

Insights from OPEXEngine's 2024 Benchmark Release

Brief on 2024 SaaS Sector Operating Trends



Outline

I. OPEXEngine 'Brief' on SaaS Trends as of Q1 2024

II. Appendix: Additional insights from analysis of Bessemer Cloud Index public companies performance, 2019-2023

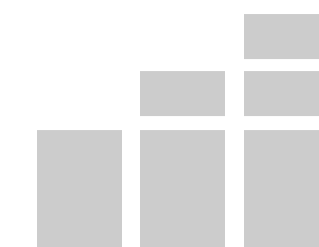
III. Appendix: Key SaaS/Software trends/themes from other industry publications

IV. About OPEXEngine

Abstract

This report shares observations on SaaS operating trends as of April 2024, published in conjunction with the latest 2024 Benchmark Release by OPEXEngine (a subsidiary of Bain & Company) to clients. The following observations leverage insights from OPEXEngine's proprietary database and Bessemer Cloud Index financials.





I. OPEXEngine 'Brief' on SaaS Trends as of Q1 2024

While macro trends have shown signs of some stabilization, macro headwinds—in which cloud spend has been scrutinized and software purchases have been delayed—have forced software/SaaS players to pivot toward more operational efficiency and profitable growth (vs. growth at all costs)

- Inflation decreased by nearly half (CPI dropped from 6.5% in Dec 2022 to 3.4% in Dec 2023), but has remained stubbornly high at 3.5% in March 2024, above the Fed's 2% target rate
- Interest rates have stabilized (the Fed last raised rates in July 2023), but optimistic rate cut predictions for 2024 have recently soured into fears of additional rate hikes if inflation remains high, as of early April 2024 Fed comments
- The US labor market remains strong overall (unemployment rate of 3.8% in March, with 303K jobs added); however, the technology sector saw over 260K layoffs in 2023 (~60% higher than 2022) and BLS data analysis (by Janco and CompTIA) shows that only a net new +700 IT/tech jobs were created in 2023 (compared to +267K in 2022)

Growth slowed down across all segments (public/private, ARR/revenue bands) because of higher scrutiny placed on software/SaaS purchases and extended sales cycles

- OPEXEngine benchmarks show that amongst *private* SaaS companies, those with \$10-50M revenue saw recognize revenue growth slow down by **-16 ppts** in 2023 vs. 2022, while those with \$50-100M and \$100M-500M revenue saw growth slow down by **-7 ppts** over the same period
- As a comparison, OPEXEngine's analysis of the Bessemer Cloud Index cohort of public SaaS companies shows that from 2022-23, growth slowed down by -9 to -13 ppts for companies <\$5B revenue, but growth improved by **2 ppts** for the largest >\$5B revenue cohort
- This is consistent with other SaaS cohorts tracked by industry reports like Iconiq, Bessemer, OpenView, KeyBanc, and others

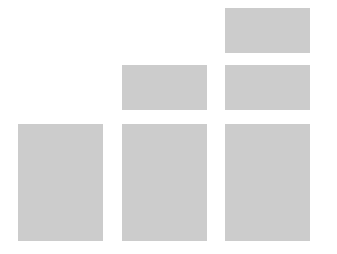
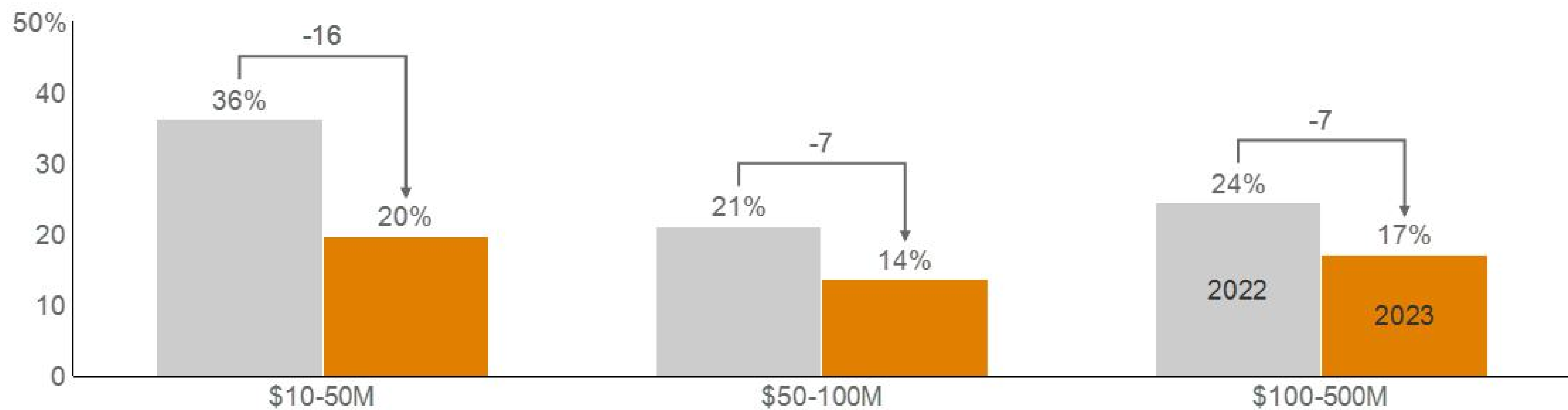


Figure 1. OPEXEngine TTM growth rates 2023 vs. 2022, by revenue size cohorts

Recognized revenue TTM growth rate by revenue size cohort
(OPEXEngine private SaaS benchmarks)



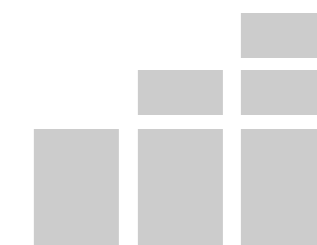
OPEXEngine private SaaS benchmarks, by revenue cohort

Note: OPEXEngine Ns (319 for \$10-50M, 78 for \$50-100M, and 53 for \$100-500M revenue cohorts)

Source: OPEXEngine private SaaS benchmarks (last released April 2024)

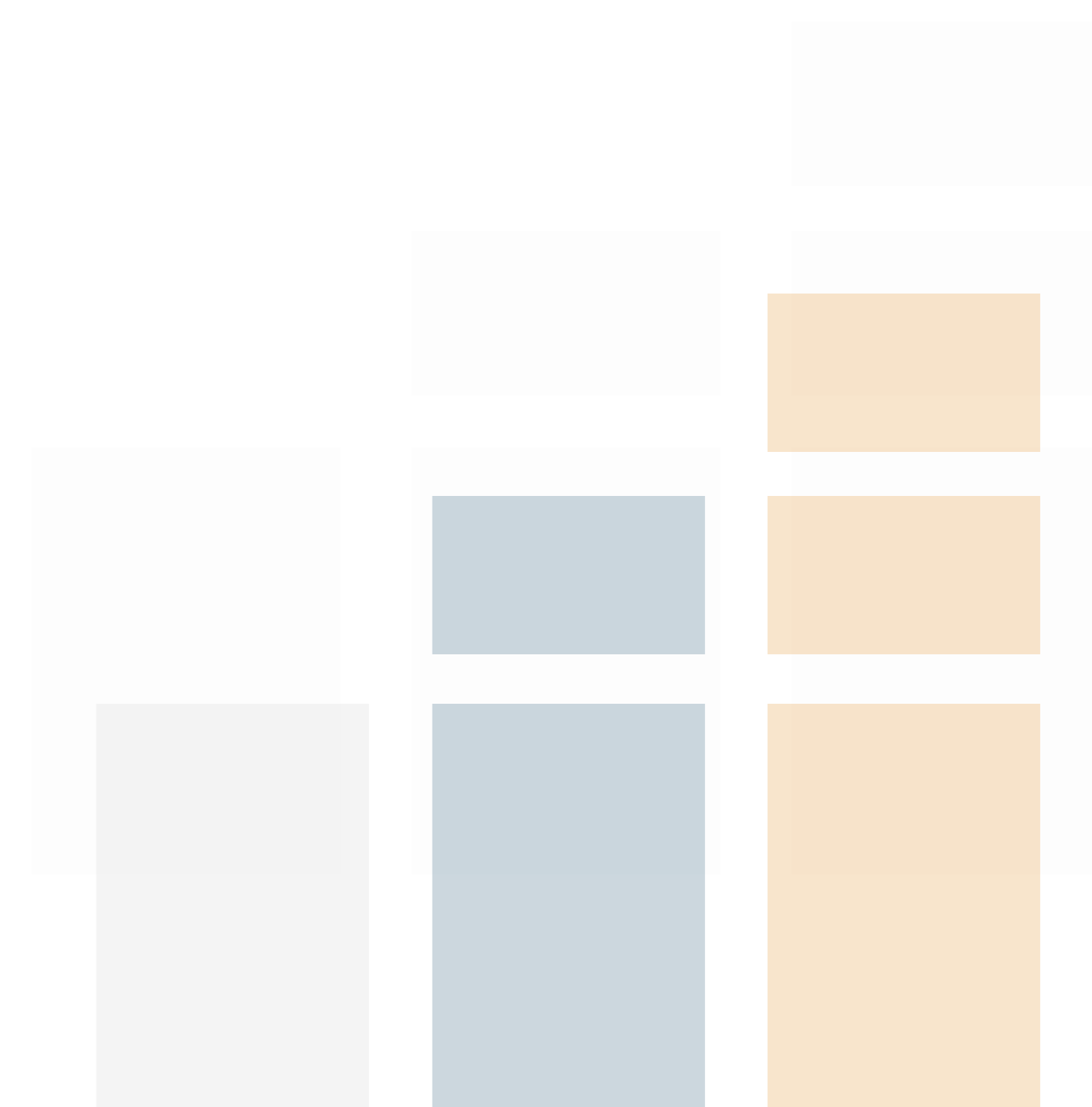
Budget cuts and more conservative purchasing behavior amongst buyers has driven higher churn and lower ACV and upsell, as seen in net dollar retention measures

