

The Present and Future of Proptech:

Signs of Cautious Optimism in a Complex Landscape

Data provided by PitchBook





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Introduction



How is the global real estate market faring? Its challenges have been well documented in the past few years, with players beset on multiple sides by factors ranging from tighter monetary policies to curtailed foreign investment. But businesses and investors have not been idle. They have negotiated, adapted, trimmed costs, and divested. Now, the forecast for growth is much more mixed, as opposed to decidedly negative, with some forecasts indicating that global real estate investment is set to rise to \$952 billion in 2025. Granted, that tally is still below the \$1 trillion mark set in 2022, but it at least represents recovery.

As the property tech (proptech) and real estate markets are closely intertwined, cautious optimism around a rebound in proptech dealmaking and growth has also returned. The ramifications of an AI-driven datacenter construction boom, for example, are but the initial harbingers of how the rebuilding of much infrastructure around a hyperconnected, energy-intensive, digitalized grid may become necessary. A different but potentially even more potent trend is the

¹ “Global Real Estate Investment: 2025 and Beyond,” Savills World Research, Charlotte Rushton and Oliver Salmon, October 2024.

reengagement with the adaptation of spaces utilizing proptech solutions to add value to existing holdings and users. Beyond the impact of the COVID-19 pandemic and consequent shifts in asset utilization, property managers already had to contend with improving tenant experience to justify the costs of premium spaces, as well as align with sustainability goals. Paused to some degree given the surge in overall costs over the past few years, now real estate players are once again looking to cautiously embrace proptech rollouts. As seen in the following pages, that sentiment is still a leading indicator that has not yet translated into any significant uptick in private capital investment within the space, but it is a sign for guarded hope nonetheless. Otherwise, proptech players have done much of the hard work that comes in challenging times, from managing spend to shoring up finances to lay out more robust pathways to profitability while staying patient. 2025 may yet see the beginnings of a payoff.

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About Us



Valley Bank

At Valley Bank, we don't just invest in your business. We invest in your future to achieve your goals, advance your communities and secure your legacies. As a leading regional bank, we balance stability and convenience—with approximately \$61 billion in assets and more than 200 branches and commercial banking offices across the US—with an agility for knowing just how to adapt, pivot and plan two steps ahead.

With more than 3,800 experts across real estate, commercial & industrial, healthcare, nonprofit, government contracting and more, we help you focus your vision and then prioritize the solutions you need to achieve your business, specialized and personal ambitions, responsibly and sustainably.

Because whether you're just starting up, looking to expand, or seeking solutions that create greater stability, we take advancing your ambitions personally. It's how we've been working since 1927, and what makes us the partner you can turn to, to power your tomorrow with confidence.



Nine Four Ventures

Nine Four Ventures prefers to Invest early and engage meaningfully across the real estate asset lifecycle, asset types and industries that sell to and through the built world. We focus on Pre-Seed and Series A stages but selectively consider B+ investments based on strategic fit. We partner with founders who are building unique/proprietary technologies, and leveraging go-to-market strategies and business models that support fast growth and drive margin expansion at scale. We Align on strategic objectives early, plug in our network and follow through on what we say we're going to do including everything from but not limited to: product iteration and feedback, customer & partnership building, market insights & expansion, etc.

Kurt Ramirez, General Partner, Nine Four Ventures

Kurt Ramirez is a Founding Partner at Nine Four Ventures. Based in Chicago, his responsibilities include leading originating, evaluating, and executing investment opportunities and supporting existing portfolio companies.

Kurt has been active in the PropTech space since 2015, and previously worked with a Chicago-based real estate tech accelerator and fund, where he was a member of the investment team and ran firm diligence and operations. He's worked with countless PropTech companies and has experience investing across startups targeting all facets of residential and commercial asset classes.

Prior to founding Nine Four, Kurt was a consultant at Bain & Company, an investor at Cue Ball Capital, a venture capital firm focused on consumer and information media investments, and Greenfield Partners, a real estate private equity firm. He received an MBA from Harvard Business.



MetaProp

MetaProp is a New York-based venture capital firm focused on the real estate technology ("PropTech") industry. Founded in 2015, MetaProp's investment team has invested in 175+ technology companies across the real estate value chain. The firm manages multiple funds for both financial and strategic real estate investors that represent a pilot- and test-ready sandbox of 20+ billion square feet across every real estate asset type and global market. The firm's investment activities are complemented by pioneering community leadership including the PropTech Place innovation hub, MetaProp Accelerator at Columbia University programs, global events including NYC Real Estate Tech Week, and publications Global PropTech Confidence Index and PropTech 101.

Zak Schwarzman, General Partner, MetaProp

Since joining MetaProp as a General Partner in 2016, Zak has led MetaProp's venture capital funds, investing in high-growth PropTech startups that are transforming the way we conceptualize, utilize, build, transact, interact with, and manage physical space. Zak's investment experience spans seed, multi-stage and corporate venture capital as an investor at Gotham Ventures, Canaan Partners, AOL Ventures and LearnCapital. Zak is also an Adjunct Professor at Columbia Business School where he teaches the graduate venture capital seminar. Zak is a Kauffman Fellow and holds an M.B.A. from Columbia Business School and a B.A. in Political Economy and Business from Tulane University.

Executive summary

Headwinds:

Private capital investment flows across the proptech landscape have decreased substantially in the past two years, across both venture and growth equity transactions. The sheer array of challenges facing proptech and the broader real estate sector remain daunting: Interest rates are still high relative to those of the past decade and a half, and the process of working through the rapid hikes of the past couple years is still underway; inflation and costs for key materials have simultaneously combined to raise prices for multiple players in different aspects of the ecosystem; and considerable uncertainty around potential volatility in economic growth, insurance costs, supply-and-demand dynamics for property segments, tariffs, regulations, and more all persist.

Resiliency:

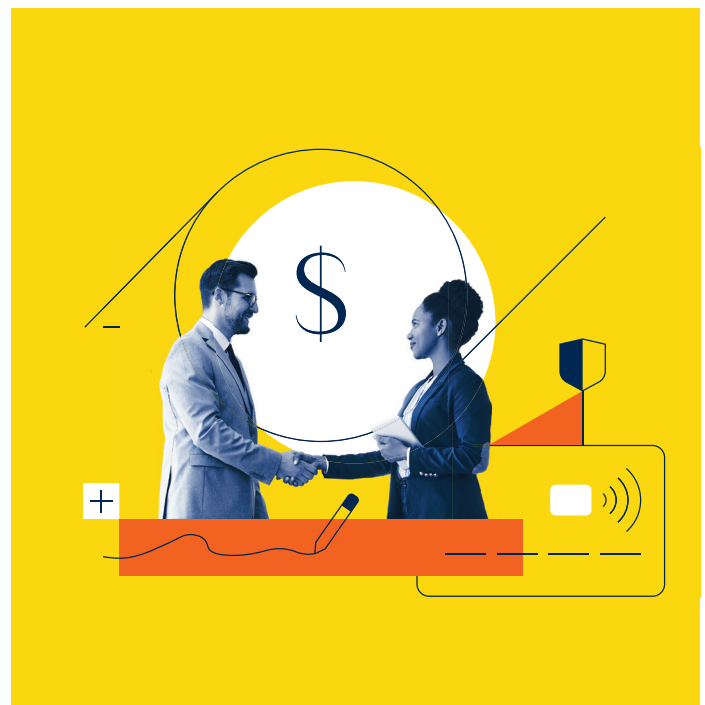
Financing metrics, however, are not as depressed as one may surmise. In fact, averages are up in VC valuations while there was the slightest of upticks in general M&A within proptech. This suggests that there are still pockets of opportunity perceived by dealmakers plus opportunistic acquisitions given more reasonable valuations after the market dislocations of the past few years. Proptech innovation has not slowed in tandem with financing flows, but rather remains focused on easing industry workflows, cost reductions, regulatory compliance, and more.

Risks:

Regulatory uncertainty, ongoing commercial real estate weaknesses, competition from larger rivals that have more financial cushioning, tighter lending conditions and pressures from backers for profitability or faster pathways to profitability all still present key risks for proptech companies.

Opportunities:

However, as noted above, some signal transactions within proptech in the past few years showcase how innovation in investment platforms (for example, offering routes to real estate exposure to retail investors in pockets of the market that previously were less accessible), sustainability solutions that can immediately help reduce energy expenditures, AI-powered applications for lessening back-office workloads, and more all remain avenues for opportunity for proptech firms. Many are still working through necessary adaptations for operating fundamentals given broader market conditions, but as such processes have been ongoing for two years or more by now, there is greater optimism that the worst of the economic pressures have been weathered.



Macro Trends

Despite the headwinds of the past few years, there is a tempered optimism regarding economic growth and fundamentals within the real estate sector heading into 2025. CBRE, for example, anticipates still-growing demand in suburbia and leasing activity in industrial real estate despite a prediction that the 10-year US Treasury yield will remain above 4%.² In addition, the National Association of Realtors expects that residential home sales will increase by 9% for 2025 and even more for 2026, as buyers and markets price in stabilization for mortgage rates around 6%.³ Such optimism is common at the start of most years, but it is also the case that market participants have had ample time to adapt to a new regime of costlier capital, which could still mute transactional activity to some degree, but acclimatization will likely lead to at least some consistent leasing and purchasing.

As anticipated in previous editions of this report series by Valley National Bank, lenders and real estate players are finding common ground with regard to looming debt loads. Maturities are being extended in recognition of the aftereffects of the COVID-19 pandemic as well as ongoing shifts in overall business usage and occupancy patterns. An estimated nearly \$600 billion may mature this year, with an escalation in volume for the next few years, until finally the sheer mass of loans begins to catch up to new operating realities. It remains to be seen how new debt issuance may shift current economic realities⁴, but adaptations such as fixed-rate financings, increased sale-leasebacks, and other asset utilization schema can maximize value. In a positive sign, investors are returning to snap up either perceived bargains or premium spaces in office buildings, notching an increase in aggregate investment value of 20% over 2023's total, though volume has still much ground to make up relative to averages from the 2010s.⁵

Regardless of any political shifts that could change which regulations may or may not be altered or at minimum implemented and/or monitored, real estate players are looking primarily to mitigate costs, which is still often best addressed through sustainability



investments—especially as buildings are estimated to account for 34% of energy demand.⁶ From replacing lighting to installing lower-flow plumbing systems or energy-efficient insulation, builders and landlords are still utilizing such techniques when feasible in anticipation of growing management costs going forward.

As AI applications become more widely accessible at lower prices, real estate players are adopting them where possible for high-volume yet often simpler sets of tasks, such as navigation of tools, analytics of usage, property searches, and more. Higher-value-add tasks are being focused upon yet not fully rolled out into active daily use for clients as risk levels are still being assessed, but they can be utilized in back-office functions as a hybrid approach to expedite time-consuming tasks, like price-setting, trend prediction, property comparisons, architectural visualizations, and more.

2: "US Real Estate Market Outlook 2025," CBRE, Richard Barkham, Henry Chin, and Julie Whelan, December 11, 2024.

3: "NAR Chief Economist Lawrence Yun Forecasts 9% Increase in Home Sales for 2025 and 13% for 2026, With Mortgage Rates Stabilizing Near 6%," National Association of Realtors, November 8, 2024.

