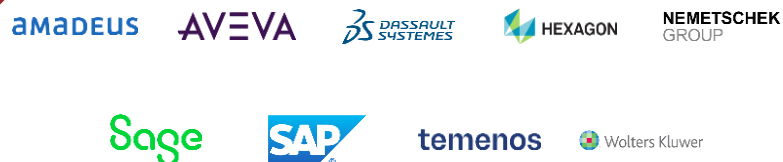


## Public Company Stock Performance – Last 12 Months

Indexed Stock Price Performance for the period August 2021 – August 2022



### Large-Cap Software



### Mid-Cap Software



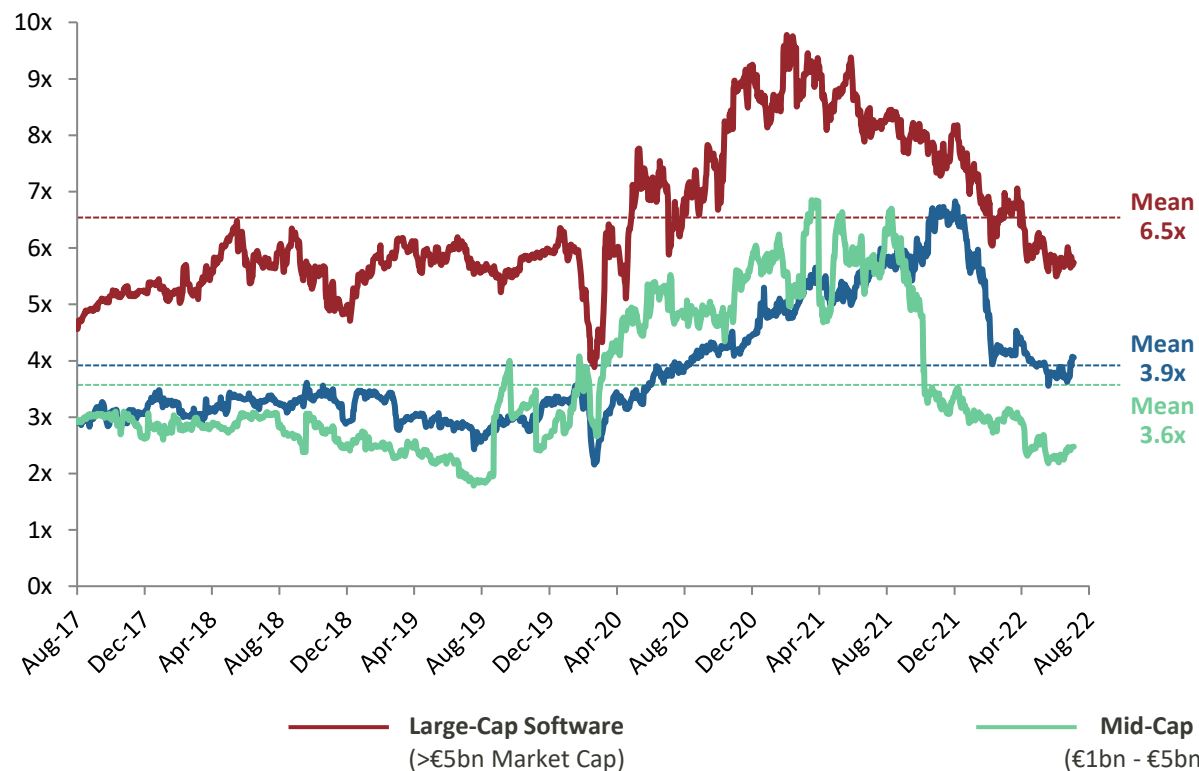
### Small-Cap Software



# Forward Valuation Performance

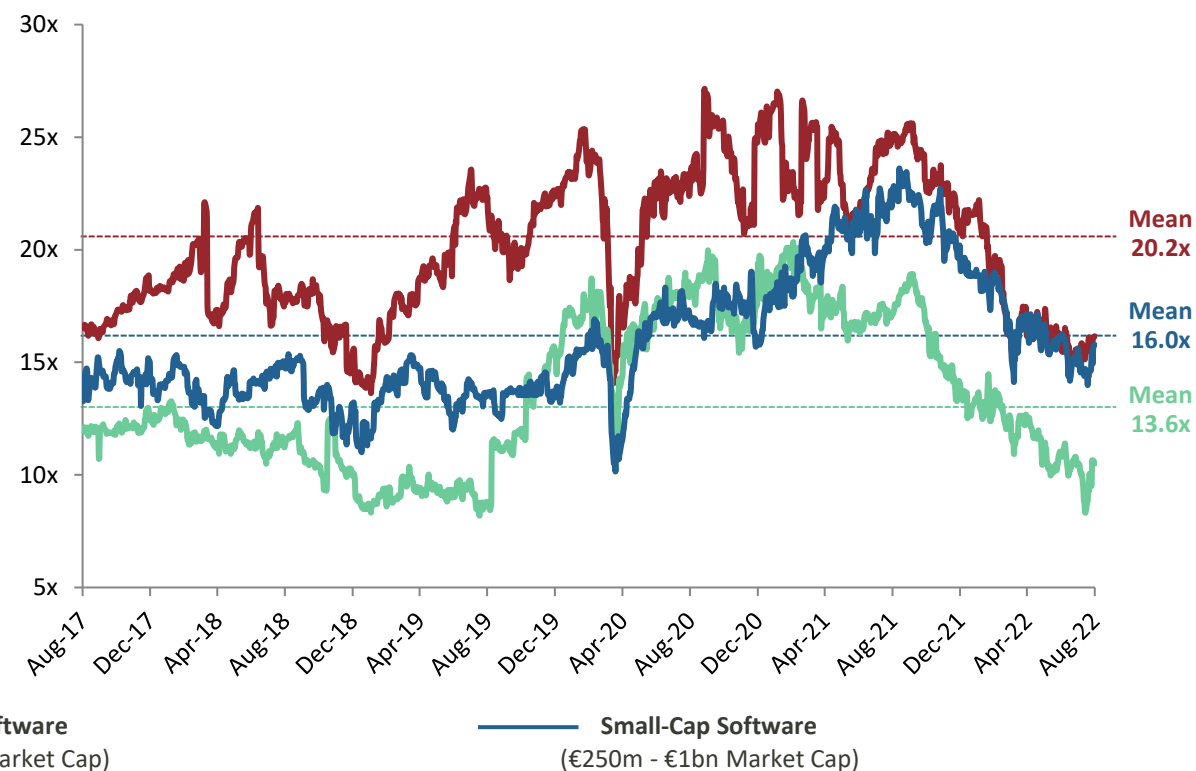
## Forward NTM EV/Revenue Performance – Last 5 Years

