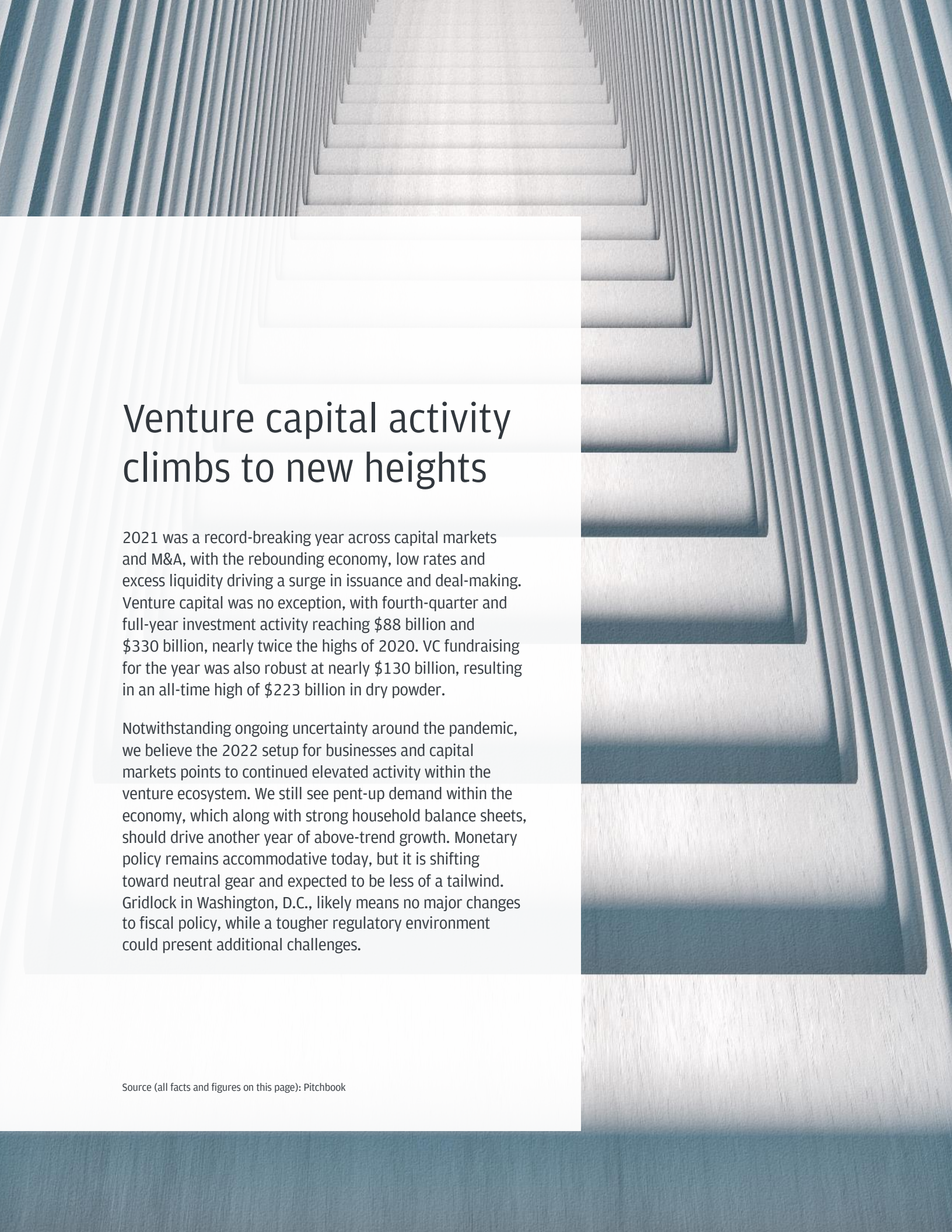


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TRENDS IN VENTURE CAPITAL

Q4 2021 Update

By Ginger Chambless, Head of Research, Commercial Banking



Venture capital activity climbs to new heights

2021 was a record-breaking year across capital markets and M&A, with the rebounding economy, low rates and excess liquidity driving a surge in issuance and deal-making. Venture capital was no exception, with fourth-quarter and full-year investment activity reaching \$88 billion and \$330 billion, nearly twice the highs of 2020. VC fundraising for the year was also robust at nearly \$130 billion, resulting in an all-time high of \$223 billion in dry powder.

Notwithstanding ongoing uncertainty around the pandemic, we believe the 2022 setup for businesses and capital markets points to continued elevated activity within the venture ecosystem. We still see pent-up demand within the economy, which along with strong household balance sheets, should drive another year of above-trend growth. Monetary policy remains accommodative today, but it is shifting toward neutral gear and expected to be less of a tailwind. Gridlock in Washington, D.C., likely means no major changes to fiscal policy, while a tougher regulatory environment could present additional challenges.

Key insights

Venture capital investment activity climbed to \$330 billion in 2021, a new record by almost double. The ongoing U.S. economic recovery, accommodative monetary and fiscal policies, and strong capital markets backdrop all contributed to the heightened activity over the past year.

We believe the 2022 setup remains positive for the venture ecosystem as many of the drivers of elevated activity in the past year remain intact today. We anticipate another year of above-trend economic growth driven by robust consumer demand, replenishment of depleted inventories and still accommodative monetary policy.

We expect inflation and supply chain issues to fade as the year goes on, though labor shortages and wage pressures could linger. Importantly, we do not presume rising interest rates will derail sustainable growth or materially dampen consumer demand or capital markets activity.

Venture capital “dry powder” stands at an all-time high of \$223 billion, as strong venture returns drove a robust fundraising environment for private capital. We see this as supportive of ongoing demand for venture investment opportunities.

The capital raising and exit environment in 2021 was unprecedented, with Equity Private Placements (EPP), IPO and M&A volumes hitting new highs by a wide margin. The rise of Special Purpose Acquisition Companies (SPACs) also garnered a lot of attention.