4: "CRE Mortgage Maturities & Debt Outstanding Q1 2024: Commercial Mortgages Increased by \$231 Billion," Emily Yue, July 12, 2024.

5: "Investors Who Shunned the US Office Market Are Coming Back," The Wall Street Journal, Peter Grant, January 28, 2025.

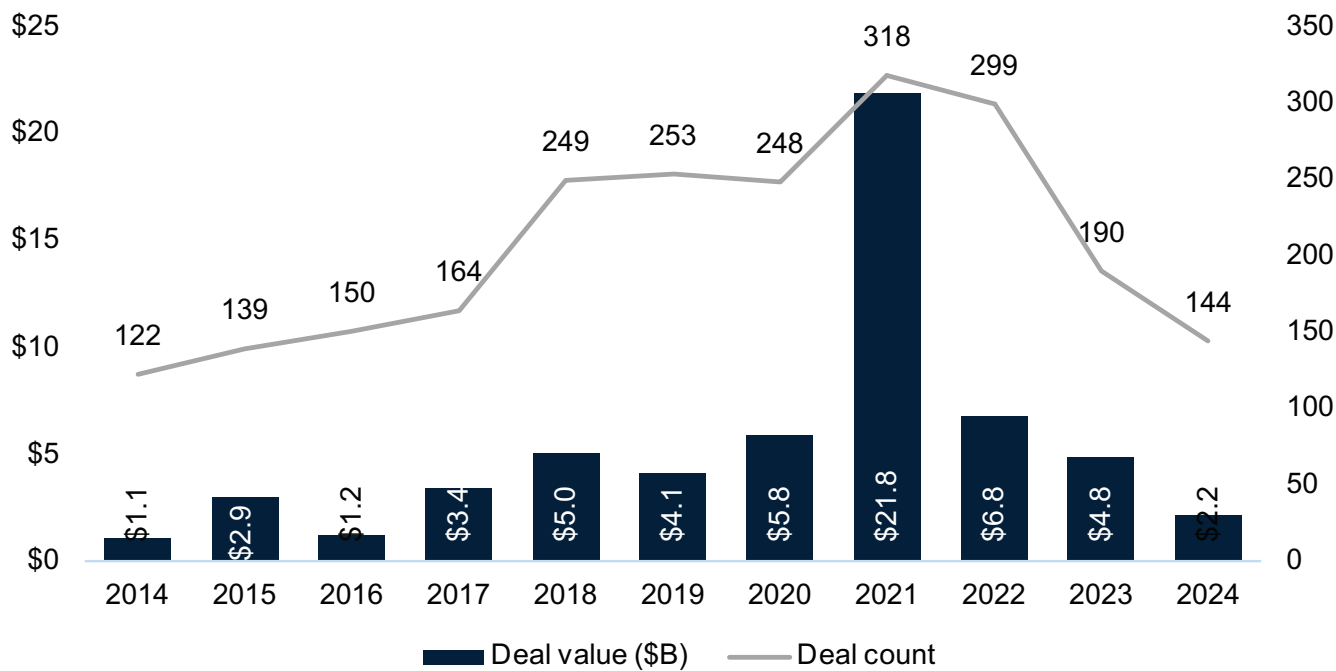
6: "Decarbonizing Commercial Real Estate," CBRE, n.d., accessed February 4, 2025.

Market Trends

Dealmaking slows further as players assess risks

After resilience throughout 2022, 2023 saw the first significant onset of slowing private capital investment in proptech—2024 saw even more deceleration, as aggregate value shrank to \$2.2 billion across 144 completed transactions. By comparison, global VC dealmaking remained slow as well in terms of count but saw more of an uptick between 2023 and 2024 in terms of aggregate VC invested. A lagging effect, much like how proptech remained more resilient in 2022 than other sectors, could be in play, as the real estate and proptech markets, in particular, continue to price in and adapt to ongoing risks.

US private capital deal activity

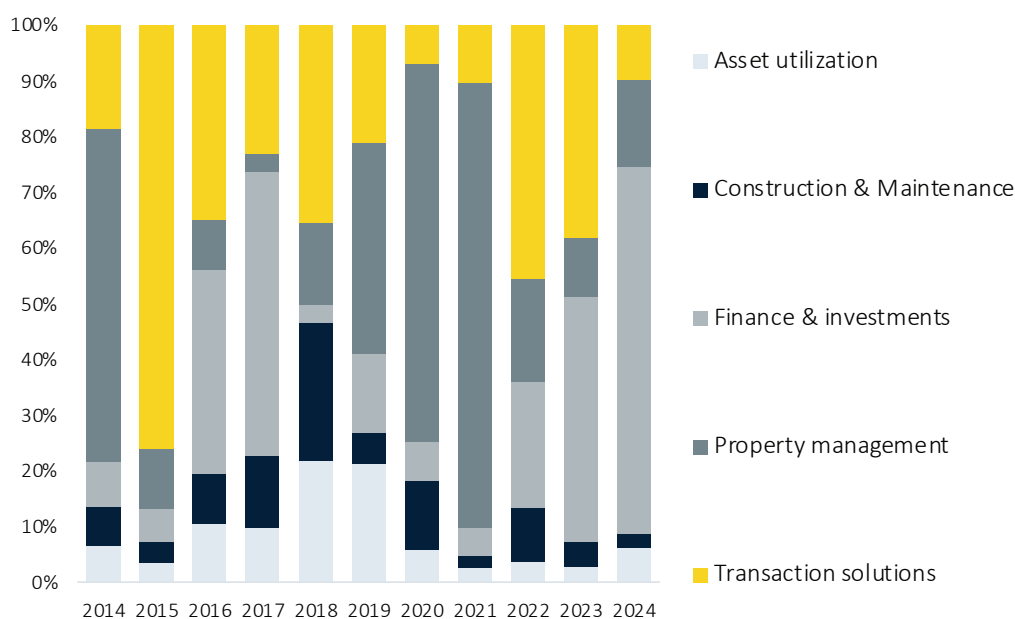


Source: PitchBook

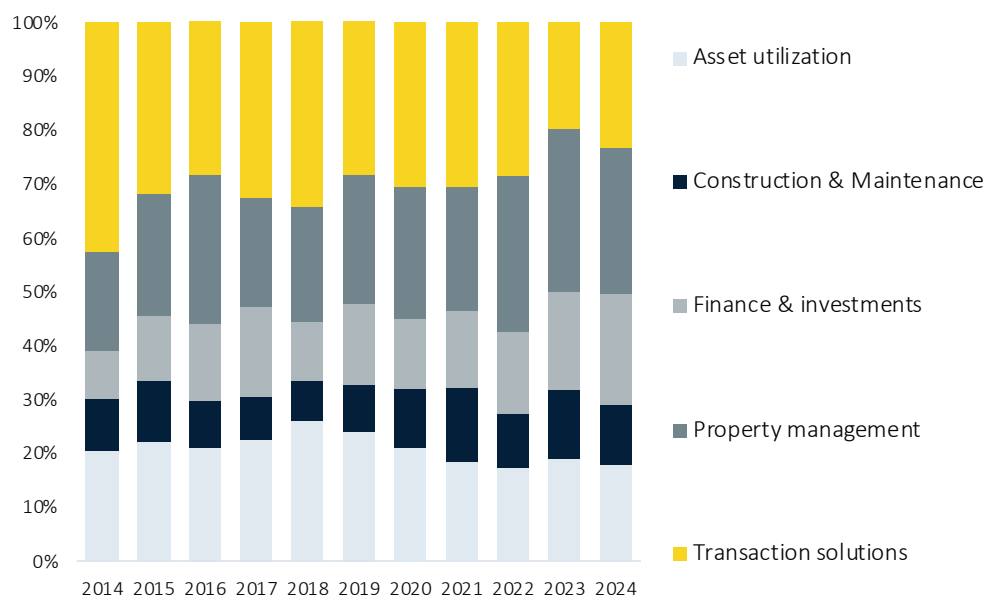
Select segments see boost in deal flow, in a sign of the times

Amid the sluggish pace of transactions, the bulk of deal value in 2024 was concentrated in finance & investments to an even greater extent than was seen in 2023. By count, volume primarily concentrated in property management, transaction solutions, and finance & investments. In times of sluggish deal flow and pressing economics, with real estate players focused on triaging less-productive leases and rearranging longer-term, pressured financings, the startups within proptech focus on shoring up fundamentals. However, such an environment also presents an opportunity for opportunistic investors, as noted earlier, and thus a trickle of investment has flowed to real estate investment platforms that offer exposure to rental properties, plus novel liquidity solutions for owners looking to tap additional value from homes that have accreted significant value in the past few years.

US private capital deal activity (\$B) by segment



US private capital deal activity (#) by segment

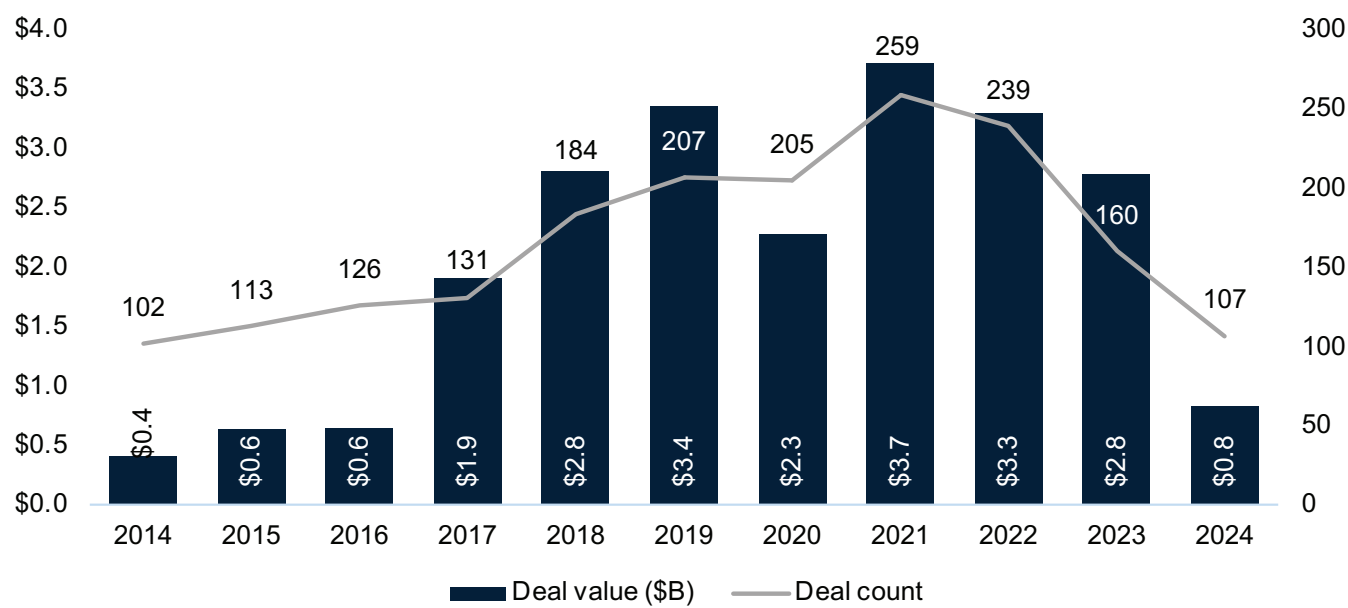


Market Trends

VC dealmaking retreats significantly

After a standout closing quarter to 2023, both aggregate VC invested and volume contracted throughout 2024, producing annual tallies that aligned more with 2014 than any full year in between. Segment breakouts of deal flow show an interesting divergence from broader private capital activity, however, with property management skewing much higher in its proportion of VC invested last year. Otherwise, the bulk of completed VC transactions has concentrated in transactions, finance, and management once again. Any diminution in asset utilization or construction is explained in part by reviewing the proportions of VC deal flow by stage in each; for example, over time there has been a growing preponderance of venture growth and late-stage VC in asset utilization, as well as finance & investments (though there was a slight uptick in early-stage VC in investments last year, likely due to a surge in real estate investment platforms catering to retail investors and pitching undervalued property exposure). Other proptech segments, such as transaction solutions, saw a mix of those two same trends, with a growing encroachment of more mature companies raising heftier sums versus upticks in earlier-stage financings. The former signifies an increase in more mature, perceived lower-risk businesses commanding the bulk of capital, and the latter signals investor enthusiasm for a crop of newer approaches to securitizing and accessing financial exposure to formerly hard-to-reach property assets.