Multiples Performance for the period August 2017 – August 2022



## Forward NTM EV/Cash EBITDA Performance – Last 5 Years

Multiples Performance for the period August 2017 – August 2022



### Large-Cap Software



### Mid-Cap Software



### Small-Cap Software

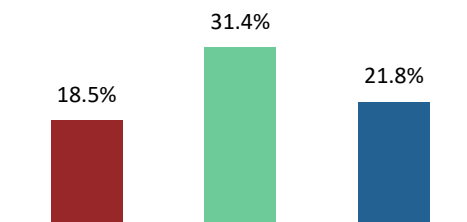




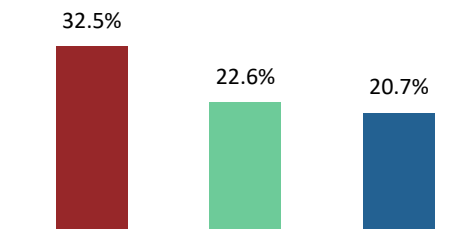
# Current Operating and Valuation Metrics

## Public Company – Operating Metrics

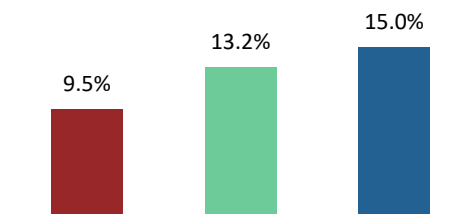
Mean CY22E Revenue Growth



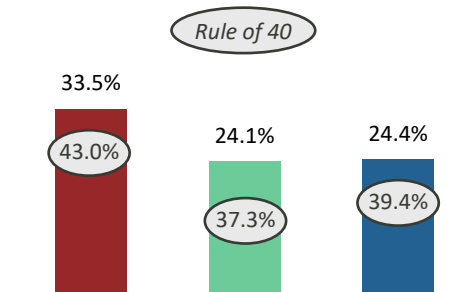
Mean CY22E Cash EBITDA Margin



Mean CY23E Revenue Growth

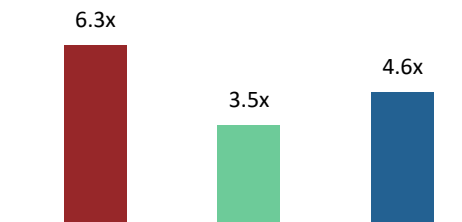


Mean CY23E Cash EBITDA Margin

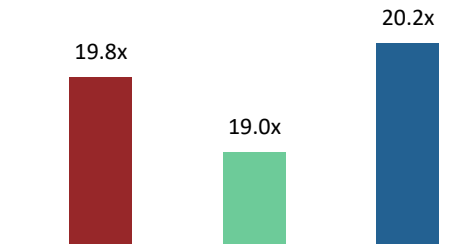


## Public Company – Valuation Metrics

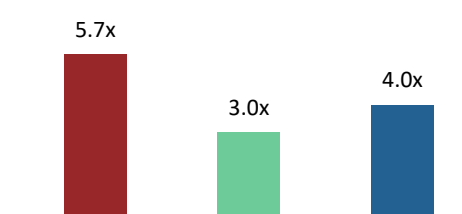
Mean EV / CY22E Revenue



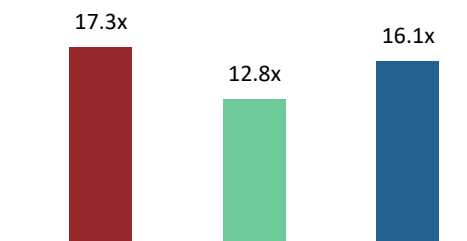
Mean EV / CY22E Cash EBITDA



Mean EV / CY23E Revenue



Mean EV / CY23E Cash EBITDA