- OPEXEngine benchmarks show that NDR has dropped by **110-180 bps** across revenue segments, while GDR remained **nearly flat** in 2023 vs. 2022
- Magic Number has fallen by **6-13 pts** for the \$10-50M and \$50-100M cohorts, while the \$100-500M cohort saw a more modest **2 ppt** decline from 2022-23
- This is consistent with other SaaS cohorts tracked by investor benchmarks, which note the resulting increase in CAC / decrease in LTV and falling magic numbers from more downgrades and/or unsuccessful upsells



As software/SaaS companies prioritized operational efficiency and profitable growth, we saw overall EBITDA margins improve, driven by cuts primarily in S&M and G&A (lower cuts in R&D; while R&D investments in integration of generative AI capabilities into software/SaaS solutions is important, R&D spend also remains more opaque to leadership)

- OPEXEngine benchmarks show that vs. 2022, 2023 EBITDA margins improved **~4 ppts** for \$100-500M revenue companies, and improved by **~13 ppts** for \$10-50M and \$50-100M cohorts
- This was driven by **4-8 ppt** cuts in S&M as % of revenue, **1-6 ppt** cuts in G&A as % of revenue, and **2-3 ppt** cuts in R&D as % of revenue (11 ppt cut in smallest \$10-50M cohort); overall Gross Margin **largely held steady**, alongside cost of sales
 - As a comparison, our Bessemer Cloud Index public analysis showed that EBITDA improved 3-11 ppts across cohorts, driven primarily by S&M and G&A cuts (except smallest <\$500M cohort, which saw 5 ppt cut in R&D as % of revenue)
- OPEXEngine benchmarks also show that headcount came down **7-15%** 2022-23 across cohorts, while ARR per FTE has increased **6-18%** across the \$10-50M and \$50-100M revenue segments
 - As a comparison, our Bessemer Cloud Index public analysis showed that the smallest cohort of <\$500M revenue companies cut HC by 16%, while larger cohorts cut HC by a more modest 3-6%
 - This is consistent with other SaaS cohorts tracked by industry reports such as Iconiq (noting higher S&M and G&A cuts) and OpenView (noting the resulting increase in ARR per FTE from cuts)



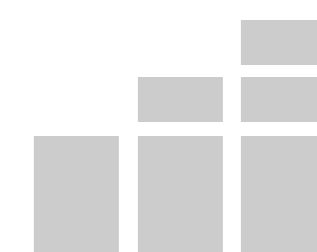
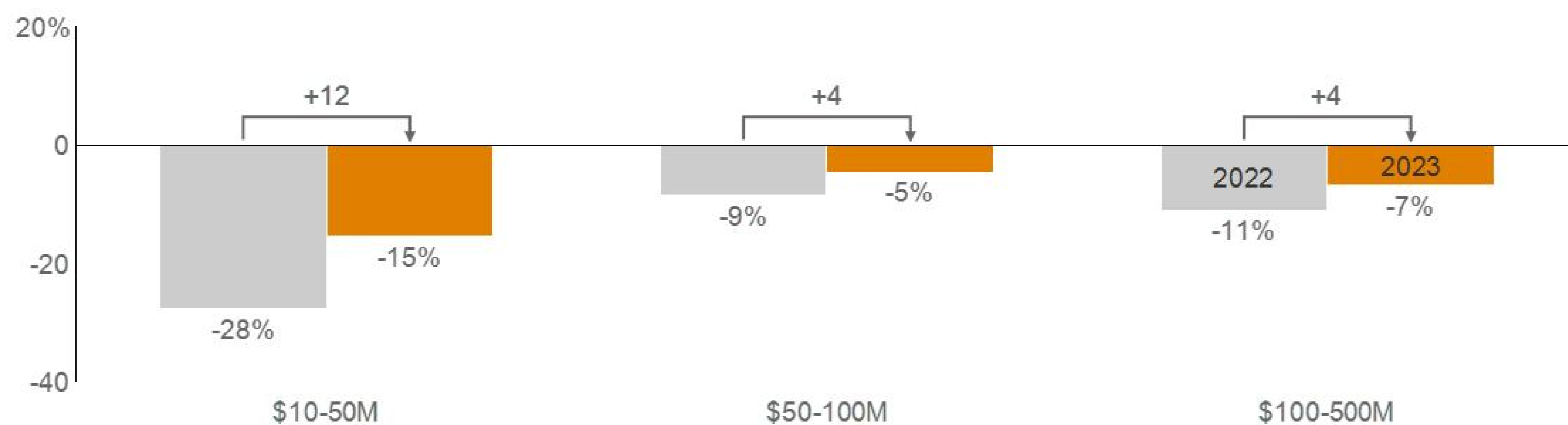


Figure 2. OPEXEngine EBITDA margins 2023 vs. 2022, by revenue size cohorts

EBITDA by revenue size cohort
(OPEXEngine private SaaS benchmarks)



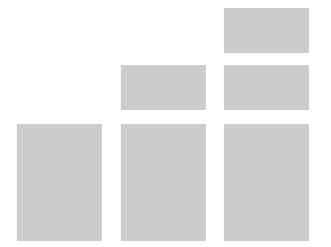
OPEXEngine private SaaS benchmarks, by revenue cohort

Note: OPEXEngine Ns (319 for \$10-50M, 78 for \$50-100M, and 53 for \$100-500M revenue cohorts)

Source: OPEXEngine private SaaS benchmarks (last released April 2024)

Overall, there were lower cuts in R&D (than in S&M or G&A); R&D investments into the integration of generative AI capabilities (both internally for use in development plus investments into new AI products or features) and other shifts in how/where R&D resources are applied have made R&D trends less clear-cut

- OPEXEngine benchmarks show **2-3% lower R&D spend as % of revenue** in 2023 compared to 2022 across all revenue segments
- As outlined in Bain's 2024 PE Tech Report, while companies are often more reticent to cut R&D costs, there remain clear opportunities to right-size the R&D product development function and improve execution across most orgs, and companies must balance this against the need to fuel their growth engine in upcoming years by not over-cutting in the S&M org



In a year characterized by heightened scrutiny on operational efficiency, green-shoots for a rebound in private transactions in the PE technology market, and increased IPO appetite in the public markets, ensuring SaaS operational KPIs remain competitive and balance tradeoffs in cost allocation appropriately is becoming more important than ever before

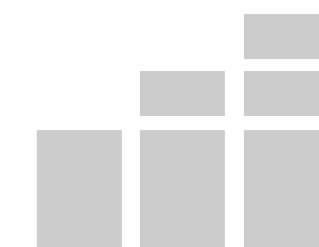
- Bain's 2024 PE Tech Report shows that while tech PE deals declined ~20% CAGR from 2021 peak through 2023 — as valuations have begun to tick back up in tech to pre-COVID levels (~20% increase YoY) to close the 'bid-ask-spread' in the M&A market and dry powder amongst PE investors has accumulated to 3-year highs — we should expect a busier deal market by year-end 2024
- In the public markets, 2024 Q1 saw 30 IPOs in the US, for a combined nearly \$8B in proceeds raised (3x Q1 2023) and investor sentiment is generally positive about a gradual 'unplugging' of the IPO market in the 2H 2024

Note on methodology: OPEXEngine produces benchmarks on SaaS KPIs based on annual data, whether FY or TTM

These annual benchmarks are refreshed twice a year with the latest inputs.