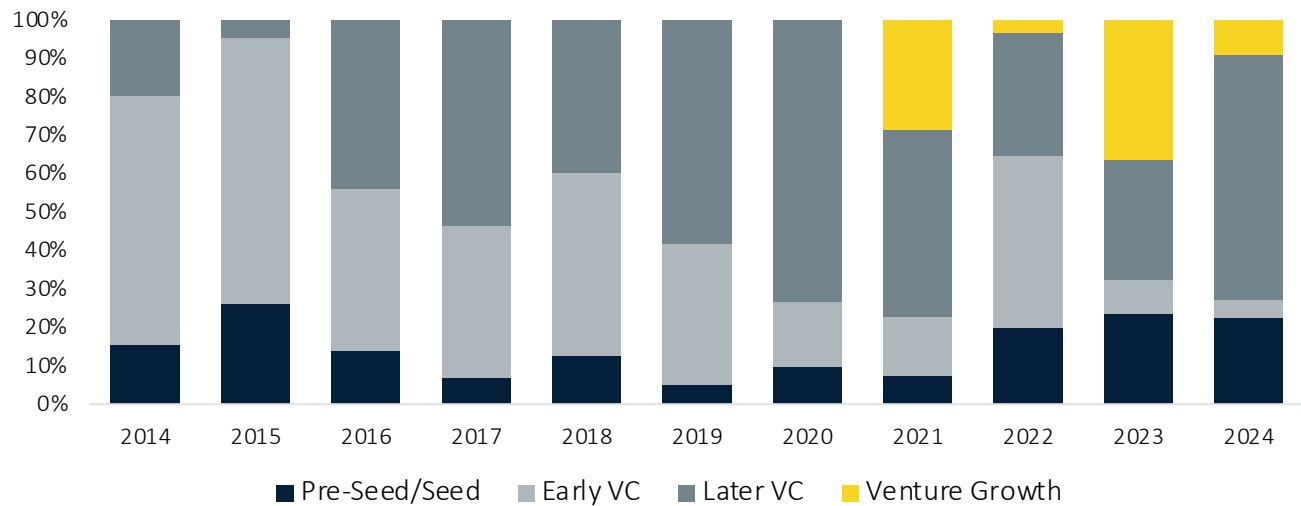
US VC deal activity



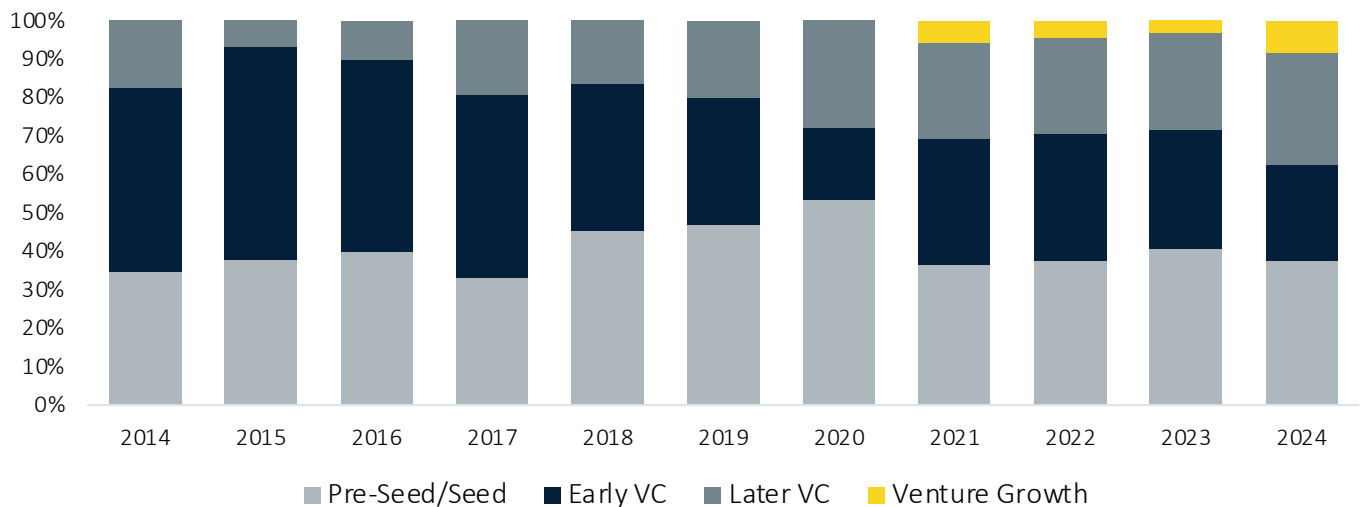
Market Trends

VC dealmaking retreats significantly

US VC deal activity by stage (\$M) - Asset Utilization



US VC deal activity by stage (#) - Asset Utilization

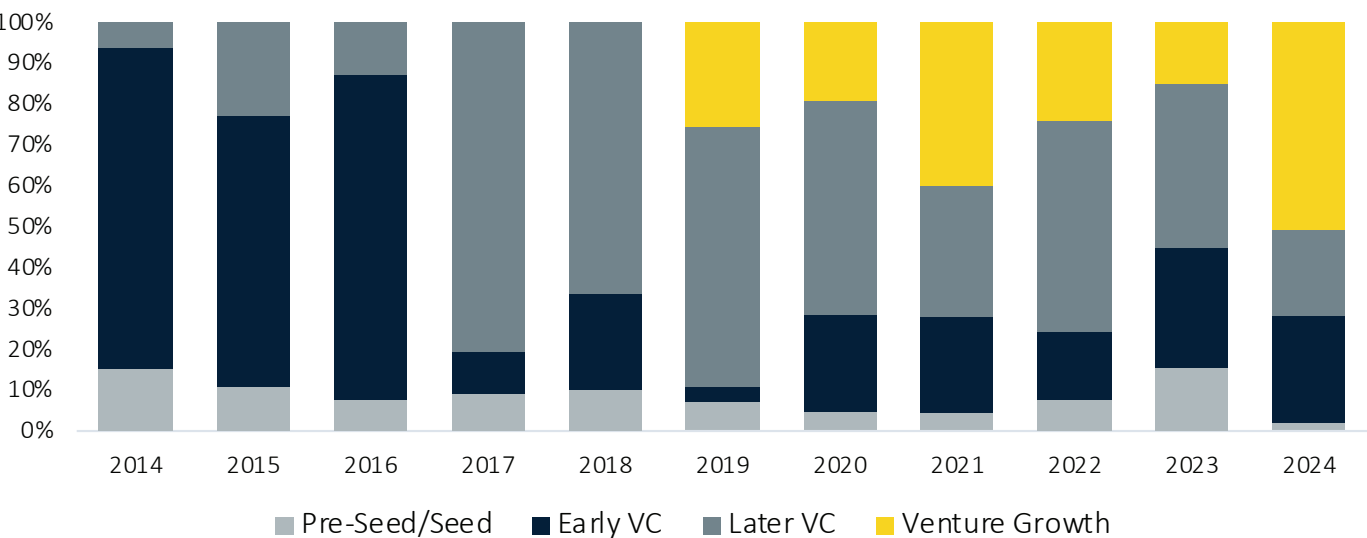


Source: PitchBook

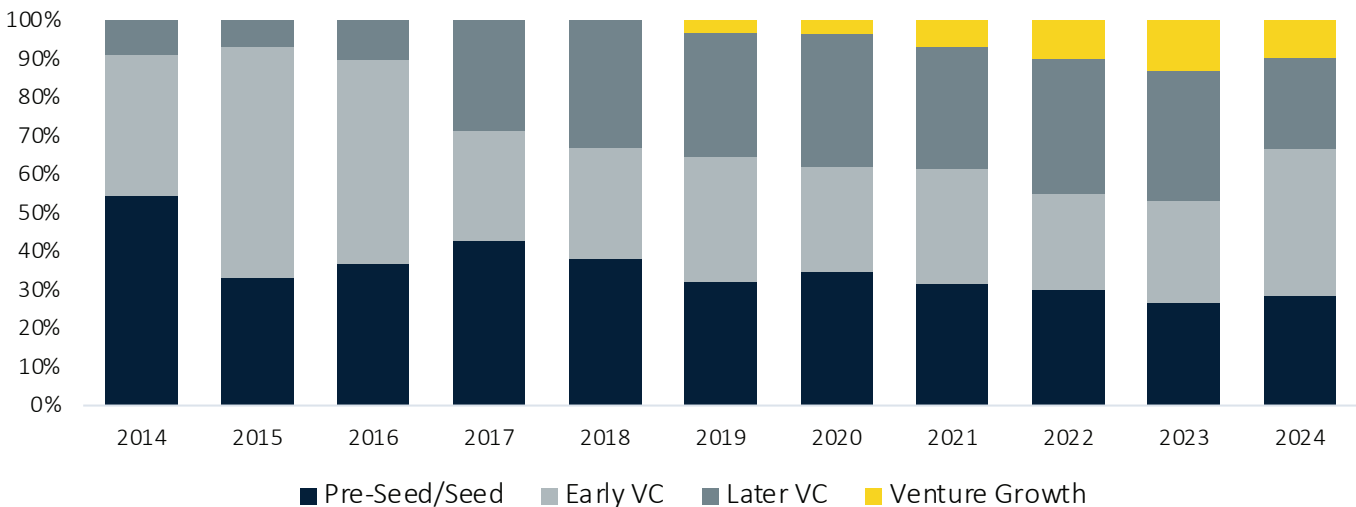
Market Trends

VC dealmaking retreats significantly

US VC deal activity by stage (\$M) - Finance & Investments



US VC deal activity by stage (#) - Finance & Investments

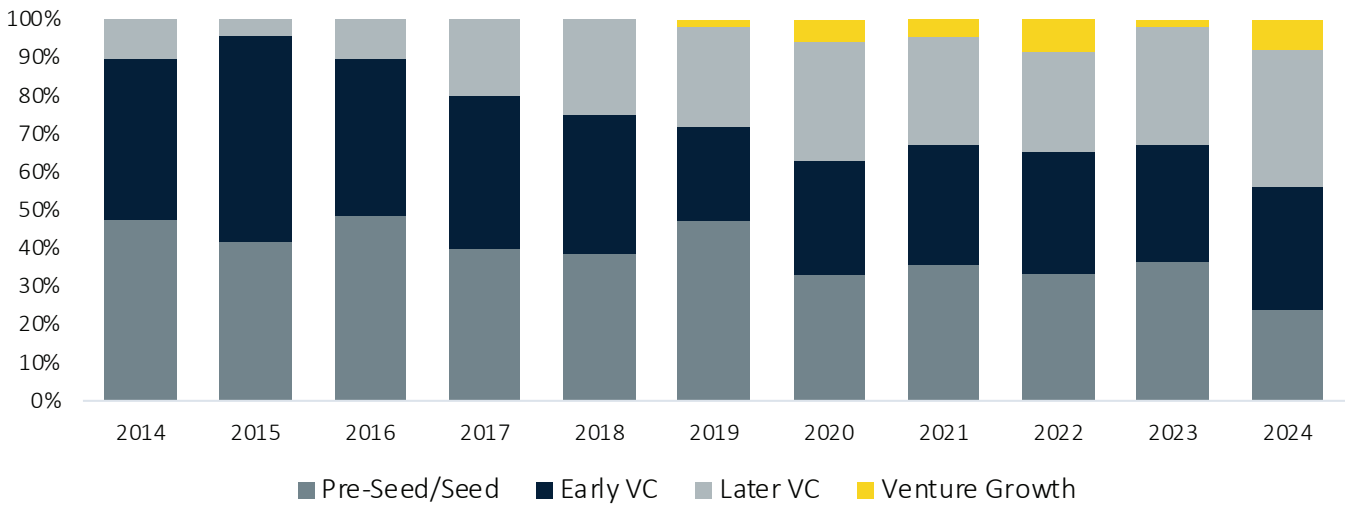


Source: PitchBook

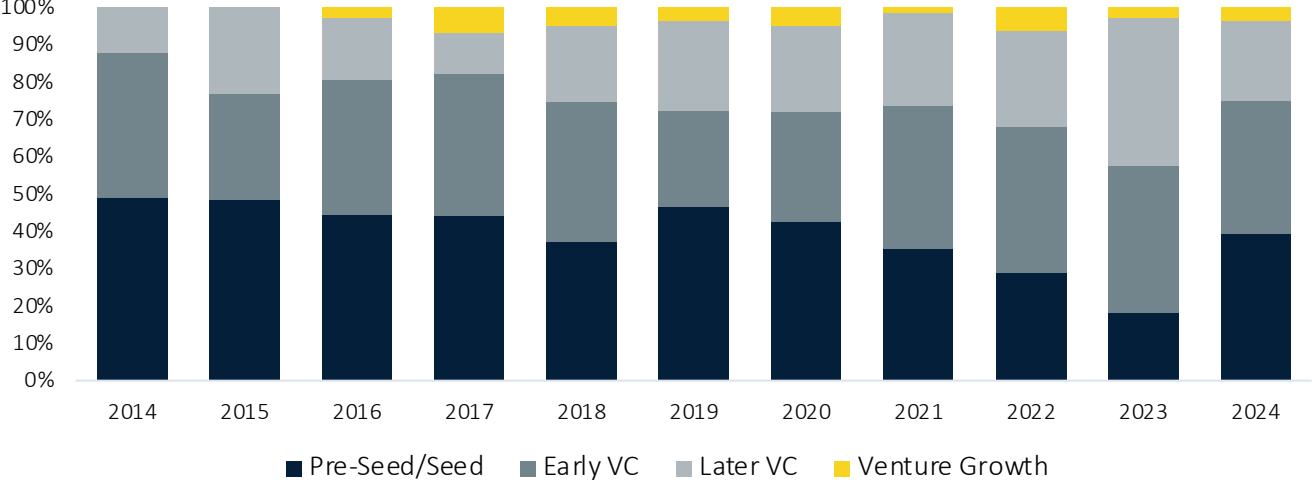
Market Trends

VC dealmaking retreats significantly

US VC deal activity by stage (#) - Property Management



US VC deal activity by stage (#) - Transaction Solutions



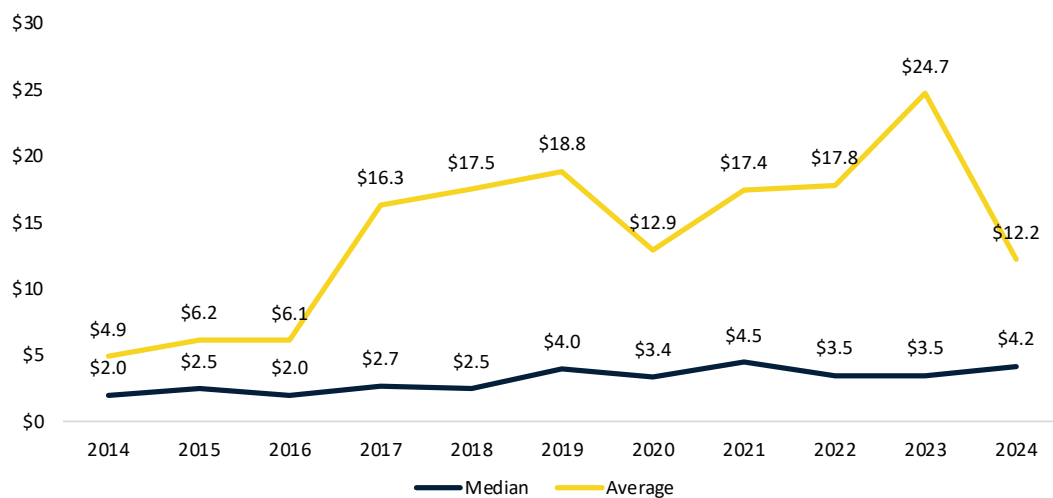
Source: PitchBook

Market Trends

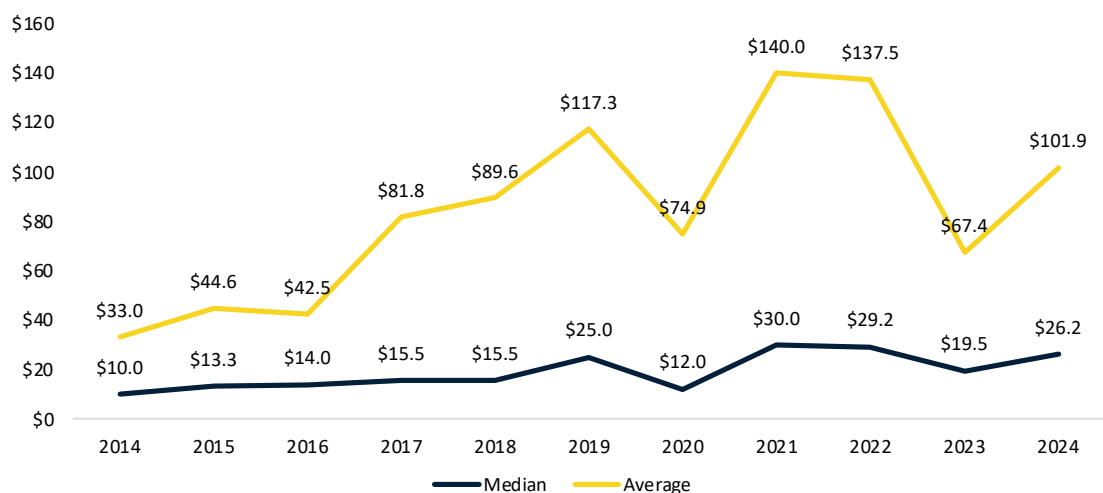
Financing metrics still paint a nuanced picture