### Large-Cap Software



### Mid-Cap Software

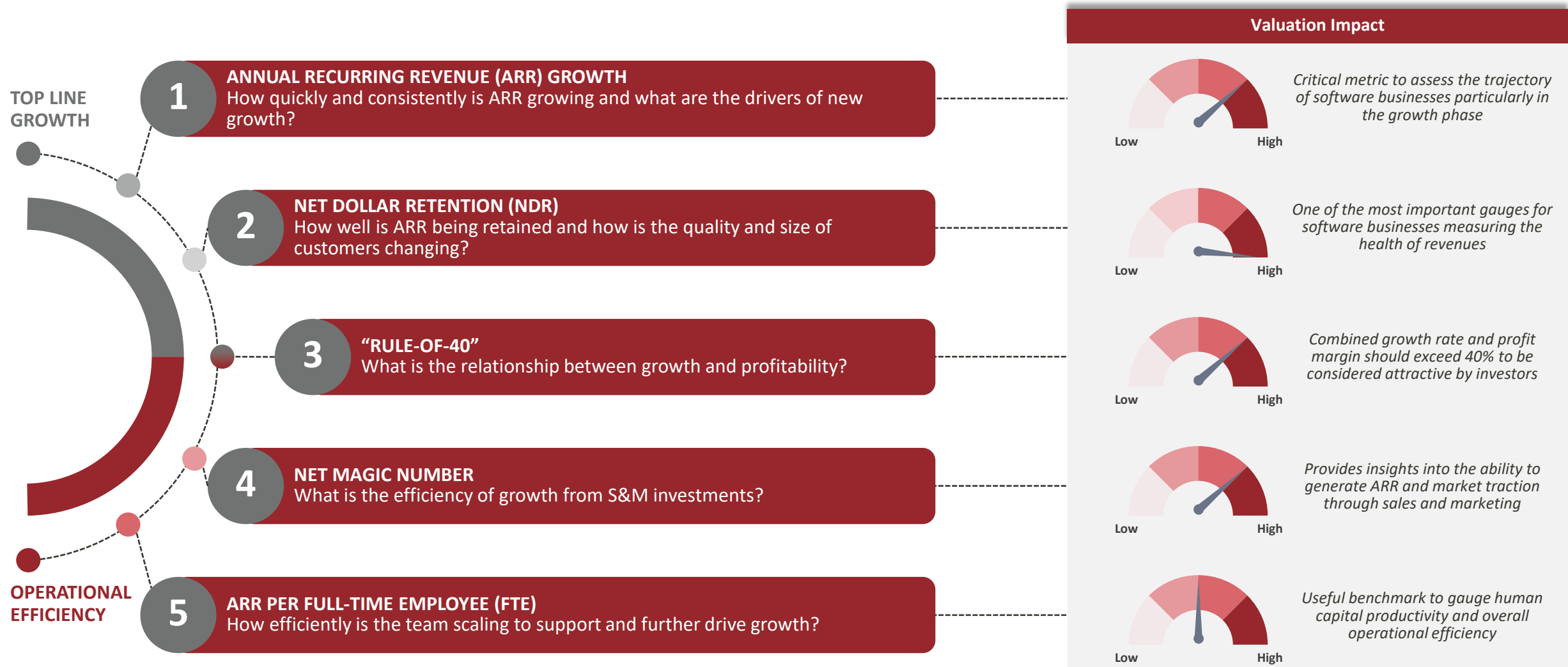


### Small-Cap Software





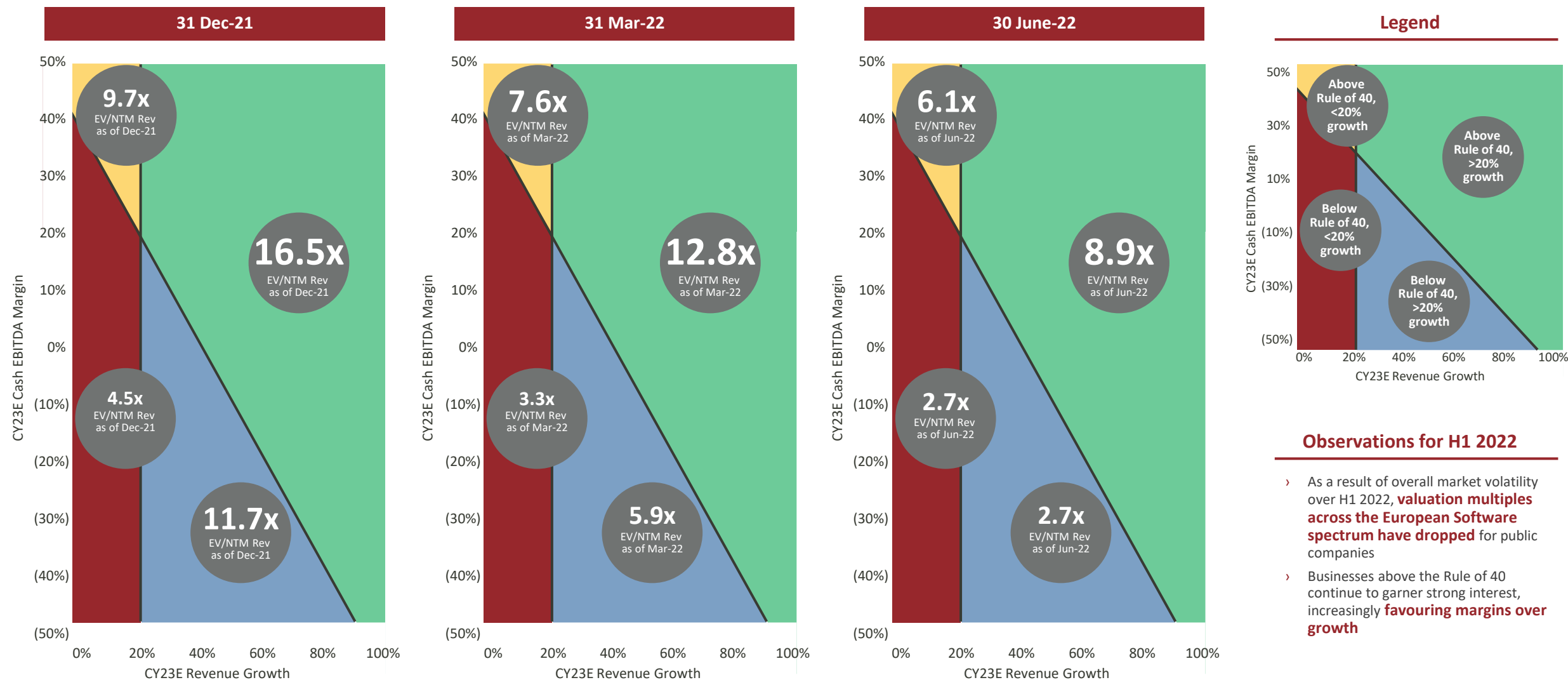
# Valuation Framework for European Software Companies



Source: Harris Williams internal data

Notes: ARR growth defined as the change in ARR over a given year; NDR defined as the change in customer expansion, down-selling and churn added to ARR as a percentage of ARR; Rule of 40 defined as the sum of revenue growth and profit margin; Net Magic Number defined as net new ARR divided by the prior period sales and marketing operating expense; ARR per FTE defined as ARR generated divided by full-time employees

# Public Comparables Valuation Analysis – Last Three Quarters Contraction



# Public Comparables Valuation Analysis – Growth and Margins



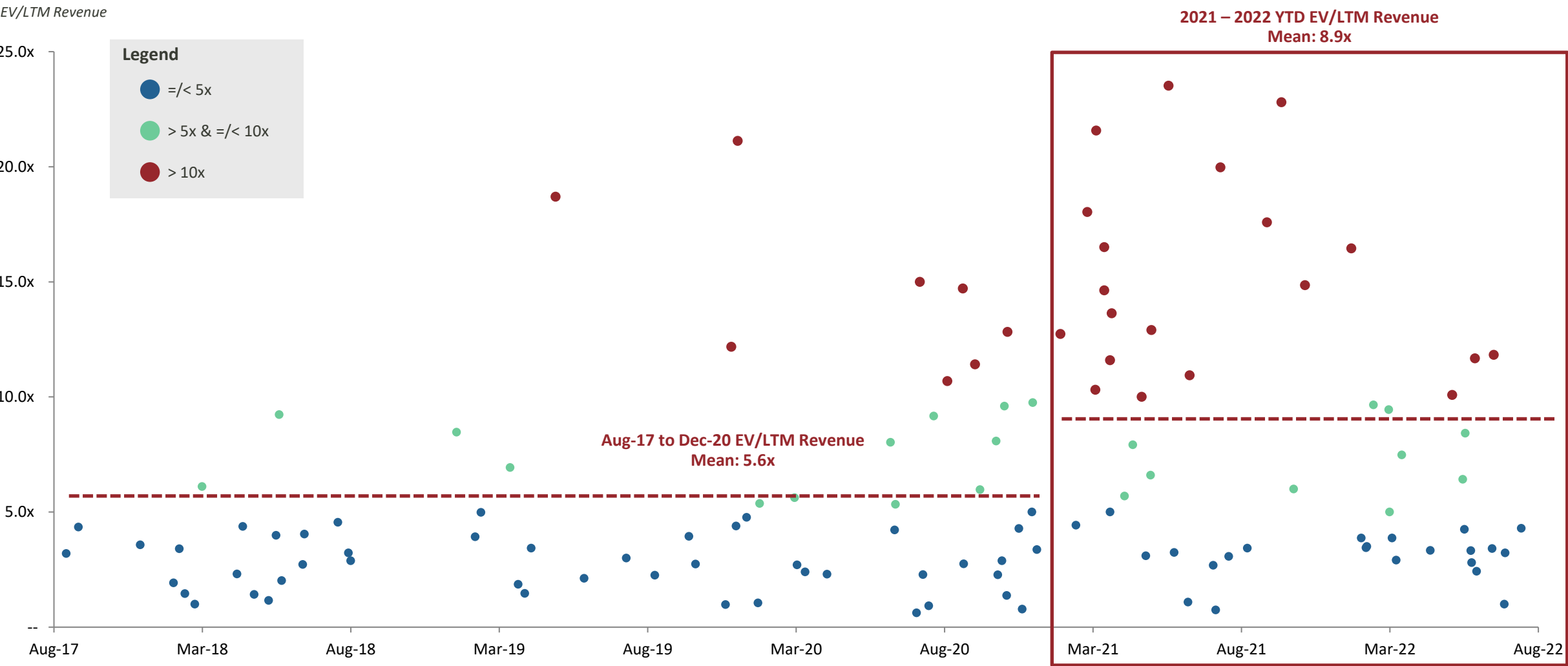
# Public Comparables Valuation Analysis – Margins at Varying Growth Rates

