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The Perfect Storm: Software Valuation and Restructuring in the Age of AI

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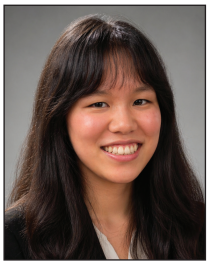

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The software sector is under pressure. Public software company valuations have declined materially — by roughly 50% from their peak[1] — and that decline is now evident in the private markets as well. Drivers of falling valuations include higher interest rates and advances in artificial intelligence (AI). During the 2020-21 period, private credit was a major source of funding for software companies. Loans to the sector were generally predicated on expectations of continued growth and stable valuation multiples. As performance has weakened and uncertainty has increased, those assumptions are being tested, placing pressure on software companies and their capital providers.

Against this backdrop, software companies facing slower growth, increased competition and reduced access to capital will increasingly have to evaluate a range of restructuring options, including asset sales, operational changes, reduced investment and alternative financing. Restructuring professionals will need to determine which of these paths offers the best opportunities to preserve long-term value for creditors. This article examines the forces reshaping software valuations and provides a framework for bankruptcy and restructuring professionals to use when evaluating restructuring alternatives.

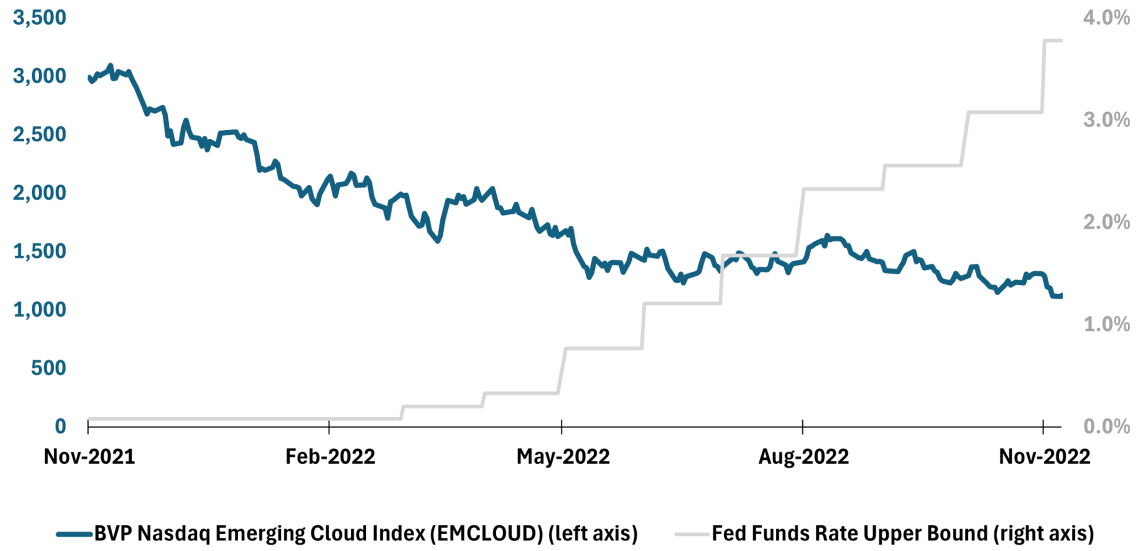
How We Got Here

Public software valuations peaked in November 2021, when interest rates were near zero. Shortly thereafter, interest rates increased dramatically, driving up companies' cost of capital. This, in turn, led to a reduction in the value of future cash flows (which, in the software industry, are often long-dated) and lower valuation multiples. The BVP Nasdaq Emerging Cloud Index (EMCLOUD), a widely followed benchmark for publicly traded software companies, declined by approximately 60% within 12 months of its November 2021 peak, demonstrating the impact of rising rates (see Exhibit 1).

In addition, AI has introduced a major source of uncertainty for software companies. For example, on Feb. 5, 2026, Anthropic released Claude Opus 4.6, an AI agent with the ability to generate, test and deploy functional software applications. Fast-moving AI

1 From November 2021 to June 2026. Given the volatilty in software valutions, this figure may have changed to some degree by publication date.

Exhibit 1: Software Values and Interest Rates (November 2021 – November 2022)



Source: S&P Capital IQ (BVP Nasdaq Emerging Cloud Index) and Federal Reserve Bank of St. Louis, FRED (Federal Funds Rate)

developments, such as Opus 4.6, have increased competitive pressure on software companies by enabling competitors and customers to more easily replicate complex applications. The EMCLOUD Index declined by approximately 30% in the first two months of 2026 alone as investors reassessed the long-term growth, pricing power and durability of software business models (see Exhibit 2).