Although sample sizes are barely statistically significant for pre-money valuations, they paint an initially surprising picture: The average pre-money VC valuation hit \$101.9 million last year, rebounding from a dip to \$67.4 million in 2023. The median pre-money VC valuation stayed healthy at \$26.2 million. The average VC deal size, meanwhile, dipped to its lowest level since 2016, while the median VC deal size was one of the higher on record, at \$4.2 million. Such divergences make more sense in the context of a general venture environment that is investor friendly—capital overhang remains relatively elevated, and yet demand by startups still outstrips the supply of capital investors are willing to dispense. Thus, the deals that do get done tend to be of perceived higher quality, leading to more robust metrics, and some companies are able to command robust valuations by any historical comparison. However, such deals are fewer and farther between, thus the overall slowdown in dealmaking.

US VC deal value (\$M)



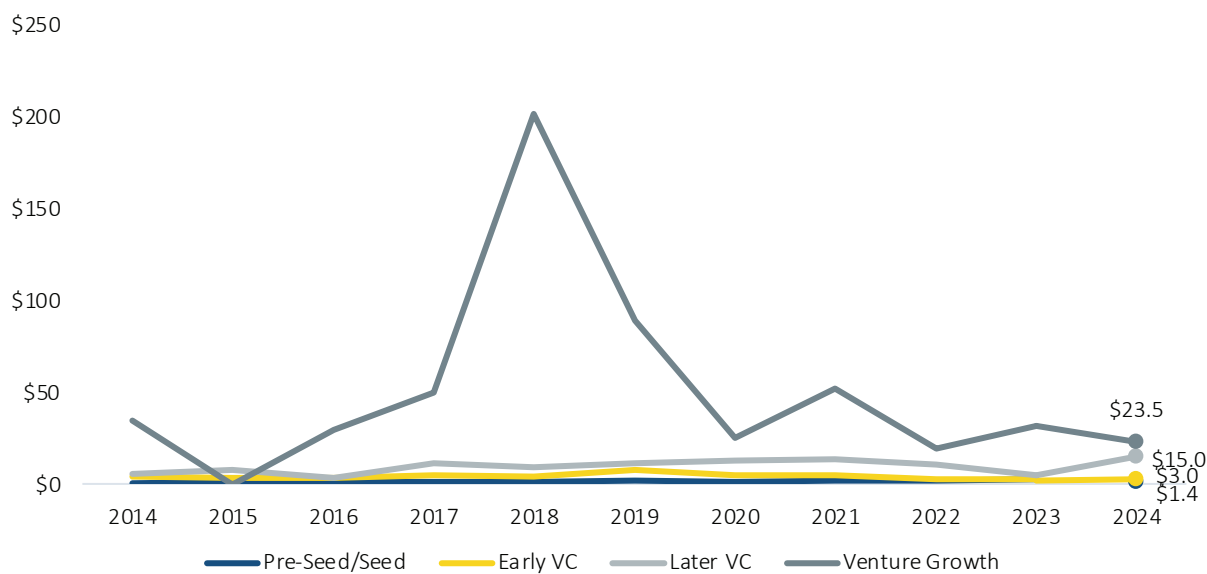
US VC Pre-Money Valuation (\$M)