Private capital markets continue to increase in volume, led by “a surge in equity private placements in 2021,” states Keith Canton, JPMorgan’s Global Head of Private Capital Markets. The EPP market rose a significant 160% last year to \$277 billion. Canton notes that favorable public company valuations during most of 2021 provided a constructive backdrop for framing private company valuations. Looking forward, its likely private companies will continue to stay private longer given increased public market volatility. We believe that VC-backed issuers may raise capital opportunistically prior to IPO to begin building public shareholder bases and limit overhang from existing shareholders. And we can see an expanding universe of investors looking for exposure to the equity private placement asset class.

On the IPO market, for the full year, 309 companies went public for \$152 billion in proceeds. This was up 79% from 2020 and 58% ahead of the prior record set in 2000. **Michael Millman, JPMorgan’s Global Head of Equity Capital Markets,** saw astounding depth and breadth in the IPO markets in 2021 and noted that more founder-led companies went public than ever

before. He also noted a very discerning post-IPO trading environment. For VC-backed companies, IPOs represented 18% of 2021 exit activity and 88% of VC exit transaction values.

Turning to M&A, announced global volume in 2021 shattered the previous full year record (up 28% vs. 2007). **Anu Aiyengar, JPMorgan’s Global Co-head of M&A Advisory,** said “action was in the \$1 billion-\$10 billion deal size range, comprising ~50% of deal value volumes, and the number of these deals was up 42% from its prior record.” M&A involving private targets rose to its highest level ever, accounting for 54% of global M&A deal value volumes in 2021, up from 45% of total volumes in 2020 and 36% in 2019. VC-backed exits via acquisition represented 62% of transactions and 10% of proceeds.

The rise of Special Purpose Acquisition Companies (SPACs) was notable in both IPOs and M&A this year, representing ~50% of the overall IPO market and ~10% of M&A volumes. For the full year, 602 SPAC IPOs priced for \$162 billion in proceeds, up +95% YoY. This exceeded the cumulative issuance over the prior 11 years. SPAC merger activity also accelerated meaningfully with 248 SPAC mergers announced for \$600 billion of announced firm value (186 SPAC mergers closed in 2021). Meanwhile, the clock is ticking on over 550 SPACs with ~\$150 billion of capital raised looking for M&A.

The trend toward larger deals was notable in venture capital and IPOs. VC-mega deals, sized \$100 million or higher, represented 58% of all investment activity in 2021. We also saw more jumbo IPOs; there were 29 \$1 billion+ IPOs in 2021, the most ever in a single year, topping the previous year’s record of 22.

The technology sector was the center of the action across venture capital, IPOs and M&A. Most pronounced in VC, software represented 37% of deal activity, with the more broadly defined tech sector making up over 80%. In the IPO market, the tech sector made up 46% of proceeds, with \$70 billion raised in 2021. And in M&A, tech was involved in nearly one-third of North America transactions.

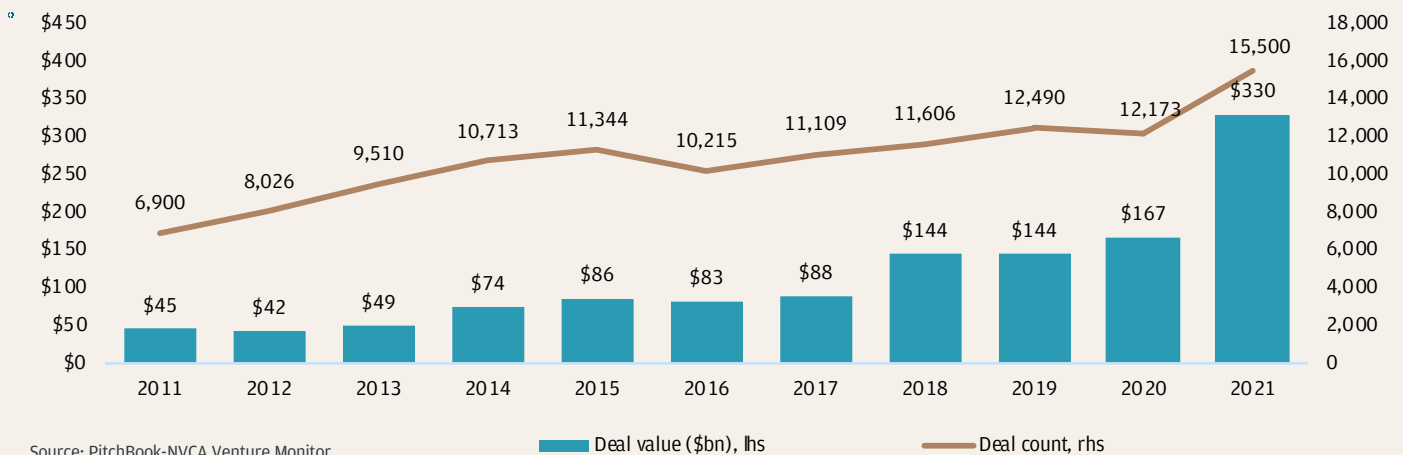
We are also watching trends in the venture capital ecosystem involving female founders and investors, as well as gender diversity in startup boardrooms. While fallout from COVID-19 was a more pronounced setback for venture investments in female-founded companies during much of 2020, some of that lost ground was recovered in 2021. **Pamela Aldsworth, Head of VC Coverage for JPMorgan,** has contributed to important work to help understand trends in startup boardrooms in [Board diversity: Is it really improving for women?](#)