- The OPEXEngine proprietary benchmarking database is based on confidential and anonymized data from SaaS companies and SaaS investors, representing an unbiased spectrum of B2B SaaS vendors with data submitted and validated directly by each company's finance department.
- Every year, we go through a major process in Q1 to collect and validate the most current actuals from the previous year. The benchmarks are labeled for the calendar year of the actuals collected from that year.
- We update the benchmark aggregates as new clients and investors contribute new data throughout the year. The biannual update is not a "quarterly" benchmark, but rather an ever-improving and expanding "n," which allows for more granularity and filtering to find appropriate cohort comparisons for benchmarking analysis.

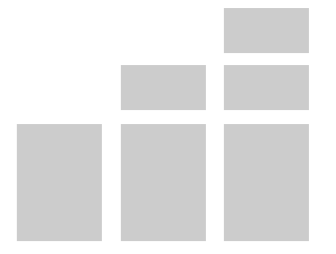




II. Appendix: Additional insights from analysis of Bessemer Cloud Index public companies performance, 2019-2023

Summary of Insights

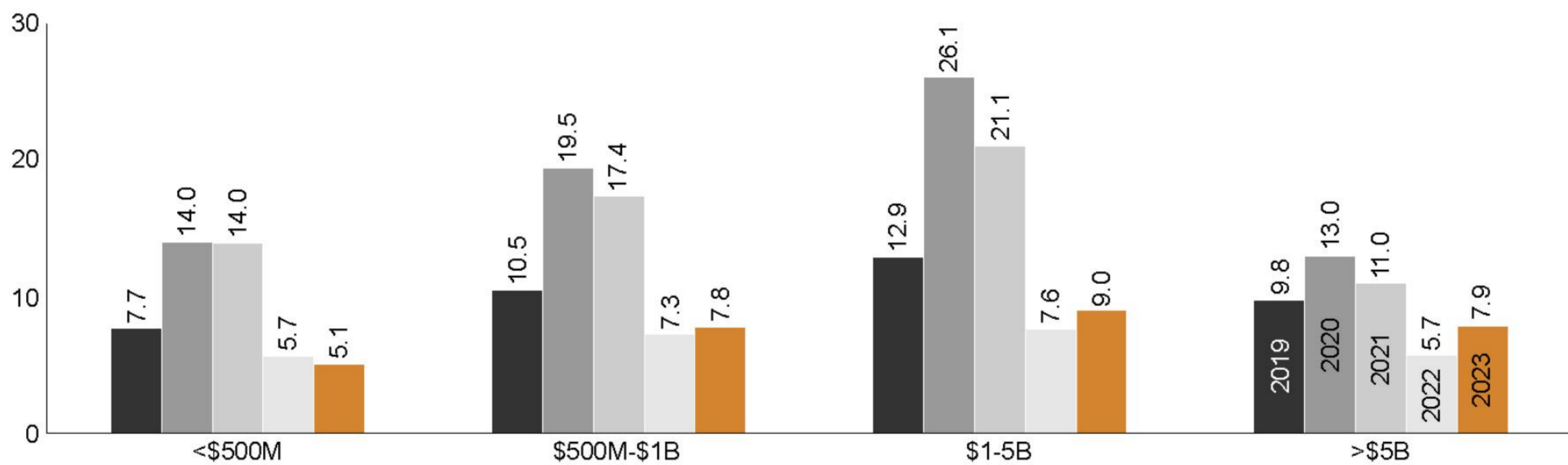
- 1. 2023 EV/Rev multiples remain lower than pre-COVID levels in 2019**, but showed some recovery vs. huge 2022 drop-off from pandemic-era peaks in 2020-21
- 2. 2023 saw growth slow down vs. 2022 almost across the board** (except >\$5B cohort), as buyers placed higher scrutiny on software/SaaS purchases and extended their purchase/sales cycles
- 3. From a profitability standpoint, while gross margins held steady 2022-23 due to flat COGS, EBITDA margins improved by 3-11 ppts in 2023**, as companies prioritized operational efficiency and profitable growth (vs. growth at all costs)
- 4. The overall increase in EBITDA was driven by operating expense cuts, primarily concentrated in S&M** (and G&A, to a lesser extent), but with more minimal cuts to R&D expenses (except in smallest <\$500M cohort)
- 5. Looking at a longer 5-year historical trend**, S&M costs are at 5-year lows as % of revenue, G&A costs shown slight cut-backs from 2021-22 highs, while R&D costs remain near 5-year highs for cohorts above \$500M in revenue
- 6. While headcount reductions were seen across the board** (as high as -16% in <\$500M cohort), **larger revenue cohorts were able to drive relatively more non-HC reduction-based increases in revenue efficiency per FTE** than smaller orgs



Visualization of Bessemer Cloud Index Insights

Insight: 2023 EV/Rev multiples remain lower than pre-COVID levels in 2019, but showed some recovery vs. huge 2022 drop-off from pandemic-era peaks in 2020-21

Enterprise Value: Recognized Revenue ratio, by revenue size cohort (Bessemer Cloud Index)

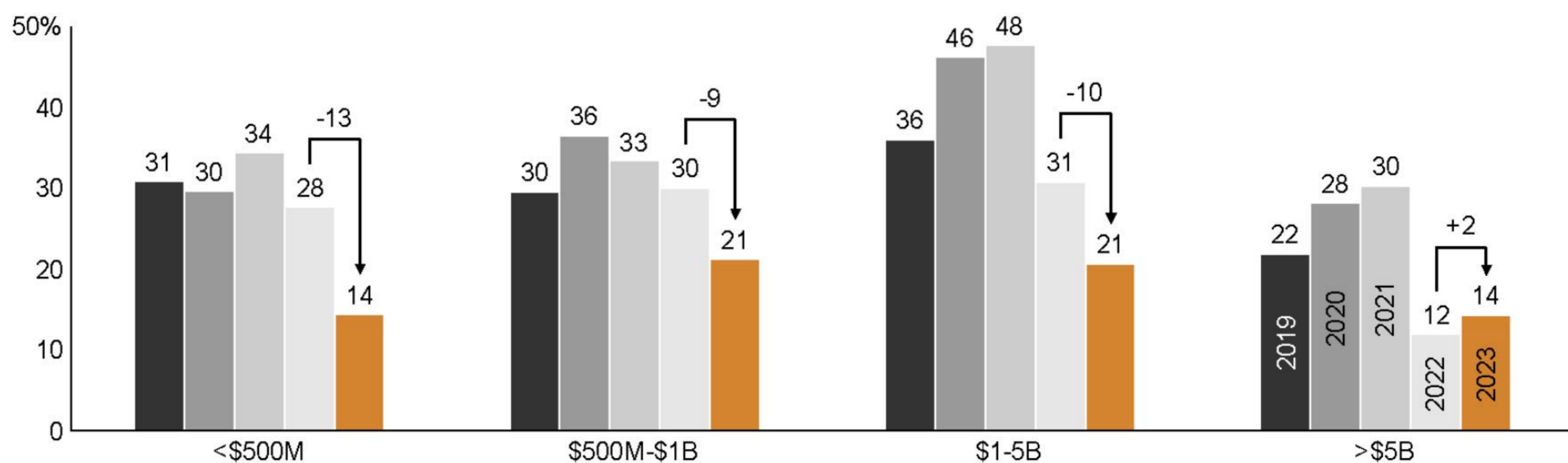


Bessemer Cloud Index (n=70 companies), by revenue cohort

Note: Revenue cohorts are generated based on in-year revenue of each company (i.e., Company A may shift from one cohort to another one as it grows over time)
Source: OPEXEngine analysis of Bessemer Cloud Index cohort of 70 public market software/SaaS companies