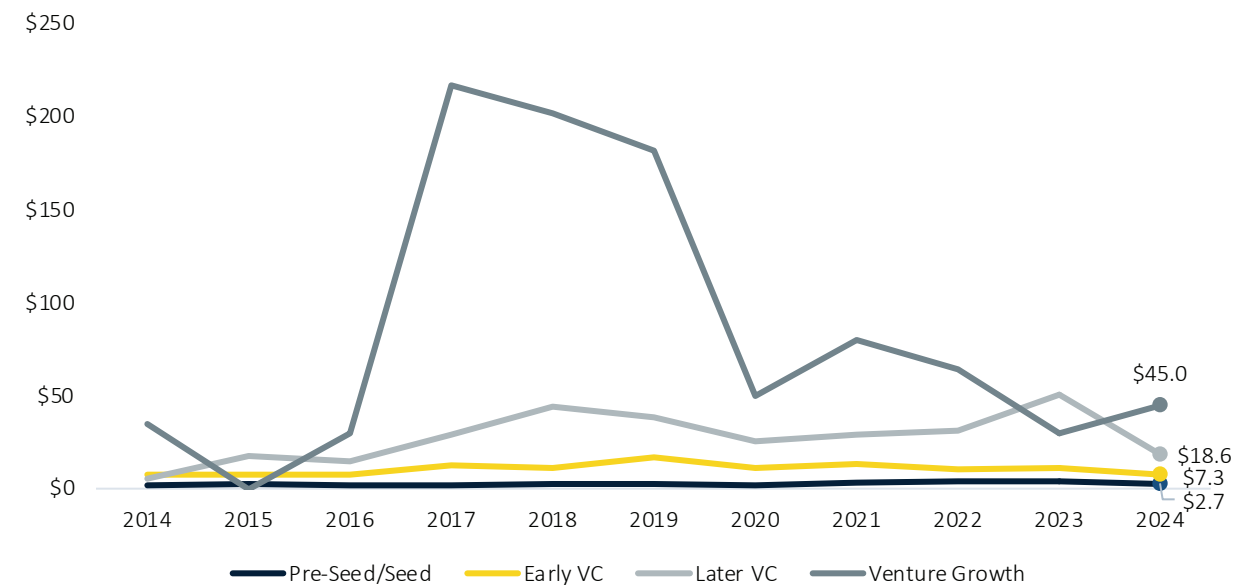
Market Trends

Financing metrics still paint a nuanced picture

US median VC deal size by type (\$M)



US average VC deal size by type (\$M)



All 2024 metrics are based on non-normative population sizes, as are all venture growth figures

Market Trends

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Even though overall financing — and venture activity in particular— compressed sharply in 2024, the median pre-money VC valuation stayed relatively healthy at \$26.2 million.



Source: PitchBook

65%

Finance & investments accounted for the bulk of all private capital deal value in 2024, rebounding to more than ever on historical record.

\$26.2 million

Even though overall financing — and venture activity in particular—compressed sharply in 2024, the median pre-money VC valuation stayed relatively healthy at \$26.2 million. Much like is observed in other realms of VC, this suggests that there is still sufficient capital in VC funds focused on proptech or similar sectors to fuel healthy valuations, but firms are much more cautious nowadays.

28%

Pre-seed/seed VC dealmaking in 2024 hit its lowest overall proportion of completed VC transactions in at least the past decade. This is another intimation of overall hesitation on the part of VC firms amid an uncertain dealmaking and economic environment.

13

Another handful of exits occurred in 2024, with most undisclosed, thus only an aggregate of just over \$500 million in exit value was confirmed. That still is just below the tally observed in 2023, so it could be a sign that acquirers are willing to stay active in the right circumstances. Matterport's pending acquisition may skew figures in 2025, should it be completed.

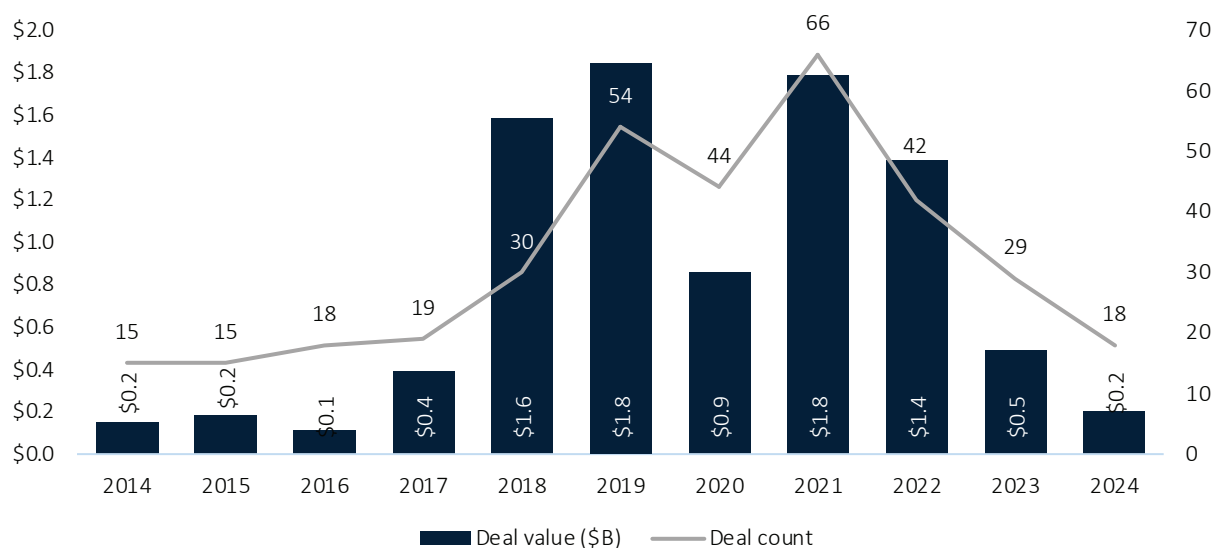
\$382.1 billion

Real estate's capital overhang stood at its seventh-highest level as of mid-2024 (given private fund reporting cycles, that is the customary lag in terms of capital overhang calculations). Although it is still too early to say with certainty, that figure coupled with the slightest of upticks in PE and M&A activity in proptech does signal that after the market dislocation of the past few years, there could be growing interest in gaining exposure to companies at more favorable valuations after they have adapted operating fundamentals in response to any economic challenges as of late.

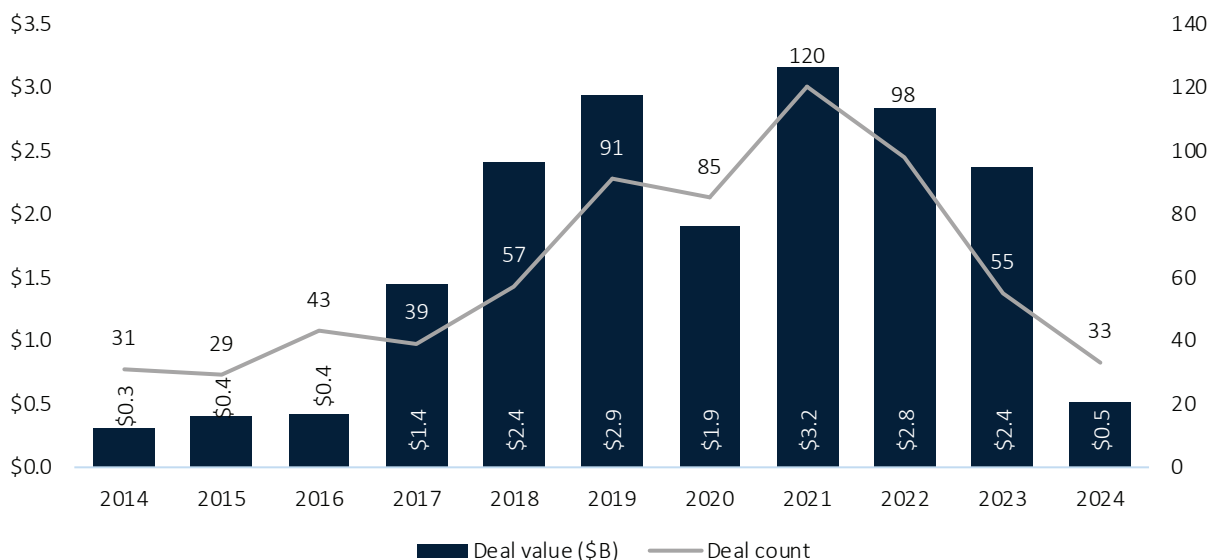
Given a broad array of challenging factors, corporates and nontraditional players retrench

Nontraditional investors have pulled back from the risky arenas of VC in general, and proptech is no exception. After joining in \$2.4 billion worth of rounds in 2023, they participated in just 33 rounds for barely \$500 million last year. Corporates continued their pullback that commenced in 2022, joining in only 18 completed transactions. Given that many corporates and corporate VC arms remain cautious until economic growth looks more stable and proptech companies have navigated through a longer period of costly capital, their reluctance is understandable. For nontraditional investors, it is likeliest that their frenzy of participation in late-stage deals has not yet produced significant liquidity and, until said liquidity returns, they will remain inactive.

US VC CVC deal activity



US VC NTI deal activity

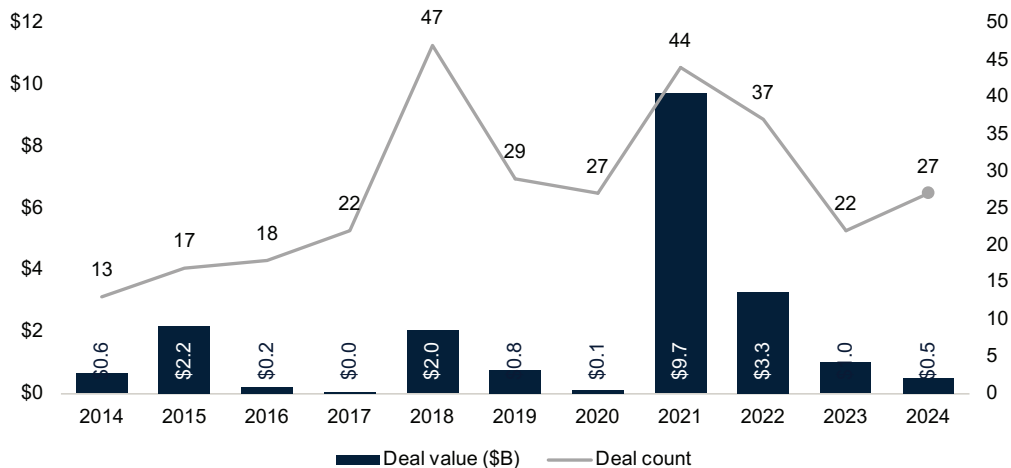


Market Trends

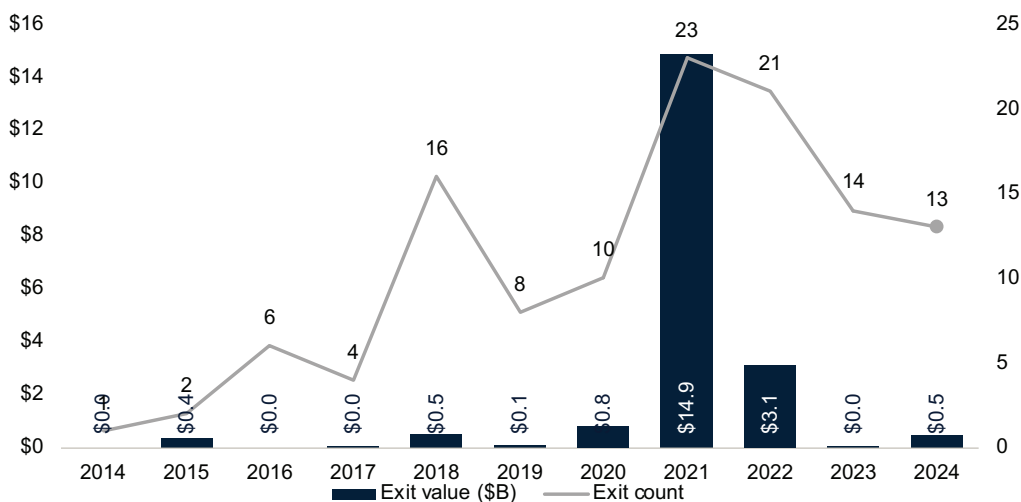
Opportunistic buying leads to mild uptick in M&A, but liquidity remains protracted

Liquidity for proptech VC-backed startups, as well as investors, has been sluggish, much like in the general venture environment. However, there was a slight uptick in completed M&A in general (beyond just VC-backed M&A) in proptech last year, with 27 completed deals relative to 22 in 2023. (Note: Some M&A remains undisclosed or unconfirmed in value, thus the actual tally of exit value may be higher given the uptick as well.) It is likely that if valuations for many proptech companies remain pressured in the general challenging environment, there could be further M&A on the horizon as buyers grow cautiously optimistic and seek to find bargains.