Source (all facts and figures on this page): Pitchbook, Dealogic, Bloomberg

Venture capital activity climbed to new heights in 2021

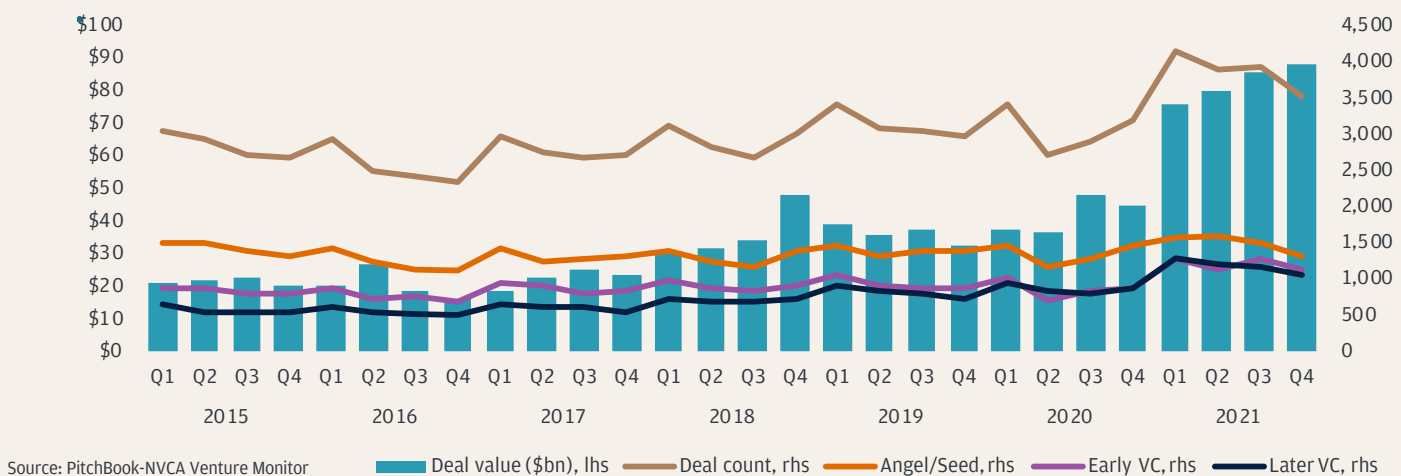
Venture capital activity climbed to new heights in 2021, with \$330 billion invested across 15,500 deals. The year-over-year increase of 98% in investment activity exceeded the 27% rise in deal count, reflecting the significant trend toward larger deals. Mega-rounds, or deals exceeding \$100 million, more than doubled in 2021, making up 58% of VC investment dollars for the year.

Venture Capital Deal Value (\$) and Count (#), Annual



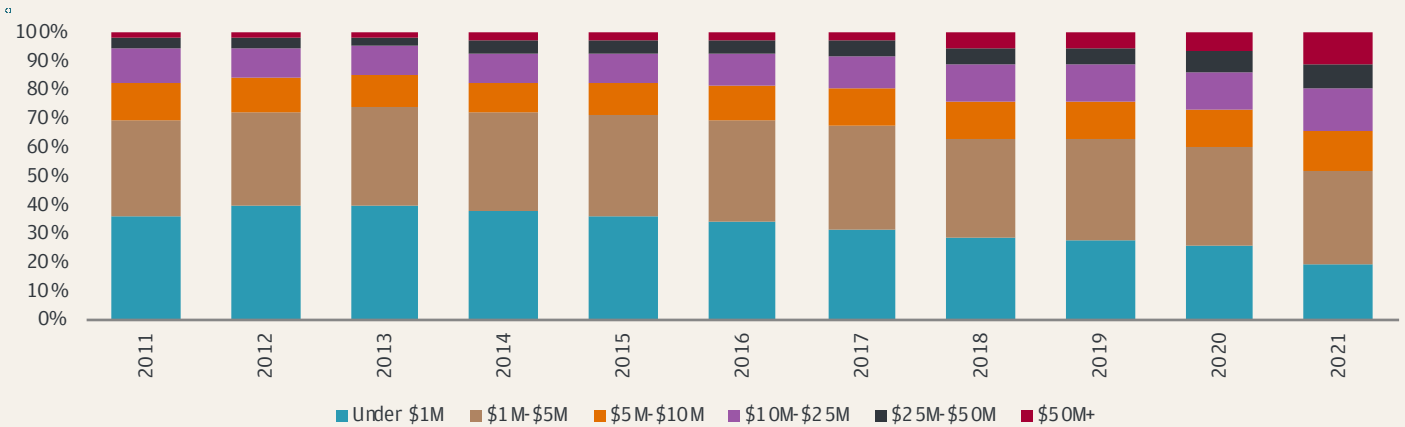
Each quarter of 2021 marked a new quarterly record for VC investment activity in terms of dollars. Fourth quarter 2021 VC investments were up 3% sequentially and up 96% from the year-ago period.

Venture Capital Deal Value (\$) and Count (#), Quarterly



The trend toward larger deals continued in 2021. Investment rounds over \$50 million increased to 10% of VC deals in 2021. This was up notably from 6% in 2020 and 3% in 2017. Similarly, the incidence of rounds under \$1 million has declined to 16% of deals in 2021 from 22% in 2020 and 28% in 2017.

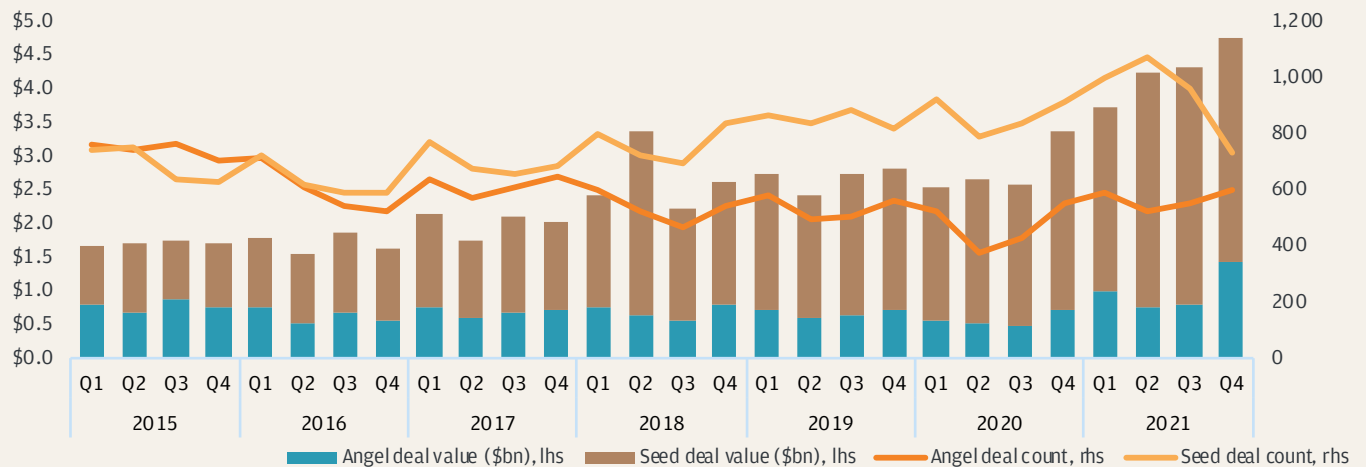
Percent of Total Venture Capital Deals (#) by Size, Annual