Forward Revenue Growth vs. Forward Cash EBITDA Margin Matrix					
		Projected Revenue Growth CY23E			
		<5%	5%-10%	10%-20%	>20%
Cash EBITDA Margin CY23E	>30%	5.5x	6.8x	6.7x	15.8x
	20%-30%	2.9x	3.2x	3.7x	5.6x
	<20%	1.0x	1.4x	2.6x	3.9x

 EV/CY22E Revenue

# Acquisition Multiples on an Upward Trend over the Last Two Years

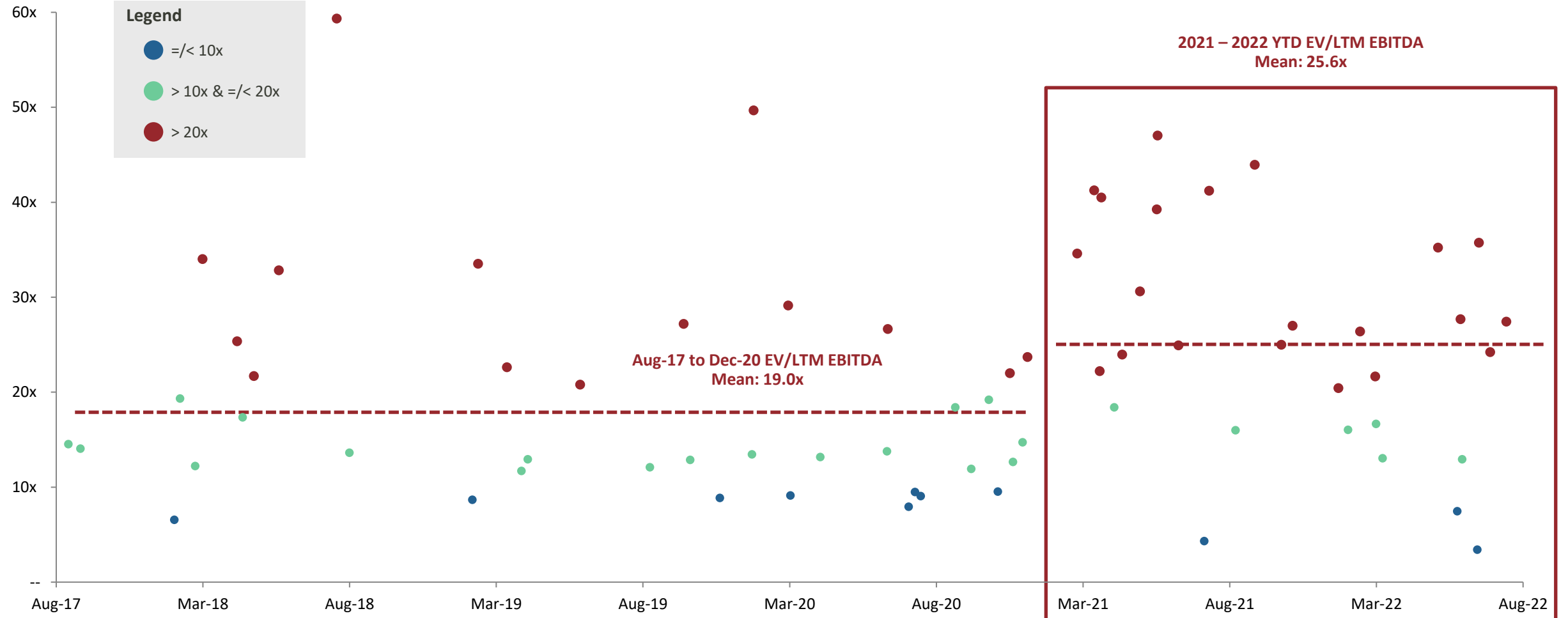
## Recent European Software Transactions – EV/LTM Revenue



# Acquisition Multiples on an Upward Trend over the Last Two Years (*cont'd*)

## Recent European Software Transactions – EV/LTM EBITDA

EV/LTM EBITDA



# Select Recent European M&A Transactions

Date	Buyer	Target	Target Description	EV (€m)	EV/LTM Rev	EV/LTM EBITDA	Date	Buyer	Target	Target Description	EV (€m)	EV/LTM Rev	EV/LTM EBITDA
Pending	 ResMed	 MediFox	Develops software solutions and services for professional and non-professional care, therapeutic practices and welfare facilities.	950	11.7x	27.7x	Jun	 KEENSIGHT CAPITAL	 LISAM SYSTEMS Enabling full compliance	Developer of environment, health and safety (EH&S) software designed to manage documents and ensure compliance.	Confidential	Confidential	Confidential
Closed	 Apax	 EcoOnline	Leading provider of Software-as-a-Service (SaaS) for Environmental, Health, Safety, and Quality.	380	8.4x	NM	Jun	 neogames	 aspireglobal	Leading B2B-provider of iGaming solutions, covering casino and sports.	410	2.4x	12.9x
Closed	 NortonLifeLock	 Avast	Cybersecurity software company that researches and develops computer security software.	7,280	9.1x	16.4x	Jun	 SGT CAPITAL INVESTING IN FUTURE GROWTH	 utimaco	Developer of cloud-based hardware security and compliance software intended for telecommunication, governments and corporations.	425	4.3x	NA
Sep	 cority	 Reporting21	ESG data monitoring platform, backed by expertise in sustainability transformations.	Confidential	Confidential	Confidential	May	 PERMIRA	 mimecast	Provider of next generation cloud security and risk management services for email and corporate information.	5,470	10.1x	35.2x
Aug	 AKKR	 basware	Helsinki-based global provider of Cloud-based Networked Procure-to-Pay solutions.	662	4.3x	27.4x	Mar	 SS&C	 blueprism	Develops Intelligent Robotic Process Automation (RPA) software to provide businesses with a secure, agile and smart digital workforce.	1,440	7.5x	NM
Jul	 Bridgepoint	 CAST	Provider of Automated Application Intelligence software, publishing language analysis software intended for computer professionals.	139	3.2x	24.2x	Mar	 Partners Group REAL ESTATE INVESTMENT MANAGEMENT	 FORTERRO	Pan-European software services provider for small and mid-sized businesses.	1,000	5.0x	16.7x
Jul	 Duck Creek Technologies	 Prima Compliance divisions of prima solutions	Developer of a software platform designed to help insurance and reinsurance professionals speed up their digital transformation.	Confidential	Confidential	Confidential	Feb	 CARLYLE	 AUTOFORM Forming Reality	Developer of specialized die-facing design and simulation software intended for the die-making and sheet metal forming industries.	1,750	NA	NA
Jul	 BainCapital	 inetum Positive digital flow	IT services business providing services spanning IT consultancy, cloud computing, artificial intelligence and blockchain.	2,200	1.0x	NA	Feb	 S&P Global	 IHS Markit	Leading provider of data and analytics to corporate and sovereign clients across a wide variety of industries.	43,120	9.4x	21.7x
Jul	 Hg	 Ideagen	Provider of market-leading information management, safety, risk and compliance software solutions.	1,300	11.8x	35.7x	Feb	 Apax	 Alcumus Safer. Healthier. Stronger.	Developer of supply chain and risk management software intended for small and medium-sized businesses.	Confidential	Confidential	Confidential