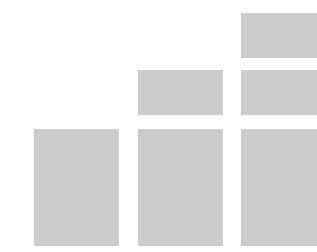
Insight: 2023 saw growth slow down vs. 2022 almost across the board (except >\$5B cohort), as buyers placed higher scrutiny on software/SaaS purchases and extended their purchase/sales cycles

Year-over-year (TTM) growth rate in Recognized Revenue, by revenue size cohort (Bessemer Cloud Index)



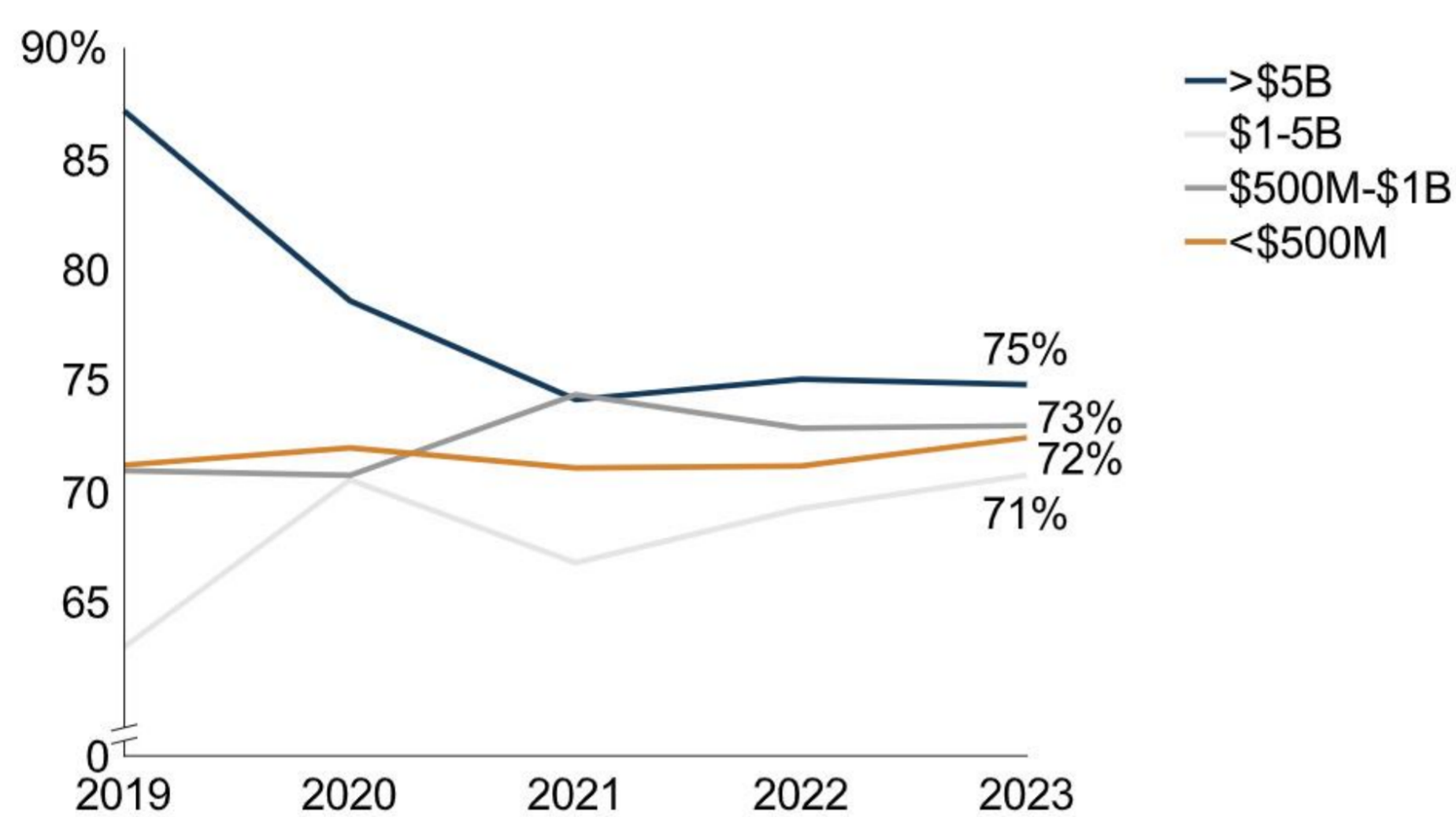
Bessemer Cloud Index (n=70 companies), by revenue cohort

Note: Revenue cohorts are generated based on in-year revenue of each company (i.e., Company A may shift from one cohort to another one as it grows over time)
Source: OPEXEngine analysis of Bessemer Cloud Index cohort of 70 public market software/SaaS companies