Source: PitchBook-NVCA Venture Monitor

The angel/seed stage saw a notable step up in activity in 2021, after three years of relatively stable performance. Each quarter of 2021 marked a new quarterly record, resulting in an annual record of \$17 billion, up 53% from full-year 2020. Angel deal value reached \$4 billion for full-year 2021, up 74% year over year. Seed stage deal value reached \$13.3 billion, up 48% from prior year.

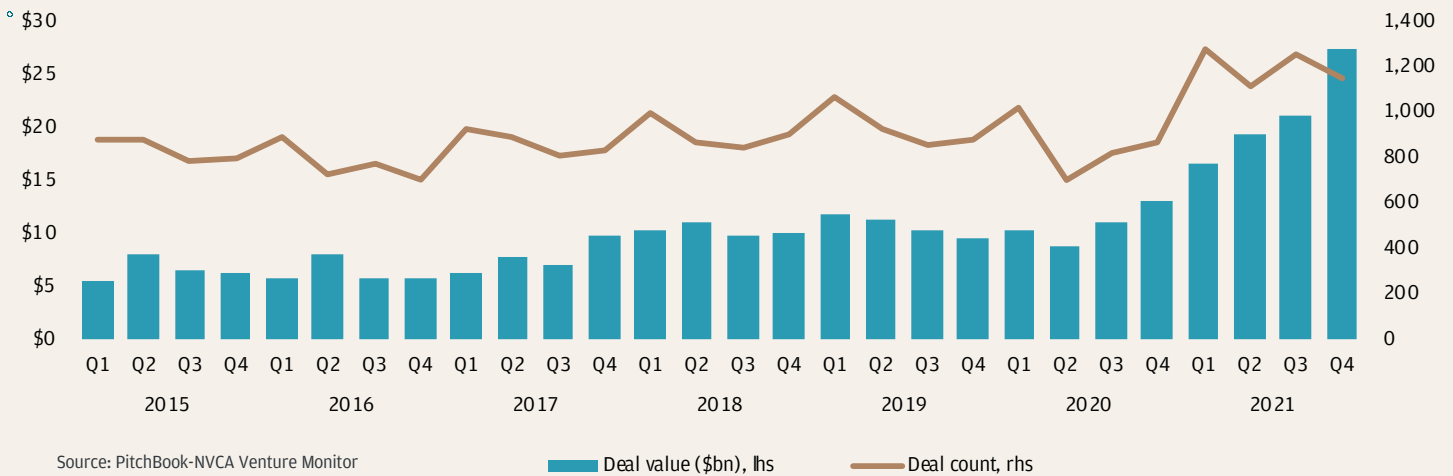
Angel/Seed Stage Venture Capital Deal value (\$) and Count (#), Quarterly



Source: PitchBook-NVCA Venture Monitor

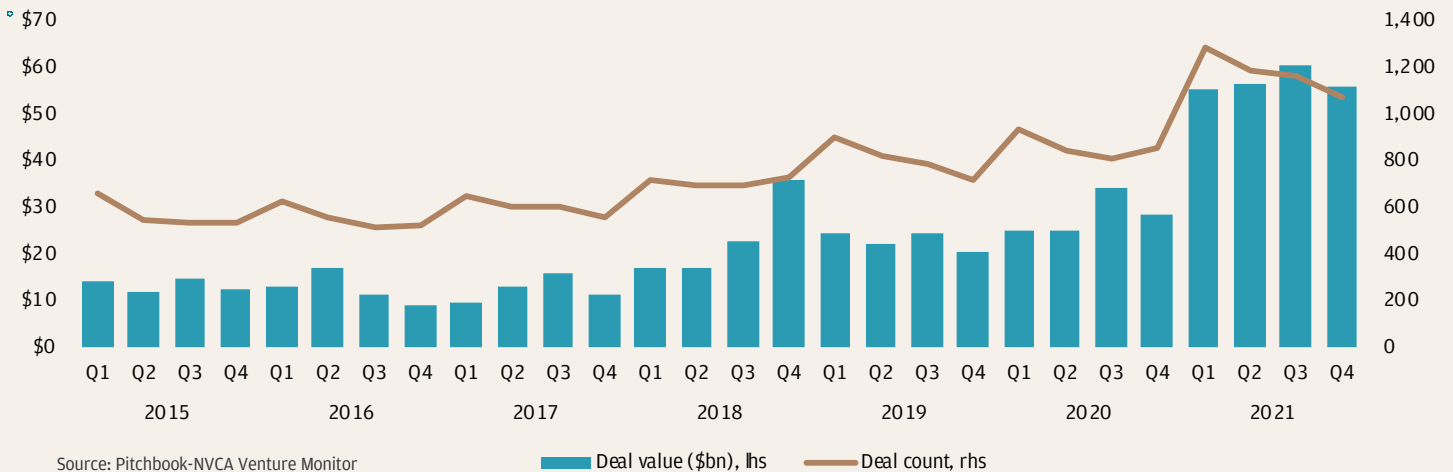
Early-stage investment activity accelerated into year-end, with \$27 billion of deals. On a full-year basis, early-stage investment activity totaled \$84 billion, up 97% from prior year—which was the previous annual record. Deal counts rose 41%, the largest increase among investment stages.