Public Targets

Harris Williams Advised



# Select Recent Harris Williams European Software Experience

September 20, 2022



## Harris Williams Advises Cority on Its Acquisition of Reporting 21

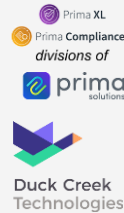
### About Reporting 21

Founded in 2014, Reporting 21 is an ESG data monitoring platform, backed by expertise in sustainability transformations. Reporting 21 bridges the gap between software and advisory, offering a SaaS solution informed by expert guidance. The company's software accommodates hundreds of KPIs mapped to global frameworks.

### Successful Outcome

"We are excited about the Harris Williams Technology Group's continued momentum in the EHS sector. This transaction underpins the firm's leadership position in the compliance software industry, having advised on the sale of Alcumus to Apax and Keensight's growth investment in Lisam earlier this year," said Julien Oussadon, a managing director at Harris Williams.

July 13, 2022



## Harris Williams Advises Prima Solutions on the Sale of Prima XL to Duck Creek Technologies

### About Prima XL

Prima XL is a powerful, cloud-based reinsurance software that collects, centralises, and analyses all data for insurers, reinsurers, and brokers. Prima XL tracks all the information related to reinsurance policies, allowing insurance businesses to manage all of their policies from underwriting to commutation and renewals.

### Successful Outcome

"Throughout the sale process, Harris Williams provided outstanding support and advice to Prima Solutions. The team was pivotal in successfully positioning Prima XL and Prima Compliance, leading to an exceptional outcome," said Julien Victor, previously CEO of Prima Solutions, who has joined Duck Creek as managing director.

June 24, 2022



## Harris Williams Advises Keensight Capital on its Investment in Lisam Systems

### About Lisam Systems

Founded in 1999, Lisam is a global provider of EH&S compliance management software solutions and services, operating worldwide. Thousands of actors in the chemical supply chain rely on Lisam's software and services to manage the authoring and distribution of all their safety documents.

### Successful Outcome

Gregory Agez, a partner at Keensight, commented, "Harris Williams has a deep understanding of the EH&S software sector, and their transaction expertise was integral to our successful outcome. We look forward to supporting Lisam as it executes on its growth and expansion strategies in the years ahead."

February 11, 2022



## Harris Williams Advises Alcumus Group on Its Sale to Apax Partners

### About Alcumus

Alcumus is a leading provider of technology-led risk management solutions. It supports many FTSE 100 and Fortune 500 clients. This includes ESG solutions, EHSQ solutions, contractor supply chain management, UKAS accredited certification services, workplace monitoring services, training, and HR consultancy.

### Successful Outcome

"Harris Williams' experience in the space and deep understanding of Alcumus' business model enabled them to tell our story in the right way and identify the right partner for our next phase of growth. They provided us with the cross-border support and strategic partnership we were seeking to achieve a successful outcome," said Alyn Franklin, the CEO of Alcumus.

# Harris Williams at a Glance

## HARRIS WILLIAMS

- **Preferred M&A advisor** for premier assets
- **30+** years with thousands of deals closed
- **8** offices across the U.S. and Europe

## FOCUSED ADVISORY SERVICES

- **10** industry groups with deep sector expertise
- **100%** of revenue is from M&A advisory
- **70%** of revenue from repeat clients

## GLOBAL FOOTPRINT



## CONSISTENT RECOGNITION FOR QUALITY



## HARRIS WILLIAMS TECHNOLOGY GROUP

### THEMATIC FOCUS AREAS

- A.I. / Machine Learning
- Digital Transformation
- Integrated Payments
- SaaS / Cloud

### COVERAGE AREAS

- Application Software
- Infrastructure and Security Software
- IT and Managed Services
- Tech-Enabled Services

### VERTICAL FOCUS SECTORS

- Architecture, Engineering, & Construction
- Compliance Technology
- eCommerce & Retail Technology
- Education Technology
- Government Technology
- Healthcare IT
- Human Capital Management
- Industrial Software
- Legal Technology
- Office-of-the-CFO
- Pharma IT
- Property Technology
- Supply Chain and Logistics

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# Harris Williams Capabilities and Locations



Harris Williams has a broad range of industry expertise, which creates powerful opportunities. Our clients benefit from our deep-sector experience, integrated industry intelligence and collaboration across the firm, and our commitment to learning what makes them unique. For more information, visit our website at [www.harriswilliams.com](http://www.harriswilliams.com).



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# Sources and Disclosures

## Sources

- |                                  |                             |                  |
|----------------------------------|-----------------------------|------------------|
| 1. Harris Williams internal data | 7. FocusEconomics           | 13. Mergermarket |
| 2. Eurostat                      | 8. OECD                     | 14. LinkedIn     |
| 3. Gartner                       | 9. McKinsey                 |                  |
| 4. Pitchbook                     | 10. Harvard Business Review |                  |
| 5. Bain & Company                | 11. Forbes                  |                  |
| 6. S&P Capital IQ                | 12. BCG                     |                  |

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## Appendix

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# European Software Public Market Operational and Valuation Metrics Detail