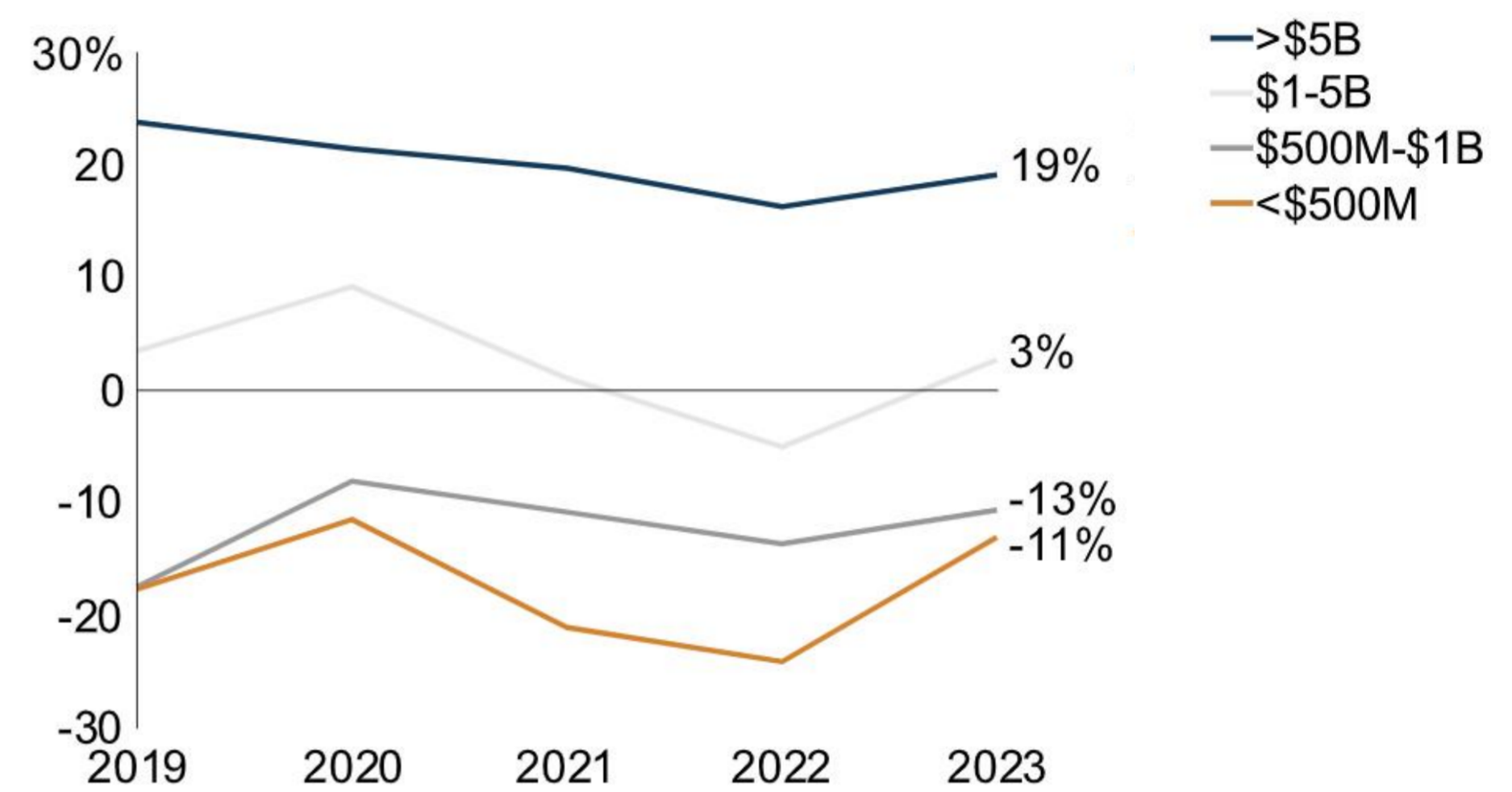


Insight: From a profitability standpoint, while gross margins held steady 2022-23 due to flat COGS, EBITDA margins improved by 3-11 pts in 2023, as companies prioritized operational efficiency and profitable growth (vs. growth at all costs)

Gross Margin, by revenue size cohort (Bessemer Cloud Index)



EBITDA Margin, by revenue size cohort (Bessemer Cloud Index)

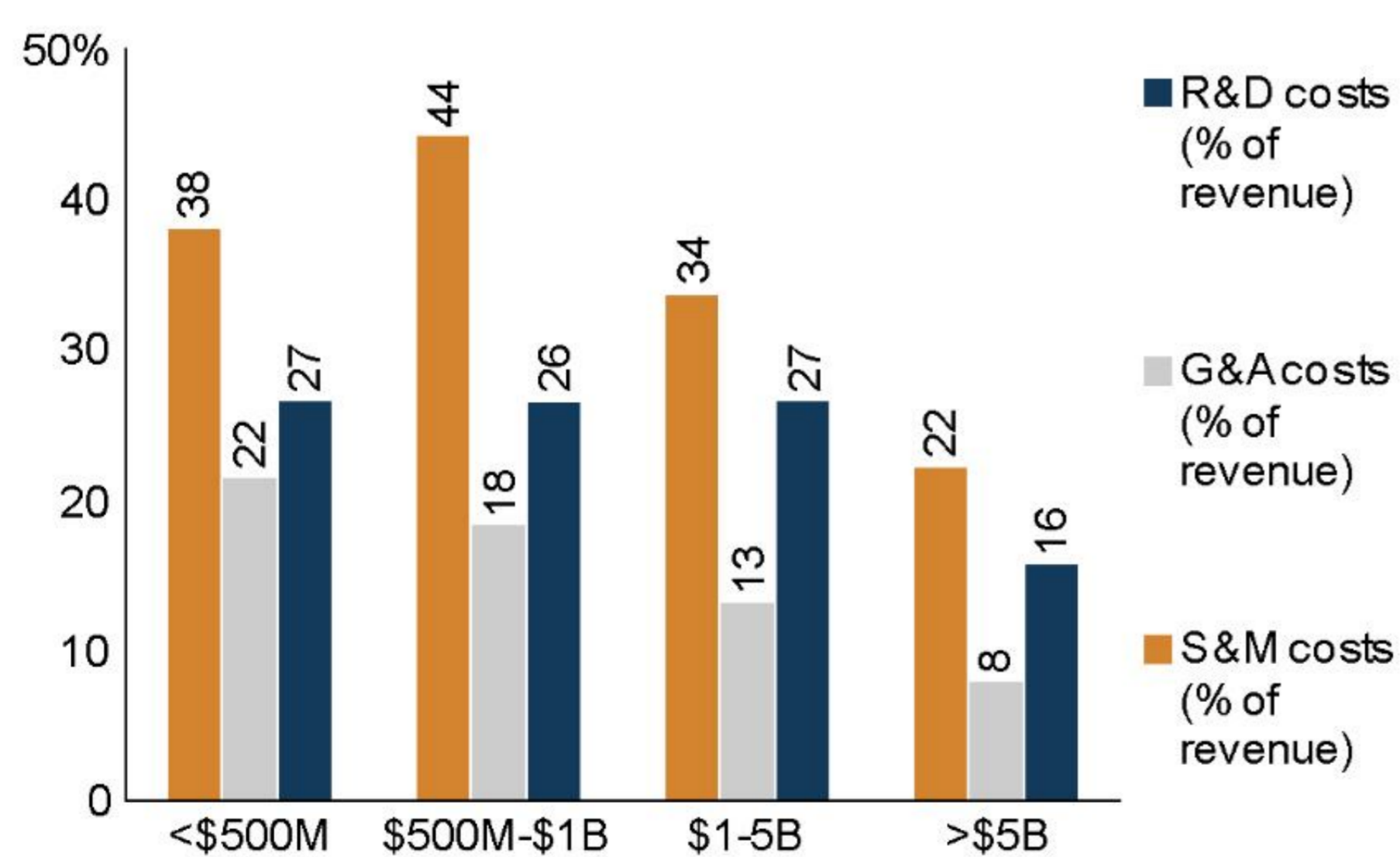


Bessemer Cloud Index (n=70 companies), by revenue cohort

Note: Revenue cohorts are generated based on in-year revenue of each company (i.e., Company A may shift from one cohort to another one as it grows over time)
Source: OPEXEngine analysis of Bessemer Cloud Index cohort of 70 public market software/SaaS companies

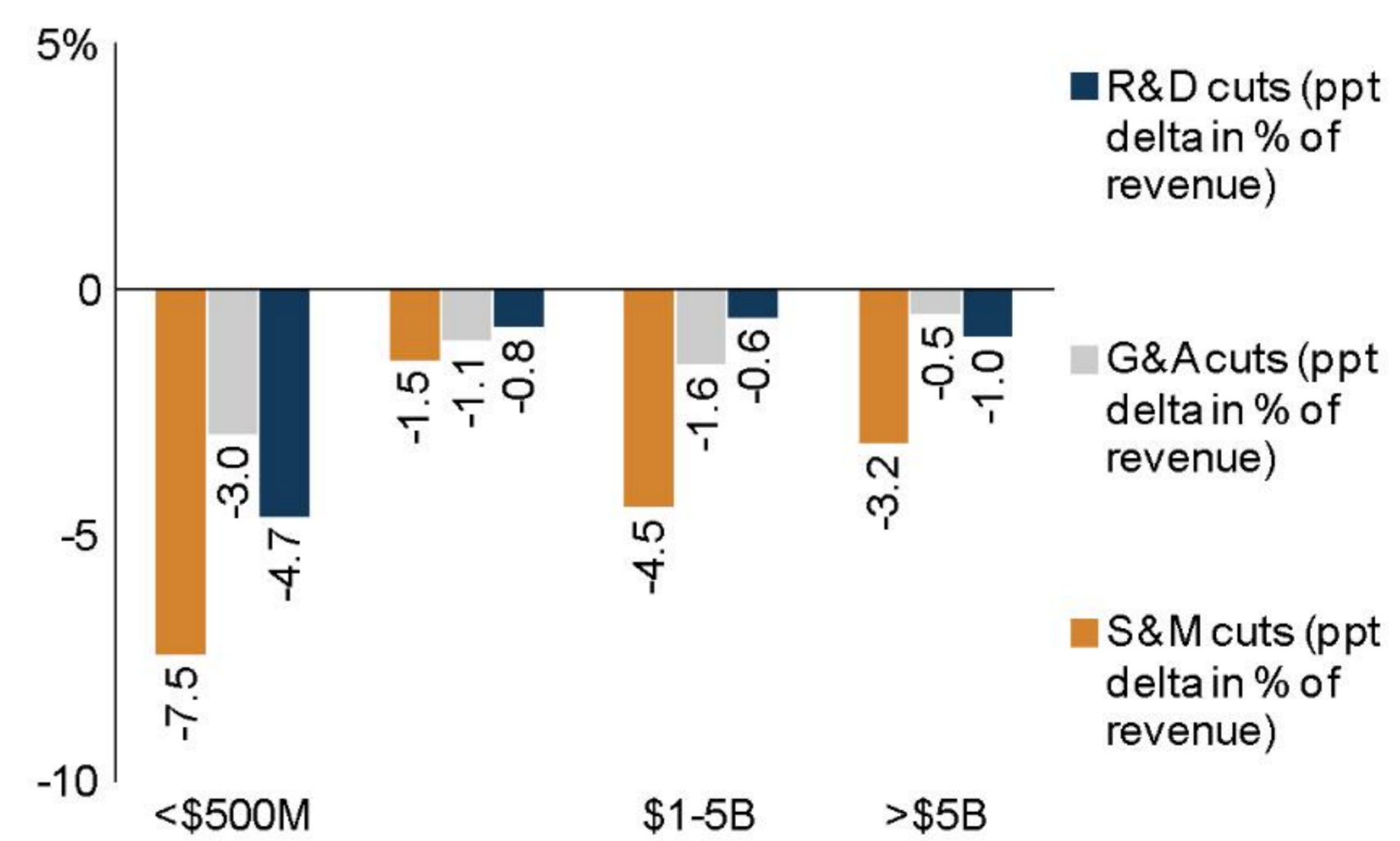
Insight: The overall increase in EBITDA was driven by operating expense cuts, primarily concentrated in S&M (and G&A, to a lesser extent), but with more minimal cuts to R&D expenses (except in smallest <\$500M cohort)