Early-stage Venture Capital Deal Value (\$) and Count (#), Quarterly



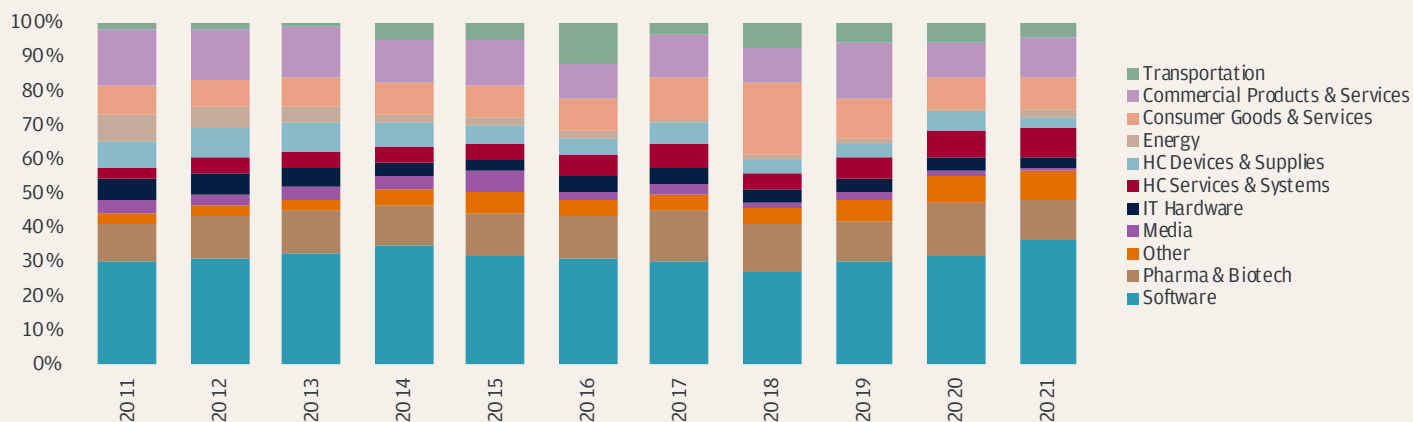
Though third quarter 2021 marked the quarterly peak for late-stage venture investments at \$60 billion, activity remained heightened in the fourth quarter at \$56 billion. The full-year tally of \$228 billion was up 103% from 2020 and represented 69% of all VC investment activity in 2021. Late-stage deal counts rose 37% to 4,700 for the full year.

Late-Stage Venture Capital Deal Value (\$) and Count (#), Quarterly



Technology—and software, in particular—continued its run as the most active sector for VC investing in 2021, representing 37% of deal values, or \$121 billion. Commercial products and services garnered the second-largest amount of venture capital dollars in 2021 at \$39 billion, followed by pharmaceuticals and biotechnology at just under \$38 billion.

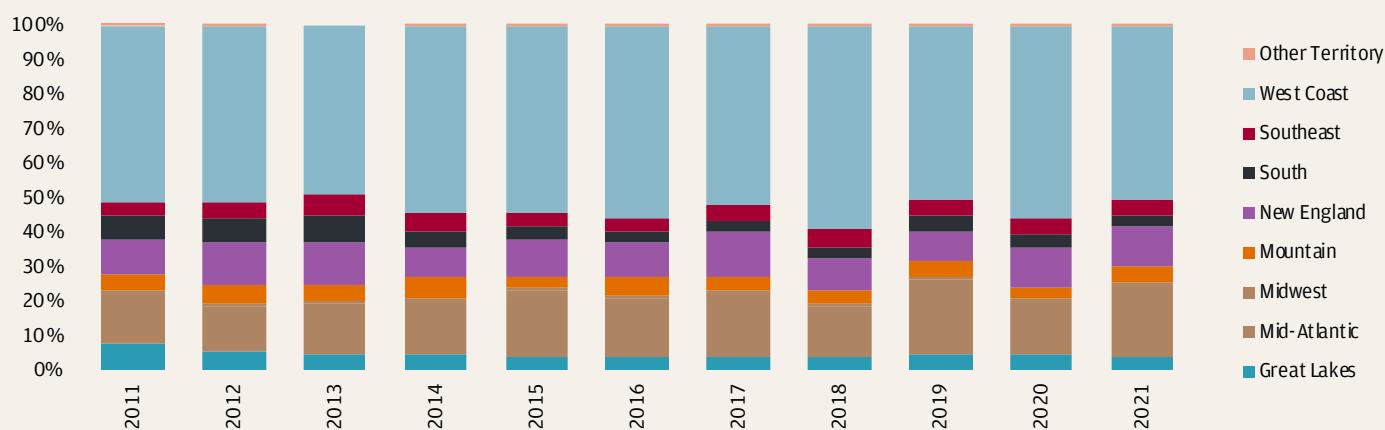
Venture Capital Deal Value (\$) and Count (#) by Sector, Annual



Source: PitchBook-NVCA Venture Monitor

We saw only a slight shift in VC deal activity by region within the U.S. in 2021, with the West Coast continuing to dominate the landscape at 51% vs. 56% of deal activity in the prior year. Among the other regions, the Mid-Atlantic saw the largest uptick in activity to \$69 billion in 2021 vs. \$26 billion in 2020.