As of August 29, 2022

€ in Millions

€ in Millions	Market Capitalisation	Enterprise Value	% of 52-Week High	Revenue Growth CY23E	Cash EBITDA Margin CY23E	EV/Revenue		EV/Cash EBITDA	
Company						CY22E	CY23E	CY22E	CY23E
Large-Cap Software (>€5bn Market Cap)									
SAP	98,861	107,157	65.2%	7.1%	34.3%	3.5x	3.3x	10.6x	9.6x
Dassault Systemes	50,736	51,236	68.0%	9.0%	35.8%	9.2x	8.5x	26.0x	23.6x
Hexagon	28,526	32,162	74.2%	6.9%	34.3%	6.3x	5.9x	19.2x	17.2x
Wolters Kluwer	26,291	28,507	93.1%	4.5%	35.8%	5.4x	5.2x	15.2x	14.5x
Amadeus IT Group	23,673	26,502	81.1%	23.6%	23.8%	5.9x	4.8x	29.9x	20.2x
AVEVA Group	9,865	10,457	65.8%	9.9%	37.7%	6.9x	6.3x	19.0x	16.7x
The Sage Group	8,659	9,429	84.2%	6.1%	25.1%	4.1x	3.9x	16.8x	15.5x
Nemetschek	6,923	6,941	51.6%	9.3%	31.3%	8.8x	8.0x	27.2x	25.6x
Temenos	5,651	6,410	51.0%	9.1%	43.3%	6.2x	5.7x	14.8x	13.1x
Median	23,673	26,502	68.0%	9.0%	34.3%	6.2x	5.7x	19.0x	16.7x
Mean	28,798	30,978	70.5%	9.5%	33.5%	6.3x	5.7x	19.8x	17.3x

Mid-Cap Software (€1-5bn Market Cap)									
SoftwareONE Holding	2,011	1,762	47.7%	15.7%	21.7%	1.6x	1.4x	7.3x	6.4x
CompuGroup Medical	1,973	2,678	45.6%	4.8%	24.5%	2.4x	2.3x	10.9x	9.3x
Software Aktiengesellschaft	1,953	2,172	60.0%	7.1%	20.9%	2.3x	2.2x	13.2x	10.3x
TeamViewer	1,842	2,367	33.2%	12.6%	48.0%	4.2x	3.7x	8.6x	7.7x
Criteo	1,656	1,248	62.8%	12.0%	31.1%	1.3x	1.1x	4.1x	3.7x
Sinch	1,516	2,499	9.4%	13.3%	11.6%	1.0x	0.9x	10.1x	7.4x
Vitec Software Group	1,321	1,384	68.0%	14.5%	24.5%	7.7x	6.7x	34.7x	27.5x
Qt Group	1,269	1,270	27.9%	35.2%	29.7%	7.9x	5.9x	28.3x	19.8x
Asseco Poland	1,266	1,245	72.3%	7.7%	13.2%	0.3x	0.3x	2.6x	2.4x
Lectra	1,208	1,261	71.3%	6.9%	24.8%	2.4x	2.2x	10.1x	9.0x
Addnode Group	1,176	1,232	81.5%	11.6%	19.0%	2.3x	2.1x	12.3x	11.1x
Cint Group	1,175	1,247	37.9%	22.7%	10.2%	4.0x	3.3x	86.0x	31.9x
Learning Technologies Group	1,071	1,266	48.5%	4.1%	26.5%	1.9x	1.9x	7.8x	7.1x
ATOSS Software	1,042	1,013	58.0%	16.9%	31.5%	9.2x	7.9x	30.5x	25.0x
<b>Median</b>	<b>1,295</b>	<b>1,268</b>	<b>53.3%</b>	<b>12.3%</b>	<b>24.5%</b>	<b>2.4x</b>	<b>2.2x</b>	<b>10.5x</b>	<b>9.1x</b>
<b>Mean</b>	<b>1,463</b>	<b>1,618</b>	<b>51.7%</b>	<b>13.2%</b>	<b>24.1%</b>	<b>3.5x</b>	<b>3.0x</b>	<b>19.0x</b>	<b>12.8x</b>

# European Software Public Market Operational and Valuation Metrics Detail (*cont'd*)

As of August 29, 2022

€ in Millions

€ in Millions	Market	Enterprise	% of 52-Week	Revenue Growth	Cash EBITDA	EV/Revenue		EV/Cash EBITDA	
Company	Capitalisation	Value	High	CY23E	Margin CY23E	CY22E	CY23E	CY22E	CY23E
Small-Cap Software (€250m-€1bn Market Cap)									
VTEX	819	584	15.9%	25.8%	6.4%	3.7x	2.9x	NM	NM
Nexus	790	773	62.0%	11.1%	23.0%	3.6x	3.2x	16.2x	14.1x
Esker	763	729	35.6%	15.1%	14.4%	4.6x	4.0x	32.6x	27.9x
Craneware	662	730	59.4%	10.2%	11.9%	4.2x	3.8x	34.5x	31.6x
Byggfakta Group	610	806	37.3%	9.0%	53.2%	3.9x	3.6x	7.7x	6.8x
LiveChat Software	586	567	78.5%	9.7%	58.7%	9.6x	8.8x	16.3x	14.9x
Alfa Financial Software	575	570	75.1%	2.0%	36.1%	5.6x	5.5x	15.6x	15.2x
Volue	440	405	44.5%	18.7%	11.6%	3.2x	2.7x	44.8x	23.0x
cBrain	435	433	33.4%	29.3%	41.8%	15.8x	12.2x	40.0x	29.2x
ESI Group	407	436	89.2%	7.0%	5.2%	3.0x	2.8x	NM	NM
PSI Software	373	344	48.5%	10.4%	17.0%	1.3x	1.2x	8.6x	7.0x
Lime Technologies	372	394	74.0%	15.0%	31.7%	8.8x	7.6x	27.9x	24.0x
Tracsis	358	331	92.4%	8.4%	22.1%	3.9x	3.6x	18.3x	16.2x
IDOX	347	354	83.6%	4.9%	24.0%	4.3x	4.1x	18.3x	16.9x
Infotel	346	270	85.5%	6.3%	15.1%	0.9x	0.9x	6.1x	5.7x
Media and Games Invest	341	699	35.4%	11.8%	15.0%	2.3x	2.0x	15.0x	13.6x
FINEOS	335	297	31.7%	13.1%	NM	2.3x	2.1x	NM	NM
Cerillion	330	316	85.7%	17.8%	33.8%	8.2x	6.9x	24.1x	20.5x
SmartCraft	321	304	75.0%	17.1%	40.7%	8.8x	7.5x	22.3x	18.4x
Epsilon Net	319	324	77.8%	30.0%	28.4%	4.3x	3.3x	15.2x	11.6x
dotdigital Group	316	272	30.6%	8.0%	24.3%	3.6x	3.3x	14.3x	13.6x
GK Software	282	248	72.7%	11.8%	22.1%	1.7x	1.5x	7.8x	6.8x
Cegedim	275	527	68.7%	4.6%	10.7%	1.0x	0.9x	9.5x	8.5x
Aptitude Software Group	274	261	55.2%	7.6%	23.2%	3.1x	2.9x	14.4x	12.3x
RS2 Software	266	260	76.7%	53.8%	13.4%	4.0x	2.6x	29.7x	19.3x
EQS Group	261	292	60.2%	31.2%	26.2%	4.3x	3.3x	25.8x	12.6x
Median	352	374	65.3%	11.4%	23.0%	3.9x	3.3x	16.3x	14.9x
Mean	431	443	61.0%	15.0%	24.4%	4.6x	4.0x	20.2x	16.1x
TOTAL COMP SET MEDIAN	790	773	62.8%	10.4%	24.5%	4.0x	3.3x	15.9x	14.3x
TOTAL COMP SET MEAN	5,936	6,387	60.1%	13.5%	26.0%	4.6x	4.0x	19.8x	15.3x



