Global Corporate Venturing

June 2021

Fighting back against covid

The importance of the healthcare sector is clearer than ever

South Africa's innovation sector

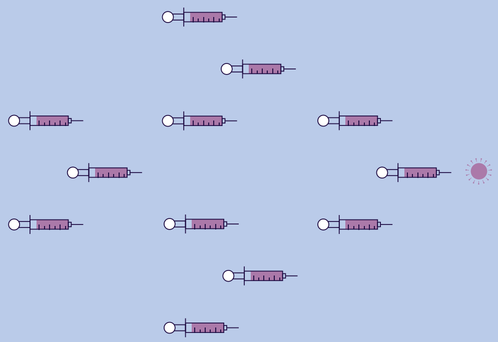
ESG is vital to spinouts

Deal volume and dollars up in May

Contents

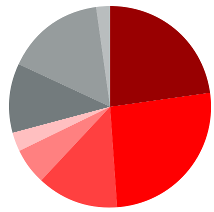
The importance of the pharmaceutical industry to life as we know it became crystal clear during the pandemic, and it was innovative ways of working and thinking that drove the early deployment of vaccines.

As Kaloyan Andonov's feature shows, the tipping point of the pandemic took place against a backdrop of change in the sector, with digitisation and telemedicine only accelerated by the crisis.



If the respective CVC unit becomes known as an investor willing to "overpay", other VC funds may avoid sharing dealflow

Patrick Flesner and Stephan Bank



Lisa Smith

Global Impact Venturing

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Deals in May

Check out the Global Healthcare Council quarterly supplement, with comments from Cleveland Clinic and B Cap.

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Editorial

Learn from the best

- David Swensen revolutionised endowment investing
- Swensen taught generations of investors
- Demand for returns is now driving direct investment

By James Mawson
Editor-in-chief

"Then what makes a beautiful human being? Is it not the presence of human excellence? Young friend, if you wish to be beautiful, then work diligently at human excellence. And what is that? Observe those whom you praise without prejudice."

These words from Epictetus' Discourses could have been written more than two thousand years ago with David Swensen, head of Yale University's $31.2bn endowment, in mind.

Swensen's great insight from joining Yale in 1985 was that investors paid a premium for liquidity. This allowed him and other long-term investors to reap better returns – an average of 12.4% a year for the three decades to mid-2020 – by moving more heavily into venture capital and other alternative investments.

Almost a quarter of Yale's endowment, so nearly $8bn, is in VC. But as Swensen led other investors into private capital markets, so they have started to blur with public markets for liquidity.

This quarter, Singapore state-owned Temasek and mutual fund manager BlackRock set up Decarbonization Partners as a climate-focused venture fund and committed an initial $600m. It aims to raise a total of $1bn with input from external institutional investors. This asset management strategy of building VC products to appeal to investors is related but separate from the strategic financial technology interest.

As the secondaries market matures, this encourages further the flow of capital from mutual and hedge funds as well as the traditional endowments and family offices, which has made private markets effectively as deep for new issuance as public stock markets with a record $125bn of VC deals in the first quarter. Corporations and universities had traditionally partaken through their pension and endowment funds but the search for returns as well as strategic imperative is now driving more direct investment.

Hence the drive for corporate and university venture funds to invest directly in startups as well as commit to VC funds. But to do this well requires learning from best.

Swensen was a natural teacher, through his book, Pioneering Portfolio Management: An Unconventional Approach to Institutional Investment, and teaching generations of investors, such as MIT's Seth Alexander, Princeton's Andrew Golden and Lei Zhang, the founder of the Asian private equity giant Hillhouse Capital Group, the Financial Times noted in its obituary of Swensen, who passed away last month at 67 of cancer.

For those direct investors navigating the now more liquid private investment world having other teachers steeped in decades of insights is a gift.

The demand for GCV Institute courses as well as the appetite for collaboration through the Global Healthcare Council (see special quarterly supplement), among others run by CVCs for CVCs, indicate the hunger and support from those in the community as well as the parent companies to learn from the best.

The Global Corporate Venturing Digital Forum 4.0 is an online conference and entrepreneur-investor discussion on 27 July. Register here.

News

PayPal pitches in $50m for diverse venture capital

> Qualcomm oversees $45m IoT fund
> Legend Capital lets in $270m for fund
> Alteryx sticks $50m in corporate venturing fund

By James Mawson, Robert Lavine, Thierry Heles, Liwen-Edison Fu and Jordan Williams

Digital payment services provider PayPal has committed an additional $50m to 11 black and Latinx-led venture capital funds, it revealed last month.

The funds include those managed by Aperture Venture Capital, Collab Capital, Interlace Ventures, Kapor Capital, MaC Venture Capital, Noemis Ventures, Seae Ventures and SV Latam Capital. The corporate has also backed three undisclosed additional funds.

Paypal had initially committed $50m to eight black and Latinx-led VC funds in October 2020. The commitments are part of a $535m PayPal initiative to support black and minority-owned businesses and communities in the United States.

OpenAI ropes in Microsoft for $100m fund

US-headquartered artificial intelligence (AI) researcher and technology developer OpenAI has formed a $100m corporate venture capital (CVC) vehicle to make early-stage strategic investments.

OpenAI Startup Fund will provide funding for startups developing technology which will use AI in socially responsible areas such as healthcare, education or climate change, in addition to products that harness AI to improve productivity.

The fund will be managed by OpenAI but it has recruited several external backers as limited partners (LPs). They include software producer Microsoft, which agreed in mid-2019 to invest $1bn in the company.

Portfolio companies will be able to access future OpenAI systems before they become commercially available and will receive support from the company's staff in addition to credit for Microsoft's cloud services platform, Azure.

Qualcomm oversees $45m IoT fund

Qualcomm Ventures, a corporate venturing arm of chipmaker Qualcomm, has partnered Brazilian Development Bank and VC firm Indicator Capital to launch a R$240m ($45m) Latin America-focused fund backed by corporates.

The Indicator 2 IoT FIP Fund has secured capital commitments from LPs including electronics producers Lenovo and Multilaser, communications technology provider Motorola, financial services firm Banco do Brasil and Telefônica Ventures, on behalf of telecommunications firm Telefónica.

The vehicle, which will be managed by Indicator Capital, also drew commitments from unnamed institutional and corporate investors. It will focus on early-stage, Latin America-based companies that provide goods and services related to internet-of-things technology and connectivity.

Legend Capital lets in $270m for fund

Legend Capital, a China-based VC offshoot of conglomerate Legend Holdings, has closed a healthcare technology-focused vehicle, LC Healthcare Continued Fund I, at $270m.

Accounts managed by alternative investment manager Hamilton Lane and private equity firm Coller Capital co-led the transaction, with participation from unnamed institutional investors.

The capital was secured through secondary financing, which was carried out alongside a transfer of healthcare portfolios of two vintage funds. The new vehicle intends to supply cashflow, help boost financial returns for existing shareholders and provide follow-on funding for portfolio companies.

Founded in 2001, Legend Capital manages VC and private equity deals for Legend Holdings through its dollar and renminbi-

Lenovo has backed an internet-of-things fund

denominated funds with $9bn under management.

Alteryx sticks $50m in corporate venturing fund

US-headquartered analytics automation software producer Alteryx has put aside $50m for a CVC vehicle dubbed Alteryx Ventures.

Alteryx provides software which enables organisations to automate AI and machine learning activities. It floated in a $126m initial public offering in 2017 and has never disclosed any direct or fund investments.

The unit will provide funding for companies developing business-to-business products capable of expanding the company's analytics process automation platform, particularly in areas such as marketing analytics, tax and auditing, personal finance, supply chain management and healthcare software.

White Star closes $50m fund

US-based investment firm White Star Capital has hit the final close of a $50m fund focused on blockchain technology and cryptocurrencies with commitments from video game developer Ubisoft. French state-owned investment bank Bpifrance is also an LP in the Digital Asset Fund, which was initially targeting $30m.

White Star Capital plans to make initial investments of between $500,000 and $3m per deal in 15 to 20 companies primarily located in North America and Europe. It will invest in pre-seed, seed and series A rounds.

The firm is looking at various segments of the digital asset space including cryptocurrency protocols, blockchain infrastructure, financial services and gaming.

7wireVentures sources corporate for fund close

7wireVentures, a digital health-focused VC firm, has raised $150m for the close of its latest Connected Consumer Health Fund, which is backed by several strategic investors from the healthcare and life science sectors.

LPs for the fund included unnamed health plans, healthcare providers, self-insured employers and life sciences companies.

The firm said on its website that its strategic LPs include health insurers Arkansas BlueCross BlueShield, Horizon Blue Cross Blue Shield

Alteryx floated in 2017 and has now set up a CVC vehicle

of New Jersey and Cigna, as well as healthcare providers Spectrum Health, Allina Health, Bon Secours Mercy Health, Memorial Hermann Health System and Rush University Medical Center.

It is unclear whether these corporates are committed to the new fund. They have, however, partnered 7wireVentures through its Connected Consumer Health Coalition.

One Capital 1 hits $147m close

Japan-based software-as-a-service technology-focused VC firm One Capital's corporate-backed One Capital 1 fund reached a ¥16bn ($147m) final close last month.

The fund has added $41.3m from Japanese government-affiliated Organisation for Small and Medium Enterprises and Regional Innovation and unnamed backers from outside Japan including institutional investors, family offices and private investors. Corporates including pharmaceutical firm Eisai, medical fabric products manufacturer Hogy Medical, recruitment portal En-Japan, engineering consultancy Japan Asia Group and business card platform Sansan have contributed to One Capital 1.

Gas utility Saisan's Gas One subsidiary and Z Venture Capital – a vehicle for internet group Z Holdings which had operated as separate corporate venturing units YJ Capital and Line Ventures – are also among the LPs, as are financial services firm Mizuho Bank and Fukuoka Financial Group, the latter through its FFG Venture Business Partners fund.

Ulu ushers in $138m for Fund III

US-based VC firm Ulu Ventures has raised $138m for its third fund from investors including social media firm Twitter and Motley Fool Ventures, the corporate venturing arm of financial advisory service Motley Fool.

University of Rochester and Grinnell College also chipped in, as did financial services firms Bank of America and Goldman Sachs.

The LPs were filled out by seven foundations – of which only John D and Catherine T MacArthur and Harry and Jeanette Weinberg Foundations were named – as well as pension fund Los Angeles Fire and Police Pension, funds of funds including Fairview, Plexo and Illumen Capital, VC firm Norwest Venture Partners and family offices One World Investments and the Kwanza Jones & José E Feliciano Supercharged Initiative.

Founded in 2008, Ulu Ventures has more than $200m under management and focuses on diverse seed-stage developers of enterprise IT software.

Pi Labs lands Embassy Group commitment

Gas utility Saisan is an LP in One Capital 1

Real estate developer Embassy Group has made a capital commitment of undisclosed size to the third fund of UK-based, property technology-focused VC firm Pi Labs.

Other limited partners committed to Pi Labs Fund III include property developer Great Portland Estates, healthcare-focused real estate investment trust Assura, real estate investment manager Patrizia and real estate fund manager Revcap.

Revcap had supplied $3.1m to Pi Labs' third fund in March 2020, after the vehicle held a $23m initial close earlier that month.

PropertyFundsWorld reported Pi Labs was intending to hit a $75m target by the end of 2020, but it is unclear how much total capital the fund has secured.

SoftBank swells Vision Fund 2 to $30bn

Japan-headquartered telecommunications and internet group SoftBank has increased the size of its Vision Fund 2 from $10bn to $30bn, chief financial officer Navneet Govil told Reuters.

The company's original Vision Fund closed at $98.6bn in 2017 with contributions from corporate limited partners and sovereign wealth funds, but it has so far been unable to secure backing for its successor, instead committing the capital itself, though Govil said it is mulling external contributions.

The first Vision Fund booked a $16.8bn net loss for 2019 due to bankruptcies for portfolio companies OneWeb and Brandless, the failure of workspace provider WeWork to successfully float and lacklustre share performance for others such as ride hailing service Uber.

However, the coronavirus pandemic has caused tech stocks in several industries to rocket while also driving the pre-initial public offering (IPO) funding market, leading to a considerable turnaround in the corporate's fortunes.

Huobi hauls up $100m for corporate venturing

China-headquartered cryptocurrency trading platform developer Huobi has established a $100m strategic investment fund, Coindesk has reported.

Founded in 2013, Huobi operates a blockchain-equipped online platform where users can buy and sell digital currencies including Bitcoin, Ethereum and XRP.

Huobi Ventures will make early-stage investments in blockchain-focused companies which can integrate their operations with its parent company's businesses, in addition to decentralised finance (DeFi) projects and merger and acquisition deals.

The unit has reserved $10m of the capital for investments in non-fungible tokens (NFTs) and NFT marketplaces, and it brings together existing subsidiaries including Huobi Eco Fund, Huobi Capital and Huobi DeFi Labs. It will be headed by the company's chief financial officer, Lily Zhang.

Eli Lilly counts up Sixty8 Capital contribution

Sixty8 Capital, a US-based VC firm focused on startups led by underrepresented groups, has reached a $20m first close of its fund with backing from pharmaceutical firm Eli Lilly.

The fund has also secured capital commitments from financial services firms First Internet Bank and Bank of America as well as 50 South Capital, The Indiana Next Level Fund and the Central Indiana Community Foundation.

Sixty8 is industry-agnostic but is concentrating on companies led by founders from underrepresented groups in entrepreneurship, such as women, black and Latinx people and members of the LGBTQ+ community.

The firm will deploy the fund by investing 25 to 30 pre-seed and seed-stage companies with a geographical emphasis on the Midwest region of the US, providing between $250,000 and $500,000 per deal.

BeLab1407 brings $20m to UK universities

The universities of Birmingham, Dundee, Edinburgh and Nottingham have joined forces with drug discovery and development company Evotec and pharmaceutical firm Bristol-Myers Squibb to launch BeLab1407.

Equipped with $20m, BeLab1407 is the latest addition to Evotec's international network of early-stage academic collaborations under the Bridge umbrella, and will focus on drug discovery.

Bridge was launched in 2016 through Lab282 at University of Oxford, with $16m of capital. The institution subsequently added Lab10x in 2019 to focus on digital therapeutics and data-driven drug discovery.

Adam Stoten, chief operating officer at tech transfer office Oxford University Innovation, spearheaded the initiative and in April revealed exclusively to GUV he was joining

Birmingham University has joined forces with other universities and a drug discovery company

Atlassian will host a second product development programme through its incubator

Evotec to expand the roster of partnerships.

Big Idea Ventures closes $50m fund

Singapore-based VC firm Big Idea Ventures has raised $50m for the final close of its New Protein Fund I, from LPs including multiple corporates, DealStreetAsia reported.

France-headquartered cheese producer Le Groupe Bel, Sweden-based vegetable oil and fats provider AAK and Japan-based confectionery manufacturer Meiji all committed to Big Idea's New Protein Fund 1, founder and managing general partner Andrew Ive told DealStreetAsia.

The LPs also included Switzerland-based food production equipment manufacturer Bühler, and US-headquartered meat processing group Tyson Foods.

Big Idea Ventures targets investments in developers of plant-based foods and the infrastructure to support them. It also runs an accelerator scheme in the US, France and its home country.

Atlassian plans second programme for in-house incubator

Australia-based enterprise software producer Atlassian is set to host a second product development programme through its in-house startup incubator, Point A, TechCrunch reported.

Founded in 2002, Atlassian provides a suite of enterprise software products including software development platform Jira and online collaboration platform Confluence.

The unit, which launched in 2019, enables Atlassian's employees to submit ideas about ways to improve the company's products through a competition format. Employees who submit the most successful pitches receive funding, time away from their regular role and coaching from executives.

SAP.io launches Israel-based startup accelerator

SAP.io, the corporate venturing arm of Germany-based enterprise software producer SAP, has partnered digital consultancy Publicis Sapient to launch an accelerator in Israel.

SAP.io Foundry Tel Aviv accelerator has selected seven early-stage startups that are developing tools to help consumer companies boost customer engagement.

Over the course of the three-month programme, SAP and Publicis Sapient will help the companies develop new services for personalised marketing content, product discovery and social engagement.

Juewei and Qiaqia cook up $170m fund

China-based roasted seed and nut provider Qiaqia Food and domestic snack food producer Juewei Food have formed a RMB1.1bn ($170m) industry investment fund, DealStreetAsia has reported, citing a regulatory filing.

Sichuan Chengdu Xinjin Siyiwu Investment will be equipped with almost $100m from Juewei Food's Wangju Capital vehicle, which will take a 58.6% share, while Qiaqia Food is set to provide $9m in return for a 5.45% stake.

The vehicle will invest in companies operating in areas like restaurant chains, snack and condiment brands, pet food producers and developers of technology which can enhance the supply chain. Linzhi Yongchuang Information Technology and Zhejiang Jiyuan Network Technology have also agreed to commit capital to the fund, according to DealStreetAsia.

Raccoon scurries to LaunchPad Fund

E-commerce group Raccoon Holdings, which is based in Japan, has invested ¥100m ($920,000) in LaunchPad Fund, a seed-stage vehicle operated by VC firm Infinity Ventures.

Infinity Ventures has been holding LaunchPad pitch events twice a year at its Infinity Ventures Summit since 2007 in a bid to identify and back early-stage entrepreneurs.

The firm has increased their frequency to four times a year and delegated investment initiatives to the LaunchPad Fund formed in October 2020 with $9.5m of capital.

The corporate intends to increase its startup investment activities and mergers and acquisitions deals through its commitment to LaunchPad Fund.

Ince inches towards second fund

Ince Capital, a China-based VC firm backed by medical researcher and care provider Mayo Clinic, is close to raising up to $500m for a second fund, Bloomberg reported.

The firm raised $352m for its debut fund in late 2019 from LPs including Mayo Clinic and endowment funds from institutions including the University of Pittsburgh, Duke University and Carnegie Mellon, and is targeting $350m to $500m for this vehicle, according to people familiar with the matter.

Gan Jianping and Steven Hu, who had previously been managing directors at VC firm Qiming Venture Partners, co-founded Ince Capital with Paul Keung, a former chief financial officer for online education provider iTutor Group.

People

Bos migrates from M Ventures to Forbion

> Bos will be GP for Growth Opportunities Fund I
> Gilbert launches own firm
> Kossmann moves to In-Q-Tel

By James Mawson, Robert Lavine, Thierry Heles, Liwen-Edison Fu and Jordan Williams

Jasper Bos, the former senior vice-president and managing director at M Ventures, a corporate venturing arm of pharmaceutical group Merck, has been appointed as a general partner at Netherlands-based venture capital firm Forbion.

Bos joined M Ventures, then known as Merck Serono Ventures, in 2009 and led a team of 21 investment professionals.

Bos has been involved in investment activities from seed stage deals to the supervision of four initial public offerings. He has supported investments in more than 50 companies in the technology, biotechnology and life sciences tool sectors.

At Forbion, Bos will serve as a general partner (GP) for the firm's $428m Forbion Growth Opportunities Fund I, which held a final close in April 2021.

Gilbert builds Launchpad with $35m fund

Ryan Gilbert, a former GP at Propel Venture Partners, financial services firm BBVA's VC firm, has started a US-based VC firm called Launchpad Capital.

The firm has raised $35m for its debut fund from nearly 100 limited partners including several financial technology entrepreneurs from the San Francisco Bay Area of California, according to San Francisco Business Times.

Gilbert spent five years at Propel Venture Partners before leaving in April.

Launchpad will focus on pre-seed and seed-stage companies in the financial, insurance and real estate technology sectors, and also plans to participate in late-stage deals through special purpose vehicles and special purpose acquisition companies.

Kossmann leaves Applied Ventures for In-Q-Tel

Jaclyn (Jackie) Kossmann, former senior investment manager at corporate venturing unit Applied Ventures (AV), has joined In-Q-Tel, the strategic investment vehicle for the US government's intelligence community, as an investor.

AV, the corporate venturing arm of US-listed materials engineering technology provider Applied Materials, hired Kossman, a GCV Rising Star 2021 award winner, in 2017.

Kossman closed and exited some of its notable investments in the broader optics and semiconductor sector, according to AV global head Anand Kamannavar when contributing to her Rising Stars award profile in January.

Feature

BAT unveils corporate venture capital arm

> Corporate is investing from its first venture fund
> The first investment was in June 2020
> It is targeting wellbeing and stimulation

By Jordan Williams
Reporter

BAT is vying to become a leader in the on-the-go wellbeing and stimulation space through a new corporate venturing unit that has been quietly investing in the space since last summer.

British American Tobacco (BAT), a UK-headquartered provider of tobacco products, has unveiled its corporate venturing arm, BTomorrow Ventures.

The company started to recruit people to work at its corporate venture capital (CVC) unit towards the end of 2019 before completing its first investment in June 2020.

Following 12 months of investment and preparation, Lisa Smith, the head of BTomorrow Ventures spoke to Global Corporate Venturing about what the unit has been up to behind the scenes, ahead of its official launch this month.

Smith said: "Our corporate is undergoing a massive transformation and having a CVC unit that drives investment is one of the key foundational pillars of helping accelerate that transformation."

BAT's corporate investment unit is aiming to reduce the health impact of its business by offering a greater choice of enjoyable and less risky products for adult consumers.

After more than a century in the tobacco and cigarette industry, BAT is adapting to consumers' interests in topics such as health and sustainability by looking at the on-the-go wellbeing and stimulation sectors.

"As you can imagine, we are starting from scratch and so we have got to build that investment ecosystem out entirely," Smith added.

BTomorrow Ventures is investing from its first venture fund. On a global scale, the unit will invest from the seed to series A stage but will also seed large and medium-sized deals through a separate vehicle. In addition, it plans to raise a second venture fund in the near future to avoid interrupting its investment activities.

BTomorrow Ventures is looking at startups that answers questions such as "how do you improve concentration?" or "how do you offset the energy slump of the afternoon?"

"We are looking for people that have a consumer facing product that delivers real functional benefits in this on-the-go wellbeing and stimulation space, and it is as broad as that," Smith said.

"We are exploring the space and we are using our investment capability to build knowledge [of that space] in the broadest way possible."

Smith said the unit recently closed an investment in a UK-based company that has a portfolio of functional chewing gum products.

The unit has completed more than 12 investments to date in less than a year across the globe.

More recently in March 2021, BAT made a $176m strategic investment in Organigram, a Canada-based producer of cannabis products.

BTomorrow Ventures has also had to adjust to new business practices during a time of significant disruption caused by the covid-19 pandemic.

Smith said: "All of our investments have been done virtually and we have not met any of our management teams, we really look forward to meeting them in person."

"That is kind of strange as an old school investor. When I was at Unilever Ventures, we obviously met everyone, looked [them] in the eye and shook their hands. Now we are waving through a screen, so it is a very different world."

Smith added her team also had to be recruited virtually while they were in stealth mode.

In reaction to the covid-linked disruption, companies have had to quickly pivot their business models

"We are looking for people that have a consumer facing product that delivers real functional benefits in this on-the-go wellbeing and stimulation space, and it is as broad as that"

Lisa Smith

and embark on new commerce routes, Smith said.

"It has really separated out the quality of the management teams, so I think you were left with a very robust set of investments."

Smith said she loves the corporate venturing space because if you get the David and Goliath relationship right and leverage the corporate in the right way, you can help innovators and founders. "When you get it right, it is just magic, but it is really, really hard."

Smith has had a long and illustrious career both inside and out of the corporate venturing arena.

She was a chief engineer at consumer goods producer Unilever from 1996 to 2000, before joining consulting firm McKinsey in 2004.

It was at McKinsey that she began to incorporate her passion about healthcare into her day job.

Smith helped found the world's first Aids treatment centre in South Africa, spurred on by a number of deaths at the factory she worked at.

"It was very close to the heart to try and help get treatments to people really quickly. That then led into using McKinsey to switch into the healthcare space."

Smith worked at McKinsey for a few years before returning to the investment space by joining Unilever's corporate venturing arm, Unilever Ventures, in 2006.

She has a significant interest in sustainability issues and serves as a senior associate at the Cambridge Institute for Sustainability Leadership at University of Cambridge.