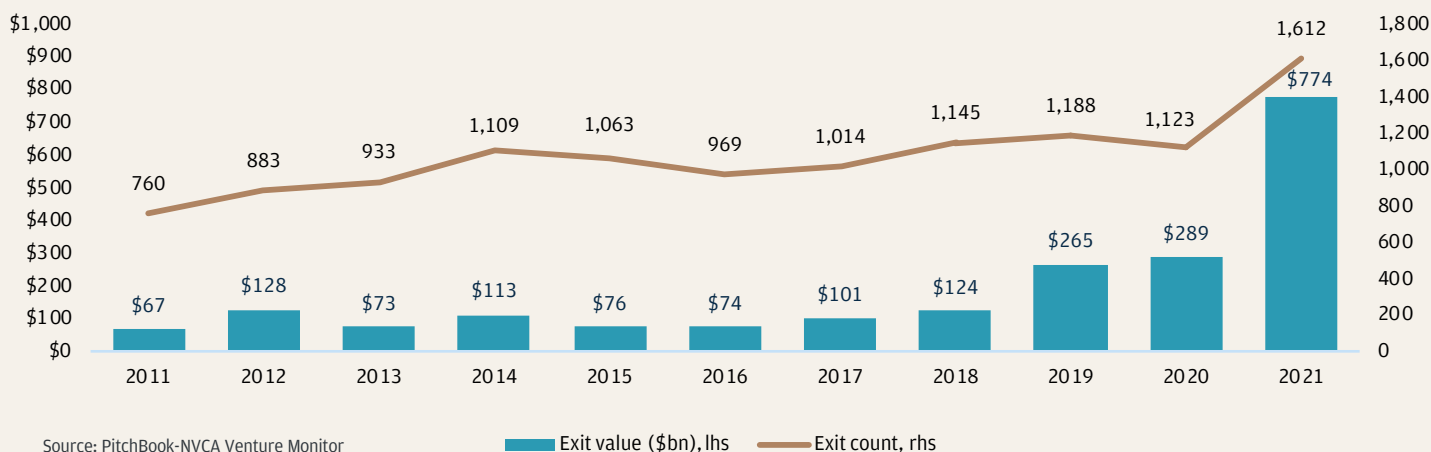
Venture Capital Deal Value (\$) and Count (#) by Region, Annual



Source: PitchBook-NVCA Venture Monitor

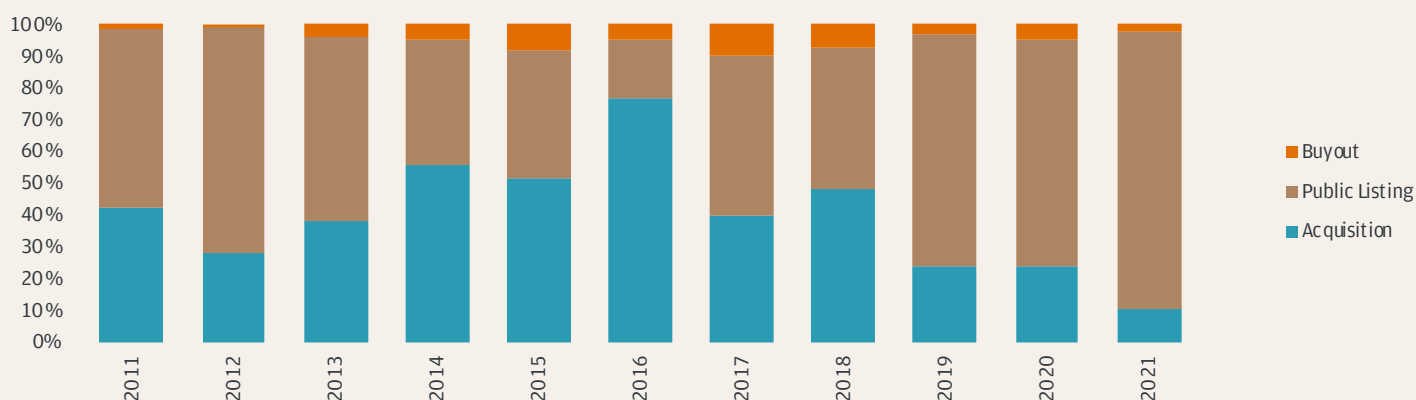
The VC exit environment was the best ever in 2021, reflecting the wide-open IPO market and record M&A volumes, driven in part by the rise of SPACs. VC aggregate exit values were up by more than 2.5x the prior year to \$774 billion.

Venture Capital Exit Activity \$ and #, Annual



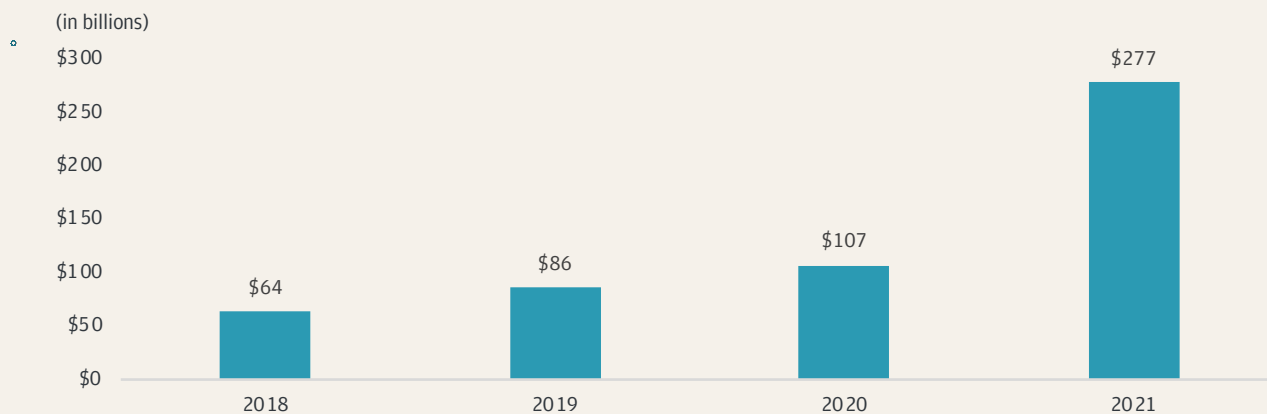
Venture capital exits via IPO represented 88% of proceeds raised in 2021, up from about 72% in 2020. IPOs represented 18% of all VC exits in 2021, up from 12% in 2020. Exit via acquisition represented 62% of transactions in 2021 and 10% of proceeds.

Venture Capital Exit Activity (% of \$) by Type, Annual



Private capital markets continue to increase in volume, representing an important source of capital to later stage VC-backed companies. Equity private placements reached new record volumes of \$277 billion in 2021, up 160% year over year.