2023 operating expenses as % of recognized revenue, by revenue size cohort (Bessemer Cloud Index)



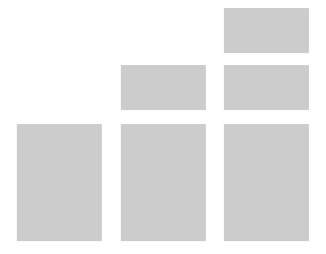
Bessemer Cloud Index (n=70 companies), by revenue cohort

2022-23 percentage point cut in operating expenses as % of recognized revenue, by revenue size cohort (Bessemer Cloud Index)



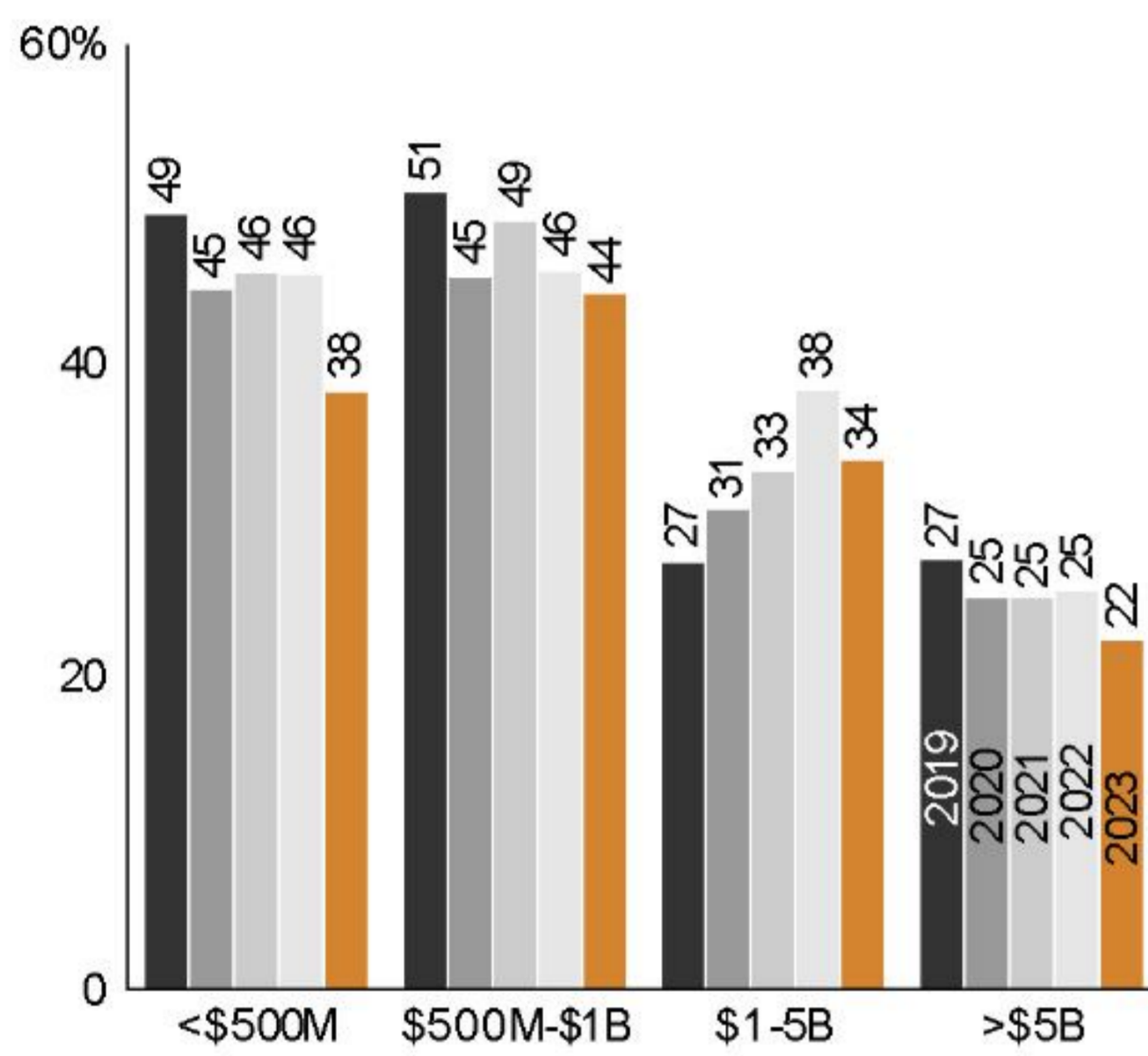
Bessemer Cloud Index (n=70 companies), by revenue cohort

Note: Revenue cohorts are generated based on in-year revenue of each company (i.e., Company A may shift from one cohort to another one as it grows over time)
Source: OPEXEngine analysis of Bessemer Cloud Index cohort of 70 public market software/SaaS companies