Analyses

> Edtech maintains pandemic momentum
> Competition means there is probably more investment in battery storage than disclosed
> Exits continuing 2020 surge
> 3D printing investment remains low despite reverse mergers
> Agtech valuations keep growing

By Liwen-Edison Fu, Robert Lavine, Thierry Heles, Jordan Williams and Kaloyan Andonov

Riiid raises $175m from SoftBank

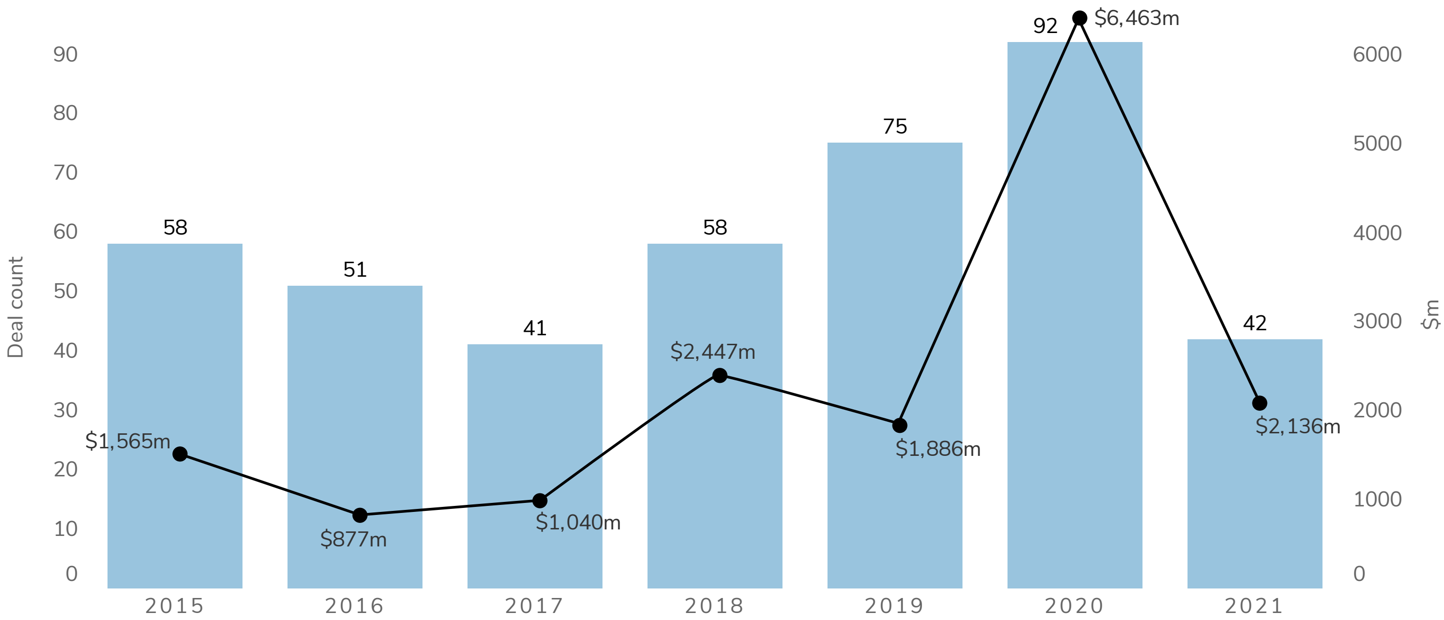
South Korea-based intelligent education software provider Riiid completed a $175m round backed by telecoms and internet conglomerate SoftBank's second Vision Fund. The investment pushed the intelligent education technology producer's total funding to $250m. Riiid intends to use the fresh funding to build out research and development and data labelling hubs across the United States, Canada and Ghana.

Founded in 2014, Riiid is developing an artificial intelligence-based online tutoring solution which personalises education. Its app, dubbed Santa, helps students to prepare for English language competency exams. The company claims it has become the number one in education app sales in Korea and Japan, counting more than 2 million users.

The company is part of the broader education and edtech space, which has enjoyed much attention from corporate venture investors. Last year, we reported a record number of corporate-backed deals in this space (92), along with a record level of total estimated capital, amounting to $6.46bn. These figures were up from $1.89bn over 75 rounds in 2019. The pandemic and stay-at-home orders appear to have driven up interest in the space and valuations.

As for the first five months of this year, we have already tracked 42 deals worth an estimated total of $2.14bn, which suggest that the momentum gained during the first year of the pandemic has been sustained.

Corporate-backed deals in edtech



Source: GCV Analytics

Data as of 27 May

Solid Power with a $130m recharge

US-headquartered solid-state battery provider Solid Power raised a $130m series B round, which was co-led by automotive manufacturers BMW and Ford Motor Company and venture capital firm Volta Energy Technologies.

The company has previously attracted other corporate backers. Battery producer A123 Systems and automotive component producer Sanoh. Hyundai Cradle, Samsung Venture Investment and Solvay Ventures – on behalf of carmaker Hyundai, electronics manufacturer Samsung and chemical producer Solvay respectively – had committed capital to it in 2018.

The company closed its $26m series A round in October, in which, according to a regulatory filing, Ford supplied an undisclosed amount.

Founded in 2012 and spun out of University of Colorado Boulder, Solid Power provides all solid-state batteries that use solid electrodes and electrolytes rather than the liquid or polymer electrolytes used in lithium-ion batteries. The batteries are for use in electric vehicles and the company claims they are safer than conventional lithium-ion batteries, while producing 50% to 100% more energy density.

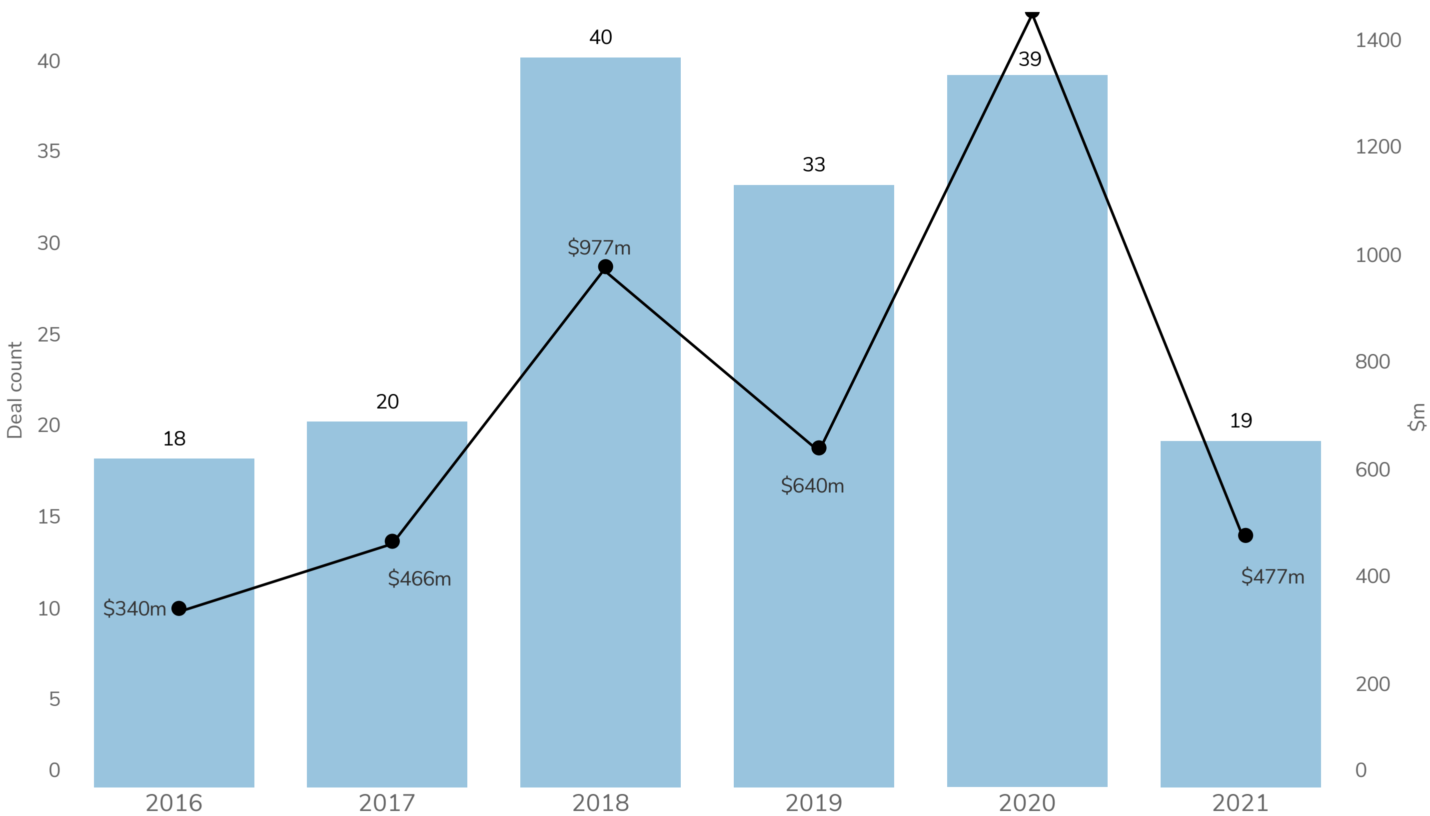
The company's technology is intended to be customisable, and Solid Power will supply full-scale battery cells for BMW and Ford so they can be tested and ultimately integrated into the companies' vehicles by 2022.

Solid Power is part of the broader batteries and energy storage tech space which has attracted the attention of many corporate investors over the past few years. The number of corporate-backed transactions last year reached 39, very close to the all-time high of 40, and a total estimated capital of $1.45bn.

These figures may seem small, but there are two points to take into consideration. It is likely that not all funding in this space is disclosed, as competition is strong and the stakes in terms of disruption are very high.

Second, the space itself is very capital intensive and requires a longer investment horizon, so it is not appropriate for all venture investors.

Corporate-backed deals in pure play batteries and energy storage tech



Source: GCV Analytics

Data as of 5 May

Mid-May multimillions

May was a busy time for exits; GCV reported various multimillion and multibillion deals across sectors.

Ginkgo Bioworks, a US-based microbe engineering services provider that counts genomics technology producer Illumina as a backer, announced a reverse merger with special purpose acquisition company (Spac) Soaring Eagle Acquisition Corp. The latter raised $1.73bn through its own IPO in February and the combined company will take its spot on the Nasdaq Capital Market.

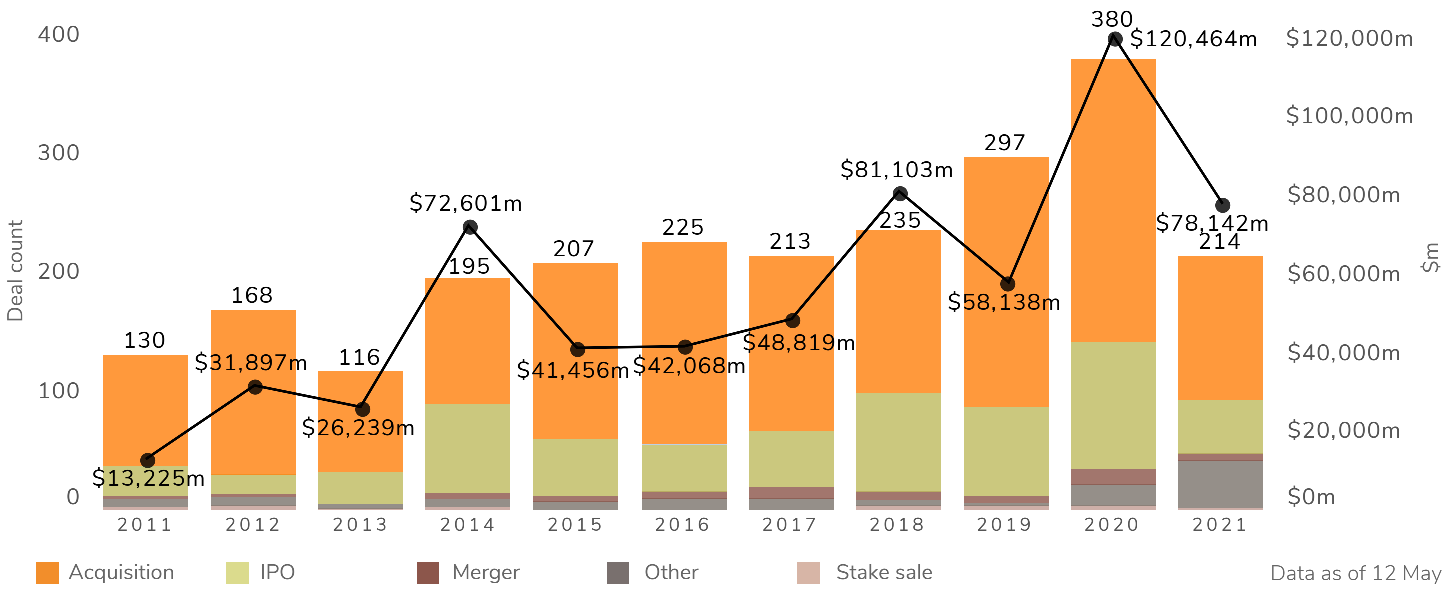
The deal valued the merged business at $17.5bn and included a $775m private investment in public equity (PIPE) financing, co-led by Putnam Investments, Baillie Gifford and Morgan Stanley Investment Management's Counterpoint Global vehicle. Launched in 2009, Ginkgo has developed a cellular programming technology used to grow organisms for industrial applications such as nutritional products, consumer goods and fragrances.

US-based automated driving technology developer Plus, which counts among its backers electronics producer Quanta Computer, automotive component maker Wanxiang, carmaker SAIC and trucking services firm Full Truck Alliance, agreed to a reverse merger with Spac Hennessy Capital Investment Corp V at a $3.3bn valuation. The merged company will take the Nasdaq Capital Market listing that was secured by Hennessy in a $300m IPO in February. Funds and accounts managed by BlackRock and DE Shaw Group were among the participants in an additional $150m PIPE deal supporting the transaction. Formerly known as Plus.ai, Plus is developing level 4 autonomous driving software, sensors and cameras for use in the trucking industry. Level 4 is where a vehicle is driven autonomously with a human driver in reserve.

There was no shortage of notable acquisitions. Kakao Entertainment, an entertainment subsidiary of internet group Kakao, agreed to purchase two of its portfolio companies – US-based short-form fiction platform developers Radish and Tapas Media, for $440m and $510m, respectively. The acquisitions would allow several corporate investors to exit. Among them are subsidiaries of internet and telecoms conglomerate SoftBank, financial services firm SBI and internet service provider Daum Communications. Founded in 2012, Tapas runs an online platform for 'bite-sized' webcomics and novels. Launched in 2016, Radish runs a mobile app platform through which users can read serialised fiction from a variety of genres.

The surge in exit transactions is a trend that has been going on over the past few years. Record highs were registered in 2020 (380 transactions), along with record total estimated dollars in them last year ($120bn). Just over the first four months of 2021, we have already tracked 214 exits, worth an estimated $78.14bn, which suggests that the trend is still at full speed.

Exits from corporate-backed companies



Source: GCV Analytics

Shapeways goes public in a reverse merger

US-based 3D printing technology developer Shapeways, which counts enterprise technology producer Hewlett Packard Enterprise (HPE) and conglomerate Sumitomo among its backers, agreed a reverse merger with special purpose acquisition company Galileo Acquisition Corp. The merged business will take the spot secured by the latteron the New York Stock Exchange.

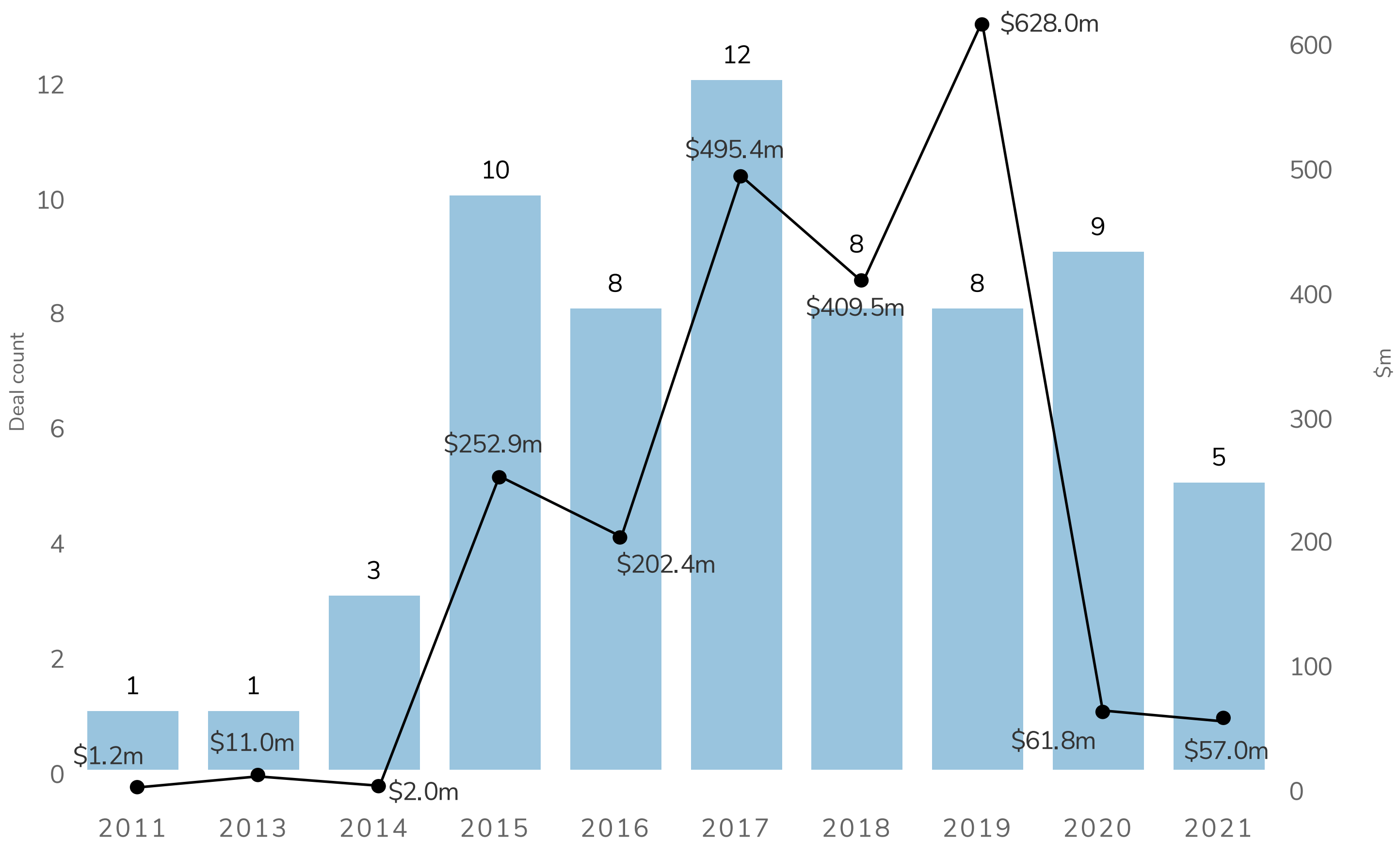
Galileo had listed in a $120m initial public offering in October 2019. The transaction was reportedly carried out at a $410m pro-forma equity valuation. The combined company is also set to raise $75m in private investment in public equity (PIPE) financing from a consortium including 3D printing system provider Desktop Metal, Miller Value Partners, XN, Lux Capital, Union Square Ventures, Inkef Capital and Andreesen Horowitz (A16Z).

Founded in 2007 as a spinout from electronics and medical technology producer Philips' lifestyle incubator, Shapeways provides digital additive manufacturing design software and services through an online platform. Users upload their creations and can choose from more than 60 different materials and finishes before selling their products on a dedicated marketplace. The company boasts manufacturing facilities in New York City and the Netherlands, serving customers globally. It plans to use the proceeds from the reverse merger to improve its 3D printing technology and expand its product offering.

Shapeways is part of the broader additive manufacturing space, which has received some attention from corporate venture investors. The number of corporate-backed deals over the past decade, however, has been somewhat low (rarely more than 10 a year) and the total estimated capital in those deals hardly suggests any significant surges in valuations. The latter is not surprising given the technical challenges around the 3D printing technology, which is capital intensive and requires a longer investment horizon than other areas of innovation.

Shapeways is not the first company in the space to agree a reserve merger, as its peer Desktop Metal agreed to one in August last year.

Corporate-backed deals in additive manufacturing



Data as of 30 April

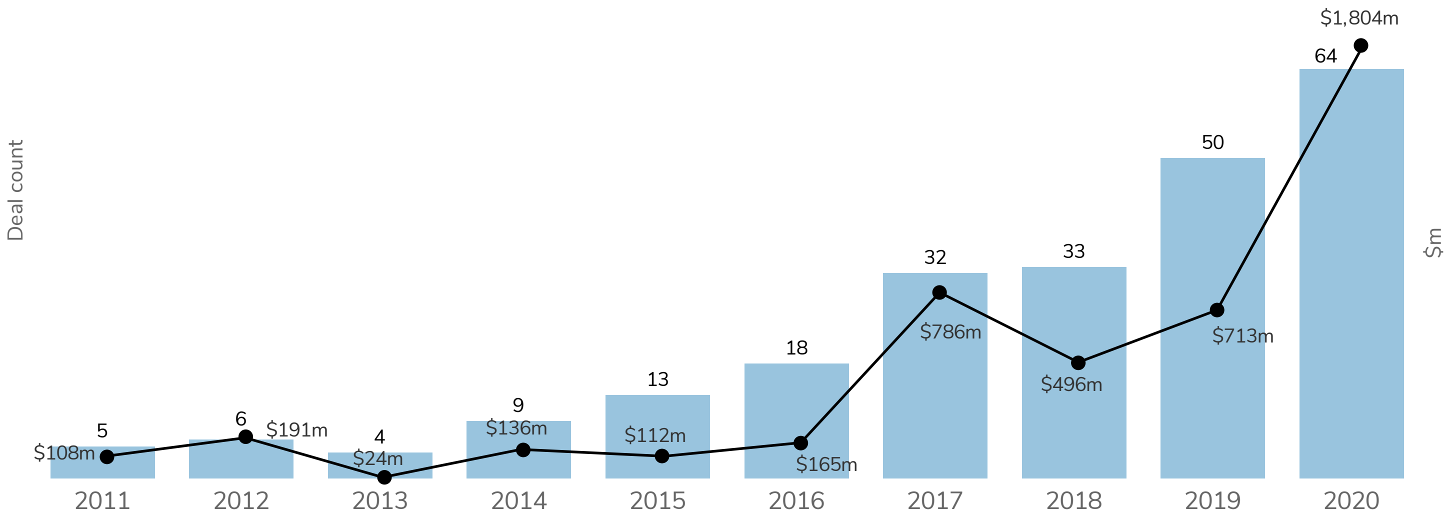
Valmont to acquire Prospera

Israel-based agriculture technology provider Prospera Technologies agreed to be acquired by US-based agricultural equipment producer Valmont Industries for nearly $300m, allowing three previous corporate backers – industrial conglomerate Tekfen, mobile chipmaker Qualcomm and networking equipment producer Cisco – to exit. They had committed capital through their venturing subsidiaries – Tekfen Ventures, Qualcomm Ventures and Cisco Investments. The deal is expected to close by the end of June. It followed a two-year strategic partnership between Prospera and Valmont through which they monitored 5 million acres of agricultural land in 2020.

Founded in 2014, Prospera has developed a software platform which uses data analytics, computer vision and artificial intelligence technology to digitise the farming process, helping farmers to grow healthier crops with higher yields. It analyses and monitors the growth and health of crops, recording climate and visual data from fields to provide actionable information to farmers.

Prospera is part of the broader agtech space, which has attracted the interest of corporate investors over the years. In 2020, the number of corporate-backed deals reached a maximum of 64 and so did the total estimated capital in those rounds at $1.8bn, hardly suggesting excessive valuations. The ongoing exuberance in public and merger and acqusitions markets is facilitating exits from this space.

Corporate-backed deals in agriculture and agtech



Sector report

Life sciences sector gives hope and continues to grow

- > Both deal count and dollars up year-on-year
- > Exits and exit dollars also significantly up year-on-year
- > Funding initiatives up in number but down in dollars

By Kaloyan Andonov
Analyst

The health sector has been going through various shifts in the context of an increasingly digitised, mobile and data-driven world. This trend predates the covid-19 pandemic and last year's lockdowns but it was undoubtedly accelerated by them. The life sciences sector has also given the world hope – by developing effective vaccines – that there will be normal life again.

The GCV Analytics definition of the health sector encompasses pharmaceuticals, medical devices and diagnostics, healthcare IT services and administration, care provision and on-demand services and other life sciences products and services.