US M & A deal activity

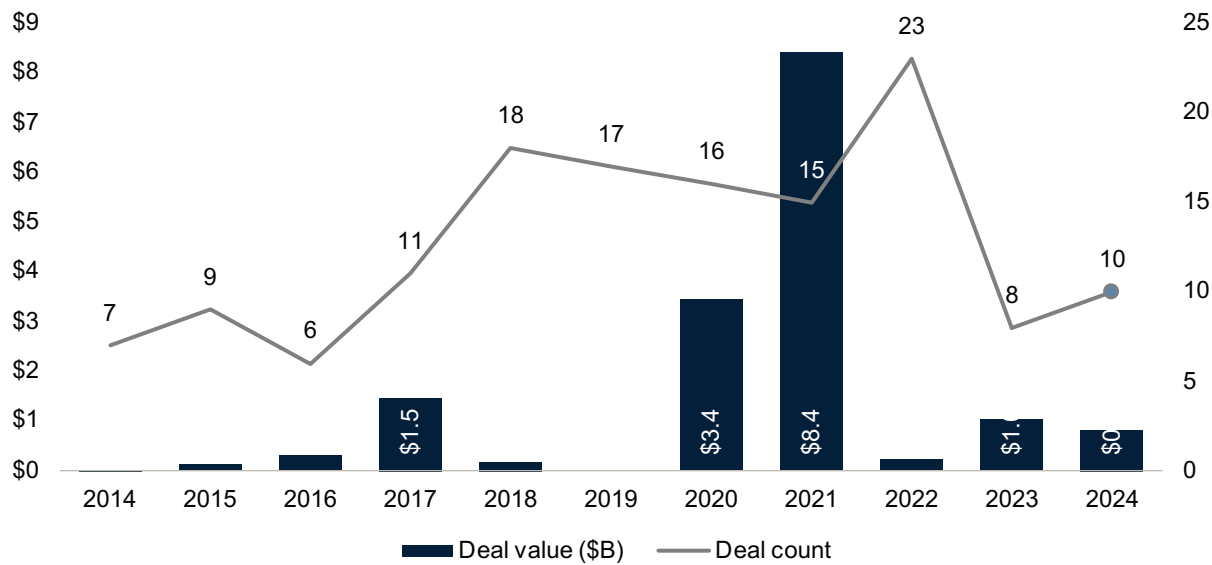


US VC exit activity

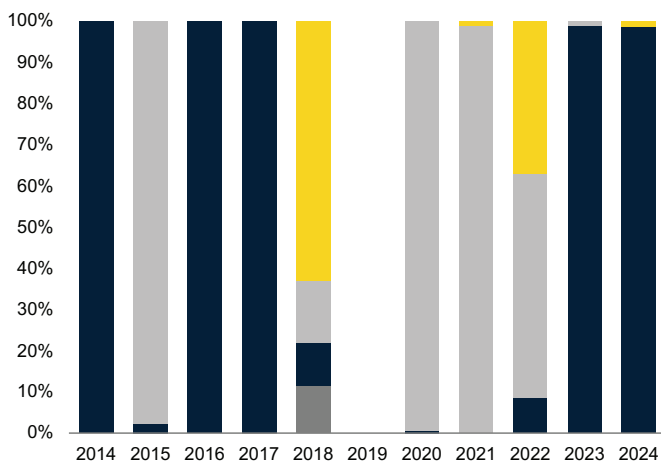


Market Trends

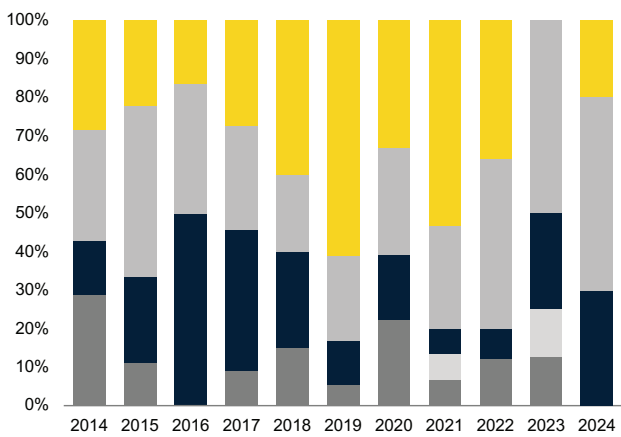
US PE deal activity



US PE deal activity (\$B) by segment



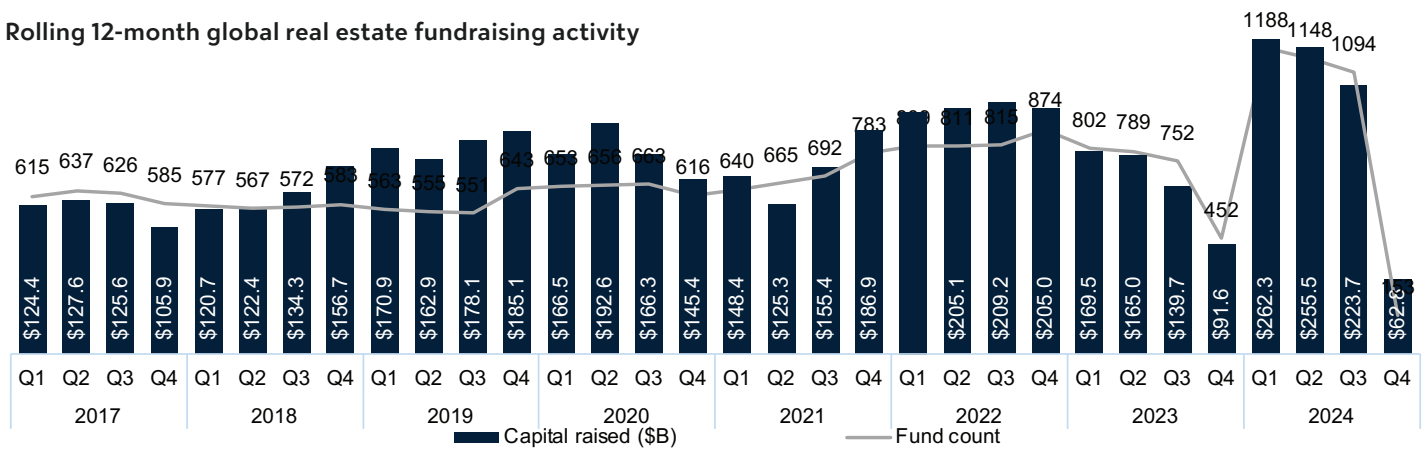
US PE deal activity (\$B) by segment



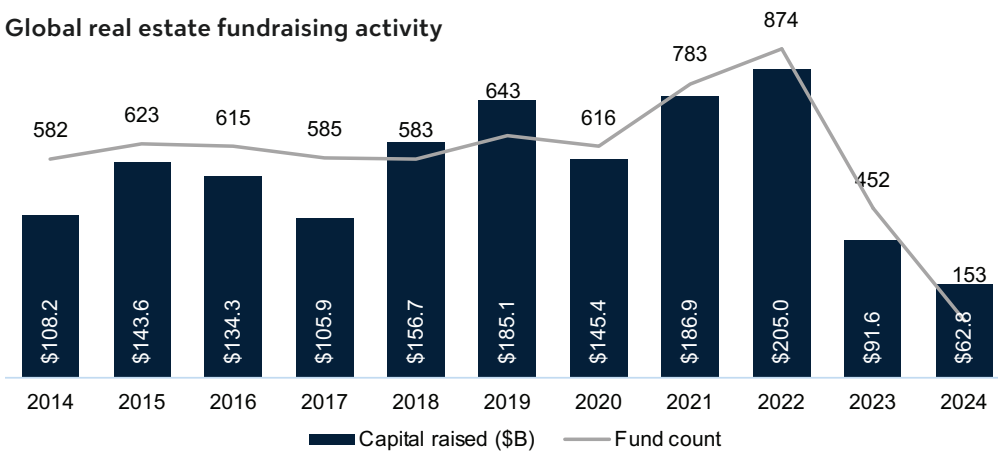
Source: PitchBook

Market Trends

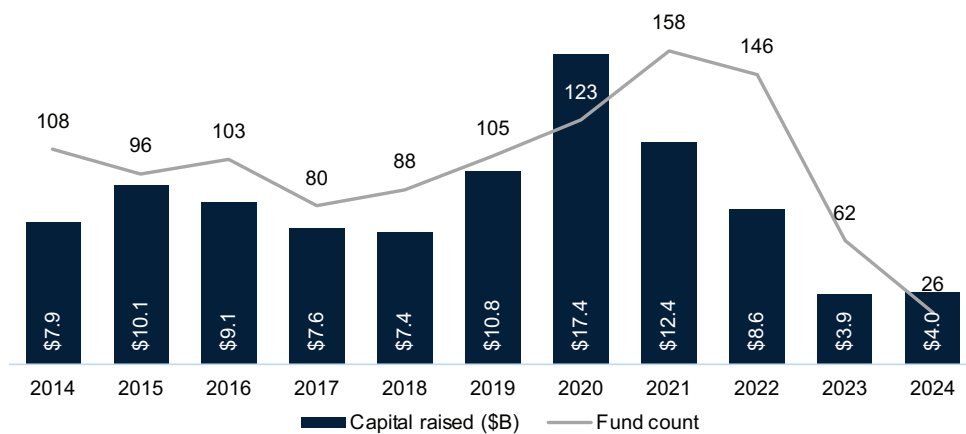
Rolling 12-month global real estate fundraising activity