# European Software Recent Transactions Detail

Date	Target	Acquirer	Target Type	HQ	Employees	Business Description	Enterprise Value (€m)	Implied EV/LTM Revenue
Pending	Access Group	TA Associates, HG Capital	Private	United Kingdom	5,000	Developer of business management software for businesses and non-profit organisations.	€10,810	NA
Pending	EMIS Group	UnitedHealth Group	Public	United Kingdom	1,400	Provider of healthcare software and information technology services.	€1,450	7.4x
Pending	MediFox	ResMed	Private	Germany	600	Develops software solutions and services for professional and non-professional care, therapeutic practices and child, family and youth welfare facilities.	€950	11.7x
Pending	Micro Focus International	OpenText	Public	United Kingdom	11,000	Enterprise software provider offering a broad portfolio of software and supporting services.	€5,990	2.2x
Pending	Viastore	Toyota Industries	Private	Germany	600	Developer and supplier of intralogistics software and systems catering to retail, manufacturing, logistics and food sectors.	NA	NA
Closed	Avast	NortonLifeLock	Public	Czech Republic	2,010	Cybersecurity software company that researches and develops computer security software, machine learning and artificial intelligence.	€7,280	9.1x
Closed	EcoOnline	Apax Partners	Public	Norway	375	Leading provider of Software-as-a-Service (SaaS) for Environmental, Health, Safety and Quality.	€380	8.4x
Closed	LucaNet	HG Capital	Private	Germany	500	Developer of software intended for financial consolidation, planning, reporting and analysis.	NA	NA
Closed	RGI Group	CVC	Private	Italy	1,200	Leading independent provider of software solutions to the European insurance industry.	NA	NA
Aug 2022	Glofox	ABC Fitness Solutions	Private	United Kingdom	220	Developer of gym and studio management software designed to help fitness studios to manage their businesses effectively.	NA	NA
Aug 2022	Data Consult	Septeo	Private	Belgium	2,300	Developer of software applications catering to notary's offices.	NA	NA
Aug 2022	Basware	Accel-KKR, Long Path, Briarwood	Public	Finland	1,615	Helsinki-based global provider of Cloud-based Networked Procure-to-Pay solutions.	€662	4.3x
Aug 2022	IPONWEB	Criteo	Private	United Kingdom	400	Developer of digital advertising software focused on programmatic and real-time advertising technology and infrastructure.	€249	NA
Jul 2022	Avinty	Main Capital Partners	Private	Netherlands	240	Developer of healthcare software designed to offer optimal user experience, workflow and process support to healthcare professionals.	NA	NA
Jul 2022	CAST	Bridgepoint	Public	France	980	Provider of Automated Application Intelligence software, publishing language analysis software intended for computer professionals.	€139	3.2x
Jul 2022	Prima XL & Compliance	Duck Creek Technologies	Private	France	400	Developer of a software platform designed to help insurance and reinsurance professionals speed up their digital transformation.	Confidential	Confidential
Jul 2022	Inetum	Bain Capital	Private	France	27,000	IT services business that provides services spanning IT consultancy, cloud computing, artificial intelligence, blockchain and infrastructure.	€2,200	1.0x
Jul 2022	Digimind	Onclusive	Private	France	230	Global leader in AI-Powered social listening platforms and market intelligence software.	NA	NA
Jul 2022	NewOxatis	Lundi Matin Groupe	Private	France	245	Developer of e-commerce software for creation and management of commercial sites.	NA	NA
Jul 2022	Outpost24	Vitruvian Partners	Private	Sweden	300	Developer of a security risk and compliance management platform designed for identifying and managing cybersecurity threats and vulnerabilities.	NA	NA
Jul 2022	Ideagen	HG Capital	Public	United Kingdom	660	Provider of market-leading information management, safety, risk and compliance software solutions.	€1,300	11.8x
Jul 2022	Vewd Software	Xperi	Private	Norway	275	Developer of cloud-based platform software created to stream content via internet devices.	€107	3.4x
Jun 2022	Quentic	AMCS	Private	Germany	225	Developer of software products for health and safety, environmental management and sustainability management.	NA	NA
Jun 2022	Lisam Systems	Keensight Capital	Private	Belgium	230	Developer of environment, health and safety (EH&S) software designed to manage documents and ensure compliance.	Confidential	Confidential
Jun 2022	Solid Solutions	TriMech	Private	United Kingdom	250	Market leading reseller of 3D design software and engineering software, providing sales, consultancy, training services.	NA	NA