When it comes to innovation in drug discovery, medical devices and the digitisation of health services, the role of general economic conditions and, particularly, low interest rates cannot be overstated. We had been living in a low interest rate environment since the end of the global financial crisis in 2008 and with the shock of the covid-19 pandemic, rates have hit a record low. The benefits for life sciences sectors stemming from cheap credit are simple – abundant cash translates into more capital available for their costly research and development (R&D) activities.

Inventing new medicinal drugs and devices is an infamously expensive, slow and risky undertaking. According to data from Pharmaceutical Research and Manufacturers of America, it takes at least 10 years, on average, for a new drug to go from initial discovery to the marketplace. The average costs of a successful drug are estimated at $2.6bn. According to a study on clinical trial success rates in the US from 2019, only about seven out of every hundred newly created molecules obtain approval from the Food and Drug Administration.

Despite all this, the pandemic has highlighted how vital the pharmaceutical sector is for normal human existence.

Given the magnitude of business risk involved and cheapness of credit, it is no surprise that many incumbents have opted to externalise R&D costs and share risks with other co-investors – through licensing, spinouts, mergers and acquisitions, venture investing and joint ventures. As long as there are no drastic changes in the costs of capital, this is unlikely to change.

The life sciences sector has also been undergoing digitisation and datafication, like most other sectors of the economy. The "2021 Global life sciences outlook" by auditing and consulting firm Deloitte notes the central role of digital tech in the sector over the past year: "Corporate funding for digital health reached a record $21.6bn globally in 2020 – an increase of 103% over 2019. One thing is clear – with the help of digital health tools, virtual care can fundamentally change healthcare access and deliver an improved care experience. Digitisation in the life sciences sector has also led to an increase in new point of care systems, digital pharmacy setups, and easy and efficient access to healthcare."

The report also notes that the accelerated digitisation may bring about a new patient-centric business model, which would enable customers to meet physicians on their terms and from any place.

The report, however, notes that remote care provision may change or stay in the post-pandemic world: "Remote selling soared in 2020 as doctors and hospitals resorted to virtual meetings with sales reps. Companies conducted more than 316,900 remote meetings with doctors globally in April 2020. However, in the future, even this change is subject to the post-covid requirements of each country. Companies will also focus on driving value to through digital channels to educate health care providers in the post-pandemic world."

According to a report entitled "Global Digital Therapeutics Market (2021 to 2027)" by report aggregrator ResearchandMarkets.com this world's digital therapeutics market is expected to reach $8.91bn in size by 2027, up from $2.1bn in 2020, growing at a compound annual growth rate (CAGR) of 22.93% during the forecast period. While the report acknowledges the progress that has been made by this emerging field of life sciences over the past decade and its adoption due to the pandemic, it contends that its biggest potential lies in treatment of chronic diseases: "Importantly, digital therapeutics tends to target conditions that are poorly addressed by the healthcare system today, such as chronic diseases or neurological disorders. In addition, they can often deliver treatment more cheaply than traditional therapy by reducing demands on clinicians' time. And

Anja König, global head, Novartis Venture Fund

Anja König is the global head of Novartis Venture Fund (NVF), the corporate venturing arm of Switzerland-based pharmaceutical company Novartis. She focused on the European and Asia-Pacific ecosystems as a managing director before stepping into the top role.

NVF has most recently participated in the financing rounds raised by biotechnology startups including Amphista Therapeutics, TScan Therapeutics, Exo Therapeutics and Faze Medicines. The corporate has also exited Renovacor, Inflazome, Zikani Therapeutics, Annexon Biosciences and Forma Therapeutics in the past year.

Before joining NVF in 2006, König was a US-based associate partner at management consultancy firm McKinsey for six years , where she worked with healthcare, pharmaceutical and biotech firms on both sides of the Atlantic.

König studied physics throughout her academic career – she holds a bachelor's degree from University of Oxford, a master's degree from Ludwig Maximilian University of Munich and a PhD from Cornell University.

all the while, more evidence is emerging to demonstrate their value in clinical terms."

In addition to the digitisation of health service, there has been a similar process taking place in pharmaceuticals, specifically in drug discovery. Digital technology has enabled new types of collaborations and it is reshaping clinical trials.

The Deloitte report notes: "It is believed that covid-19 accelerated digital transformation of the pharma sector by several years. During the pandemic, life sciences saw agility, increased speed to market and greater efficiencies. While the sector average for a new drug development and review is 8.2 years, the two novel covid-19 vaccines were developed, tested, and authorised in less than a year. As a result, companies are reassessing and challenging their previous processes to enhance efficiencies. They are also looking at innovative partnerships to excel. Additionally, companies are moving towards virtual trials and remote monitoring to involve more patients into their studies via telemedicine and mobile healthcare."

Digitisation is also taking roots in the medical devices and diagnostics space. According to "Pulse of the industry: Medical technology report 2020" by auditing and consulting firm EY, virtualised and digitally-enabled business models for medical care accelerated at an unprecedented pace last year. The global medical technology industry was coming off a record $407bn top line estimated for 2019, with a 5% decline in medtech revenue during the first half of 2020 due to the impact of the pandemic on operations. Though the tone of the report remains cautious on the assessment of longer-term impact of the pandemic, it did suggest that the presence of strong R&D spending and investor confidence would eventually make innovation and profitability rebound. The report also concluded that building resiliency and transparency into supply chain operations may be key to the industry's long-term health.

The pharmaceutical sub-sector is among the most important and nothing has made that more evident than the pandemic. As we have observed in previous years, the global outlook for the pharmaceutical industry appears relatively promising, though with certain concerns on pricing. On the one hand, there is pressure on governments that pay or co-pay for medicines of their citizens to reduce costs by placing limits on drug pricing. On the other hand, health insurers and care providers are increasingly more demanding and require evidence of effectiveness, cost savings and clinical benefits before including a new drug.

According to the "Pharmaceuticals Global Market Report 2021: Covid-19 Impact and Recovery to 2030" by ResearchAndMarkets.com, the global pharmaceuticals market is set to grow modestly from $1.22 trillion in 2020 to $1.25 trillion by the end of 2021, implying a CAGR of 1.8%. The marginal growth is attributed mainly to pharmaceutical companies rearranging operations, supply chains and recovering from the pandemic impact.

The market is forecast to reach $1.7 trillion in size by 2025 at a CAGR of 8%. The medium and longer term growth is driven

Christopher Picariello, president, Johnson & Johnson Innovation – JJDC

Pharmaceutical firm Johnson & Johnson has the longest surviving corporate venturing programme in the world. After carrying out direct investments in the 1960s, the corporate established Johnson & Johnson Development Corporation (JJDC) in 1973.

As president of Johnson & Johnson Innovation – JJDC, Chris Picariello oversees a global team of investment professionals based at J&J Innovation Centres spread across the world including San Francisco, Boston, London and Shanghai.

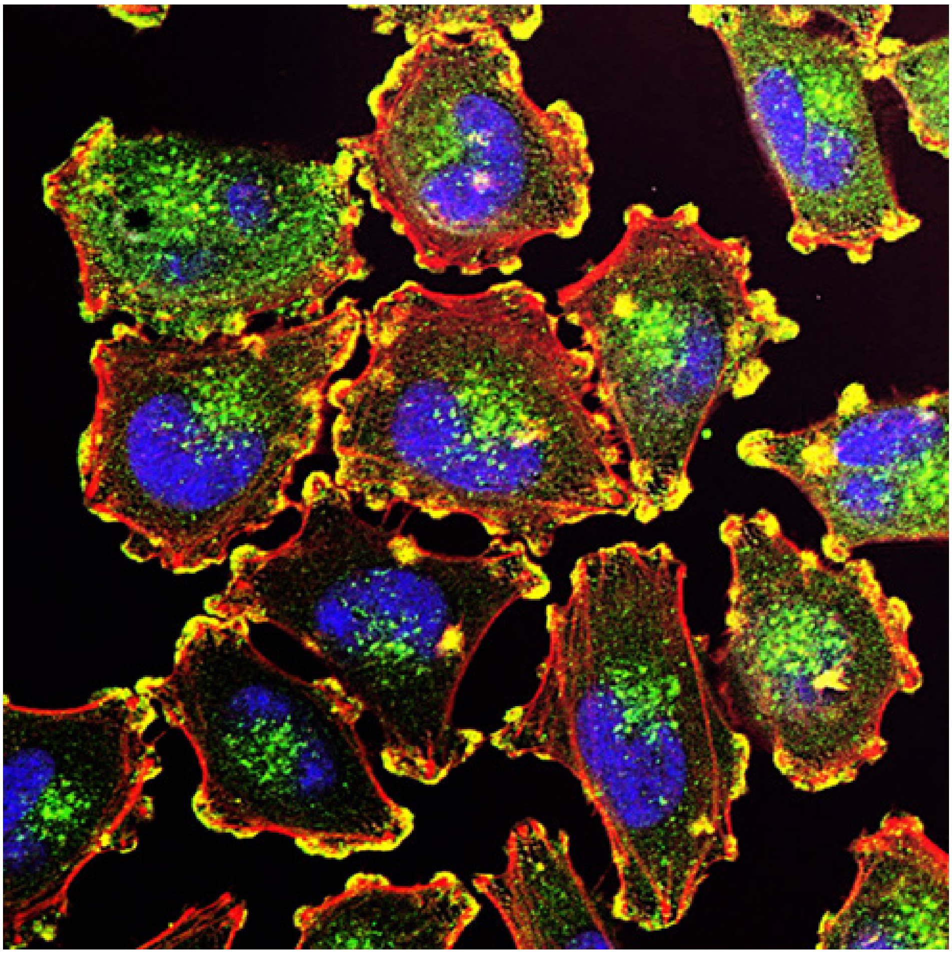
The unit, rebranded Johnson & Johnson Innovation – JJDC in 2013, focuses on areas of strategic significance including medical devices, diagnostics, pharmaceuticals, biotechnology and consumer products.

JJDC invests at all stages, having most recently backed rounds raised by fibroblast technology developer Mestag Therapeutics, textured hair care provider Sunday2Sunday, near vision loss treatment startup Visus Therapeutics, tissue imaging technology producer TechsoMed and diagnostics software company Paige.

mostly by demographic factors such as ageing population: "This rise in the ageing population increased the patient pool of many chronic diseases such as rheumatoid arthritis, hypertension, diabetes and cancer. The increase in the patient pool drove the demand for pharmaceuticals used in the treatment of these diseases, significantly impacting market growth during this period."

Within the realm of pharmaceuticals and biopharmaceuticals, cancer treatment is a has experienced a significant transformation in recent years. According to a report entitled "Oncology Drugs Market – Opportunities And Strategies – Global Forecast to 2030" by ResearchandMarkets.com the global cancer treatment market reached $167.9bn in 2019, after growing at a CAGR of 9.8% since 2015. In 2020, that market size was expected to go down to $149.9 billion in 2020, representing an 11% decline, due to lockdown, social distancing and the economic slowdown. However, the report ventures to forecast a growth from $201.1bn estimated in 2021 up to $284.5bn, implying a CAGR of 9.7%.

Companies in the oncology drugs market are increasing their product innovation through strategic collaborations. To sustain themselves in the increasingly competitive market, organisations are developing innovative products and sharing skills and expertise with other enterprises. While oncology drug companies have long collaborated with each other as well as with academic and research institutions in this market by way of partnerships, the trend has been increasing over the recent years.



A National Cancer Institute slide showing melatastic melanoma cells

The report highlights the important role of new technologies and collaborations in the oncology space: "New technologies are being implemented in the cancer drug market, such as artificial intelligence (AI) in the research and development process, as well as 3D printing devices to mimic the human body for trials and testing of the drugs developed. Companies are also investing in technologies to develop next generation biologics such as antibody drug conjugates, bispecifics, fusion proteins, cell and gene therapy that will be more effective as they are expected to have better potency against the target disease as well as have the ability to treat more than one aspect of the disease."

It also notes that approval of novel treatments has accelerated in recent years, thanks to new technologies that streamline drug development processes: "Over the last few years, there has been a significant rise in accelerated approval of cell and gene therapies for cancer treatment by regulatory bodies across the globe. CRISPR technology can be used to discover the non-coding cancer genome.

"CRISPR-Cas9 genome editing reduces the processing associated with the generation of cell line and animal models of cancer and complex generations. Thus, it generates a better cancer model for target validation and drug evaluation. CRISPR–Cas9 is accelerating the different stages of oncology drug discovery including target identification, validation and deconvolution, drug synthesis, assessment of drug sensitivity and resistance."

Key sub-sectors

Healthcare IT and administration

A decade or more after corporate venturing units that were set up with a focus on life sciences and healthcare, such as US-listed conglomerate Alphabet's GV (formerly known as Google Ventures) and US-listed drugs company Merck's Global Health Innovation Fund (GHIF), and the returns have surpassed many expectations.

GHIF has seen $6.2bn of exits in the past 18 months as the covid-19 pandemic has increased attention on the sector, according to Venture Capital Journal (VCJ).

William Taranto, president of GHIF, told VCJ he expected to see six more exits this year following on from Livongo's exit to Teladoc for $18.5bn, Preventice Solutions' acquisition by Boston Scientific for $1bn, the sale of Asuragen to Bio-Techne for $215m and Exostar's private equity purchase by Thoma Bravo for $100m.

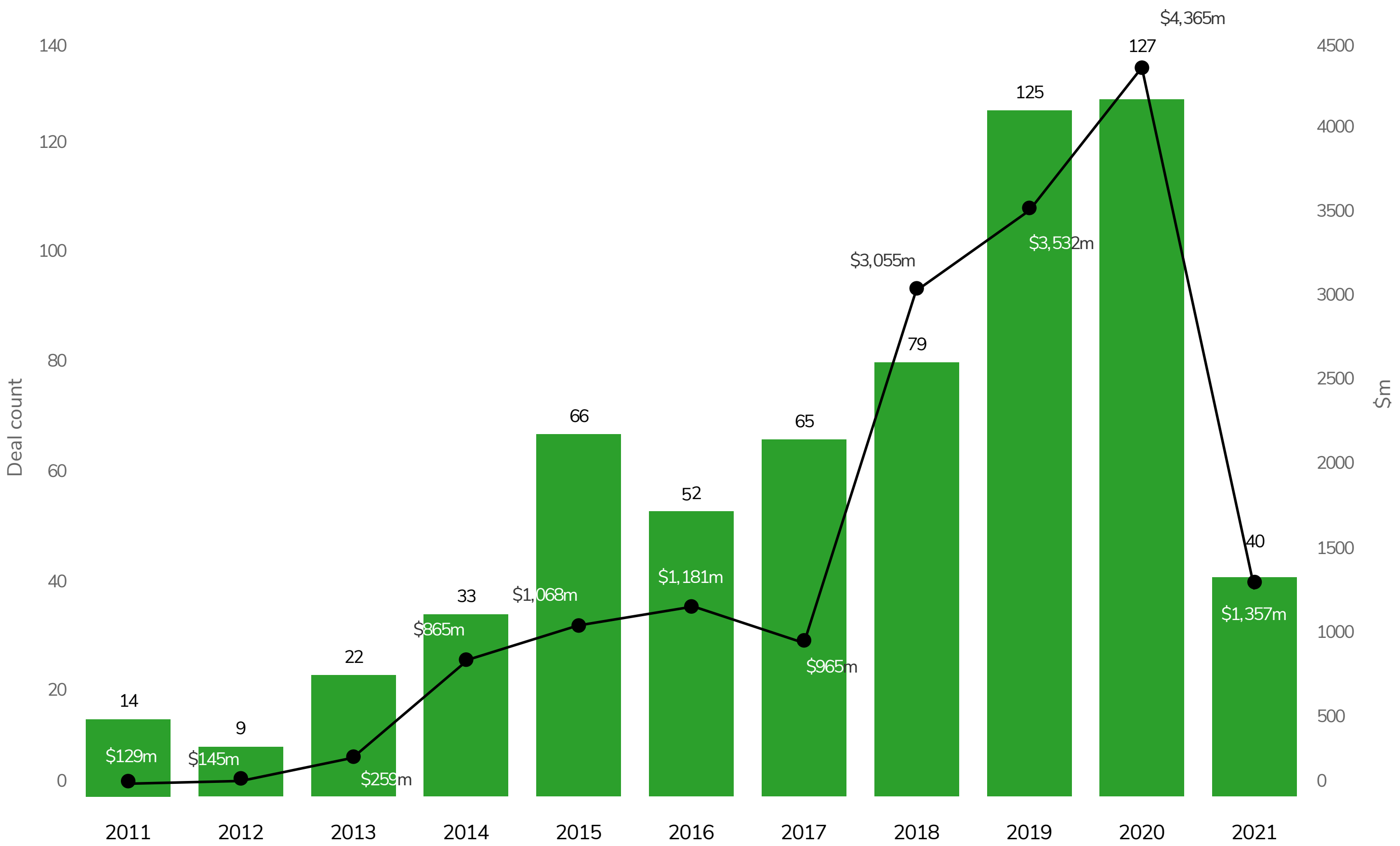
These exits, among others, have seen GHIF's $500m evergreen fund repaid more than twice, Taranto, who is also co-chairman of the Global Healthcare Council, told VCJ in its latest issue.

He added telemedicine, remote monitoring and clinical trials as well as AI and therapeutics were important.

Originally founded by Bill Maris in 2009, GV's life sciences and healthcare deals cover care delivery, health IT, devices, diagnostics and therapeutics investments and made up more than a third of its portfolio. This means more than 80 portfolio companies with home runs including Clover Health, which agreed a $3.7bn reverse merger with a special purpose acquisition company in October, and Oscar, which had a blow-out flotation in March to raise $1.44bn.

All investors in healthcare have seemingly reaped the rewards, as GCV's Kaloyan Andonov and Rob Lavine noted on healthcare sector exits after Oscar's initial public offering. And more seem to be on the way, which will encourage further dealmaking and investments.

Corporate-backed deals in healthcare IT and administration



Source: GCV Analytics

Data as of 26 April

Biotechnology and pharmaceuticals

The covid-19 pandemic has been regarded as the long-awaited start of the "biological century". The rapid development of vaccines and the use of novel methods, such as messenger RNA, to do so has created optimism that the same speed and execution is possible for a host of other viruses and more broadly to effectively create the longevity escape velocity – where people's life expectancy increases by more than a year for each year they live.

But research and startups is just part of the challenge in a geopolitical world with concern about sovereignty of supply and requirements for manufacturing bases as well as requirements to carry out large-scale trials.

The UK plans to build on the recovery trial, which uncovered two treatments for covid-19, by streamlining research and embedding it in the health service, and through fast regulation.

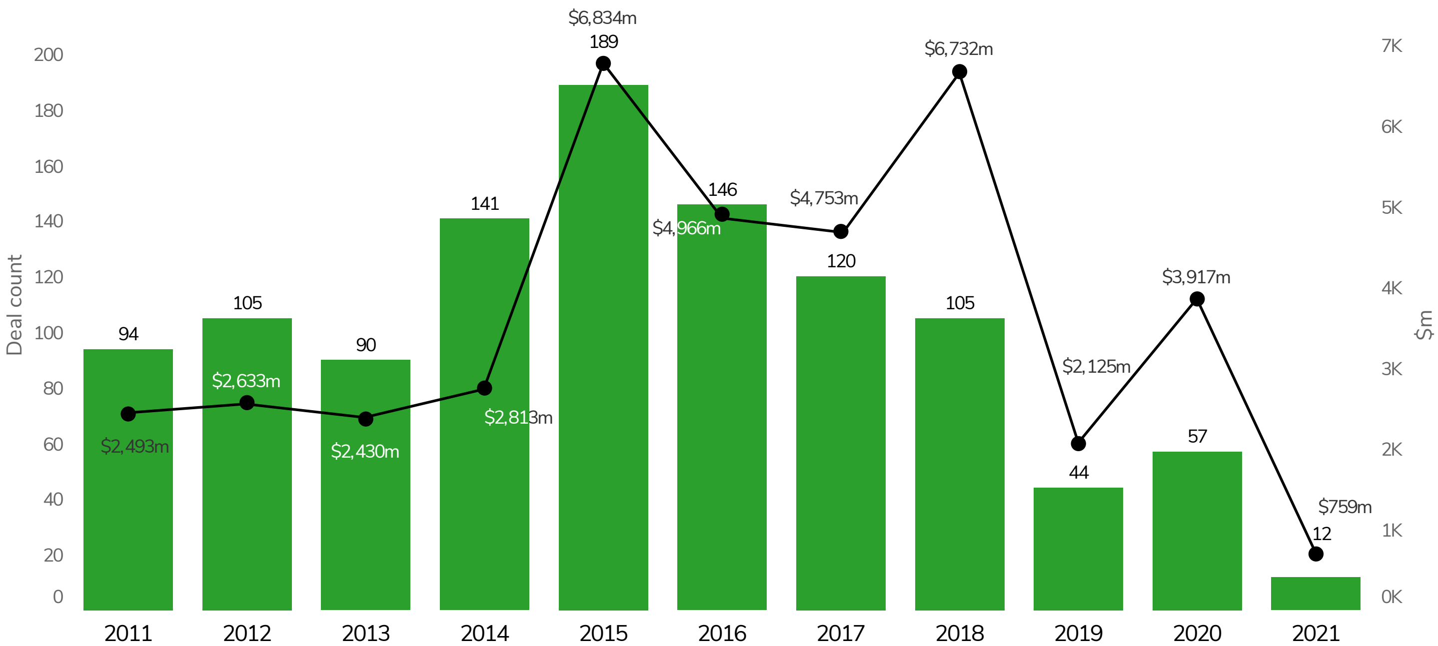
UK-based venture capital firm Abingworth raised $582m for its second clinical co-development fund in May.

Abingworth has previously invested through its co-development portfolio companies, Avillion and SFJ Pharmaceuticals, which finance and facilitate clinical trials, taking on all of the clinical and regulatory risk in return for a pre-agreed return if the drug is approved.

When Abingworth first got into clinical co-development back in 2009, it primarily worked with pharma companies who only paid out if the project was successful, by which time the cost of the deal could be amortised over the sales of the product.

The market has since expanded to cover biotechs, which want to reduce the dilutive impact that raising the money on the public

Corporate-backed deals in biotechnology



Source: GCV Analytics

Data as of April 26

market would have. And there are plenty more of them.

The Financial Times noted Magdalen College was selling a 40% stake in the Oxford Science Park "after a surge of investor interest in the fast-growing life sciences sector increased the site's value almost sevenfold in five years".

As sole owner of the park since 2016, Magdalen has invested in new labs and research space on the site and gained planning consent for a new 165,000 square foot development to support its more than 100 businesses based there, including Vaccitech, which raised $111m from an initial public offering on the Nasdaq stock exchange in April.

Last year British firms raised £1.4bn ($2bn) of venture capital, The Economist said, which was more than anywhere else in Europe but less than the American hubs, Massachusetts (£4.7bn) and San Francisco (£4.5bn).

But the parallels between the UK and US are growing.