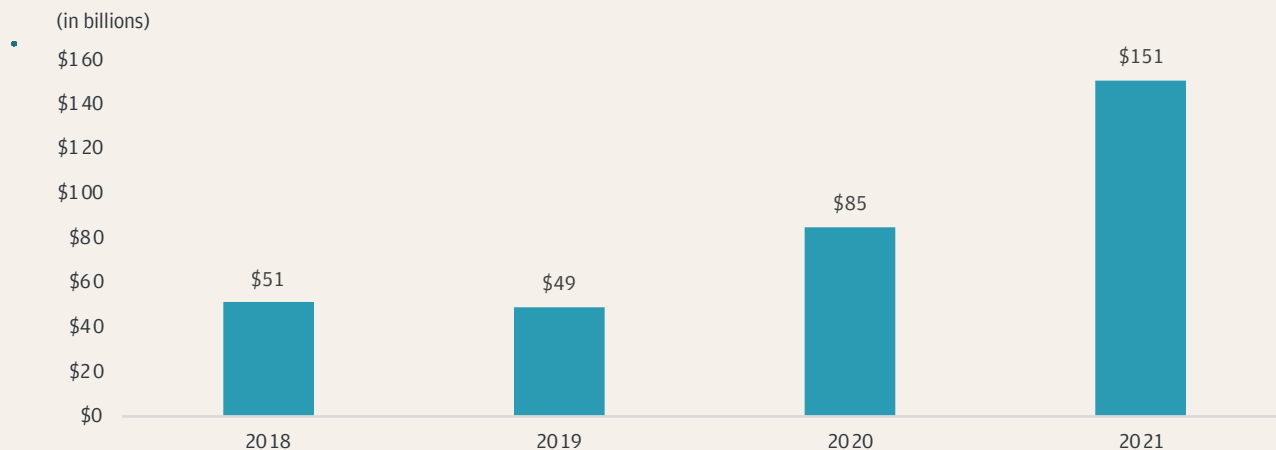
Equity Private Placements



Source: Pitchbook. Note: Excludes deals less than \$50mn.

IPO market conditions were very strong in 2021. Over 300 issuers raised \$151 billion, which was 79% above 2020 IPO volumes and 58% above the prior record in 2000. Pricing dynamics were quite favorable, with 85% of IPOs priced within or above their expected price range. In addition, there were 29 jumbo IPOs (\$1 billion+) in 2021, above the prior peak of 22 in 2020. We saw more founder-led IPOs in 2021 than ever before.

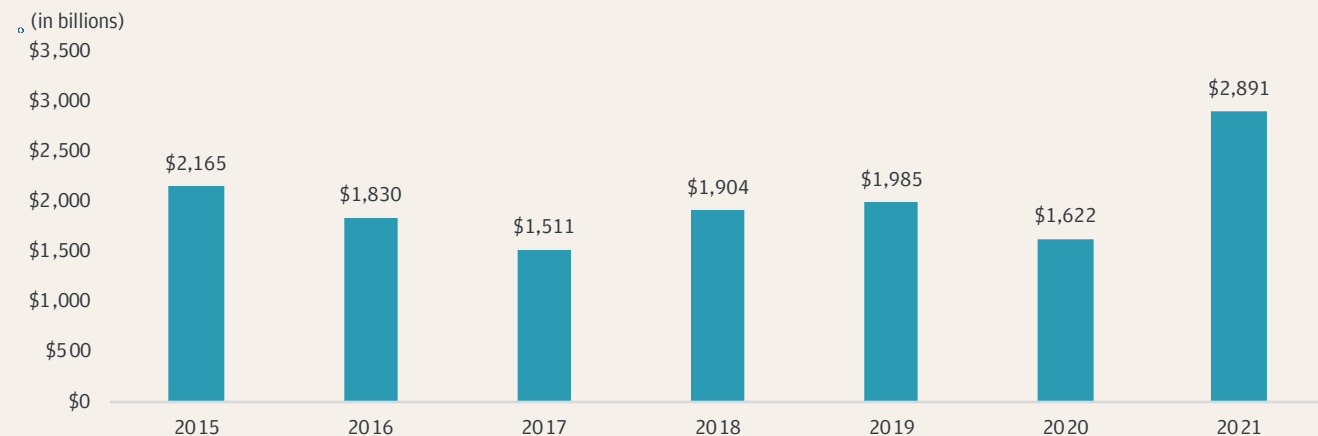
IPO Volumes



Source: Bloomberg. Note: Excludes SPAC IPOs and deals less than \$50mn.

North America announced M&A volumes shattered previous records in 2021, up 39% vs. previous full-year record volume in 2015 and 69% above the prior five-year average range. The technology sector was most active, reflecting the strategic need for innovation and growth. Also, private companies were increasingly considered as acquisition candidates.