# European Software Recent Transactions Detail (*cont'd*)

Date	Target	Acquirer	Target Type	HQ	Employees	Business Description	Enterprise Value (€m)	Implied EV/LTM Revenue
Jun 2022	Aspireglobal	NeoGames	Public	Malta	225	Leading B2B provider of iGaming solutions, offering companies support to operate a successful iGaming brand, covering casino and sports.	€410	2.4x
Jun 2022	Generix	Montefiore Investment	Public	France	990	Global provider of collaborative SaaS Software solutions for the supply chain, industrial and retail ecosystems.	€237	2.8x
Jun 2022	BE-terna	Telefónica Tech	Private	Austria	800	Developer of enterprise resource planning software intended for automotive, energy and industry sectors.	€350	3.3x
Jun 2022	Intouch Games	Skywind Group	Private	United Kingdom	500	Developer of gaming technology intended to provide iGaming solutions.	NA	NA
Jun 2022	xSuite	3i Group	Private	Germany	230	Accounts payable process automation specialist focused on the SAP ecosystem.	NA	NA
Jun 2022	Utimaco	SGT Capital	Private	Germany	470	Developer of cloud-based hardware security appliances and compliance software intended for telecommunication, governments and corporations.	€425	4.3x
May 2022	Crisp Thinking Group	Kroll	Private	United Kingdom	435	Real-time risk intelligence company that protects brands, assets and people from reputational damage, security threats and online harms.	NA	NA
May 2022	Pharma Intelligence	Warburg Pincus	Private	United Kingdom	300	Provider of specialist intelligence, data and software for clinical trials, drug development and regulatory compliance.	€2,600	NA
May 2022	inRiver	Thomas H. Lee Partners	Private	Sweden	275	Product information management system software business designed to drive revenue.	NA	NA
May 2022	Mimecast	Permira	Public	United Kingdom	2,060	Provider of next generation cloud security and risk management services for email and corporate information.	€5,470	10.1x
May 2022	SAST SOLUTIONS	Pathlock	Private	Germany	500	Developer of platform security software intended to support companies in detecting anomalies, hacking attacks, manipulation and data theft.	NA	NA
May 2022	AMCS	Clearlake	Private	Germany	1,000	Provider of integrated software and vehicle technology for the environmental, recycling and resource industries.	NA	NA
May 2022	Compusoft	20-20 Technologies	Private	United Kingdom	600	Developer of computer-aided design (CAD) software designed for the kitchen and bathroom retail industries.	NA	NA
May 2022	Melon	Kin + Carta	Private	Bulgaria	220	Provider of end-to-end software development and consulting services.	NA	NA
May 2022	Industrial and Financial Systems	HG Capital	Public	Sweden	4,500	Developer of service management, enterprise resource planning and asset management software.	€9,320	NA
May 2022	Infodream	CT Engineering	Private	France	1,800	Developer of a manufacturing execution system (MES) software intended to improve the quality level in production processes.	NA	NA
May 2022	InterConsult Bulgaria	Kongsberg Gruppen	Private	Bulgaria	400	Provider of software development and consulting services.	NA	NA
May 2022	SYSCO (Norway)	Cegal	Private	Norway	250	Provider of technical and computer programming services for the energy sector.	NA	NA
Apr 2022	Kratzer Automation	National Instruments	Private	Germany	500	Provider of vehicle testing systems and software services catering to the international automotive and transport sectors.	€55	NA
Apr 2022	Forsta (Oslo)	Press Ganey	Private	Norway	450	Developer of feedback and analytics software intended for market research.	NA	NA
Apr 2022	LOCATIQS	Sogelink	Private	Netherlands	250	Developer of geographic information system (GIS) software catering to the utility industry.	NA	NA
Apr 2022	SigFox	UnaBiz	Private	France	260	Provider of Internet of things (IoT) connectivity service intended to securely connect physical devices to the cloud.	NA	NA
Apr 2022	Version 1	Partners Group	Private	Ireland	2,100	Provider of SaaS-based information technology consulting and outsourcing services.	€800	3.3x
Apr 2022	JCommerce	Inetum	Private	Poland	300	Provider of software development services focused on supporting companies in the ongoing processes of digital transformation.	NA	NA
Apr 2022	Arriver Software	Qualcomm	Private	Sweden	800	Developer of scalable and upgradable software intended for smart mobility.	NA	NA

# European Software Recent Transactions Detail (cont'd)

Date	Target	Acquirer	Target Type	HQ	Employees	Business Description	Enterprise Value (€m)	Implied EV/LTM Revenue
Apr 2022	Decision Time	BC Partners, Vista Equity Partners	Private	United Kingdom	2,700	Developer of governance software for managing meetings, risks and objectives.	NA	NA
Apr 2022	Impresoft Group	Clessidra Private Equity	Private	Italy	700	Offers proprietary and third-party software as well as support and consulting services.	NA	NA
Mar 2022	Selerant	Trace One	Private	Italy	250	Leading global provider of process-based product lifecycle management (PLM) software and consulting services.	NA	NA
Mar 2022	Blue Prism	SS&C Technologies	Public	United Kingdom	1,000	Develops Intelligent Robotic Process Automation (RPA) software to provide businesses with a secure, agile and smart digital workforce.	€1,440	7.5x
Mar 2022	Tremend Software Consulting	Publicis Groupe	Private	Romania	650	Provider of software consulting services intended to help organizations perform tasks with the backing of digital technology.	NA	NA
Mar 2022	Bohemia Interactive Simulations	BAE Systems	Private	Czech Republic	325	Developer of gaming technology for military training and interactive simulation software serving defense, emergency and mission-critical customers.	€195	3.9x
Mar 2022	Forterro	Partners Group	Private	United Kingdom	1,200	Pan-European software services provider for small and mid-sized businesses.	€1,000	5.0x
Feb 2022	AutoForm Engineering	Carlyle	Private	Switzerland	400	Developer and marketer of specialized die-facing design and simulation software intended for the die-making and sheet metal forming industries.	€1,750	NA
Feb 2022	IHS Markit	S&P Global	Public	United Kingdom	15,500	IHS Markit is a leading provider of data and analytics to corporate and sovereign clients across a wide variety of industries.	€43,120	9.4x
Feb 2022	UMB	The BKW Group	Private	Switzerland	500	Develops individual software, provides cloud solutions, SAP services, process automation and consultancy services.	€205	NA
Feb 2022	Alcumus	Apax Partners	Private	United Kingdom	1,000	Developer of supply chain and risk management software intended for small and medium-sized businesses.	Confidential	Confidential
Feb 2022	Tecsidel	Estacionamientos y Servicios	Private	Spain	280	Developer of toll systems and logistics software.	NA	NA
Feb 2022	Bilot	Vincit Group	Public	Finland	240	Developer of cloud-based and intelligent business environments and agile applications tailored to its customer needs.	NA	NA
Feb 2022	Smartclip	ShowHeroes	Private	Germany	500	Operator of an advertising technology platform intended to develop online video marketing space.	NA	NA
Feb 2022	Surfshark	Nord Security	Private	Netherlands	300	Developer of a virtual private network software designed to protect people's digital lives.	NA	NA
Feb 2022	Tes Global	Onex	Private	United Kingdom	500	Developer of teacher-centric digital recruitment, training and resources software for the education sector.	NA	NA
Feb 2022	LoopMe	Mayfair Equity Partners	Private	United Kingdom	230	Developer of a brand advertising mobile platform designed to optimize campaigns to real-world outcomes.	€177	3.5x
Jan 2022	PTV Planung Transport Verkehr	Bridgepoint	Private	Germany	900	Developer of traffic simulation and transport planning software intended to improve mobility and transport.	€400	3.4x
Jan 2022	SoftClub	Softline Holding	Private	Belarus	950	Developer of banking software intended for finance, e-commerce and exchange industries.	NA	NA
Jan 2022	TAS Group	Rivean Capital	Public	Switzerland	560	Developer of payment systems software based in Italy.	€251	3.9x
Jan 2022	Canyon (France)	Yousign	Private	France	1,000	Operator of a legal operation platform designed to help teams collaborate on legal work efficiently.	NA	NA
Jan 2022	Busuu	Chegg	Private	United Kingdom	240	Developer of a language learning platform designed to offer varied vocabulary training courses.	€385	16.5x
Jan 2022	AMT-SYBEX Group	Constellation Software	Private	United Kingdom	200	Developer of enterprise software dedicated to supporting utility and infrastructure organisations.	€46	NA
OVERALL MEDIAN							€544	4.1x
OVERALL AVERAGE							€3,130	5.9x