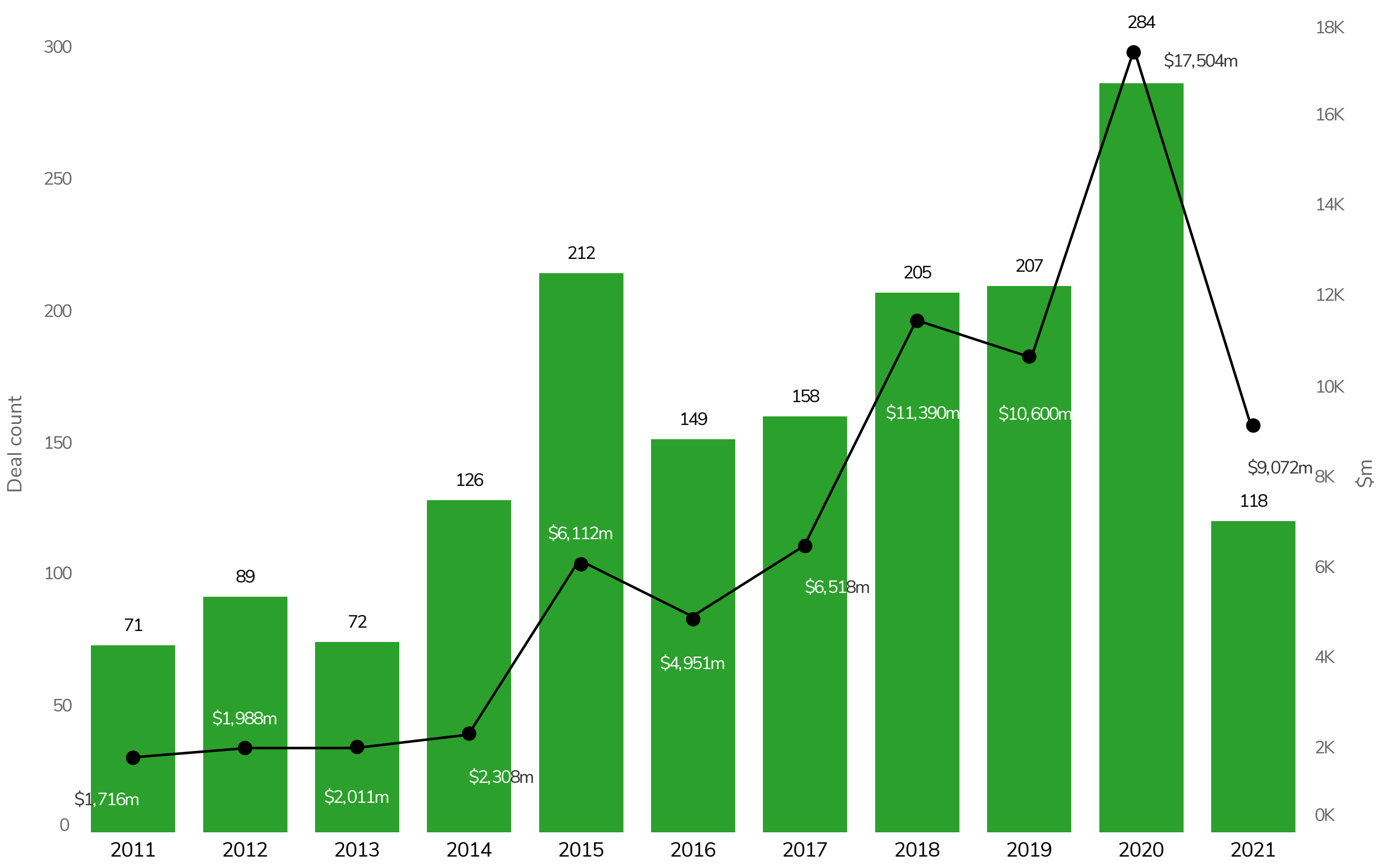
A few years ago, Seth Harrison, an American venture capitalist at Apple Tree Partners, was looking to open an office in Europe. The choice came down to Britain or Switzerland, he told The Economist. "I got quite acquainted with the whole UK biotech scene.

"The fantastic research ferment that occurs in the Golden Triangle. You know, the London, Cambridge, Oxford area... And I just said: 'Wow, this reminds me of Cambridge, Massachusetts, 25 years ago.'"

Global University Venturing

To learn more about the golden triangle, our sister publication, Global University Venturing, will start its review of the three university-led ecosystems, starting with Imperial College, London, in July before discussion and interaction at the GCV Symposium in November.

Corporate-backed deals in pharmaceuticals



Source: GCV Analytics

Data as of 26 April

Medical devices and diagnostics

Medical devices and diagnostics has often been regarded as the underloved part of the healthcare venture market compared with biotech and pharma, with relatively few deals and limited exit options.

This has changed. Last year's near-doubling in corporate venturing deal values to more than $5bn has continued this year. Most recently, in late May, Germany-based Smart4Diagnostics (S4DX) raised €5m ($6m) in its series A round, including local medical technology manufacturer Sarstedt and the EIC Fund, established in 2020 by the European Commission for direct equity investment in breakthrough technologies.

The startup has developed the "digital human blood sample fingerprint", a data picture of all quality aspects for blood samples from collection to arrival in the lab.

As Hans Maria Heyn, chief executive and co-founder of S4DX, said: "As many as three in four medical decisions are based on diagnostic results – often blood samples. Currently, this process is being managed manually which can lead to errors and can cause many issues including slow diagnosis, repeated tests on the patient, and wasted resources."

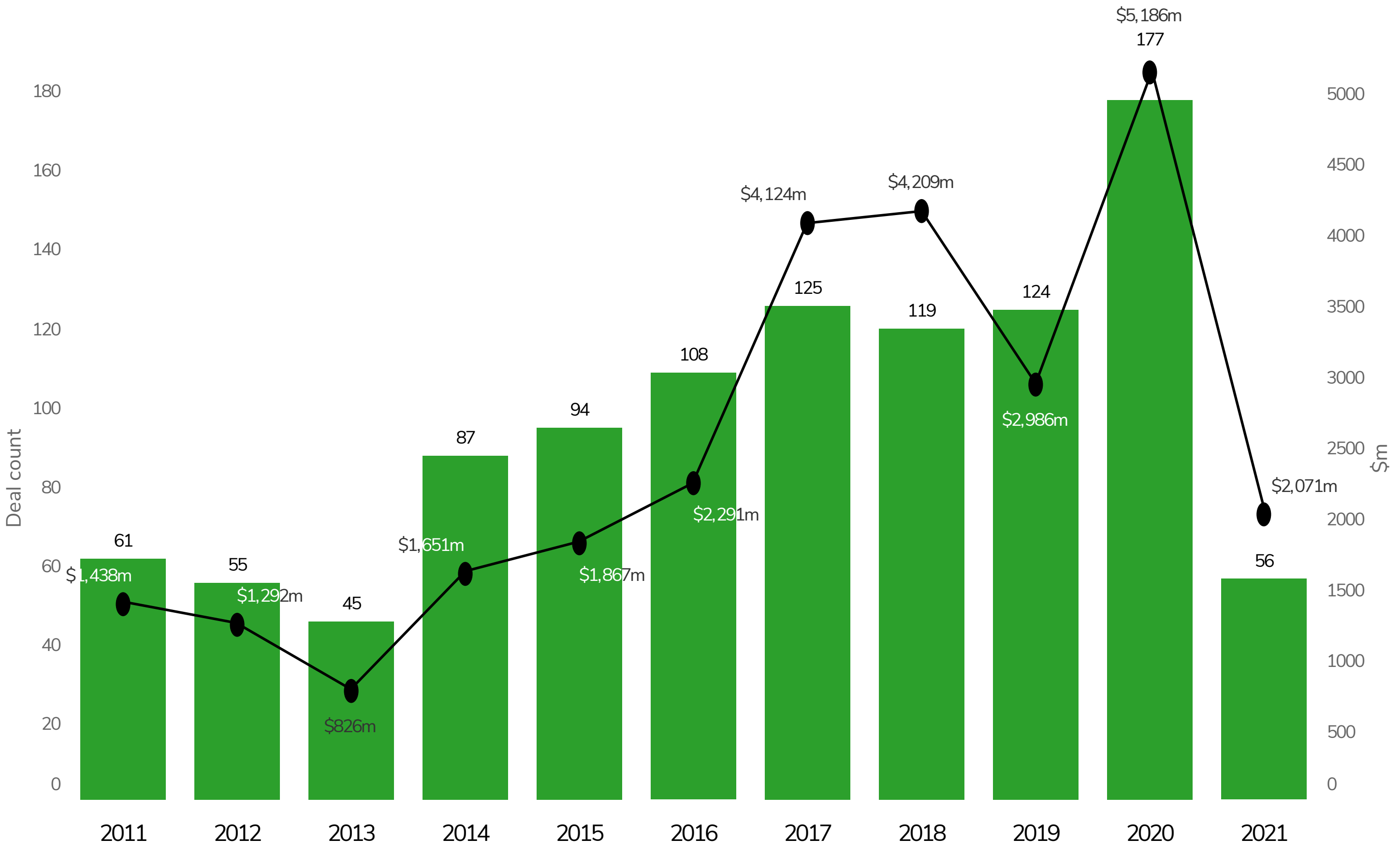
The covid-19 disease has focused more attention on diagnosis and whether treatment can be done remotely from hospitals. But the take-off in attention to medical devices and diagnostics started with the flotation, then purchase, of Merck-backed Livongo, a digital diabetes management platform, which had its initial public offering in 2019 and was acquired by Teladoc for $18.5bn last year.

Livongo had been incubated by VC firm 7wireVentures, which has recently closed its second venture fund at $150m with limited partners including health plans Florida Blue and Cigna, hospitals and health systems Atlantic Health, Wellforce, Rush University Medical Center, Memorial Hermann Health System and Spectrum Health and large employer Boeing, according to Fierce Biotech.

Similarly, E-merge Capital Partners is raising its debut fund focused on early-stage medical device companies and technologies coming out the Evolve MedTech Venture Studio.

The fund, led by managing partners Brad Klos and John Xitco, is focused primarily on class II

Corporate-backed deals in medical devices and diagnostics



Source: GCV Analytics

Data as of 26 April

medical devices in cardiovascular and orthopedics.

Others are also trying to use strategic ties to add value. Private equity firm Revival Healthcare Capital closed its second fund at $500m. It said it will invest where a corporate strategic partner will have a structural option or right to acquire the company in the future.

Rick Anderson, who is chairman and managing director (MD) at Revival, said: “Consolidation has made it increasingly difficult for medtech leaders to move the needle on growth.”

Lauren Forshey, Revival president and MD, added: “By removing the guesswork and gamesmanship that often defines the relationship and instead aligning goals at the outset, target companies benefit from increased focus, speed, and capital efficiency in driving towards milestones they know they will get rewarded for.”

And the goal remains to gain scale. Venture-backed digital health company Ro has agreed to acquire Modern Fertility, a US-based provider of at-home fertility tests for women, for at least $225m according to Fierce Biotech.

Ro started out four years ago selling erectile dysfunction medication and hair loss supplements to men but after raising $876m has started to acquire other startups, including Workpath, to move into the home-based healthcare market.

Care provision and on-demand services

The gamification of life continues, just updated for the modern world, it seems.

Akili Interactive, a US-based company that has raised $110m in its series D round from Japan-based pharma group Shionogi, has taken it further than most by developing video games approved by the US Food and Drug Administration to tackle attention-deficit hyperactivity disorder and major depressive disorder.

Akili Interactive is clinically proven to improve cognitive function, something so-called brain-training games have touted for years.

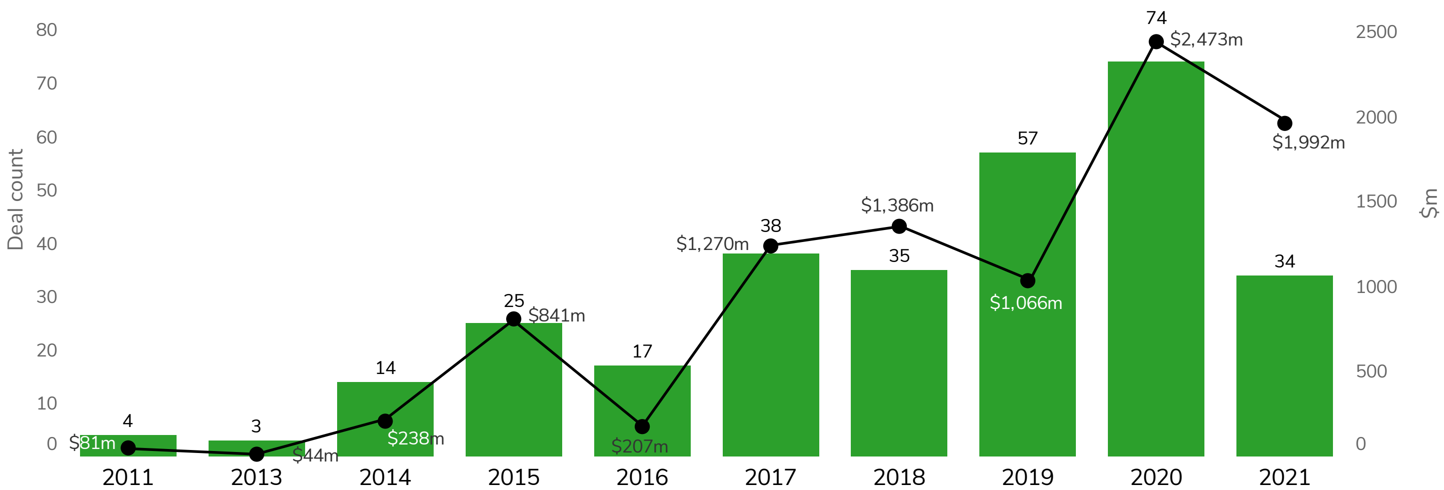
In this case Akili is tackling neurodivergent issues and fits squarely into the wellness trends to tackle people without medical procedures.

Likewise, Germany-based Ada Health, which uses AI to try to diagnose symptoms and in a peer-reviewed study was found to be the most accurate on the market, has been backed by the corporate venturing units of local pharmaceutical company Bayer and South Korea’s Samsung’s Catalyst Fund.

Both CVC units, along with peers from Hitachi, Sony and Unilever backed UK-based diagnosis firm Huma’s $130m round. Huma’s software lets clinicians monitor patients remotely through a mobile app. Huma, like Ada, also uses a range of wearables and other devices to gather data on things like heart rate and oxygen saturation.

Effectively, taking people out of the doctor’s surgery or hospital visit for routine checks and earlier monitoring of symptoms should limit expensive, time-consuming checks at a time when medical services risk being overwhelmed by covid-19.

Corporate-backed deals in care provision and on-demand services

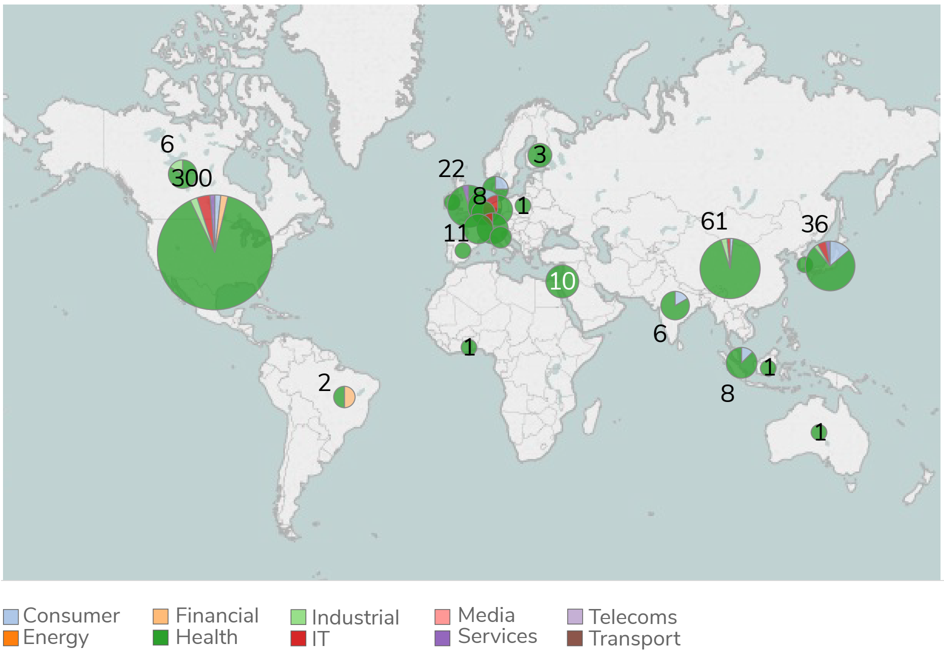


Source: GCV Analytics

Data as of 26 April

The sector in charts

Global view of past year's deals



For the period between May 2020 and April 2021, we reported 503 venturing rounds involving corporate investors from the life sciences sector. A considerable number of them (300) took place in the US, while 61 were hosted in China and 36 in Japan.

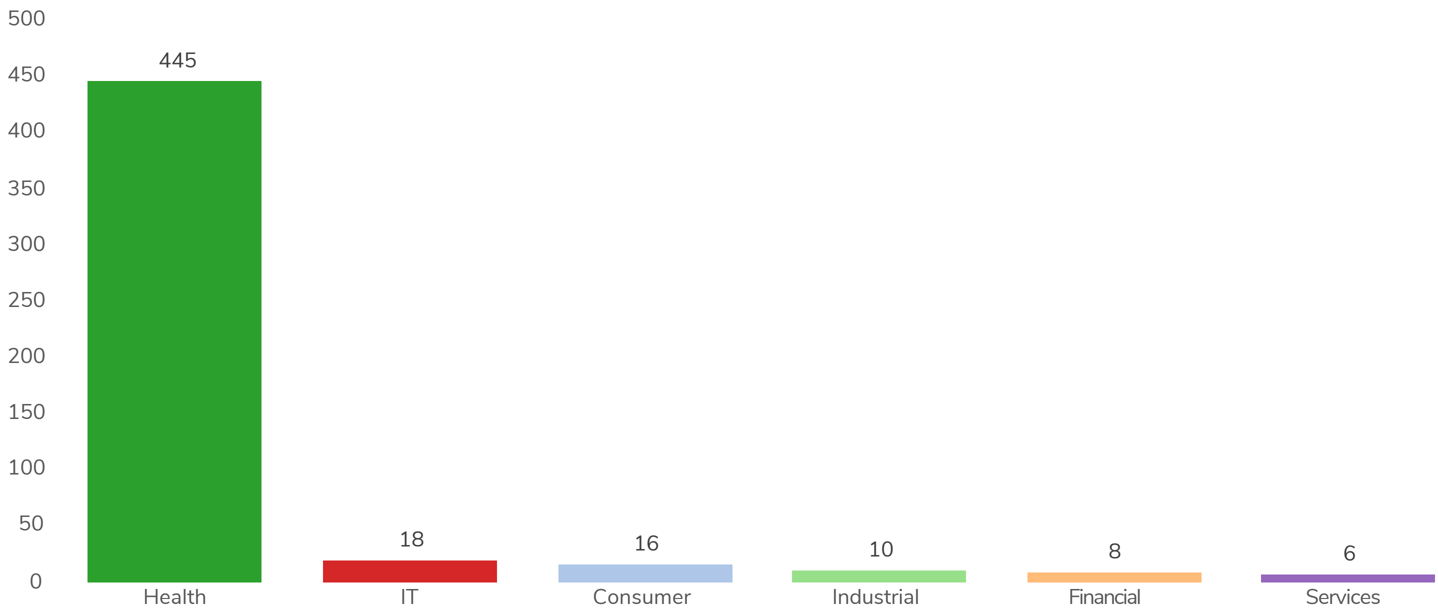
Investments of health sector corporates over the past year

Health 445 (pharmaceuticals, medical devices and healthcare IT)

IT 18 (cybersecurity, big data, AI and other)

Consumer 16 (food and beverages, hygiene and beauty)

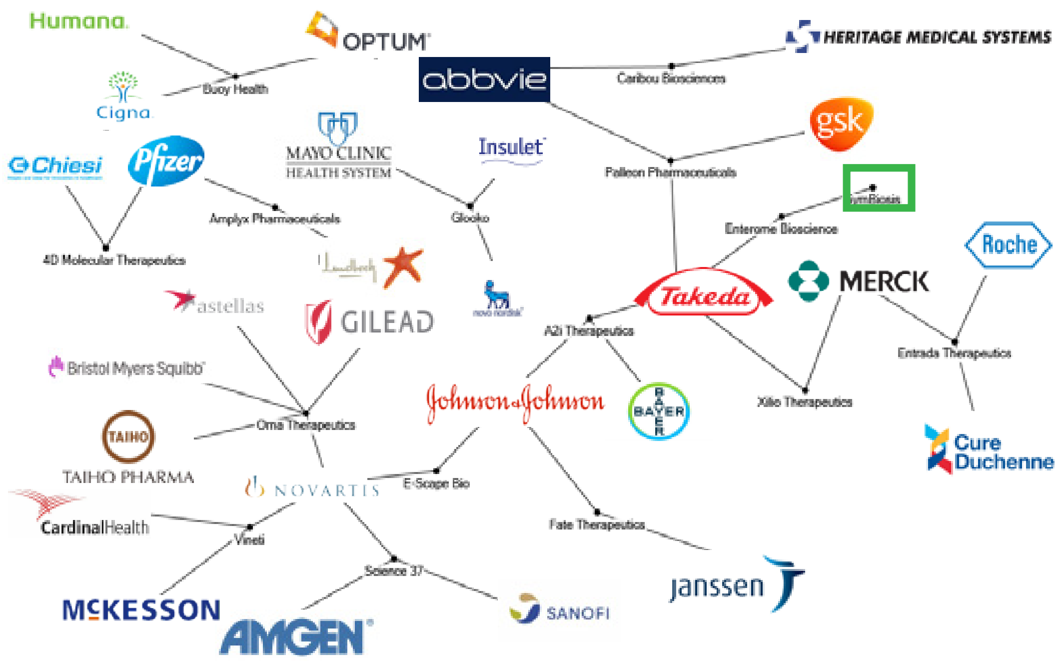
Industrial 10 (agtech and industrial chemicals)



Source: GCV Analytics

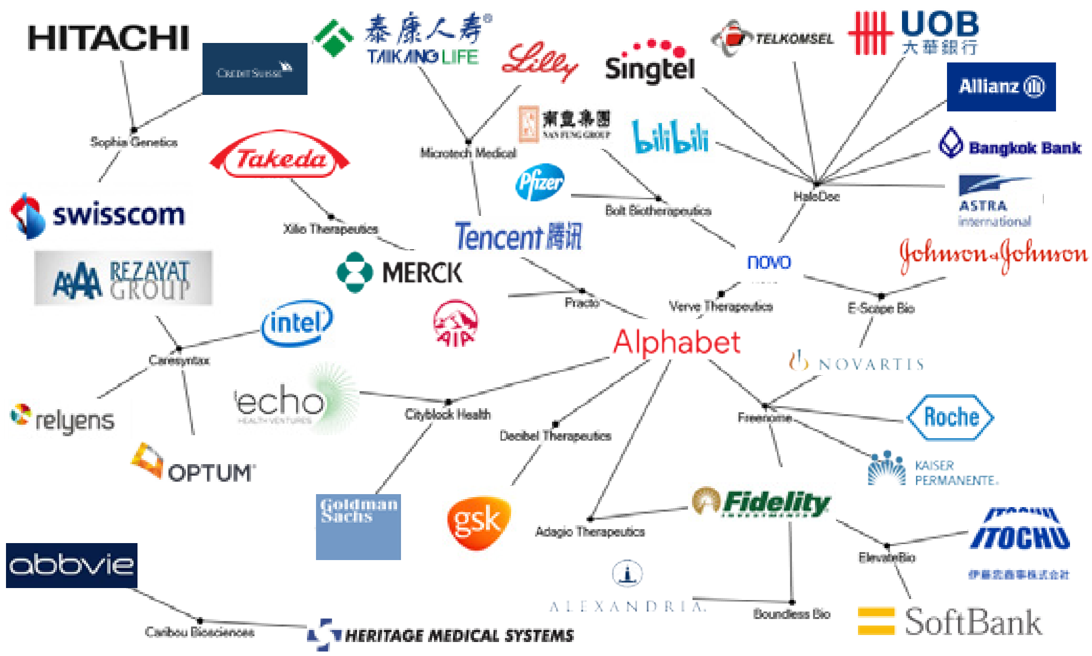
Co-investments of health sector corporate venturers

- Genetics and gene therapeutics (4d Molecular, Caribou, Vineti, Entrada)
- Cancer treatment (A2i, Palleon, Fate, Orna, Xilio)
- Telehealth and digital health (Buoy Health, Science 37)
- Neurodegenerative disease treatments (E-Scape Bio)
- Diagnostics and monitoring (Enterome Biosciences, Glooko)



Corporate co-investments in health sector enterprises

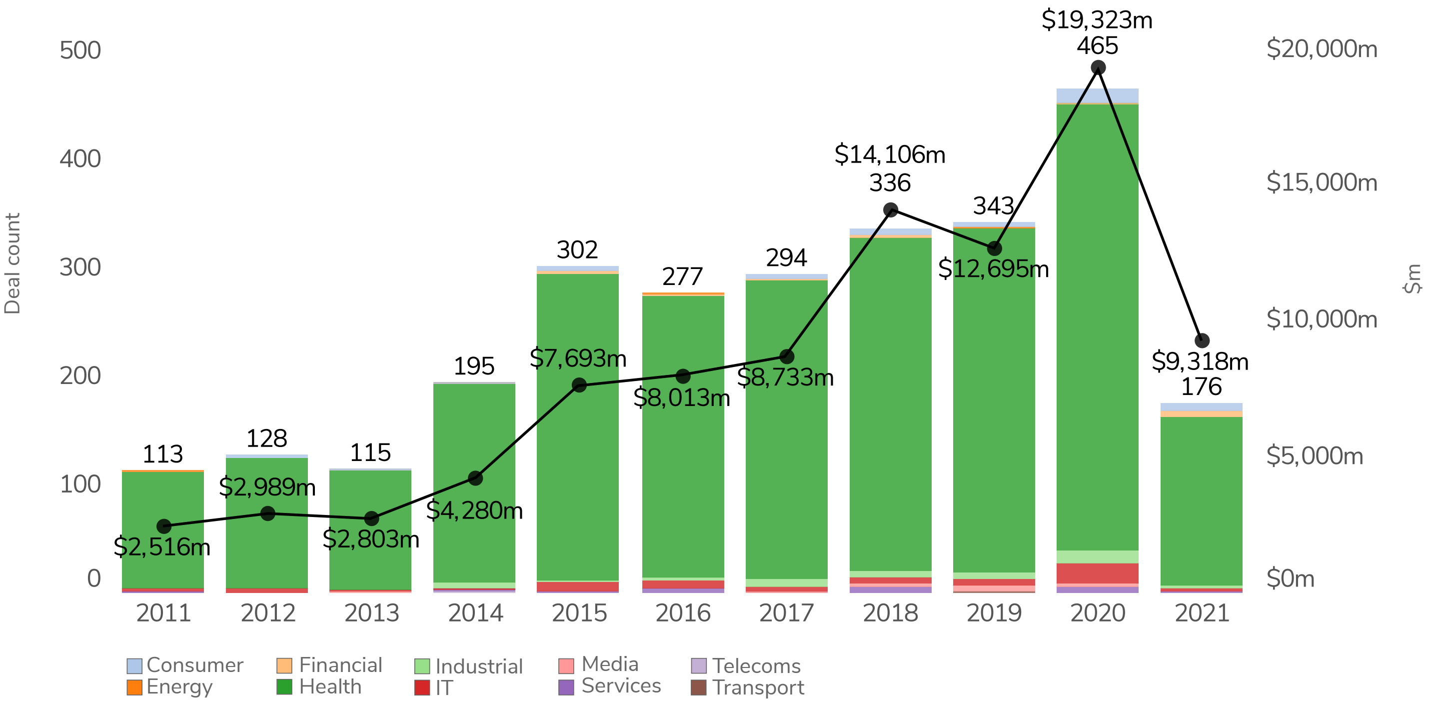
- Genetics and gene therapeutics (Sophia Genetics, Caribou, Verve, Freenome)
- Cancer drugs and treatments (Bolt, Boundles, Xilio)
- Medical equipment makers (Microtech Medical)
- Hearing loss treatments (Decibel)
- Antivirals (Adagio)
- Healthcare IT and digital health application (Cityblock Health, HaloDoc, Practo).