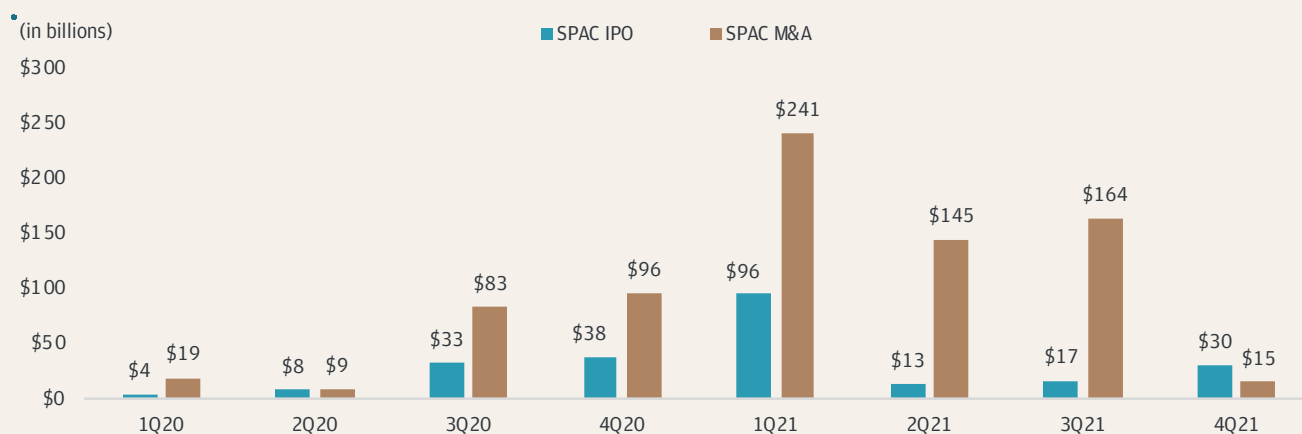
North America M&A Announced Volumes



Source: Dealogic

The rise of Special Purpose Acquisition Companies (SPACs) was notable in both IPOs and M&A last year, representing ~50% of the overall IPO market and 10% of M&A volumes. For the full year, 602 SPAC IPOs priced for \$162 billion in proceeds, up +95% year over year. This exceeded the cumulative issuance over the prior 11 years. SPAC merger activity also accelerated meaningfully with 248 SPAC mergers announced for \$600 billion of announced firm value (186 SPAC mergers closed in 2021). There are now over 550 SPACs with ~\$150 billion of capital raised looking for M&A.

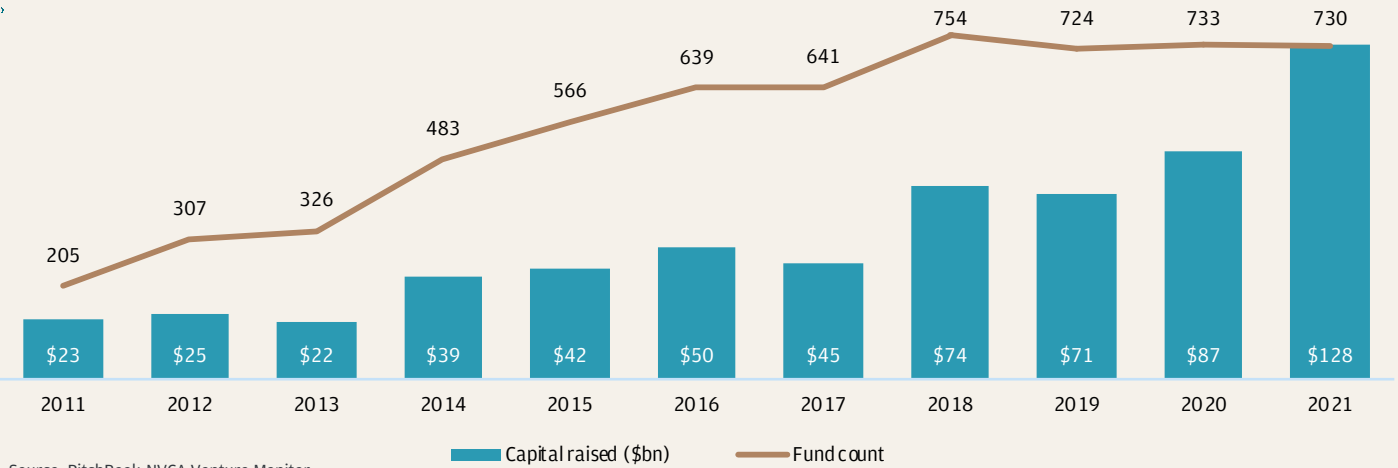
SPAC IPO and M&A Volumes



Source: Dealogic

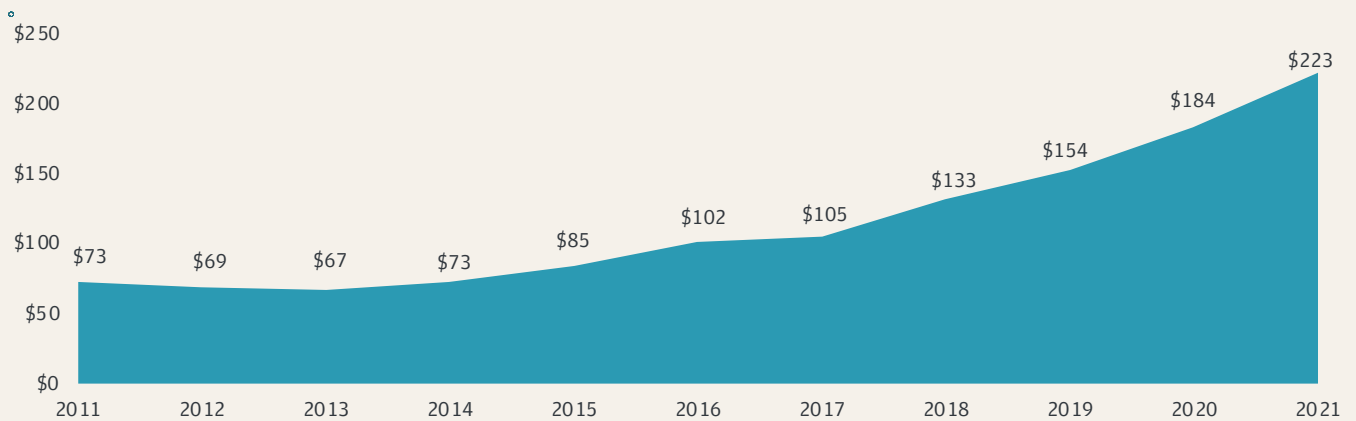
Venture capital fund raising was robust in 2021, exceeding \$100 billion for the first time ever, with \$128 billion raised across 730 funds.

Venture Capital Fund Raising in \$ and Fund Count, Annual



The strong fundraising environment has contributed to the accumulation of venture capital “dry powder.” At year-end 2021, VC funds raised but not yet deployed stood at \$223 billion, more than double the level five years ago.

Venture Capital Cumulative Dry Powder (\$bn)



Trends in Venture Capital:

4Q 2021 Update

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