From Valuation Reset to Credit Market Impact

During the 2020-21 period, private credit flowed into the software industry, with loans underwritten using a consistent set of assumptions. Specifically, the recurring revenue earned by subscription-based software companies[2] was seen as a durable source of funds for debt service due to the predictability (or "stickiness") of the revenue and embedded growth from the installed base of customers. Growth from existing customers was assessed through a metric known as net dollar retention (NDR), which measures how revenue from existing customers changes over the course of a year.

Many software companies reported NDR of 110-120% during the 2020-21 period. Stated another way, these companies could count on 10-20% in annual revenue growth from current customers. The acquisition of new customers — which, in turn, would generate growth of their own in future years — created an environment for strong double-digit annual revenue growth. This revenue growth flywheel led investors to expect that these companies would generate significant future cash flows as they scaled.

Those assumptions are now under pressure. Competition in the software industry has increased significantly, with AI-native entrants emerging and customers leveraging AI to build their own solutions. Companies are also consolidating vendors, reducing seat counts and applying greater scrutiny to software spend.[3]

Software operating metrics reflect this change. Net dollar retention has declined across the sector, but unevenly. The best-performing companies continue to report NDR of approximately 120%, but lower-performing companies are approaching 100%, limiting expansion as a source of growth and, in some cases, leading to contraction.[4]

As a result, leverage levels that were previously seen as supportable are increasingly misaligned with underlying business performance. Credit markets have begun to reflect this shift. In March 2026, JPMorgan marked down the value of certain loans backed by software companies, reducing the amount of leverage available against those assets.[5] Publicly traded software company loans have underperformed the broader market[6] (see Exhibit 3, p. 65).

The flow of private credit financing to the software sector has already been substantially reduced, but the software industry may still be in the early stages of dealing with these shocks.[7] Software exposure within private credit portfolios may be higher than reported, in part due to classification across adjacent sectors, which may trigger shifts of capital to other sectors.[8]

In addition, many private credit investments are not marked to market in real time. As these loans approach maturity or require refinancing, private credit funds will

2 For a period of time, these companies were known as software-as-a-service (or SaaS) companies, but as the hosted subscription model has become the dominant software model, "software" and "SaaS" have become generally synonymous.

3 Flexera, *2026 State of the Cloud Report*, 2026.

4 Tom Tunguz, "Software NDR Decline in 2026," March 7, 2026, https://tomtunguz.com/software-ndr-decline-2026.

5 Jill R. Shah, "Private credit marks down software-backed loans," *Financial Times*, March 11, 2026.

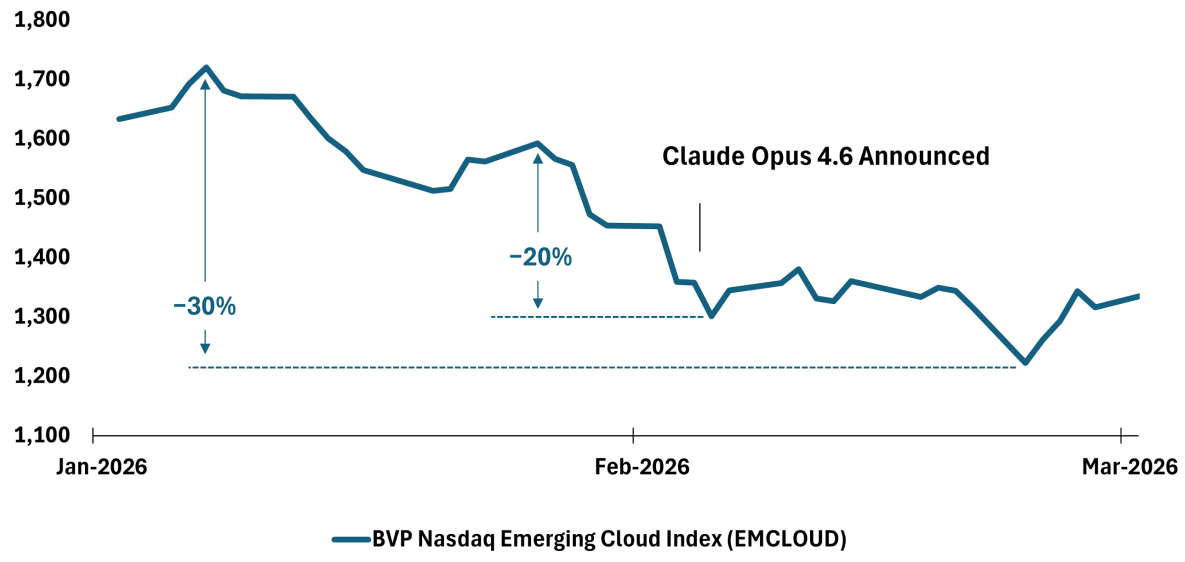
6 PitchBook, *2025 Annual Global Private Debt Report*, March 23, 2026.