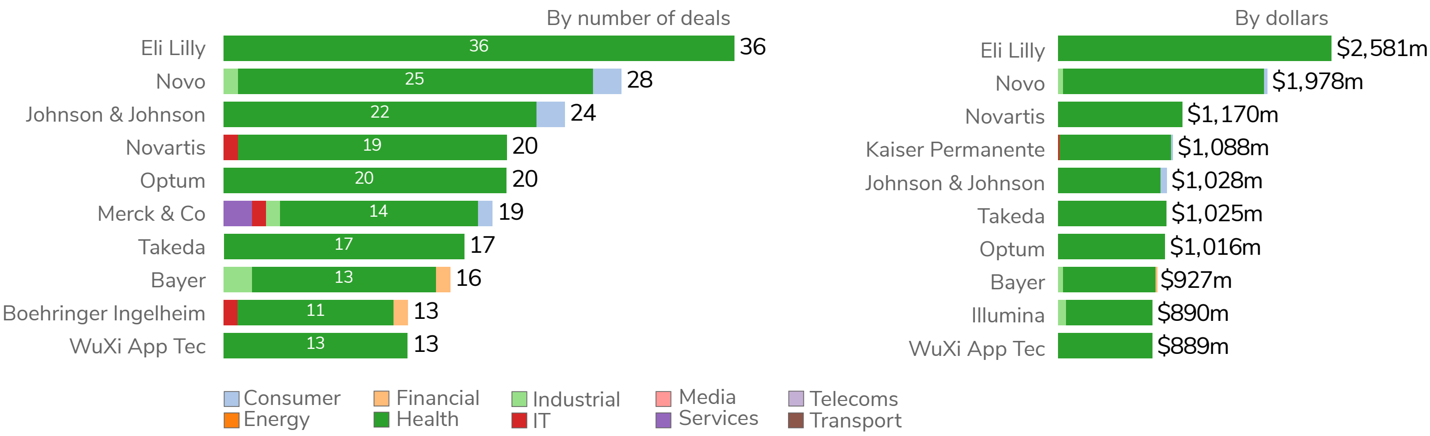
Source: GCV Analytics

Deals by health corporates

On a calendar year-on-year basis, total capital raised in corporate-backed rounds went up from $12.7bn in 2019 to $19.32bn in 2020, suggesting a 52% increase. The deal count also increased considerably by 36% from 343 deals in 2019 up to 465 tracked by the end of last year. The ten largest investments by corporate venturers from the health sector were all in the same industry.



Top health investors over the past year

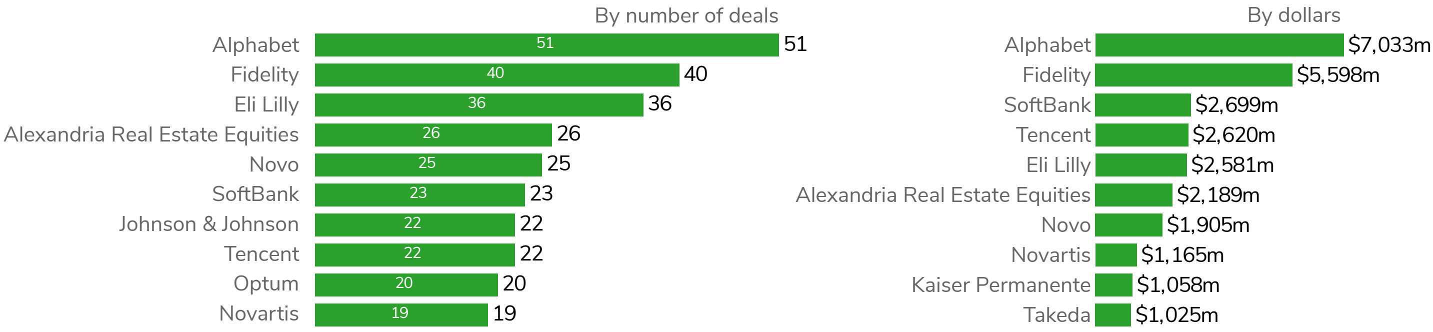


Source: GCV Analytics

The leading corporate investors from the health sector in terms of largest number of deals were pharmaceuticals Eli Lilly, Novo and Johnson & Johnson. The list of life sciences corporates committing capital in the largest rounds was headed by Eli Lilly, Novo and Novartis.

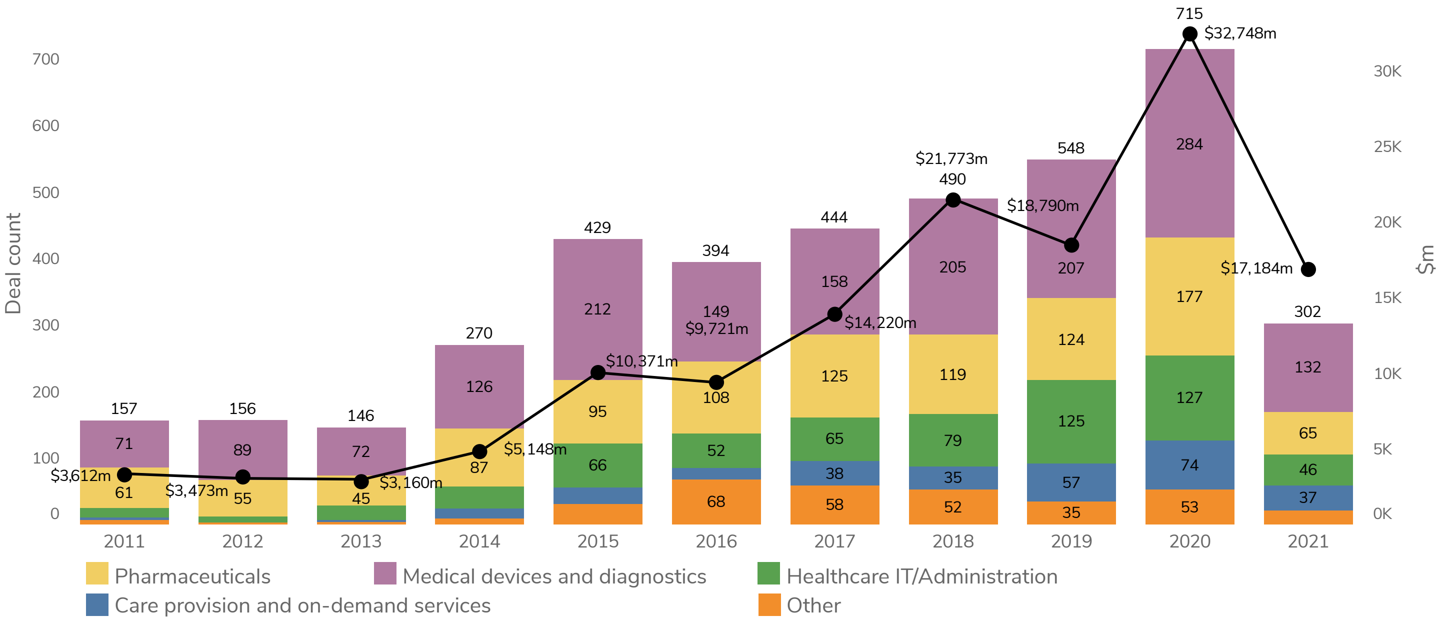
Top investors in the health sector over the past year

The most active corporate venture investors in the emerging life sciences companies were diversified internet conglomerate Alphabet, financial services firm Fidelity and Eli Lilly.



Corporate-backed deals in health enterprises

Overall, corporate investments in emerging health-focused enterprises went up from 548 rounds in 2019 to 716 by the end of 2020, suggesting a 31% increase. Estimated total dollars in those rounds nearly doubled from $18.79bn in 2019 to $32.75bn in 2020. Overall, the pandemic shock did not affect much dealmaking and flow of capital into emerging businesses.



Source: GCV Analytics

Deals

Top 10 deals by health sector corporates (May 2020-April 2021)

Portfolio Company	Location	Sector	Round	Round size	Investors List
Grail	USA	Health	D	$390m	Canada Pension Plan | Illumina | Public Sector Pension Investment Board | undisclosed investors
BlockFi	USA	Financial Services	D	$350m	Akuna Capital | Bain Capital | Bracket Capital | Breyer Capital | Castle Island Ventures | China Medical System Holdings (CMS) | DST Global | Gaingels | Hudson River Capital | Jump Capital | Kenetic Capital | Morgan Creek Capital Management | Pacific Century Group | Paradigm | ParaFi Capital | PJC Capital | Pomp Investments | Susquehanna International Group | Third Prime | Tiger Global Management | Valar Ventures | Venture Collective
LianBio	China	Health	Undisclosed	$310m	BlackRock | Casdin Capital | CMG.Asia | Farallon Capital Management | Logos Capital | Perceptive Advisors | Pfizer | RA Capital Management | Sphera Global Healthcare | T Rowe Price | Tybourne Capital | VenRock | Vida Ventures | Viking Global Investors | Wellington Management
Pionyr Immunotherapeutics	USA	Health	Stake purchase	$275m	Gilead Sciences
Freenome	USA	Health	C	$270m	Alphabet | American Cancer Society | Andreessen Horowitz | Bain Capital | Catalio Capital Management | Colorectal Cancer Alliance | Cormorant Asset Management | Data Collective | EcoR1 Capital | Farallon Capital Management | Fidelity | Janus Henderson Investors | Kaiser Permanente | Novartis | Perceptive Advisors | Polaris Venture Partners | RA Capital Management | Roche | Rock Springs Capital | Sands Capital | Section 32 | Soleus Capital | T Rowe Price
VillageMD	USA	Health	Undisclosed	$250m	Walgreens Boots Alliance
Recursion Pharmaceuticals	USA	Health	D	$239m	Advantage Capital Partners | Baillie Gifford | Bayer | Casdin Capital | Catalio Capital Management | Data Collective | Epic Ventures | Felicis Ventures | Intermountain Healthcare | Laurion Capital Management | Lux Capital | Mubadala | Obvious | Samsara BioCapital | Two Sigma Investments
3DMed Diagnostic	China	Health	Undisclosed	$224m	China International Capital Corporation | Citic Guoan | Haier Biomedical | Jemincare | LanShang Capital | Luxin Venture Capital Group | Ruiyi Investment | Sangel Capital | Shandong Transportation Industrial Development Fund | Spinnotec
DispatchHealth	USA	Health	D	$200m	Alta Partners | Echo Health Ventures | Oak HC/FT | Questa Capital | Tiger Global Management
Tempus	USA	Health	E and beyond	$200m	Alphabet | Baillie Gifford | Franklin Templeton | Novo | T Rowe Price

Source: GCV Analytics

1 US-based cancer diagnostics technology developer Grail received $390m in a series D round backed by genomics company Illumina. Pension funds Public Sector Pension Investment Board and Canada Pension Plan Investment Board also took part in the round, as did several unnamed new and existing backers.

Spun out of Illumina in 2016, Grail has created an early detection blood test for more than 50 cancer indications with a false positive rate of less than 1%. The test uses a proprietary database and machine learning algorithms to detect the presence of cancer and identify where in the body it is located. This series D funding will go towards the continued development of Grail's test.

2 US-headquartered, crypto-focused financial services provider BlockFi closed a $350m series D round featuring quantitative trading firms Hudson River Trading and Susquehanna International Group (SIG).

The round was co-led by Bain Capital Ventures, the venture capital arm of private equity firm Bain Capital, with Pomp Investments, Tiger Global Management and partners of DST Global, while SIG invested through its Susquehanna Government Products subsidiary. China Medical System Holdings, a pharma company, is also a backer.

BlockFi's online platform manages crypto assets on behalf of financial services providers and wealth managers. It will put the funding into product development and an expansion into new markets that may be supported by strategic acquisitions.

3 China-based, Asia-focused drug developer LianBio secured $310m in crossover financing from investors including pharmaceutical firm and vaccine developer Pfizer.

Investment management firm RA Capital co-led the oversubscribed round with investment firm CMG-SDIC Capital and Venrock Healthcare Capital Partners, a branch of VC firm Venock.

LianBio is developing therapeutics licensed from pharmaceutical partners including MyoKardia and BridgeBio for conditions such as cancer and cardiorenal diseases which affect the heart and kidneys. The company was launched in August 2020 with an undisclosed amount of funding from life sciences investment firm Perceptive Advisors.

4 Biopharmaceutical firm Gilead Sciences agreed to pay $275m for a 49.9% stake in US-based immuno-oncology therapy developer Pionyr Immunotherapies as part of a wider agreement. The deal gives Gilead the option to fully acquire Pionyr for a further $315m, and the latter's shareholders could eventually earn a total of $1.47bn in option exercise fees and milestone payments. Gilead can exercise its option at any point up to the completion of phase 1b clinical trials for Pionyr's two lead assets.

Founded in 2015, Pionyr is working on cancer treatments that are intended to promote anti-tumour immunity in patients who do not benefit from checkpoint inhibitor therapies. Its lead candidates, PY314 and PY159, are aimed at solid tumours and have shown promise in preclinical studies.

5 US-based oncology diagnostics technology developer Freenome completed a $270m series C round, featuring pharmaceutical firms Roche and Novartis, healthcare provider Kaiser Permanente and Alphabet. Corporates Alphabet, Kaiser Permanente and Roche participated through respective corporate venturing units GV,

Kaiser Permanente Ventures and Roche Venture Fund. Bain Capital Life Sciences and Perceptive Advisors co-led the round, which included investment and financial services group Fidelity, American Cancer Society's BrightEdge Ventures fund, Janus Henderson Investors, Farallon Capital Management and Rock Springs Capital, among other investors. Freenome has developed a system that can detect cancer with a single blood draw using multiomics technology that combines multiple forms of biological analysis. It has a screening test for colorectal cancer in clinical trials along with one that will detect precancerous lesions.

6 Pharmacy operator Walgreens Boots Alliance (WBA) formed a $1bn strategic partnership agreement with US-based primary care provider VillageMD that included an initial investment of $250m.

The $1bn figure will consist of an undisclosed mix of equity and convertible debt financing over the next three years. The $250m equity investment represented the first instalment and WBA will own a 30% stake in VillageMD once the debt has been converted into equity.

Founded in 2013, VillageMD runs a nationwide network of primary care services providers called Village Medical. It has partnered more than 2,800 physicians, with 600,000. The partnership will enable WBA to offer full-service doctor offices at its pharmacies. It plans to launch them in 500 to 700 facilities across more than 30 markets over the next five years, before adding hundreds more.

VillageMD will be responsible for recruiting more than 3,600 physicians to operate the outlets and will integrate Walgreens into its healthcare service.

7 Pharmaceutical and agricultural product manufacturer Bayer invested $50m to lead a $239m series D round for US-based drug discovery technology provider Recursion through its Leaps by Bayer subsidiary. Fellow new investors Casdin Capital, Catalio

Walgreens has formed a strategic parthernship with VillageMD

Credit: Bayer

Bayer led a series D round for a drug discovery technology developer

Capital Management, Laurion Capital Management and Samsara BioCapital also took part in the round, which valued Recursion just below $1bn pre-money, a source told The Information.

The round was filled out by existing backers which include Intermountain Ventures, care provider Intermountain Healthcare's corporate venturing unit, as well as Baillie Gifford, Mubadala Investment and other investors.

Recursion is combining automation and machine learning technology with what it claims is the largest biological image dataset in the world to discover drug treatments for a range of conditions including cancer and genetic disorders such as neurofibromatosis or GM2 gangliosidosis.

8 China-based medical test developer 3DMed Diagnostic closed a RMB1.5bn ($224m) funding round featuring pharmaceutical firm Jemincare and biomedical cold chain storage provider Haier Biomedical. The round was led by CPE, the alternative asset management arm of state-owned investment firm Citic Group, and included CICC Capital, a private equity arm of investment bank China International Capital Corporation.

Spun off by precision cancer drug developer 3D Medicines in 2018, 3DMed Diagnostic focuses on diagnostic tools, including a test for covid-19, based on technology developed at its parent company.

Proceeds from the round will support research and recruitment activities as 3DMed Diagnostic targets international growth.

9 US-based home healthcare service DispatchHealth secured $200m in series D funding from investors including health insurance provider Humana at a $1.7bn valuation. Investment firm Tiger Global Management led the round, which included Echo Health Ventures, the partnership between healthcare provider Cambia Health Solutions and investment firm Mosaic Health Solutions, as well as Alta Partners, Oak HC/FT and Questa Capital.

Founded in 2013 as True North Health Navigation, DispatchHealth provides a home care platform that delivers on-demand emergency medical services encompassing treatments for common injuries and complex diseases. The proceeds from the round will be used to increase its presence in a hundred markets and promote its Advanced Care programme, an in-home clinical service that functions as an alternative to hospitalisation.

10 US-based precision therapeutics developer Tempus raised $200m in a series G2 round featuring Alphabet and Novo, at an $8.1bn post-money valuation. The corporates joined investment management firms Baillie Gifford and Franklin Templeton in the round along with funds and accounts managed by investment manager T Rowe Price. Tempus applies AI to large volumes of clinical and molecular data to develop precision medicine products for cancer, infectious and neurological diseases. The capital will help it expand into new areas such as depression and cardiology.

Top investments in health sector enterprises (May 2020-April 2021)

Portfolio Company	Location	Sector	Round	Round size	Investors List
MGI Tech	China	Health	B	$1bn	China Renaissance | Citic | Co-Stone Asset Management | Huatai Securities Company | International Data Group | Sailing Capital | Shanghai Guofang FoF | Shenzhen Green Pine Capital Partners
Resilience	USA	Health	Undisclosed	$800m	Alphabet
Sana Biotechnology	USA	Health	Undisclosed	$700m	Alaska Permanent Fund | Alphabet | Altitude Life Science Ventures | Arch Venture Partners | Baillie Gifford | Bezos Expeditions | Canada Pension Plan | Fidelity | Flagship Pioneering | Omega Funds | Public Sector Pension Investment Board | undisclosed investors
Verily Life Sciences	USA	Health	Undisclosed	$700m	Alphabet | Ontario Teachers' Pension Plan Board | Silver Lake | Temasek
ElevateBio	USA	Health	C	$525m	EcoR1 Capital | EDBI | Emerson Collective | F2 Ventures | Fidelity | Invus | Itochu | Matrix Capital | MPM Capital | Redmile Group | Samsara BioCapital | SoftBank | Surveyor Capital | undisclosed investors | Vertex Ventures
Dxy.cn	China	Health	Undisclosed	$500m	Hillhouse Capital Management | Tencent | TrustBridge Partners
EQRx	USA	Health	B	$500m	Alphabet | Andreessen Horowitz | Arboretum Ventures | Arch Venture Partners | Casdin Capital | Nextech Invest | Section 32 | undisclosed investors
Miaoshou Doctor	China	Health	E and beyond	$466m	China International Capital Corporation | Citic Securities | Qiming Venture Partners | Sequoia Capital | Tencent
Insitro	USA	Health	C	$400m	Alexandria Real Estate Equities | Alphabet | Andreessen Horowitz | Arch Venture Partners | BlackRock | Canada Pension Plan | Casdin Capital | Foresite Capital | Hof Capital | SoftBank | T Rowe Price | Temasek | Third Rock Ventures | Two Sigma Investments | undisclosed investors
Grail	USA	Health	D	$390m	Canada Pension Plan | Illumina | Public Sector Pension Investment Board | undisclosed investors

Source: GCV Analytics

There were other interesting deals in emerging health-focused businesses that received financial backing from corporate investors from the same and other sectors.

1 Spun off by China-based genomics services provider BGI, gene sequencing technology developer MGI Tech raised a $1bn series B round. VC firm IDG Capital and private equity fund CPE Capital co-led the round, which featured also investment bank China Renaissance's New Economy Fund and Goldstone Investment, among many other investors.

Founded in 2016, MGI develops gene sequencing systems for use in life sciences research, drug development, precision medicine and agriculture. The applications of the company's systems range from mass spectrometry and medical imaging to laboratory automation. Its technology has been used for the rapid detection of covid-19 and its equipment has been sold internationally. MGI products cover genetic testing, gene editing and synthesis, and include sequencing reagents, materials and biochemical reaction systems.

2 Resilience, a US-based developer of medical manufacturing technology, emerged from stealth with more than $800m in funding from investors including GV, a subsidiary of Alphabet. GV participated in a recently closed $750m series B round co-led by Arch Venture Partners and 8VC and also backed by fellow VC firm New Enterprise Associates and unnamed pharmaceutical companies, public mutual funds, foundations, family offices and pension funds.

Founded in 2020 and also known as National Resilience, Resilience is developing technologically advanced pharmaceutical manufacturing facilities that will help therapeutics developers concentrate capital on drug discovery activities. The technology is intended to allow gene and cell therapies, vaccines, proteins and viral vectors to be produced quickly and safely at scale. The startup intends to bring more than 750,000 square feet of operating space online over the next year and will also offer drug chain development and supply chain management services.

3 US-based stem cell medicine developer Sana Biotechnology closed its inaugural funding round, having raised more than $700m from investors including GV. The round also featured F-Prime Capital, a fund owned by investment and financial services group Fidelity, as well as Canada Pension Plan Investment Board, Alaska Permanent Fund and the Public Sector Pension Investment Board. Sana is working on technology intended to repair and control genes in cells and replace missing or damaged cells to tackle the underlying causes of serious diseases, ranging from cancer and

central nervous system conditions to heart disease and various genetic disorders. The funding has been allocated to advancing the startup's core platforms, including those focusing on gene delivery, immunology, stem cell biology and gene modification and control.

4 Verily, a US-headquartered developer of data-focused life sciences technology, received $700m in funding from investors including its parent company Alphabet. The company said the funding was provided by its current investors and named private equity firm Silver Lake, Singaporean state-owned investment firm Temasek and pension fund manager Ontario Teachers' Pension Plan alongside Alphabet. The cash will go to commercialising the product range, which includes Verily Health Platforms, an umbrella that oversees covid-19 testing service Healthy at Work, diabetes management platform OnDuo and Coefficient, a health insurance product. Launched in 2015 after being incubated within Alphabet's Google X division, Verily is working on hardware and software products in partnership with other companies to use data in drug development and disease management.