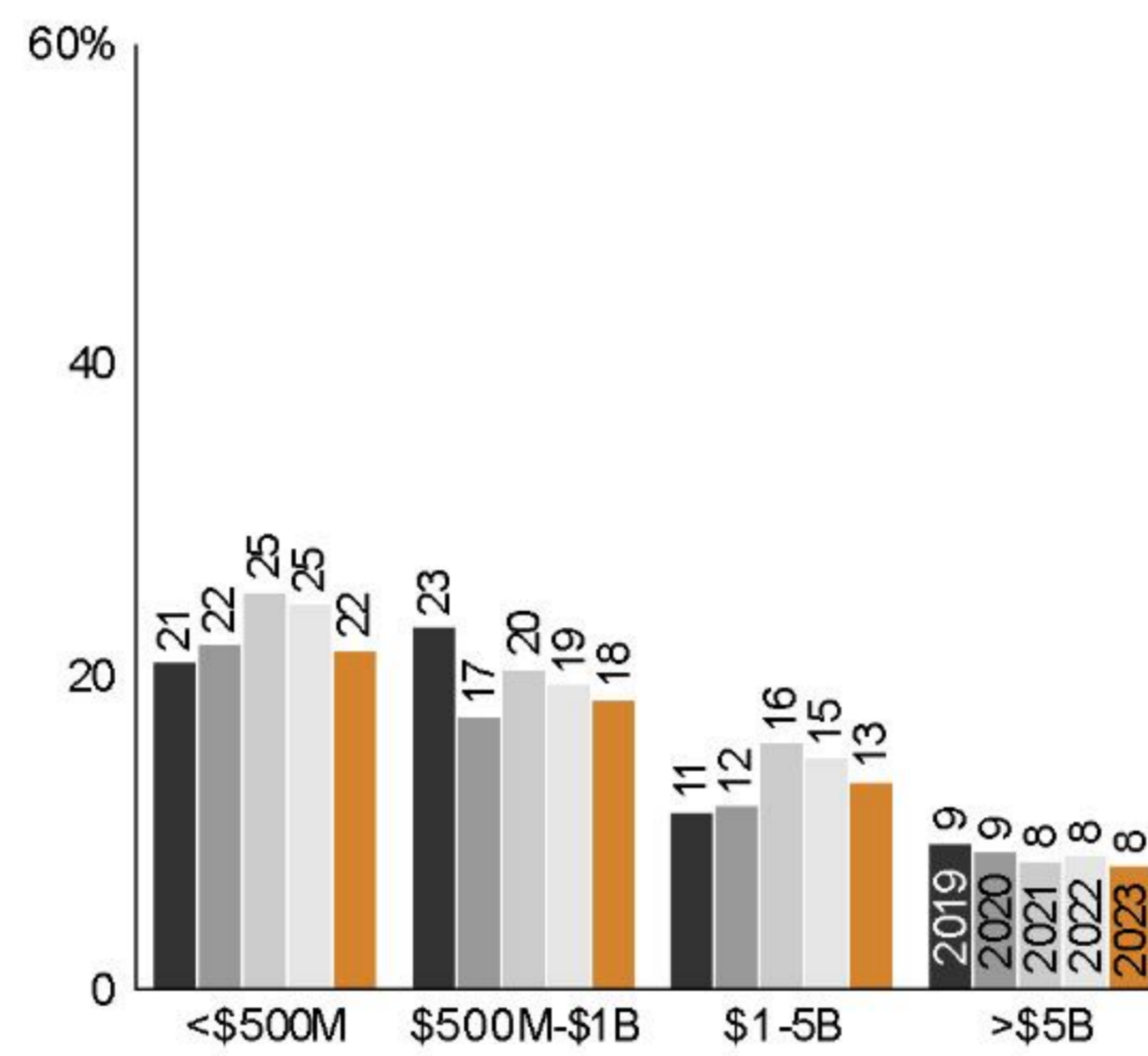
Insight: Looking at longer 5-year historical trend, S&M costs are at 5-year lows as % of revenue, G&A costs shown slight cut-backs from 2021-22 highs, while R&D costs remain near 5-year highs for cohorts above \$500M in revenue

S&M expense as % of revenue, by revenue size cohort (Bessemer Cloud Index)



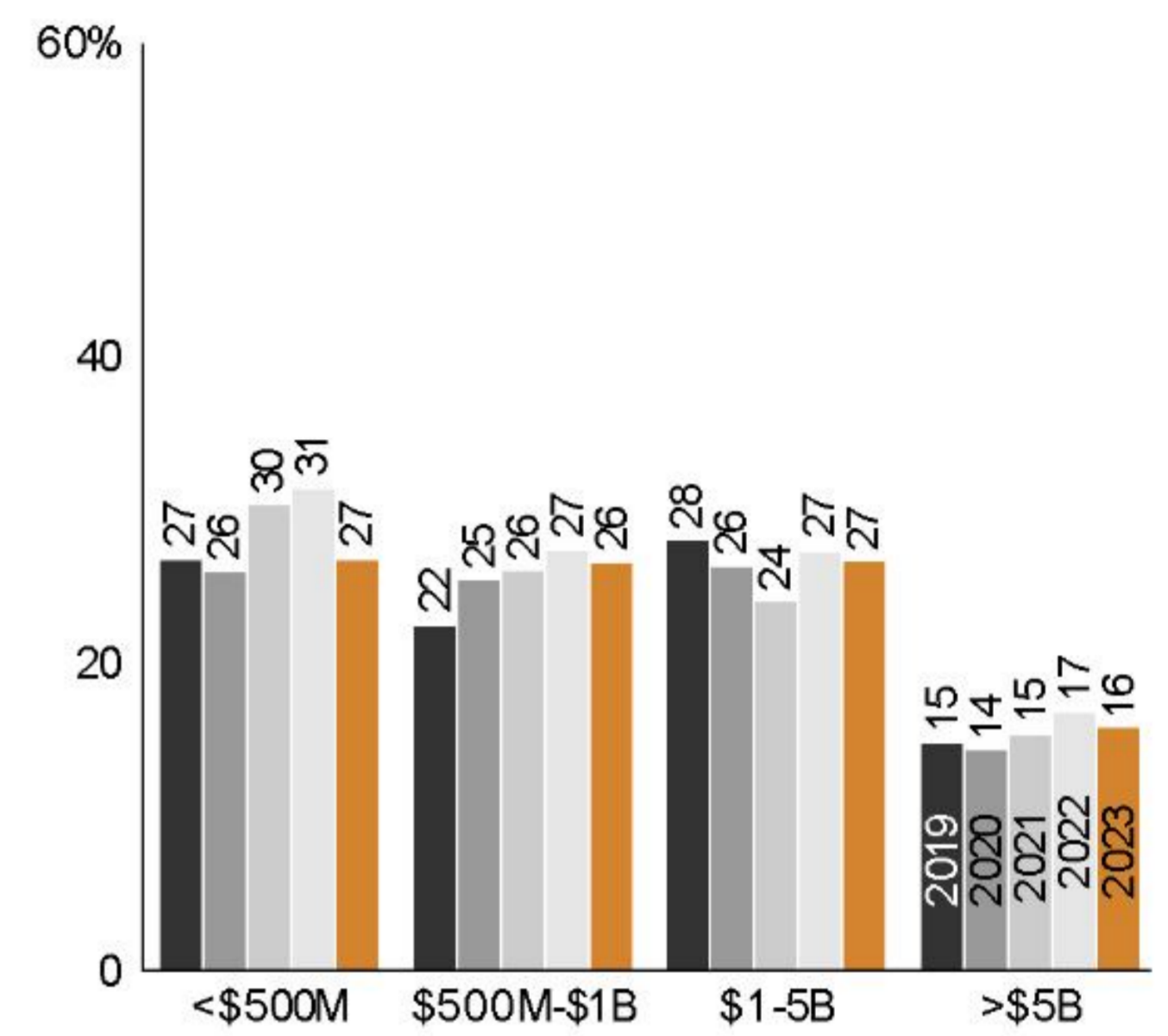
Bessemer Cloud Index (n=70 companies), by revenue cohort

G&A expense as % of revenue, by revenue size cohort (Bessemer Cloud Index)



Bessemer Cloud Index (n=70 companies), by revenue cohort

R&D expense as % of revenue, by revenue size cohort (Bessemer Cloud Index)



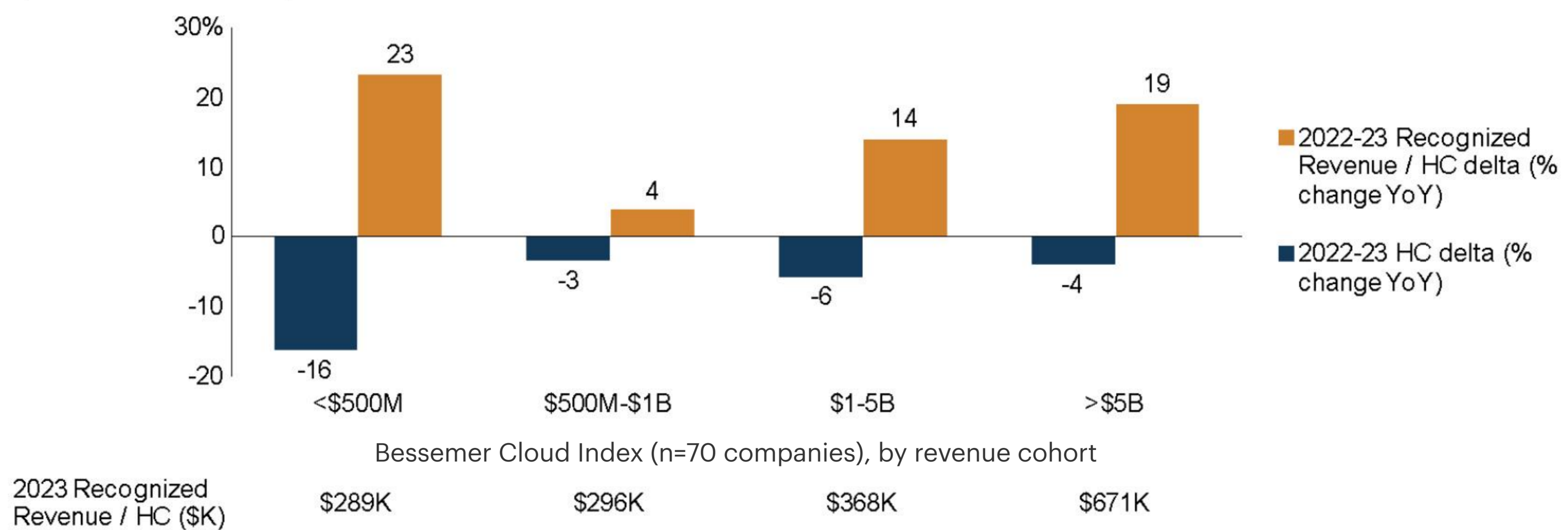
Bessemer Cloud Index (n=70 companies), by revenue cohort