Global real estate fundraising activity



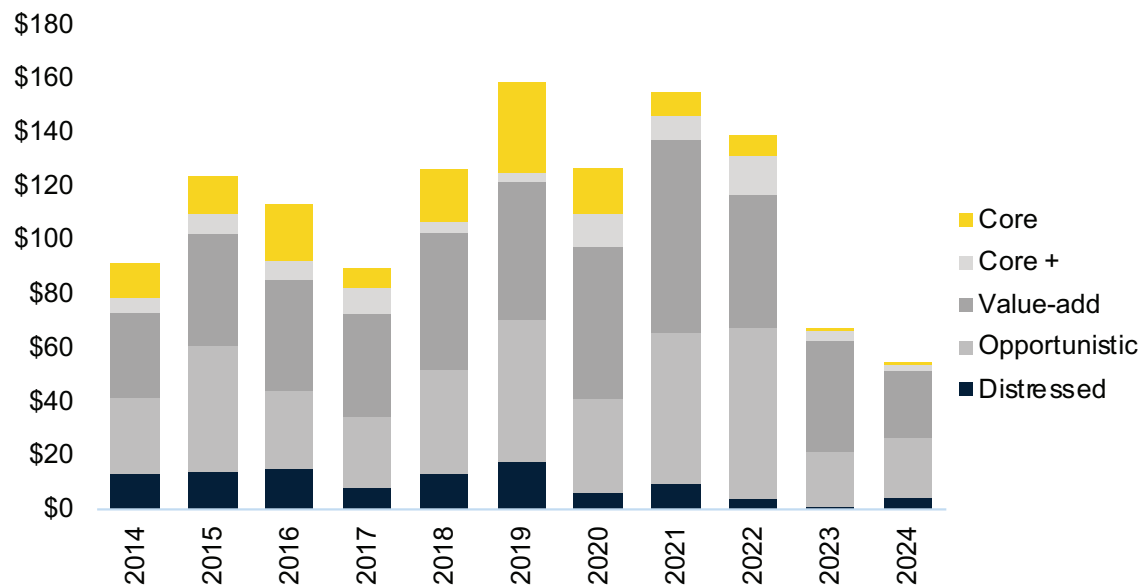
Global real estate first-time fundraising



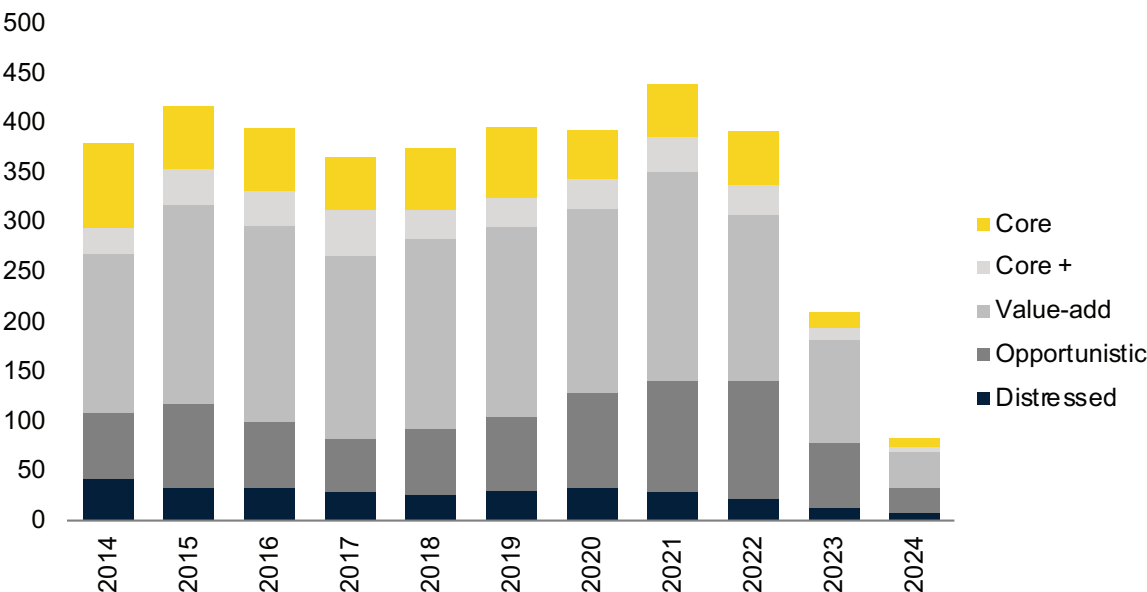
Source: PitchBook

Market Trends

Global real estate funds (\$B) by type



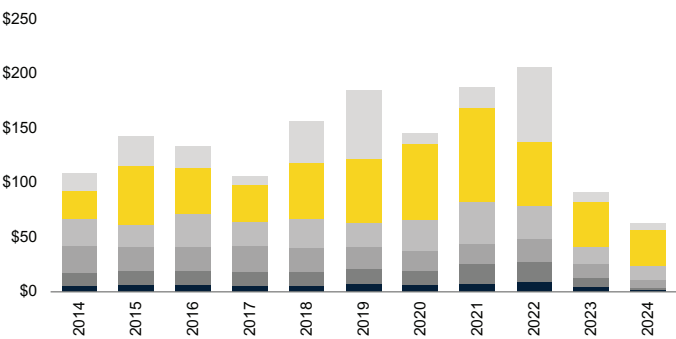
Global real estate funds (#) by type



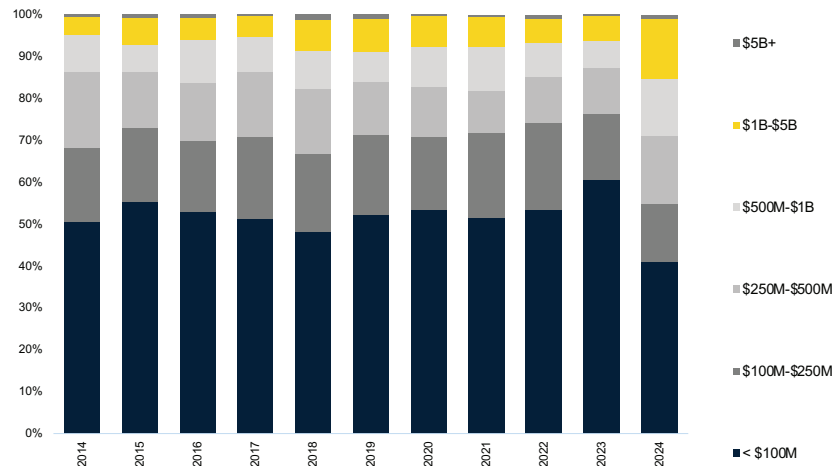
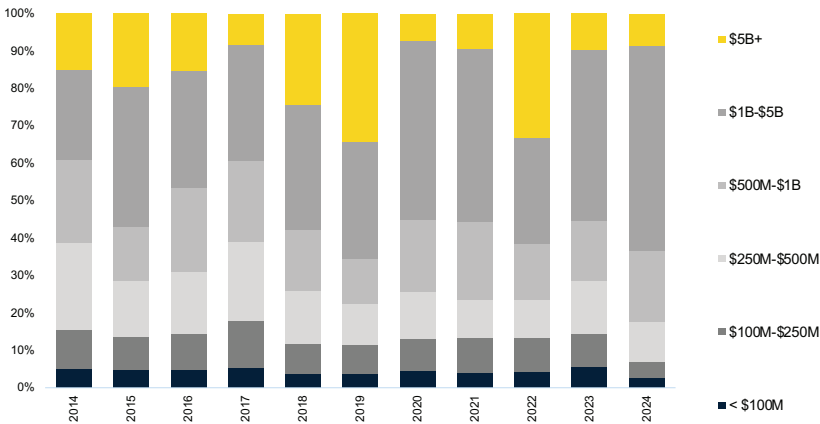
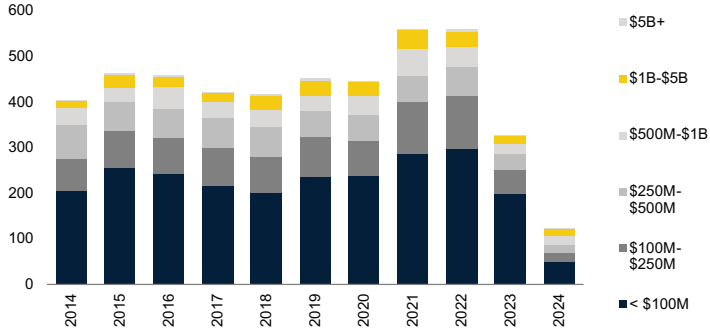
Source: PitchBook

Market Trends

Global real estate funds (\$B) by size



Global real estate funds (#) by size



Source: PitchBook

PropTech Market Map

<div>TRANSACTION SOLUTIONS</div> <div>AGENT TECH & TOOLS</div> <div><div>Jome</div><div>side</div><div>Inspectify</div><div>FLOORFY</div><div>STAGEGLASS</div><div>RealConneX</div></div>	<div>HOME BUYING/ SELLING</div> <div><div>dnk</div><div>Orchard knock</div><div>Divvy</div><div>HomeLister</div><div>ribbon</div><div>Sundae</div><div>Divvy</div></div>	<div>DATA & ANALYTICS</div> <div><div>reonomy</div><div>Juniper Square</div><div>TRUE FOOTAGE</div><div>REAL CAPITAL ANALYTICS</div><div>BUILDZOOM</div><div>InvestNext</div><div>COMPSTAK</div><div>Aloft</div><div>FORNOVA</div><div>cherre</div><div>SUSU</div></div> <div>MARKETING</div> <div><div>Bankrate</div><div>buildout</div><div>FUNNEL</div><div>findspace</div><div>An MRI Software Company</div></div> <div>CRE MARKETPLACES</div> <div><div>Ten-X</div><div>CREXI</div><div>BuildingBITS</div></div>	
<div>ASSET UTILIZATION</div> <div>CO-LIVING & HOMESHARING</div> <div><div>BUNGALOW</div><div>kasa</div><div>NATIIVO</div><div>PadSplit</div><div>GREAT JONES</div><div>A ROOFSTOCK COMPANY</div><div>placemakr</div></div>	<div>RESIDENTIAL</div> <div><div>truehold</div><div>splest</div><div>TRIPALINK</div><div>Culdesac</div><div>Vacatia</div><div>ility</div></div>	<div>COWORKING & FLEXIBLE WORKSPACE</div> <div><div>EXPANSIVE workspace</div><div>deskpass</div><div>wesmartPark</div><div>TENANTBASE</div><div>saltbox</div><div>BOND COLLECTIVE</div><div>THE WING</div></div>	<div>EVENT SPACE</div> <div><div>LYRIC</div><div>Guesty</div><div>PEEP SPACE</div><div>momentus technologies</div><div>convene</div></div> <div>INDUSTRIAL</div> <div><div>go for</div><div>metropolis</div><div>Aura Air</div><div>LoopNet</div><div>Flowspace</div></div> <div>RETAIL</div> <div><div>CloudKitchens</div><div>b8ta</div></div>

CONSTRUCTION, MAINTENANCE & PROJECT MANAGEMENT

CONSTRUCTION ROBOTS

BUILT
ROBOTICS

CANVAS

DUSTY
ROBOTICS

Mighty
Buildings™

MODULAR
CONSTRUCTION

BOXBL
welcome home



Branch
TECHNOLOGY

CONNECT HOMES

bluHOMES

Factory_OS™

abodu

PROJECT MANAGEMENT

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Bilton **Urbint** **SUPER** **VERSATILE**

constrafor **Bentley** **ergeon**

OnsiteIQ **BUILDOTS** **BEAMUP**

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Higharc

COVE

Matterport

PROSPECT
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VTS

sms assist

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SMARTRENT **daisy**

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PROPERTY MANAGEMENT

REALPAGE

Q & A

Last year saw a significant contraction in private capital dealmaking in proptech, in a continued plateau relative to heights a few years prior. However, there seemed to be a sense of adaptation in the market – what is the mood going into 2025?