5 US-based gene therapy developer ElevateBio secured $525m in a series C round that included telecoms and internet group SoftBank's Vision Fund 2 and diversified trading firm Itochu. The round was led by investment manager Matrix Capital Management and also featured investment and financial services group Fidelity Management & Research Company in addition to an undisclosed large insurance firm.

ElevateBio is working on cell, gene and regenerative therapies for a wide range of potential illnesses. The company launched in May 2019 with $150m from a series A round featuring investment bank UBS's Oncology Impact Fund.

6 China-based online medical community operator DXY closed a $500m financing round that included Tencent Investment, the corporate venturing subsidiary of internet group Tencent. Growth equity firm Trustbridge Partners led the round, which also featured hedge fund manager Hillhouse Capital's VC arm, GL Ventures.

Founded in 2000, DXY operates an online platform where physicians can share expertise, and has expanded into consumer-facing medical advice, medical staff recruitment and online consultations. It has some 5.5 million professionals on its platform including 2 million doctors. The company has also established a

Singapore's state-owned investment firm Temasek invested in Verily

Affordable medicine developer EQRx and drug discovery technology provider Insitro are backed by Alphabet

real-time information service on the covid-19 pandemic along with a service that refutes rumours about the disease.

7 US-based affordable medicine developer EQRx secured $500m in a series B round featuring healthcare software producer Nextech and GV. The round included all the participants in the $200m series A round EQRx disclosed when it emerged from stealth in January 2020, including Andreessen Horowitz, Section 32, Casdin Capital, Arch Venture Partners and Arboretum Ventures.

The series A investors were joined by undisclosed payers and health systems, life sciences specialists, family offices and mutual, sovereign wealth and private equity funds. EQRx is looking to utilise advanced technology to develop more affordable monotherapies and drug combinations in partnership with biopharmaceutical companies. The company has identified late-stage liver, breast and on-small cell lung cancer medication and drugs for inflammatory conditions as areas to pursue.

8 Yuanxin Technology, the China-based developer of a telemedicine platform, closed a RMB$3bn ($466m) series E round co-led by Tencent. VC firm Sequoia China co-led the round, which also featured peer Qiming Venture Partners, investment bank Citic Securities and CICC Capital, a subsidiary of investment banking firm China International Capital Corporation.

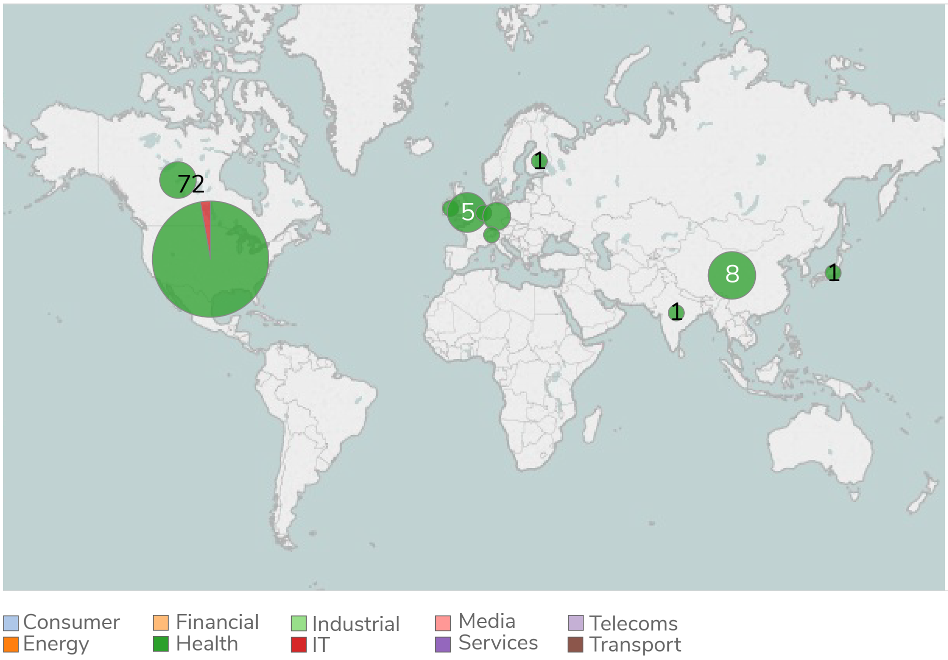
Founded in 2015, Yuanxin has created a mobile app called Miaoshou Doctor that enables users to access a network of 1.3 million doctors for online consultations outside normal work hours, in addition to paying for prescription medicine and buying health insurance. The company has about 7 million daily active users and also manages online portals for some 200 Chinese hospitals across 80 cities.

9 US-headquartered drug discovery technology provider Insitro received $400m in a series C round featuring GV and Softbank Investment Advisors, on behalf of Alphabet and SoftBank. Canada Pension Plan Investment Board led the round, which included Alexandria Venture Investments, the VC arm of life sciences real estate investment trust Alexandria Real Estate Equities, as well as an unnamed healthcare provider and undisclosed investment group.

Insitro uses machine learning technology to support drug development through enhanced medicine design, the creation of predictive cell-based disease models and the deployment of statistical genetics in locating druggable targets.

Exits

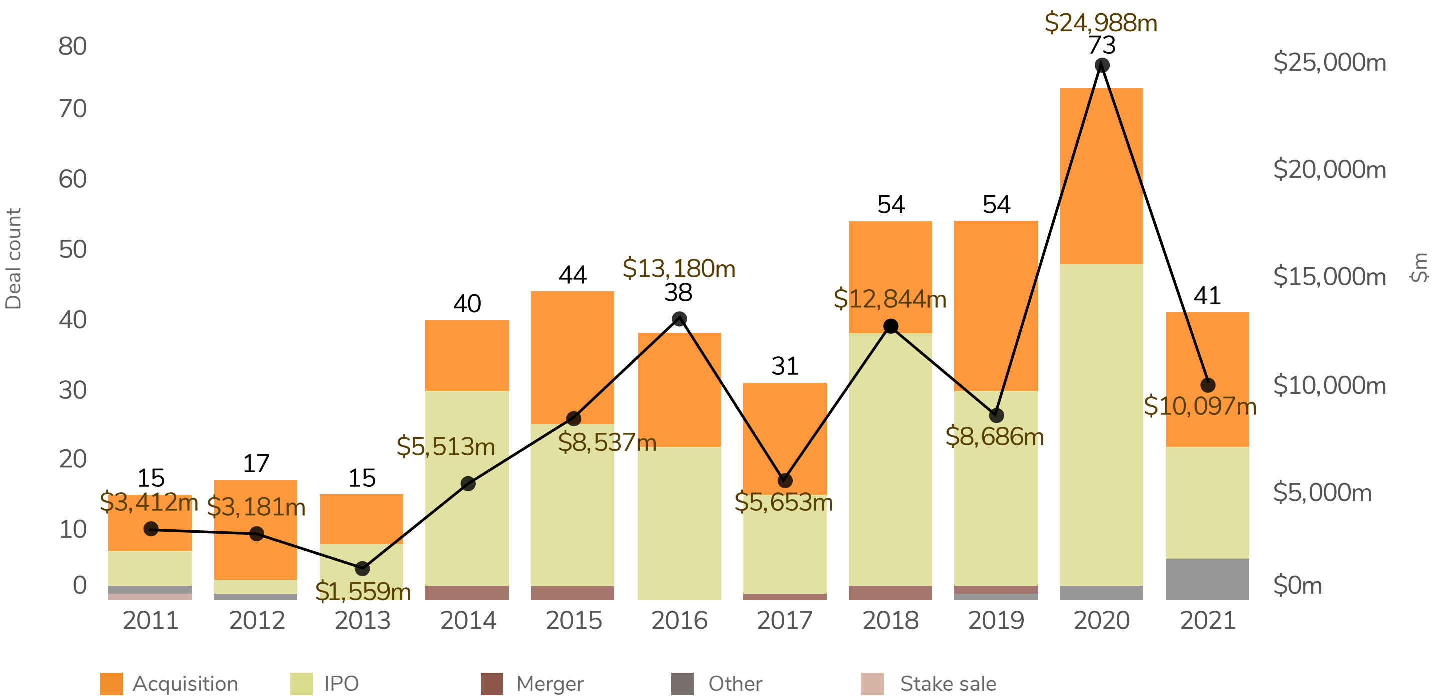
Global view of past year's exits



Corporate venturers from the health sector completed 97 exits between May 2020 and April 2021 – 54 initial public offerings (IPOs), 35 acquisitions and eight other transactions.

Exits by health corporates

As for year-on-year, the transaction volume went up from 54 to 73 between 2019 and 2020, while the estimated dollar value increased almost threefold from $8.69bn down to $24.99bn.



Source: GCV Analytics

Top exits by health corporate investors (May 2020-April 2021)

Portfolio Company	Location	Sector	Exit Type	Acquirer	Exit size ($m)	Exiting investors
Grail	USA	Health	Acquisition	Illumina	#$8bn	Ally Bridge Group | Alphabet | Amazon | Arch Venture Partners | Bezos Expeditions | Blue Pool Capital | Bristol-Myers Squibb | Canada Pension Plan | Celgene | China Merchant Securities International | CRF Investment | Decheng Capital | Hillhouse Capital Management | HuangPu River Capital | ICBC International | Illumina | Johnson & Johnson | McKesson Corporation | Memorial Sloan Kettering | Merck & Co | Milky Way Ventures | private investors | Public Sector Pension Investment Board | Sequoia Capital | Sutter Hill Ventures | Tencent | Varian Medical Systems | WuXi AppTec
VelosBio	USA	Health	Acquisition	Merck & Co	$2.75bn	Adage Capital Management | Arix Bioscience | Chiesi | Cormorant Asset Management | Decheng Capital | Farallon Capital Management | Foresite Capital | Janus Henderson Investors | Johnson & Johnson | Logos Capital | Matrix Capital | OrbiMed Advisors | Pappas Capital | Sofinnova Partners | Surveyor Capital | T Rowe Price | Takeda | VenRock | Viking Global Investors | Wellington Management
Kymab	UK	Health	Acquisition	Sanofi	$1.45bn	Bill & Melinda Gates Foundation | Malin Corporation | ORI Capital | Shenzhen Hepalink Pharmaceutical | Wellcome Trust | Woodford Equity Income Fund | Woodford Patient Capital
ArcherDX	USA	Health	Acquisition	Invitae	$1.4bn	ArrowMark Partners | Boulder Ventures | Driehaus Capital Management | Longwood fund | PBM Capital Group | Peierls Foundation | Perceptive Advisors | Qiagen | Redmile Group | Sands Capital | Soleus Capital
Moderna Therapeutics	USA	Health	Other		$1bn	AstraZeneca
23andMe	USA	Health	Other		$980m	Alphabet | Altimeter Capital Management | Casdin Capital | Fidelity | Foresite Capital | GSK | Illumina | Johnson & Johnson | Roche | VG Acquisition Corp | Virgin | WuXi AppTec
Mobidiag	Finland	Health	Acquisition	Hologic	$795m	Autobio Diagnostics | Springvest
Amwell (American Well)	USA	Health	IPO		$742m	Allianz | InVenture Partners | Philips | Takeda | Teva Pharmaceutical Industries
Rodeo Therapeutics	USA	Health	Acquisition	Amgen	$721m	AbbVie | Accelerator Corporation | Alexandria Real Estate Equities | Arch Venture Partners | Eli Lilly | Johnson & Johnson | Watson Fund | WRF Capital | WuXi AppTec
SomaLogic	USA	Health	Other		$615m	Casdin Capital | CM Life Sciences II | Farallon Capital Management | iCarbonX | Illumina | Janus Henderson Investors | Nan Fung Group | Novartis | Otsuka Pharmaceutical | Perceptive Advisors | Quest Diagnostics | SoftBank | T Rowe Price

Source: GCV Analytics

1 US-based medical diagnostics technology Grail agreed to an $8bn acquisition by genomics technology producer Illumina, which was originally spun out the former. With this transaction, Grail received $3.5bn in cash and another $4.5bn in stock. Grail and Illumina had also signed a $315m merger termination agreement.

2 Pharmaceutical firm Merck & Co agreed to acquire oncology therapy developer VelosBio for $2.75bn in cash, enabling pharmaceutical companies Chiesi and Takeda to exit. Founded in 2017, VelosBio is working on cancer drugs targeted at a type of protein known as the tyrosine kinase-like orphan receptor 1. The company's lead candidate, VLS-101, is an antibody-drug conjugate in a phase 1 clinical trial for haematologic malignancies and a phase 2 trial for solid tumours. It had secured $202m in funding prior to the acquisition agreement.

3 Pharmaceutical firm Sanofi agreed to acquire UK-based monoclonal antibody therapy developer Kymab in a deal sized at up to $1.45bn that will enable pharmaceutical manufacturer Shenzhen Hepalink to exit. The transaction consisted of $1.1bn in cash and up to $350m in milestone payments. It comes after approximately $220m in funding for the company.

Founded in 2010, Kymab is developing treatments for cancer and immune-mediated diseases. Its lead product candidate, KY1005, is a monoclonal antibody that could potentially treat a range of immune-mediated diseases and inflammatory disorders.

4 Genetic information provider Invitae agreed to acquire US-based genetic testing technology developer ArcherDX in a deal valued at about $1.4bn that will allow medical researcher Qiagen to exit. The transaction will consist of $325m in cash and 30 million shares of

Invitae stock, in addition to 27 million more shares dependent on certain milestones being met.

ArcherDX has created a range of precision oncology products informed by genetic sequencing technology and bioinformatics software to assist in cancer research. It had been preparing a regulatory submission for its debut in-vitro diagnostics product in late 2020. The company was formed in 2015 when Qiagen bought the Enzyme Solutions division of biological research technology provider Enzymatics. It had filed for a $100m initial public offering in June 2020.

5 Pharmaceutical firm AstraZeneca divested its stake in US-listed RNA therapeutics and vaccine developer Moderna for an amount likely to be above $1bn. Moderna specialises in drugs and vaccines that inject messenger RNA into human cells to spur production of certain proteins. In the past year its share price has soared multifold, mainly due to it being one of the first to successfully produce a vaccine for covid-19. The company had floated in a $604m IPO in 2018 following nearly $1.75bn in funding. AstraZeneca then held a 7.8% stake worth approximately $587m.

6 23andMe, the US-based genetic testing service backed by corporates Alphabet, WuXi AppTec, Johnson & Johnson, GlaxoSmithKline, Roche and Illumina, agreed a reverse merger with a special purpose acquisition company (Spac).

VG Acquisition Corp, which is sponsored by conglomerate Virgin Group, floated on the New York Stock Exchange in a $480m IPO in October 2020, and the merged business will take its listing on the exchange.

The transaction valued the company at $3.5bn and was supported by $500m in financing from Virgin founder Richard Branson, 23andMe co-founder and CEO Anne Wojcicki, funds managed by investment and financial services group Fidelity, Altimeter Capital, Casdin Capital and Foresite Capital.

Founded in 2006, 23andMe provides home testing kits that customers send back in order to get information on genealogy and/or their potential genetic susceptibility to certain diseases. The information also supports genetic research carried out by the company.

7 Women-focused medical technology producer Hologic agreed to acquire Mobidiag, a Finland-headquartered molecular diagnostics technology developer backed by clinical diagnostics product maker Autobio Diagnostics, for €668m ($795m). The deal involves a cash payment of $714m combined with $81m of net debt financing. Founded in 2000, Mobidiag produces polymerase chain reaction-based tests and equipment for acute care conditions including gastrointestinal and respiratory infections. The company's offering includes the Amplidiag range, for high-throughput molecular diagnostics, and the Novodiag platform for fast on-demand molecular diagnostics. It generated approximately $42m of revenue during 2020. The acquisition will strengthen Hologic's portfolio of diagnostics businesses and enable it to enter the acute care market.

8 Amwell, a US-based telehealth technology provider backed by electronics and medical technology producer Philips, insurance group Allianz and pharmaceutical firms Teva and Takeda, raised $742m in its IPO. The company has increased the number of shares in the offering from 35 million to 41.2 million and priced them at $18., above the $14 to $16 range it had set. Internet technology provider Google invested $100m in a separate private placement.

Credit: GSK

GlaxoSmithKline backed 23andMe

US-listed drugs group Amgen agreed to acquire Rodeo Therapeutics

Formerly known as American Well, Amwell has built a telehealth technology platform that links patients with healthcare providers and health insurers. It manages telehealth operations for 55 health insurance plans and 150 healthcare systems. The company increased revenue 77% year on year to $122m in the first half of 2020, though net losses near tripled to $113m.

9 US-listed drugs group Amgen agreed to acquire Rodeo Therapeutics, a US-based small-molecule therapy developer for tissue, for up to $721m. Amgen will pay an initial $55m and up to $666m in cash subject to milestones. In July 2017, Rodeo raised $5.9m in series A financing from investors including pharmaceutical firms AbbVie, Eli Lilly, Johnson & Johnson and WuXi AppTec. AbbVie and Johnson & Johnson had invested through their respective corporate venturing units: AbbVie Ventures and Johnson & Johnson Innovation – JJDC. Previous backers also include Alexandria Venture Investments, among others. Rodeo is developing small-molecule therapies, including its lead 15-prostaglandin dehydrogenase modulators, that will help regenerate and repair various types of tissue, for use in dealing with conditions such as ulcerative colitis and for haemopoietic recovery after bone marrow transplants.

10 SomaLogic, the US-based healthcare management software provider backed by Novartis, Nan Fung, iCarbonX, Otsuka and Quest Diagnostics, agreed a reverse takeover with special purpose acquisition company CM Life Sciences II. The deal gave SomaLogic a pre-transaction enterprise value of approximately $1.23bn and will involve it acquiring the spot on the Nasdaq Capital Market taken by CM Life Sciences II – sponsored by Casdin Capital and Corvex Management – in a $240m IPO. SoftBank's SB Management unit, Novartis and genomics technology provider Illumina were among the participants in a $375m private investment in public equity (PIPE) financing supporting the transaction.

SomaLogic pools data from users and its partner network to provide detailed health data that helps users manage their personal health more effectively. It specialises in proteomics, the science of proteins.

Top exits from health enterprises (May 2020-April 2021)

Portfolio company	Location	Sector	Exit Type	Acquirer	Exit size	Exiting investors
Grail	USA	Health	Acquisition	Illumina	$8bn	Ally Bridge Group | Alphabet | Amazon | Arch Venture Partners | Bezos Expeditions | Blue Pool Capital | Bristol-Myers Squibb | Canada Pension Plan | Celgene | China Merchant Securities International | CRF Investment | Decheng Capital | Hillhouse Capital Management | HuangPu River Capital | ICBC International | Illumina | Johnson & Johnson | McKesson Corporation | Memorial Sloan Kettering | Merck & Co | Milky Way Ventures | private investors | Public Sector Pension Investment Board | Sequoia Capital | Sutter Hill Ventures | Tencent | Varian Medical Systems | WuXi AppTec
JD Health	China	Health	IPO		$3.48bn	Bank of America | Baring Private Equity Asia | CICC Capital | Citic | Haitong Securities | Hillhouse Capital Management | UBS
VelosBio	USA	Health	Acquisition	Merck & Co	$2.75bn	Adage Capital Management | Arix Bioscience | Chiesi | Cormorant Asset Management | Decheng Capital | Farallon Capital Management | Foresite Capital | Janus Henderson Investors | Johnson & Johnson | Logos Capital | Matrix Capital | OrbiMed Advisors | Pappas Capital | Sofinnova Partners | Surveyor Capital | T Rowe Price | Takeda | VenRock | Viking Global Investors | Wellington Management
Kymab	UK	Health	Acquisition	Sanofi	$1.45bn	Bill & Melinda Gates Foundation | Malin Corporation | ORI Capital | Shenzhen Hepalink Pharmaceutical | Wellcome Trust | Woodford Equity Income Fund | Woodford Patient Capital
23andMe	USA	Health	Other		$980m	Alphabet | Altimeter Capital Management | Casdin Capital | Fidelity | Foresite Capital | GSK | Illumina | Johnson & Johnson | Roche | VG Acquisition Corp | Virgin | WuXi AppTec
Arvelle Therapeutics	Switzerland	Health	Acquisition	Angelini Pharma	$960m	Andera Partners | BRV Capital Management | Fidelity | HIG BioHealth Partners | KB Investment | NovaQuest
Mobidiag	Finland	Health	Acquisition	Hologic	$795m	Autobio Diagnostics | Springvest
Amwell (American Well)	USA	Health	IPO		$742m	Allianz | InVenture Partners | Philips | Takeda | Teva Pharmaceutical Industries

Source: GCV Analytics

Global Corporate Venturing also reported two exits of emerging life sciences-related enterprises that involved corporate investors.

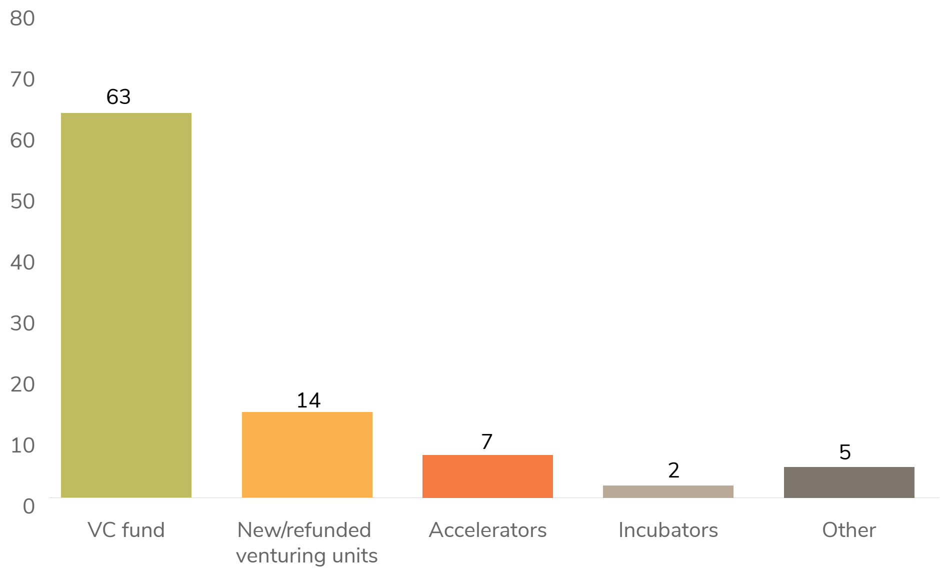
1 China-based e-commerce group JD.com's healthcare-focused spinoff, JD Health, floated on the Hong Kong Stock Exchange in a HK$27bn ($3.48bn) IPO. JD Health issued approximately 382 million shares priced at HK$70.58 each, at the top of the HK$62.80 to HK$70.58 range set, valuing it at almost $29bn. JD Health's online platform sells prescription medication and a range of products including health supplements, medical supplies and contact lenses. It also manages a telemedicine service that allows users to book online consultations with doctors.

2 Angelini Pharma, a subsidiary of conglomerate Angelini, agreed to buy Arvelle Therapeutics, a central nervous system disorder drug developer spun off by pharmaceutical company Axovant, for up to $960m. The deal involved a $610m upfront payment, with up to $350m in additional capital to be paid should Arvelle's epilepsy drug, cenobamate, achieve revenue targets. Arvelle was formed in 2019 to commercialise cenobamate to treat drug-resistant focal-onset seizures. The company expects to secure approval from the European Medicines Agency for the drug, and it has received Promising Innovative Medicine designation by the UK's MHRA. Cenobamate was originally licensed from pharmaceutical firm SK Biopharmaceuticals, which will sell its 12% stake in Arvelle to Angelini as part of the transaction.