7 At the time of submission, early press reports indicated that private-equity firm Thoma Bravo had turned the software company Medallia over to creditors and taken a full loss on its $5.1 billion equity investment. *See, e.g.*, "Thoma Bravo's $5.1B Medallia Wipeout Deepens Software Private Credit Reckoning," Investing.com, April 23, 2026, https://www.investing.com/news/stock-market-news/thoma-bravos-51b-medallia-wipeout-deepens-software-private-credit-reckoning-4633506.

8 Jack Pitcher & Matt Wirz, "Private Credit's Exposure to Ailing Software Industry Is Bigger Than Advertised," *Wall Street Journal*, March 30, 2026.

continued on page 65

Exhibit 2: Software Values and AI (January 2026 – February 2026)



Source: S&P Capital IQ

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likely come under pressure from investors to return their capital. Reductions in capital availability may cause even relatively healthy software companies to have to engage in significant restructurings of their balance sheets.

Analytical Framework for Evaluating Strategic Paths

Should this wave of restructurings take place, borrowers will need to carefully consider their restructuring alternatives. We propose the following framework as a guide. The points below are not exhaustive, as any restructuring plan will be highly dependent on the facts and circumstances of the company it concerns, but they reflect the core areas of focus we believe are likely to be helpful.

Revenue Base Assessment

Analysis of software company health begins with an analysis of the company's revenue base and drivers of growth. Recent performance often provides the most reliable indicator of future trajectory, and both expansion within the installed base and new customer acquisition must be evaluated together. Trends in these metrics tend to be difficult to reverse, particularly if they are driven by changes in customer behavior and competitive position.

When examining a company's installed base, retention metrics may be broken down into gross churn, contraction and expansion to identify revenue growth pressure. Such metrics are helpful to determine whether deterioration is concentrated in specific customer segments, products or use cases, or is broad-based.[9] Product usage is directly linked to this analysis. Declines in engagement, seat utilization or feature adoption often precede contraction and churn. If customers are not actively using the product or deriving value from it, the installed base will erode.

Customer composition further informs this assessment. Enterprise customers, smaller accounts and different verticals often behave differently under pressure, helping distinguish between structural issues and more contained challenges.

New customer acquisition must be evaluated with the same rigor. Pipeline should be analyzed by stage to identify where deals are stalling or failing. Conversion rates, sales cycle length and win rates indicate whether the issue is demand-generation, sales execution or competitive positioning. Distinguishing between execution issues and broader product or market challenges is important, as the implications for recovery differ.

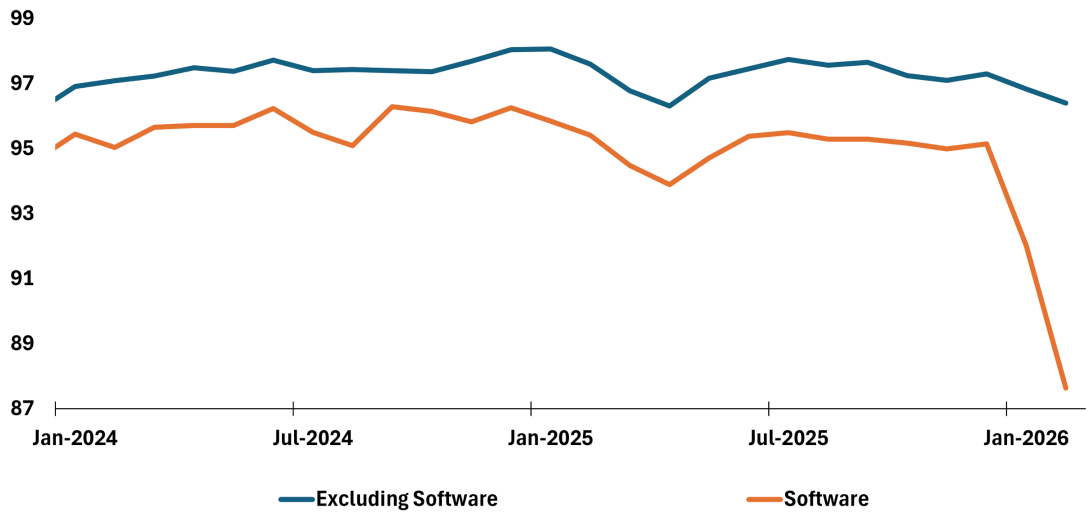
Defensibility

A metrics-driven analysis of the revenue base must be supported by a clear-eyed analysis of the company's ability to defend its position in a changing market. The most durable products sit at the center of a customer's operations, store critical data and support core workflows. Over time, they accumulate complexity through customization, configuration and the need to address edge cases across industries and functions, creating meaningful switching costs. A product such as a customer relationship management (CRM) platform that has been deployed, extended and integrated over many years is fundamentally different