Note: Revenue cohorts are generated based on in-year revenue of each company (i.e., Company A may shift from one cohort to another one as it grows over time)

Source: OPEXEngine analysis of Bessemer Cloud Index cohort of 70 public market software/SaaS companies

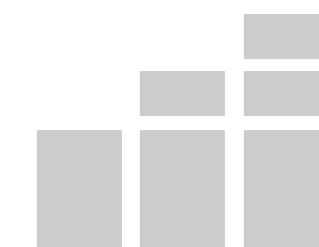
Insight: While headcount reductions were seen across the board (as high as -16% in <\$500M cohort), larger revenue cohorts were able to drive relatively more non-HC reduction-based increases in revenue efficiency / FTE than smaller orgs

2022-23% change deltas in headcount (HC) and Recognized Revenue / HC, by revenue size cohort (Bessemer Cloud Index)



Note: Revenue cohorts are generated based on in-year revenue of each company (i.e., Company A may shift from one cohort to another one as it grows over time)

Source: OPEXEngine analysis of Bessemer Cloud Index cohort of 70 public market software/SaaS companies



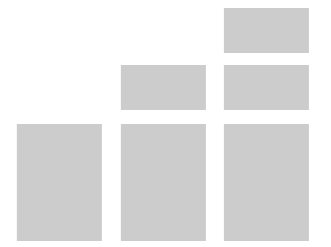
III. Appendix: Key SaaS/Software trends/themes from other industry publications

The following is a compilation of data points and insights shared by key publications from other investor benchmark reports (e.g., Bessemer, Iconiq, KeyBanc, OpenView, SEG). As users of benchmarks, organizations should recognize the context in which benchmarks were developed, to ensure the intentional comparison to a peer company cohort that is relevant and defensible. OPEXEngine benchmarks represent a broad spectrum of the industry (PE-backed, VC-backed, bootstrapped, private, and public companies) and the benchmark data can be filtered to look at very specific use cases as well as broadly to see sector trends.

See the end of this section for a short description of the data sources used by these different reports.

Theme: Slowdown in overall growth across all segments (public/private)

- **KeyBanc:** ARR growth decelerated from 35% in 2022 to 26% in 2023 for respondents
- **OpenView:** growth reduced 7 ppts 2022 to 2023 in public SaaS; growth reduced 7-26 ppts depending on ARR bucket vs. 2022 in private SaaS companies
- **Iconiq:** early-stage <\$50M ARR companies saw the biggest impact to ARR growth, falling from peak levels of 200%+ YoY growth in 2021 to 111% YoY as of 1H 2023
- **Bessemer:** Cloud 100 index contracted 11% in aggregate value in 2023 vs. 2022, with growth rates slowing to 55% YoY vs. 100% in 2022



Theme: Cutbacks in discretionary spending in SaaS budgets, with prioritization of more efficient and profitable growth (with lower spend, extended runway)

- **SEG:** operating margins saw median net income margin improve to -4% in 2023 (vs. -14% in 2022, -18% in 2021) due to cutbacks on discretionary spending
 - Cost cuts as % of revenue most notable in S&M (35% vs. 38% in 2022) and G&A (16% vs. 18% in 2022), while R&D held steady at 23%
- **OpenView:** startups have become far leaner in median # of FTEs since 2021-2023; median ARR per FTE has increased significantly (to \$250K for >\$50M ARR), as a result
- **Iconiq:** improvements to ARR per FTE (\$278K/FTE for >\$100M ARR, \$173K/FTE for <\$50M ARR), likely driven by the organizational rightsizing many companies have undertaken
 - Reduction in operating expenses as % of revenue most notable in S&M (79% vs. 101% in 2022) than R&D (65% vs. 77% in 2022) and G&A (36% vs. 43% in 2022)

Theme: Cutbacks in discretionary spending in SaaS budgets, with prioritization of more efficient and profitable growth (with lower spend, extended runway)

- **KeyBanc:** NDR declined from 108% in 2022 to 104% in 2023, driven by a spike in downgrades and lower success in upsells, reflecting heightened scrutiny on spending
 - 2023 sales cycle time expected to increase, as purchasing timelines get pushed and budgets continue to come under scrutiny; ~24 months CAC payback across revenue band sizes
- **OpenView:** GDR dropped 5 pts in 2023, and NDR dropped even more; CAC payback periods have lengthened 2022-23, especially amongst later stage companies with \$20M+ ARR (22 months vs. 16 in 2022)
- **Iconiq:** NDR fell from peak levels of 120-130% in 2017 to ~105% as of 1H 2023, driven by both elevated levels of churn as well as weakened expansion
 - Sales efficiency has declined given challenge of selling in current macro environment; net magic number fell from peak multiples of 1.7x to <1.0x in 1H 2023, LTV/CAC falling under 3x, CAC payback increasing to ~30 months



Theme: Adapting to evolving market dynamics by becoming leaner, identifying paths to profitable growth, prioritizing expansion revenue earlier in lifecycle, while balancing against investment needs in AI adoption

- **OpenView:** growth at scale comes more (and earlier) from accelerating expansion revenue to complement acquisition
 - E.g., for \$20-50M ARR companies, 38% of net-new ARR growth comes from expansion
 - Powerful expansion motions typically involve (a) multiple pricing levers for expanding customers, (b) product roadmaps prioritized based on willingness-to-pay, and (c) minimized friction in scaling from individual user to team to company adoption
- **Iconiq:** Companies are now prioritizing expansion earlier in the company lifecycle, with expansion exceeding 50% of gross new ARR as early as the \$100M ARR range, a trend that has likely been accelerated by the rise of product-led growth
- **Bessemer:** AI adoption remained prevalent, with 55 Cloud 100 honorees announcing generative AI products or features, and 70 using AI or ML in their products

Description of investor benchmark reports and their sources:

- **Bessemer:** internal tracking of top 100 private cloud-based companies
- **Iconiq:** includes 96 B2B SaaS portcos in their investor portfolio, plus 13 public companies based on IPO performance criteria
- **KeyBanc:** survey-based collection of 106 SaaS respondents for FY2023, with ~80% <\$100M ARR
- **OpenView:** survey-based collection of 700+ SaaS respondents for FY2023, almost all <\$50M ARR (i.e., smaller, higher-growth)
- **SEG:** tracks 128 publicly traded companies in their “SEG SaaS Index”



About OPEXEngine

OPEXEngine is the leading performance benchmarking solution for SaaS and software companies.

For nearly 20 years, OPEXEngine has connected many of the world's leading SaaS brands to validated insights that improve performance and operational efficiency.

Acquired by Bain in 2021, OPEXEngine enables performance benchmarking at scale with a cutting-edge software platform, a dataset of many of the world's leading private and public technology companies, tracking of 500+ metrics, and unmatched expertise.

To learn more about OPEXEngine benchmarking, please contact us at info@opexengine.com.

www.opexengine.com