Angelini Pharma, a subsidiary of Angelini (headquarters pictured), will buy Arvelle

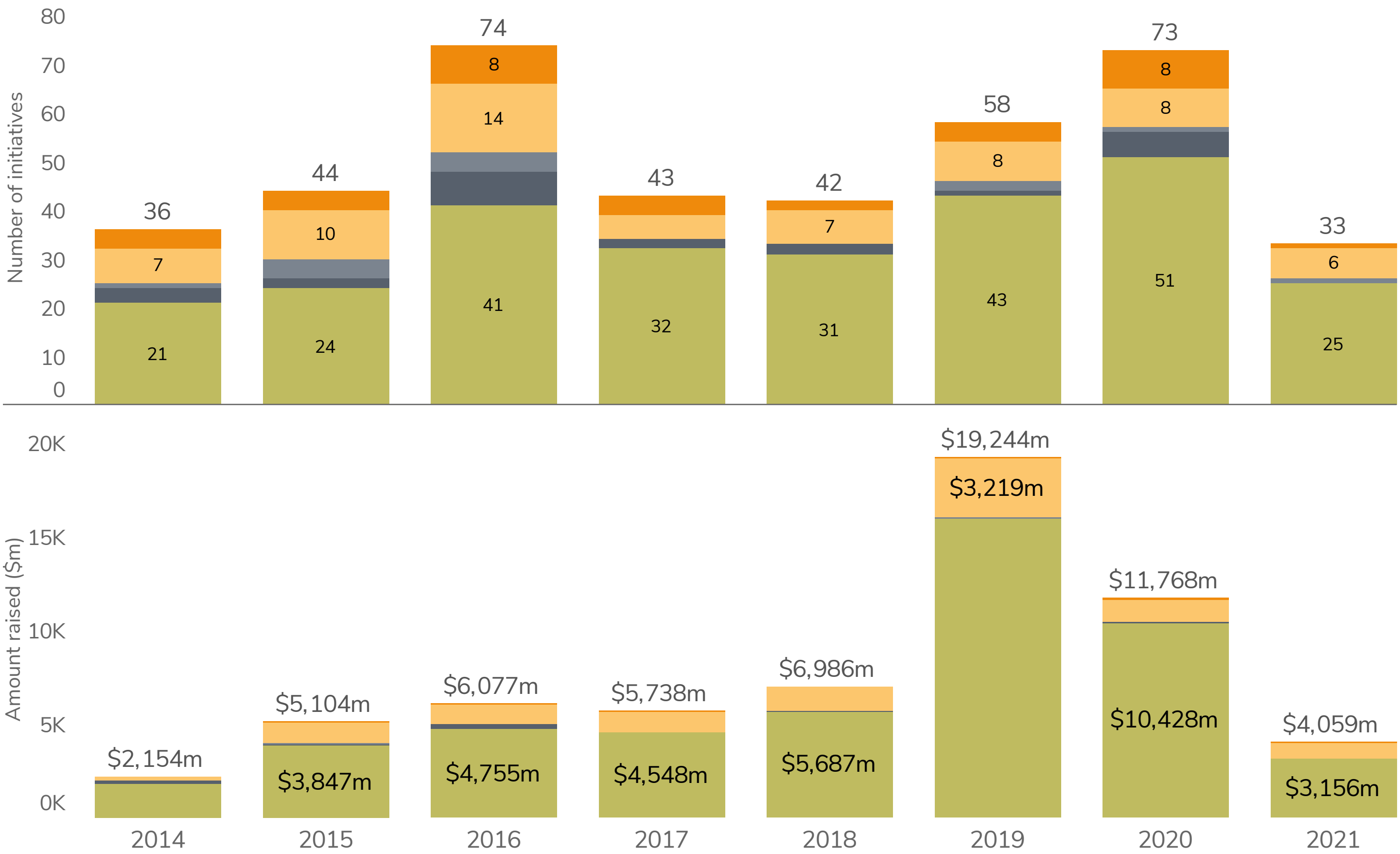
Funds

New funding initiatives



For the period between May 2020 and April 2021, corporate venturers and corporate-backed VC firms investing in the health sector secured $11.25bn in capital via 91 funding initiatives, which included 63 VC funds, 14 new or refunded venturing units, seven accelerators, two incubators and five other initiatives.

Health sector funding initiatives



Source: GCV Analytics

On a calendar year-to-year basis, the number of funding initiatives in the health sector went up by 26% from 58 in 2019 to 73 registered by the end of last year. Total estimated capital, however, drastically decreased from $19.24bn in 2019 down to $11.77bn in 2020.

Top health funding initiatives (May 2020-April 2021)

Fund Name	Type	Funds Raised	Location	Focus	Backers
Antimicrobial Resistance (AMR) Action Fund	VC Fund	$1bn	Switzerland	Health	Almirall | Amgen | Bayer | Boehringer Ingelheim | Chugai Pharmaceutical | Daiichi Sankyo | Eisai | Eli Lilly | GSK | Johnson & Johnson | Leo Pharma | Lundbeck | Menarini | Merck & Co | Merck KGaA (M Ventures) | Novartis | Novo Nordisk | Pfizer | Roche | Shiniogi | Takeda | Teva Pharmaceutical Industries | UCB Pharma
B Capital II	VC Fund	$820m	USA	Services, IT, Financial, Health, Transport, Consumer	Boston Consulting Group (BCG)
Unnamed SR One Fund	VC Fund	$500m	UK	Health	GSK
Pfizer Breakthrough Growth Initiative	VC Fund	$500m	USA	Health	Pfizer
TVM Life Science Innovation II	VC Fund	$478m	Germany	Health	Eli Lilly | TMV
Qiming Venture Partners RMB Fund VI	VC Fund	$441m	China	IT, Telecoms, Media, Health	Qiming Venture Partners | Xiamen C&D
Wuxi AstraZeneca CICC Investment	VC Fund	$338m	China	Health	AstraZeneca | CICC Capital
Heritage Healthcare Innovation Fund III	VC Fund	$317m	USA	Health	AdventHealth Central Florida | Amedisys | Blue Cross Blue Shield of Tennessee | Cardinal Health | Cerner | Community Health Systems | Health Care Service Corporation (HCSC) | Heritage Group | Horizon Blue Cross Blue Shield of New Jersey | Intermountain Healthcare | LifePoint Health | Memorial Hermann Healthcare System | Sutter Health | Tenet Health | Trinity Health | UnityPoint Health
Adjuvant Capital Unnamed Fund	VC Fund	$300m	USA	Health	Adjuvant Capital | Anthos Capital | Beacon Pointe Advisors | Bill & Melinda Gates Foundation | CDC Group | Children's Investment Fund Foundation | Dalio Philanthropies | Elma Investments | Ford Foundation | International Finance Corporation (IFC) | John D and Catherine T MacArthur Foundation | KFW | Laerdal Million Lives Fund | Merck & Co | Novartis | Rock Creek Advisors | Sonanz and Sorenson Impact Foundation
Ascension Ventures V	VC Fund	$285m	USA	Health	AdventHealth Central Florida | Ascension Health | Carle Foundation | CentraCare Health | Children's Medical Center of Dallas | Intermountain Healthcare | Luminis Health | Novant Health | OhioHealth | OSF Healthcare | Sentara Healthcare | Texas Health Resources

Source: GCV Analytics

1 Switzerland-based investment fund Antimicrobial Resistance (AMR) Action Fund launched with almost $1bn in capital from biopharmaceutical companies to invest in developers of new antibiotics.

AMR Action Fund is intended to operate as a partnership between 23 biopharmaceutical companies with the aim of bringing two to four new antibiotics to market by 2030. Pfizer, Merck & Co and Johnson & Johnson have each pledged $100m in capital for the initiative while Boehringer Ingelheim is providing $50m and Daiichi Sankyo and Shiniogi put up $20m each. Novo Nordisk, Leo Pharma, Lundbeck and Novo Nordisk Foundation are combining to jointly invest about $76m. Novartis, Almirall, Bayer, Roche, Amgen, GlaxoSmithKline, Eli Lilly, Merck Group, Takeda, Eisei, Chugai, Menarini, Teva and UCB also backed the fund.

The initiative is being launched as increased AMR among viruses and bacteria is reducing the effectiveness of existing antibiotics. Some 700,000 patients die from AMR each year, a figure expected to rise to up to 10 million by 2050.

2 B Capital Group, the US-based VC firm affiliated with consulting firm Boston Consulting Group (BCG), closed its second fund at $820m. Founded in 2014, B Capital targets growth-stage deals and pursues a portfolio management strategy that involves connecting its companies to corporates which can help them scale, through a network provided by BCG. The firm invests between $10m and $60m per round, at series B to D stage, and its areas of interest include healthcare, enterprise software as well as financial, consumer, transportation and logistics technology.

3 GSK spun off its corporate venturing unit, SR One, into an independent VC firm. GSK remains the largest investor in newly rebranded SR One Capital Management's latest fund, an oversubscribed $500m vehicle also backed by undisclosed asset managers, pension funds, family offices,

endowments and foundations. Founded in 1985, SR One has made strategic investments in innovative drug developers on behalf of the pharmaceutical company. Its portfolio currently includes Palleon Pharmaceuticals, an immunotherapy developer that raised $100m in 2020, and oncology drug developer Arcellx, which secured $85m in late 2019.

4 Pfizer pledged to invest up to $500m in biotech companies while also providing expertise through a scheme dubbed Pfizer Breakthrough Growth Initiative. Pfizer intends to acquire minority stakes in publicly listed companies with small to medium-sized market caps that are developing internal medicine, inflammation, immunology cancer and rare disease drugs, vaccines and hospital-related products, that are at the clinical stage.

The company is already an active investor in the healthcare VC space, off its own balance sheet and through Pfizer Ventures, the CVC subsidiary it established in 2004.

5 Germany-headquartered VC TVM Capital Life Science closed its latest vehicle, TVM Life Science Innovation II, at $478m, with Eli Lilly among the LPs. The list of backers included undisclosed strategic investors in addition to US-based banks, funds of funds, endowments, foundations, pension funds, wealth managers and family offices.

TVM Capital Life Science makes early and late-stage investments in companies developing medical products, diagnostic technology and biopharmaceuticals, in the European Union and North America. This latest fund will allocate between 50% and 60% of its cash to what TVM Capital refers to as project-focused companies that it will hold a majority stake in, and is focusing its investments on assets expected to provide a clear route to an early exit.

6 China-based VC firm Qiming Venture Partners raised RMB 2.9bn ($441m) for the final close of its RMB Fund VI, with backing from state-backed conglomerate Xiamen C&D. Existing LPs for the firm's previous funds also made capital commitments to the fund, including China-headquartered insurance companies, fund of funds manager Oriza FOFs Investment Management and science and technology-focused funds of funds.

Founded in 2006, Qiming manages nine US-dollar and six renminbi-denominated funds, boasting $5.9bn of assets under management. It currently has investments in more than 380 companies, 40 of which have achieved a valuation of over $1bn. The firm typically targets early and growth-stage companies in the healthcare, technology, telecoms and media sectors.

7 AstraZeneca launched a RMB2.2bn ($338m) healthcare investment fund with investment banking firm China International Capital Corporation's private equity vehicle, CICC Capital. Wuxi AstraZeneca will target developers of innovative therapeutics, medical devices, diagnostics technology and AI-equipped healthcare technology. In addition to technology, the

Eli Lilly is working on antibody treatments for covid-19

fund will back the development of innovative supply chain solutions for pharmaceutical companies.

AstraZeneca had previously partnered China International Capital Corporation to establish a vehicle called Healthcare Industrial Fund in late 2019 with $1bn in capital. The drug producer already maintains a life sciences incubator in the Chinese city of Wuxi dubbed the Wuxi International Life Science Innovation Campus. It also teamed up with Chinese Future Industry Investment Fund to launch a drug commercialisation company called Dizal Pharmaceutical in 2017.

8 Heritage Group, a US-based VC firm backed by 15 strategic LPs in healthcare, raised $317m for its third fund. Heritage Healthcare Innovation Fund III has about 50 investors and the firm references AdventHealth, Amedisys, Blue Cross Blue Shield of Tennessee, CardinalHealth, Cerner, Community Health Systems, Health Care Service Corporation, Horizon Blue Cross Blue Shield of New Jersey, Intermountain Healthcare, LifePoint Health, Memorial Hermann, Sutter Health, Tenet Health, Trinity Health and UnityPoint Health as strategic partners.

Heritage had previously raised $220m for its second fund in 2016 and has invested in companies including Medical Solutions, Sharecare, HealthChannels, Abode Healthcare, MDLive, Lumere and Spero Health.

9 US-based life sciences investment firm Adjuvant Capital raised $300m for an oversubscribed fund from investors including pharmaceutical firms Merck and Novartis.

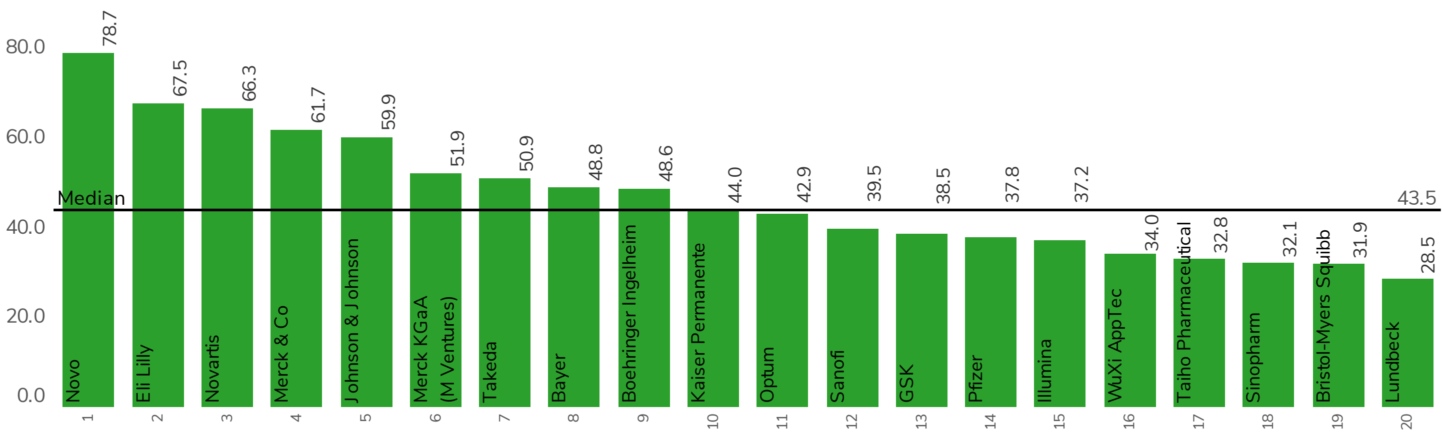
LPs also include Bill and Melinda Gates Foundation, Anthos Fund and Asset Management, Beacon Pointe Advisors, CDC Group, Children's Investment Fund Foundation, Dalio Philanthropies, Doris Duke Charitable Foundation and Elma Investments. Ford Foundation, International Finance Corporation, John D and Catherine T MacArthur Foundation, Global Health Investment Corporation (with funding from KfW), Laerdal Million Lives Fund, RockCreek, Sonanz and Sorenson Impact Foundation have also invested. The fund has also welcomed unnamed LPs.

Launched in 2019, Adjuvant Capital's fund is focusing on medical technologies aimed at public health issues that have traditionally struggled to attract VC funding. Areas of interest include malaria, tuberculosis and Lassa fever. The fund has already backed 14 companies, such as US-based herpes vaccine developer X-Vax Technology, Austria-based vaccine developer Themis Bioscience and Denmark-based vaccine developer MinervaX.

10 Ascension Ventures the VC firm formed by health system Ascension, closed its fifth fund with $285m in capital supplied by 13 healthcare providers. LPs included Ascension, as well as AdventHealth, Carle Foundation, CentraCare, Children's Medical Center of Dallas, Intermountain Healthcare, Novant Health, OhioHealth, OSF HealthCare, Luminis Health, Sentara Healthcare and Texas Health Resources. One unnamed health system has also joined the roster of investors.

Ascension Ventures was launched in 2001 and now has more than $1bn under management. The firm has backed approximately 80 companies in the software, services, medical device and diagnostic sectors. It operates as a stage-agnostic investor with a strategic focus on the needs of its LPs.

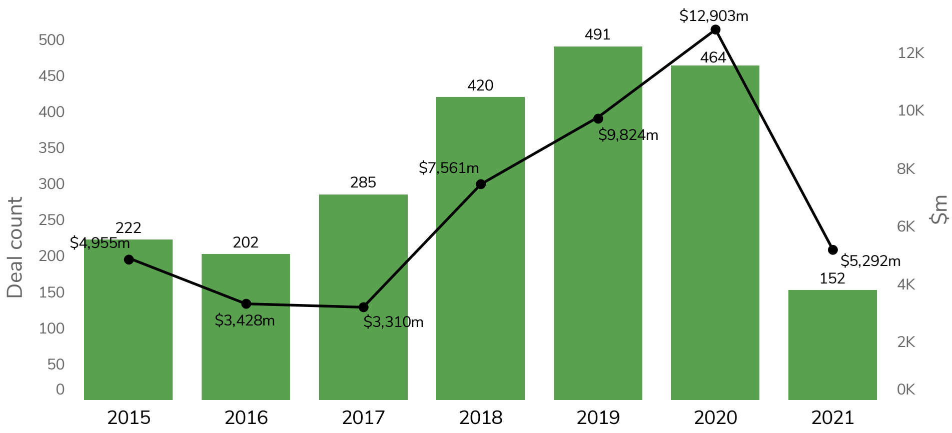
Power ranking



Source: GCV Analytics

Universities

Deals in university spinouts



Source: GCV Analytics

Over the past few years, we reported various commitments to university spinouts in the health sector through our sister publication, Global University Venturing.

By the end of 2020, there were 464 rounds raised by university spinouts, slightly down from the 491 registered in the previous year. The level of estimated total capital deployed last year stood at $12.9bn, up 31% from $9.82bn in 2019.

1 German government-owned development bank KfW agreed to invest €300m ($339m) in CureVac, a Germany-based RNA therapy developer spun out of Eberhard Karls University of Tübingen. The transaction gave KfW a stake sized at about 23% and it came after the company agreed a $90m loan from the European Investment Bank, when it announced it would concentrate efforts on developing a coronavirus vaccine.

CureVac is working on messenger RNA (mRNA)-based drugs but its technology could also influence development of a vaccine for covid-19. It has two drug candidates in phase 1 clinical trials, each of which is targeted at forms of cancer.

2 Hinge Health, a US-based digital therapeutics company backed by commercialisation firm IP Group, closed a $300m series D round co-led by Coatue Management and Tiger Global. Atomico, Insight Partners, Quadrille, 11.2 Capital, Lead Edge Capital, Bessemer Venture Partners and Heuristic Capital also took part in the round, which valued Hinge at $3bn post-money.

Founded in 2014, Hinge Health has built a digital healthcare platform for people living with chronic musculoskeletal conditions, such as back and joint pain. The offering consists of an app, wearable sensors and access to remote health coaching to deliver physical and behavioural health therapy. Hinge Health was co-founded by chief executive Daniel Perez, who gained a PhD in medical sciences from University of Oxford in 2013, and president Gabriel Mecklenburg, who obtained an MPhil in bioengineering from Imperial College London in 2014.

3 Thrive Earlier Detection, a US-based cancer screening technology spinout of Johns Hopkins University, collected $257m in a series B round co-led by Casdin Capital and Section 32.

Thrive Earlier Detection is commercialising a blood test called CancerSeek that detects multiple forms of the disease at early stages of progression by distinguishing biomarkers such as circulating tumour DNA – fragments from cancerous cells which roam freely in the patient's bloodstream. The hope is that CancerSeek could be combined with existing tests to diagnose most cancer subtypes effectively and in asymptomatic patients, enabling treatment before disease progression becomes severe.

People

Jieyu Zou was promoted to managing director at Lilly Asia Ventures (LAV), the VC firm spun out of Eli Lilly. Based in Shanghai, Zou has worked her way up from investment manager since joining LAV in 2015. She is on the boards of portfolio companies Gracell, Transcenta and Virtue DX. Her earlier deals included Geneception, CARsgen, Edigene, Tmunity and Passage Bio in new modality therapeutics, Sansure in molecular diagnostics/genomics and Avedro, which was acquired in November 2019 for about $500m by Glaukos after an earlier flotation.

US-based healthcare product supplier McKesson Corporation promoted Dave Schulte to senior vice-president and head of its corporate venturing arm, McKesson Ventures. The unit hired Schulte in 2015 as managing director under former head Tom Rodgers, who has since been appointed executive vice-president and chief strategy officer at McKesson. Global Corporate Venturing had selected Schulte as a Rising Star in 2016 and 2017. Schulte has nearly two decades of healthtech investment experience, having spent 12 years from 2003 at Kaiser Permanente's corporate venturing arm, Kaiser Permanente Ventures. He ran the unit for four years prior to his departure, helping it grow its resources from $20m under management to $400m.

Schulte's investments at McKesson Ventures included healthcare provision network Aledade, healthcare plan manager AllyAlign Health, healthcare macrodata platform provider Komodo Health, infusion centre operator IVX Health, clinical trial services provider Lightship and Oncology Analytics, the developer of a cancer treatments analytics tool. Two of his portfolio companies have also led to exits. Biotechnology analytics platform developer Shyft Analytics was acquired by medical research firm Medidata for $195m while growth equity firm General Atlantic purchased a majority stake in telecare service provider Landmark Health.

The unit also appointed Lizzie Lee as senior director. Lee will oversee portfolio development and help foster collaboration between McKesson's business units, portfolio companies and customers. She will also lead the firm's market research, including the development of thought leadership content on emerging trends. Lee joined McKesson in 2017 and was a director on its enterprise strategy team. She has a decade of healthcare experience, part of which was spent as a consultant at professional services firm, ZS Associates.

Later in the year, McKesson Ventures promoted Jennifer Carter and Carrie Hurwitz Williams to partner positions. Carter had been McKesson's director of marketing communications before she joined the unit in 2015 as vice-president of portfolio development and marketing, helping to find synergy between the corporate and its portfolio companies. She added the role of vice-president of venture operations in September 2019.

Williams had a five-year stint at McKesson that ended when she moved to digital care provider Omada Health in 2014. She rose to vice-president of strategy and business development before she was hired by McKesson Ventures as a principal in 2017.

Ben Luckett, head of Aviva Ventures, the CVC arm of UK-listed insurance firm, Aviva, was promoted to chief innovation officer at the parent. Luckett set up Aviva Ventures in 2015 and its deals have included home security system developer Cocoon and DIY services marketplace Opun, which were later acquired by Ecobee and John Lewis respectively. Ant Barker has been promoted from senior manager at Aviva Ventures to head the unit. It has also formed an external collaboration agreement with VC firm Anthemis Group, which will deploy capital on behalf of Aviva through funds focused on early and growth-stage financial and insurance technology deals.

US-based medical care provider Tampa General Hospital (TGH) launched a CVC unit led by Rachel Feinman. Feinman joined TGH in the new created role of vice-president for innovation and now heads TGH InnoVentures from her position as executive director of the Florida-Israel Business Accelerator.

TGH InnoVentures will be comprised of three primary vehicles and act as the healthcare partner for educational innovation hub Embarc Collective, taking up residence in its 32,000 square foot facility alongside more than 50 early-stage startups. The TGH Innovation Lab will look for operational efficiencies and methods of solving problems within the organisation, while TGH Accelerator will use the hospital to develop ideas by physician-scientists as well as emerging companies, providing space, expertise and capital.

Ilka Wicke was appointed head of Making More Health, an impact investment partnership between Germany-based pharmaceutical firm Boehringer Ingelheim and non-government organisation Ashoka. Wicke had been an investment director at Boehringer Ingelheim's CVC unit, Boehringer Ingelheim Venture Fund (BIVF), and was a 2018 GCV Rising Stars award winner. Wicke spent the past decade at BIVF and her deals included Promethera Bioscience, Pcovery, MetaboMed, Anagenesis and Cardior. She has also been on the investment committee of state and corporate-backed VC fund High-Tech Gründerfonds.

US-based oncology research centre and hospital Dana-Farber Cancer Institute launched a CVC unit. The unit, Binney Street Capital (BSC), will invest between $250,000 and $2m over the next three years in eight to 10 companies developing research and technologies to treat incurable cancers.

Luba Greenwood was appointed managing partner at BSC, after having left US-listed Alphabet's healthcare subsidiary, Verily, in 2019 to teach at Harvard University and advise Dana-Farber. Greenwood said: "Excited to be leading Dana-Farber Cancer Institute's first venture capital fund, Binney Street Capital. Honoured to have the opportunity to invest in the breakthrough innovation coming out of the Dana-Farber Cancer Institute and support its mission to cure cancer."

Reza Halse, president of US-listed pharmaceutical firm Merck & Co's MRL Ventures investment vehicle, joined healthcare-focused investment manager RA Capital Management. Halse reconnected with Joshua Resnick, an inaugural managing partner at MRL Ventures, who joined RA Capital in 2018 to set up its venture funds after a few years as a partner at VC firm SV Life Sciences. RA Capital hired Halse as a partner, having closed its second venture fund, RA Capital Nexus Fund II, at $461m in October 2020. Its first fund closed in July 2019 with about $300m and funded 59 companies, 15 of which have since floated or been acquired. Halse joined Merck's MSD London Innovation Hub in 2015, also becoming a partner at MRL Ventures, which targets startups in therapeutics and complements Merck's other main corporate VC unit, Global Health Innovation fund, which is run by William Taranto.