Kaufman Gafter: That sense of adaptation was evident throughout the year, following the downturn of dealmaking in 2023. The decline that persisted for the past couple of years was not entirely unexpected, given the degree of shocks in general financial markets and the broader-geopolitical and economic turbulence. Inflationary pressures have also played a significant role influencing capital costs and shaping investors sentiment, which had further emphasized the need of financial discipline. Assuming a world of capital costs that are still multiple basis points higher than the preceding 12-15 years, we will continue to witness financial discipline this year, supporting investments particularly in AI, construction Tech and sustainability.

Korhn: As noted in PitchBook datasets, there were some pockets where proptech companies can still command relatively healthily sized infusions of capital. Those companies tended to be the ones that had the best fundamentals either going into or after a period of adjustment. Some companies maybe raised flat rounds, or even took a cut to valuations – but they did what had to be done. The question now is with a bit of relief on the horizon in likely rate cuts, even if they are marginal, what does that do to shifting capex and opex forecasts and allow for a bit of flex that could be devoted to growth?

Coiley: Any bit of relief is useful, as anyone in the industry can tell you. As interest rates have come down, even if marginally, that allows for evolutions in cash flow projections for real estate players like landlords, asset managers, etc. IRR projections get a bit of breathing room, too. What that all boils down to are some key questions for the proptech startups and investors that did the hard work to retrench their businesses in the past few years, namely, what do we want to do with this flex, and what happens if it remains intact but other types of shocks pop up in 2025?

What types of adaptations do you think were most critical?

Ramirez: Any type of period like the post-early 2022 adjustment - that remains ongoing – can end up being useful. Startups across the board were forced to shift from a “growth at all costs” mindset to one focused on shoring up unit economics and efficient growth. Unfortunately, some companies found out that wasn’t possible, or wouldn’t be possible for long, in a higher rate environment. Others found out they were really on to something, and are being pulled into the market. It now feels like we’re into a second wave of change, where some founders are also recognizing that consolidation may be the way to go. We’re seeing a consistent wave of smaller M&A by companies



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Chris Coiley
Valley Bank
Commercial Real Estate
Regional President of NJ and PA



Neal Kapur
Managing Partner
VLY Ventures Digital Banking

Q & A

with strong balance sheets that are able to creep towards meaningful economies of scale and distribution advantages.

Schwarzman: Getting tactical in times when capital raises can be more challenging can be a relief when embraced with the right mindset, because it involves focusing on the nuts and bolts of daily business flows. For example: Where do we have unexpected spend, and why? What is the most tedious, time-consuming part of your workflow and how can we solve it with our extant tech stack in a creative way rather than throwing headcount and/or dollars at the problem? You can often stretch dollars more than you think by restructuring hiring plans but adjusting goals so as to not demoralize people, as well as find additional flex in compensation by getting creative with different types.

Kapur: The most important adaptations were in mindset and preparation. Everyone recognized that the real estate market and other areas where many types of clients resided would experience knock-on effects as capital costs mounted. That was the zeitgeist throughout 2022 – raise now and begin to batten down the hatches. Now, however, if 2023 was a period of adaptation, 2024 was more about gearing up to cautiously embrace more growth without overstretching the financials and teams that were adjusted and rendered more robust throughout the previous years. Looking to 2025 now, that will be the balance teams will have to strike – how can we raise for the next phase of growth but more importantly, what does that phase look like, in every facet?

Which proptech segments may see unexpectedly healthy growth heading into 2025?

Coiley: Any recovery in general private markets dealmaking will lift all tides, so to speak, but I still think that it will be largely a matter of outliers. Which companies improved their operating fundamentals the most in the past two years of challenging circumstances? Which have balanced that work with investment in growth to a sufficient degree that they are poised for growth? If I had to name one specific subsegment, it

likely would be companies that have done the most legwork to leverage AI into domains where it is most useful and ROI is balanced against its potential to incur additional costs. For example, property management platforms may be able to trim significantly on back-office, reporting, analytical and other routine tasks with AI application suites.

Schwarzman: There is a sweet spot between the upfront cost and ambition of certain tools like AR/VR modeling, advanced valuation AI-powered packages, etc. and the reconciliation with the fact that the market may still well be relatively challenging for the entirety of 2025. Basically, a proptech company with an ambitious, innovative new tool could likely still raise, but they will be one of the outliers that drives up a significant valuation gain if they have already garnered traction in concrete financials, such as a few key new major customer signings, etc.

Kapur: Expanding on the AI-powered packages mention above, the rise of agents may not be quite as swift as some expect in some areas, but much faster in others as companies that deploy the tools see ROI quickly. For example, customer service chatbots are increasingly expected by users in some functions, but then being able to correctly identify when to handle an escalated issue to prevent frustration when someone wants to talk to a human will be critical for, say, property management firms. For internal usage, however, it'll be much easier to test, deploy, and iterate as needed on AI solutions to common tech stack problems, like proofing, manual entries, calculations and the like.



Q & A



Ramirez: Given how expensive housing is and looks set to be, any platform that can help owners either achieve more liquidity with their holdings without sacrificing outright ownership, or also ease the costs of maintenance, operations and the like will be very well placed in 2025, as they have been before a correction. We also expect voice AI and AI agents to see rapid adoption as a lot of their applications replace roles that owners and managers have had a tough time hiring and retaining people for. When you can onboard AI seamlessly and not worry about downtime or consistency, financially motivated sponsors are going to give it a look. We're still in the early days, but results we've seen have been really impressive.

What other risks or opportunities remain underrated in your view?

Korhn: In what may be a contrarian viewpoint, I don't think that central banks will slash rates extensively this year or the next, but they also won't raise them anymore. In essence, we are in a new normal of rates being marginally higher, but without further shocks to come. That should be good news for the proptech and real estate markets, as more certainty will allow greater confidence going forward in striking deals, especially given the longer-term factors at play in coming years as workplace occupancy rates evolve and shift.

Schwarzman: It's impossible to predict any geopolitical or economic shocks that could slow the market, but what I think is underrated as an opportunity is the creativity that players are embracing in the housing market, especially in the realms of expanding supply and increasing energy efficiency at the same time

Q & A

with segments like modular construction, smart home energy monitoring and solar and battery packs built in from the start. That way, homeowners and operators can help reduce projected lifetime costs and help justify construction.

Coiley: AI will empower a lot of the background work in mortgage lending, as they continue to be deployed with proper oversight. Automated underwriting, personalized loan recommendations, predictive analytics, and online platforms that can act as central repositories and clearinghouses will help expedite workloads too.

Kaufman Gafter: I think that there is an opportunity to empower all decision makers in real estate forecasting and lending by leveraging advanced data and analytics, including AI-driven applications. These tools can help mitigate the high costs and uncertainties that persist in large-scale construction projects, spanning both commercial and residential segments. The democratization of data, combined with access to a broader range of insights, can support more informed decision-making on critical issues such as creditworthiness and insurability risk.

Ramirez: VC dynamics are fluid, but we're consistently seeing big, late-stage deals attracting outsized capital flows relative to the earlier stages. Early-stage investing is as much an art as it is science, but it feels like the bars have gotten so high that some great founders and opportunities are being looked over. For smaller investors, that can be a good thing – an outcome overlooked for potentially being too small for a mega-fund can still be a multiple-fund returner for a VC.

Kapur: In digital banking, embedded finance will be an increasingly accelerated trend as consumers grow to expect if not demand easier workflows and unified experiences. As part of that, security and compliance will be critical, especially as regulators are likely to heighten scrutiny in the next few years of such solutions.



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With all the ups and downs of the market it can sometimes be easy to lose sight of just how large and diverse the opportunity is to apply technology and tech-enabled businesses models within the real estate industry.

Conclusion

2025 appears full of potential volatility—but have proptech companies adapted?

Much of the market data presented in this report was likely no surprise to proptech players, based on their own experiences and anecdotal data. Dealmaking conditions have been challenging, for both investors and those looking to fundraise, while operators at companies have remained focused on working through the business challenges presented by both the aftershocks of the COVID-19 pandemic and its shifts to occupancy as well as the rapid increase in interest rates by multiple central banks worldwide, among other factors.

The question is, given that process of adaptation, are proptech players more prepared for the volatility 2025 could bring? Arguably, yes. Regardless of the typical regulatory whipsaws that have been occurring for the past decade between shifts in political administration, the trend toward sustainability as a tool primarily to cut costs will remain popular. Economic conditions may

remain complex as the impacts of potential tariffs to key inputs, or discouragement for certain sets of foreign investors, will have to be assessed, but firms have already contended with a sluggish fundraising landscape. Occupancy trends may be easing with some major corporations mandating returns to office, but also, landlords and lenders have been working through renegotiations or extensions to arrive at suitable accommodations for debt packages for years now.

In short, the degree of volatility that 2025 may bring for proptech is considerable, but the sector's companies and investors have already weathered such a variety of challenges in the past few years that it is likely investment will even out and any further adaptation is well underway already. It remains to be seen if there will be any increases in dealmaking from the levels of 2024, and this year could well result in similarly subdued tallies, but a plateau—at minimum—is likeliest to be in the offing.



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Methodology



Proptech was defined using a custom mix of keywords and industry verticals within the PitchBook Platform to arrive at five distinct segments: construction, maintenance & renovation, asset utilization, property management, finance & investments, and transaction solutions. Subsegments for each include: construction & maintenance (project management, architecture, design & planning, modular construction, and construction robotics); asset utilization (coworking and flexible workspace, residential, coliving, home-sharing, retail, events, and industrial); property management (residential tenant management, commercial tenant management, building operations & analytics, and security deposit alternatives); finance and investments (investment platforms, commercial lending & financing, mortgage tech, and insurance); and transaction solutions (home buying or selling, agent tech, marketing, data & analytics, and commercial real estate marketplaces). All five of the principal segments were then pooled to arrive at the entire population of companies that were deemed to be proptech and were scanned to remove any duplicate numbers. Each distinct segment was deduped from the other in descending order from largest to smallest, for its individual breakout datasets. PitchBook's standard venture, M&A, and PE methodologies otherwise applied to all transaction types and datasets. The market map had additional segmentation below the five main proptech segments, which were not broken out in terms of datasets but were used to identify relevant, prominent companies within each proptech

subsegment to represent a given subsegment, such as mortgage tech, in the market map. Only completed transactions were included. As proptech within this report has a custom definition based on a curated population of companies, these figures are more accurate and differ from other estimates of proptech financing activity. Corporates were defined as private or public companies, not institutional venture firms. Real estate companies were defined likewise, with their primary industry having to be tagged as real estate within PitchBook—based on a group of related industry codes. Other nontraditional investor types included hedge funds, sovereign wealth funds, and asset managers.

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