9 Gross churn refers to the loss of customers or revenue from cancellations. Contraction reflects reduced spending from existing customers, such as seat reductions or lower usage. Expansion captures increased spending from existing customers through upsells or additional usage. These components are typically reflected in NDR, but should be analyzed separately to understand underlying customer behavior, as aggregate metrics can mask offsetting trends.

continued on page 66

Exhibit 3: Weighted Average Bid Prices for Performing U.S. Leveraged Loans (January 2024 – February 2026)



Source: PitchBook, 2025 Annual Global Private Debt Report, March 23, 2026

from a standalone application addressing a narrower use case.

Workflows and integrations reinforce this position. Products embedded in daily operations and connected to multiple systems across the enterprise become part of a broader architecture, making replacement more complex and risky. By contrast, products with limited integration or narrower functionality are easier to displace.

Time in market also matters. Companies that have operated for years or decades have addressed a wide range of customer requirements that newer entrants may not replicate quickly. This dynamic favors platforms with established customer bases and accumulated functionality.

Scenario-Based Forecasting

Forecasting must reflect the uncertainty discussed above. For example, a single base case of financial projections will typically be insufficient to capture all of the uncertainty facing companies that are introducing or repositioning around AI-driven products. Rather, scenario-based analysis will likely be more effective, with a company's overall value and risk estimated by probabilistically weighting these different scenarios.

Facts about a new AI offering will be critical to determining and defending reasonable valuations and restructuring scenarios. For example, is there a defined AI offering? If the answer is yes, is it in production or still in development? Where it is live, adoption should likely be evaluated directly: number of customers, usage trends, revenue contribution and evidence of renewal or expansion. These indicators determine whether the product has achieved meaningful traction.

Additionally, competitive positioning should typically be assessed in context. The relevant question is not only whether the product is competitive, but what advantage the company has in offering it. In many cases, new entrants are developing similar capabilities without the burden of a legacy product. Any incumbent advantage — brand, customer base, integration with existing workflows, proprietary data or engineering capability — may be considered.

Implementing this product and competitive analysis into a scenario analysis requires care. Typically, the base case should reflect current trends in the business. Upside scenarios may incorporate successful product adoption and incremental revenue contributions, while downside scenarios may consider the impact of limited or delayed adoption of new products, competitive displacement or accelerated erosion of the legacy business.

In particular, the treatment of new AI products must be closely analyzed. An AI-based product is key for many software companies simply to remain competitive, but such an offering will displace existing revenue in many cases, often at lower margins and with different usage-based pricing models. These second-order effects are often overlooked.

Profitability and Investment Capacity

The reported profitability and cash-flow margins of software companies can be overstated. For example, stock-based compensation is often excluded from adjusted metrics. Struggling software companies may also downsize product and engineering functions to increase short-term cash flow and profitability, but this frequently comes at a long-term cost.

These factors become critical when the company must reinvest to remain competitive, particularly in developing AI-driven capabilities and in retaining talent in the aftermath of a restructuring. Careful diligence is important to assess whether a business can generate sufficient cash after appropriately funding both existing products and the innovation required to compete effectively.

Execution Capability

Execution capability often determines the outcome of a restructuring. In distressed situations, the same strategic path can produce very different results depending on the strength and stability of the organization.

The stability of a company's sales force and of its leadership team below the Chief Executive Officer (CEO) level are often important indicators of execution capabilities. The CEO must define a clear strategic direction while managing two competing priorities: stabilizing the existing business and investing in a new product direction. The Chief Product Officer (CPO) and Chief Technology Officer (CTO) must translate that direction into a coherent product roadmap, balancing the maintenance of the current product with the development of new capabilities.

Technology history shows that these dual mandates are difficult to execute within a single organization. Turnover in key roles may indicate that turning the business around will be challenging. Successful software company turnarounds tend to exhibit clear prioritization and a willingness to accept trade-offs, including the potential cannibalization of the existing business.

Conclusion

Many software companies are now operating with capital structures that no longer reflect their financial reality. Slower growth, weaker customer retention and higher costs of capital have placed these companies under stress, forcing the company and its constituents to make hard decisions.

The analytical framework outlined here — rooted in cash-flow analysis — is intended to help struggling companies distinguish a credible value-preservation plan from an unrealistic turnaround plan — grounding valuation and the analysis of cash flow generation potential in the subject company's underlying performance and fully evaluating the range of outcomes that can realistically be achieved. abi