Jack Miner, former managing director at Cleveland Clinic Ventures, the corporate venturing arm of US-based healthcare system Cleveland Clinic, joined the State of Maryland's venture investment unit. Miner will serve as chief investment officer at Tedco, which runs the Builder, Seed and Maryland Venture Funds backing more than 400 investments. He has replaced Tedco's interim managing director, Elizabeth Good Mazhari. At Cleveland Clinic Ventures until April 2020, Miner oversaw a team focused on its portfolio companies and led efforts to spin off new companies. Previously, Miner was the director of the Venture Center at University of Michigan Tech Transfer where he launched more than 50 startup companies and worked with a portfolio of more than 300 emerging technologies spanning all industries.

Nicola Broughton and Alexandre Ouimet-Storrs co-founded and serve as managing partners at Óskare Capital, a firm targeting medical cannabis product developers from seed to patient stage. Their first investment was in Octarine Bio, a developer of cannabinoid and psilocybin derivatives. Ouimet-Storrs was managing director for Europe at Solvay Ventures, the $100m evergreen corporate venturing unit for France-based chemicals and materials producer Solvay. In November 2019, he backed a University of Edinburgh spinout called Invizius in a round led by asset manager Mercia Asset Management. Broughton was previously principal and head of universities at Mercia.

Broughton and Ouimet-Storrs said in a joint statement: "Our goal is to help bring technologies in Europe to other geographies as well as be a founding member of the medical cannabinoid ecosystem in Europe. We are raising and advising a €150m ($170m) fund based in Ireland."

Søren Thinggaard Hansen joined Denmark-based pharmaceutical firm Novo as a senior partner to set up a private equity initiative to complement its existing corporate venturing strategy. Hansen had spent more than 17 years at local pension fund Industriens Pension, mainly as head of private equity. Novo already provides seed and venture capital to development stage companies and takes significant ownership positions in well-established companies within life sciences through a public corporate venturing strategy. The Novo Holdings Repair Impact Fund also has an investment proposal to life sciences companies developing new treatments to combat anti-microbial resistance.

Blake Byers has stepped down as a general partner at GV, a corporate venturing arm of US-headquartered internet and technology group Alphabet, to launch what appears to be his own firm, dubbed Byers Capital. The firm will reportedly invest evenly between technology and biotech companies at series A and B stage, and opportunistically in growth equity deals. GV confirmed that other investors at the firm would take up some of Byers' board seats at its portfolio companies.

GV has hired Daniel Lynch as an executive venture partner and appointed Mojca Skoberne to an entrepreneur-in-residence position.

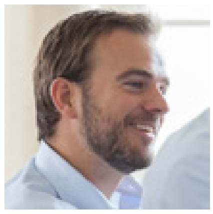
Lynch is chairman of five biopharmaceutical companies: Xilio Therapeutics, SpringWorks Therapeutics, Blueprint Medicines, Translate Bio and BlueBirdBio, having previously held similar positions at peers including Surface Oncology, Bind Therapeutics and Nimbus Discovery.

Skoberne had been a senior vice-president for gene therapy developer Repertoire Immune Medicines, where she offered her expertise in immunology, cancer and infectious diseases. Her role at GV will involve her mentoring entrepreneurs building immunotherapy-themed companies.

SR One, the VC firm spun off by GSK, recruited Chris Chai and Peter Van Vlasselaer as venture partners. GSK spun off the unit into an independent firm in November 2020 with $500m in funding and operates out of offices in London, San Francisco and Philadelphia. Chai had been chief financial officer of Principia Biopharma, the biopharmaceutical company that floated in 2018 having raised $127m in funding from investors including SR One, since 2013. Van Vlasselaer was a pharmaceutical executive for two other SR One portfolio companies. He had been chief executive and president of iPierian, which was bought for $725m in 2014, as well as co-founder and chairman of True North Therapeutics, which was acquired for $825m in 2017.

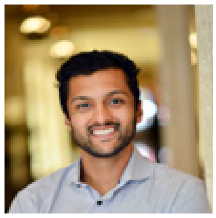
Japan-headquartered biotechnology producer Eisai appointed Manabu Aruga, formerly China-based business development director, as strategic investment officer covering Japan and Asia for its Corporate Venture Investment (CVI) division. His new role involves relocating to headquarters in Tokyo and leading CVI investment initiatives. He will collaborate with chief strategy officer Kazumasa Nagayama and chief financial officer Ryohei Yanagi to strengthen the unit's corporate venturing strategies.

Formed in May 2019, CVI is armed with approximately $137m in capital and partners innovative technology developers in a bid to accelerate Eisai's drug discovery activities and build an ecosystem around its strategic areas of nervous system disorder and cancer treatments.



Edward Kliphuis departed from his position as an investment director at M Ventures, the investment arm of Germany-headquartered pharmaceutical company Merck Group. VC firm Amadeus Capital Partners has hired Kliphuis as a partner, and he will help lead its scale investment activities under the firm's managing partner, Andrea Traversone. Investments led by Kliphuis during his time at M Ventures included Akili Interactive Labs, the developer of the first prescription video game to get approval from the Food and Drug Administration, as well as battery-free Bluetooth tag provider Wiliot and voice analysis technology developer Sonde Health. Prior to M Ventures, Kliphuis was a life sciences market analyst at investment bank Kempen, covering listed small and mid-cap life sciences equities, having originally begun his career as an analyst in M Ventures' biopharma investment team in 2009.

Illumina's corporate venturing subsidiary, Illumina Ventures, promoted Wouter Meuleman from principal to partner. Part of the initial Illumina Ventures team when the unit was formed in 2016, Meuleman had been director of corporate and business development for Illumina since the previous year, a post he held until 2019. Meuleman led investments in Biota Technology and Fluent Biosciences, where he also holds board seats, in addition to Delfi Genomics and Ribometrix.



Binoy Bhansali, former managing director at Sandbox Industries, provider of fund management services for more than 30 Blue Cross Blue Shield health insurers, joined US-based healthcare provider Scan Group. Scan provides healthcare for patients on Medicare Advantage health insurance plans. As vice-president of corporate development, Bhansali will identify opportunities for strategic partnerships, external investments and acquisitions. At Sandbox, he sourced more than 1,000 healthcare technology and services companies from seed to growth equity-stage, led diligence efforts for hundreds of them and completed investments in eight companies.

Annual survey results

Every year, Global Corporate Venturing asks the industry questions about investment priorities, strategies and fit with the corporate. We have broken out the consumer sector answers and compared them with the overall answers.

		Overall (n=141)	Health (n=14)
What is your priority, financial and/or strategic returns?	A mix of both strategic and financial	67%	71%
	Strategic returns mostly	23%	14%
	Financial returns mostly	9%	14%
How do you invest?	From corporate balance sheet with a dedicated unit	57%	71%
	Off corporate balance sheet with a dedicated unit	26%	29%
	From corporate balance sheet without a dedicated unit	11%	
	Off corporate balance sheet without a dedicated unit	3%	
If you have a fund structure, what type of fund structure is it?	Not applicable	55%	36%
	Separate legal entity and fully committed capitalB but fund rem..	23%	21%
	Separate legal entity and fully committed capital with significant ..	20%	43%
What would you define as an important strategic return?	Synergies and/or revenue and P&L impact for parent corporation	18%	14%
	Entering new markets and/or creating new business lines/units	11%	
	Innovation in product/service of corporate parent or help with stra..	9%	7%
	Market intelligence, insights and expertise	9%	29%
	Commercial partnerships/ contracts/collaborations	9%	7%
	Deploying/implementing new technology internally	7%	7%
	Optionality and access to potentially disruptive new technol..	6%	7%
	Combination of the above	6%	7%
	Acquistion of assets/companies	4%	14%
	Testing new business models	4%	

	Other	3%	
	Unclear comments	3%	
	Sustainable/environmentally-related goals	2%	
What is your overall CVC fund size?	Under $50m	23%	21%
	$51m - $100m	18%	7%
	$101m - $200m	15%	21%
	Other	9%	14%
	$301m - $500m	11%	14%
	$501m - $1bn	8%	14%
	$201m - $300m	5%	
	Over $1bn	4%	
In light of the pandemic and the economic challenges it entails, what levels of capital do you expect to have at your unit's disposal going forward?	Same as before pandemic	52%	57%
	More than before the pandemic	26%	36%
	Less than before pandemic	14%	7%
	Not sure yet	7%	
Of the deals your unit has backed, what percentage of those deals did your unit act as the lead investor (i.e. leading or co-leading setting valuation, key investment terms and leading negotiation process)?	Less than 25%	49%	50%
	Greater than 50%	25%	29%
	Between 25% and 50%	23%	21%
Do you help your corporation's M&A team identify and buy yours or other venture-backed portfolio companies?	No	26%	21%
	Yes	63	64%
	Not applicable/Corporate parent does not have M&A division	8%	7%
Do you negotiate in your investments for specific rights related to a sale of the portfolio company?	No	62	86%
	Yes, a right of first negotiation	11%	
	Yes, a right of first refusal	11%	7%

			June 2021
	Yes, a right of first offer	7%	7%
	Yes, a block right on a sale transaction	2%	
How many of your portfolio companies has your parent corporation bought?	None	56%	71%
	1 to 5 companies	32%	14%
	None yet but expected to acquire at least one when portfolio matur..	6%	7%
	11 or more companies	2%	
	6 to 10 companies	1%	7%
What percentage of the founders/co-founders of your portfolio companies come from a diverse ethnic background (i.e. different from the predominant in the country where you are based)?	25% or fewer	48%	71%
	26% to 50%	27%	21%
	76% or more	11%	7%
	51% to 75%	11%	
Do you actively take LP stakes in other VC funds?	No	51%	43%
	Yes	47%	57%
How many LP stakes in funds do you hold?	None	35%	43%
	3 to 5	25%	7%
	2	12%	7%
	1	11%	29%
	6 to 10	8%	7%
	More than 10	6%	7%
What is your portfolio worth compared to original invested amount by multiple?	101% to 150%	30%	36%
	151% to 200%	21%	7%
	201% to 300%	13%	21%
	51% to 100%	8%	14%
	0 to 50% of invested capital	6%	7%

	301% to 500%	4%	
	501% to 1000%	1%	
	More than 1000%	1%	
What is yourB net internal rate of return (IRR) on the portfolio?	11% to 20%	21%	21%
	21% to 30%	14%	7%
	31% to 40%	11%	7%
	6% to 10%	9%	7%
	0 to 2%	5%	14%
	3% to 5%	5%	7%
	A negative IRR	4%	
	41% to 50%	3%	7%
	More than 50%	3%	
What is the loss rate of your fund (i.e. the percentage of investments that fail to return the capital invested)?	30% or lower	62 %	50%
	31% - 50%	11%	7%
	51%B - 75%	1%	
	76% or higher	1%	
Which C-level executive does the head of your unit report to?	CEO	30%	29%
	CFO	17%	14%
	Chief Innovation Officer	14%	7%
	Head of R&D	1%	
	Head of corporate development	10%	7%
	Head of strategy	18%	21%
	Chief Technology officer	9%	7%
	COO	3%	

	Chief Information Officer	1%	
	Chief Marketing Officer	1%	
In terms of the compensation of all employees, in addition to base salary and cash bonuses, what other incentives are there in your CVC unit/investment department?	Only corporate stock	33%	36%
	None of the above	31%	7%
	Other	5%	7%
	Shadow/phantom carry only	6%	14%
	Only carried interest ("Carry"') shared with the team	6%	14%
	A combination of corporate parent's stock and carried interest	1%	14%
What is the male-to-female ratio in your team?	Majority male	49%	21%
	Relatively even	28%	57%
	All male	11%	
	Majority female	4%	14%
What percentage of your investment unit's employees are from a diverse ethnic background (i.e. different from the predominant in the country where you are based?	25% or fewer	49%	43%
	26% to 50%	26%	21%
	76% or more	10%	14%
	51% to 75%	7%	14%

Comment

Structuring a CVC: invest on market terms

> VCs may shy away from a CVC if it overpays
> Startups may find a high valuation hinders fundraising
> The return potential is reduced

By Patrick Flesner
Partner, LeadX Capital Partners, author of FastScaling
LinkedIn

Stephan Bank
Partner, SMP
LinkedIn

Many executives that want to initiate corporate venturing activities already struggle answering the question how to set-up a CVC organisation for success. The six guiding principles described in this series of articles are supposed to help answer this question.

Guiding Principle 1: create a traditional venture capital fund structure

Guiding Principle 2: define a clear investment focus

Guiding Principle 3: embrace fast decision-making

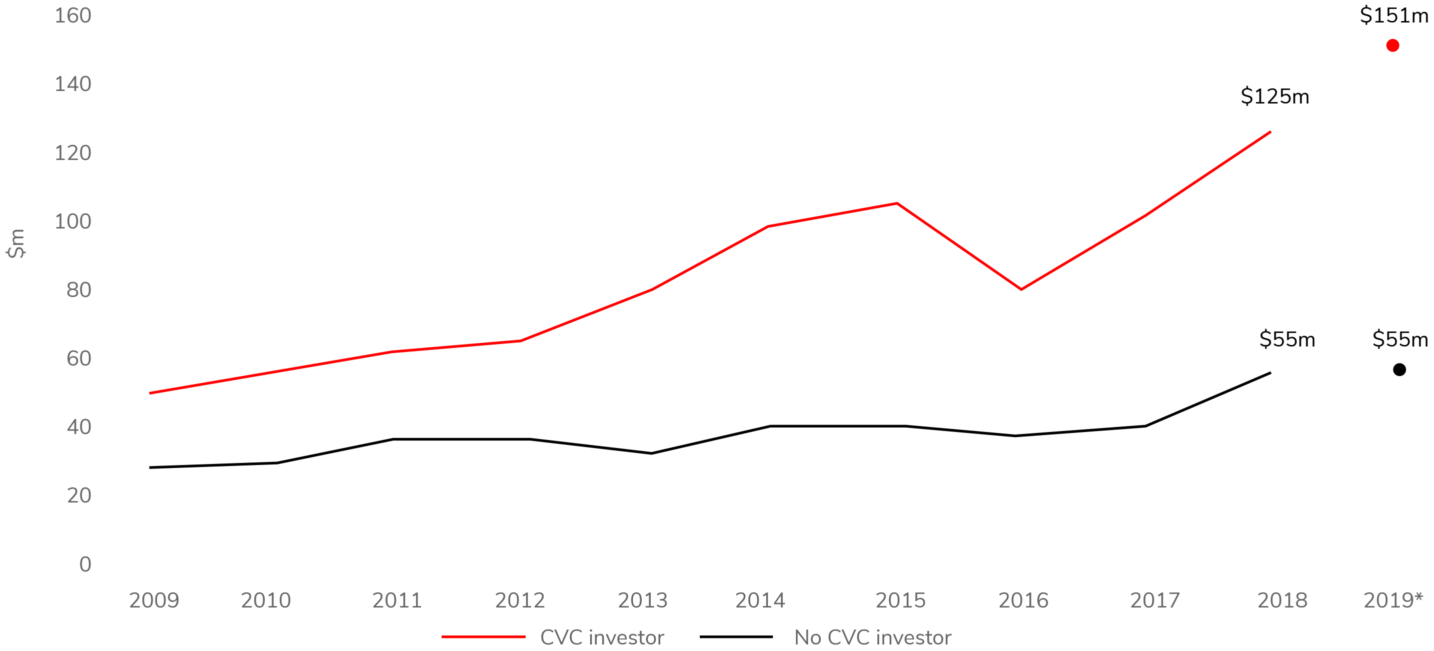
Guiding Principle 4: ensure long-term commitment

Guiding Principle 5: invest on market terms

Corporate venture capital (CVC) units are usually set up in order to generate strategic value for the given corporation and – given these strategic goals – it seems that CVCs are sometimes willing to pay more for a stake in a company than traditional venture capital firms are willing to pay. The median pre-money valuation of late-stage deals with CVC involvement has consistently been higher than VC deals without a corporate investor.

The problem with investing on above-industry-standard valuations is that traditional

Median late-stage CVC pre-money valuations in the US



Source: Pitchbook. *as of June 30, 2019

VC investors who also want to invest are often kicked out of the investment process since they cannot invest on comparable terms without giving up the chance to make the required return on investment. If the respective CVC unit becomes known as an investor willing to "overpay", other VC funds may avoid sharing dealflow and co-investing with this unit, which will have a material negative impact on the CVC, at least in the long run.

Above-industry valuations may also backfire on startups when they need to raise funds again but cannot find external investors willing to invest on an even higher company valuation.

Last but not least, paying a high price naturally reduces the return potential. And if a CVC unit fails to also generate attractive financial returns it may lose its internal right to play and may be shut down sooner than later.

We therefore believe that the long-term CVC success chances are better if a CVC unit acts like traditional VCs and invests on market terms.

Notes from the Bund

> **Asian CVC is likely to exceed North American**
> **CVC is 17% of venture capital investment in China**
> **The country's CVCs focus on IT**

By Nick Yusko
Chief executive and chief investment officer, Morgan Creek Capital Management

Modern corporate venture capital (CVC) was first established in North America, and in 2014, US corporate investments accounted for 61% of global activity.

In recent years, tech giants such as BAT (Baidu, Alibaba and Tencent) have hyper-charged Asia's economic growth and have steadily increased their corporate investments in the region. By 2018, North America's share of global investment activity dropped to 41% and Asia's share doubled to 38%.

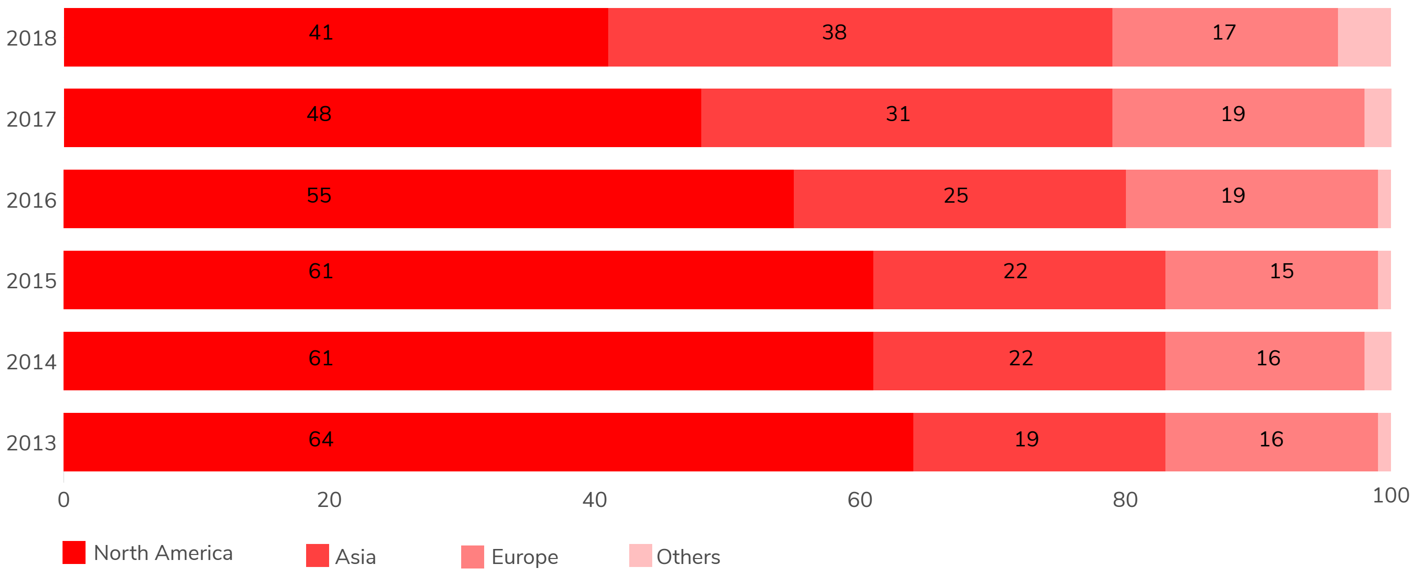
CVC activity in this region is expected to surpass that of North America in the coming years.

Asian CVC is comprised primarily of conglomerates from China, Japan, and India. The first significant CVC investment in China was in June 1998, when Shida Group invested RMB12m in Beijing Mingtai Technology Development Company, establishing Shida Mingtai Company to develop Chinese software.

Two decades later, in 2018, China's CVC investment output reached RMB20.3bn, or 17% of all venture capital investments domestically.

According to Chinese local VC data platform 36Kr, tech giants Tencent, Alibaba, Baidu, Ant Financial, and

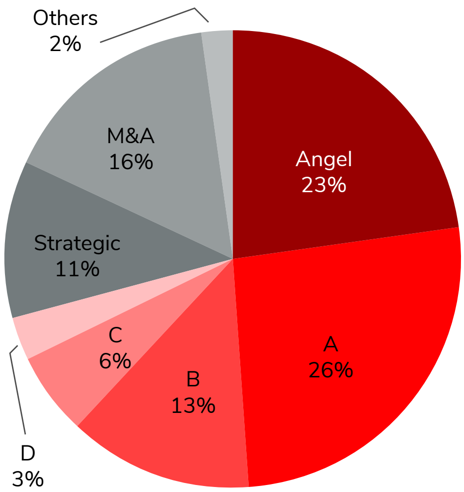
Global CVC investment activity by region



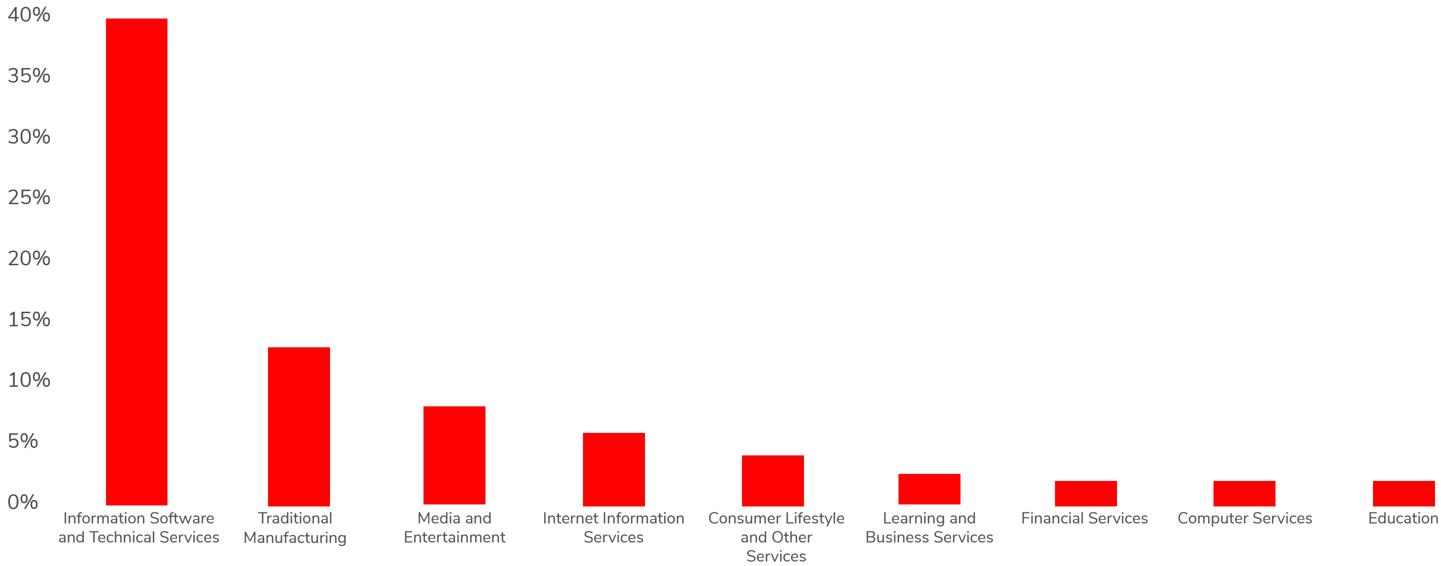
China's top 10 CVCs by investment frequency

Ranking	Company	2014	2015	2016	2017	2018
1	Tencent	72	93	110	130	139
2	Alibaba	40	54	64	64	89
3	Baidu	18	29	23	62	71
4	Ant Financial	16	13	24	19	54
5	Mi	47	40	47	57	30
6	Meituan	2	8	12	10	16
7	ByteDance	2	5	8	13	15
8	Fosun	12	14	20	13	12
9	Lenovo	5	10	14	13	11
10	Didi	-	7	4	12	11
	Total	**142**	**170**	**216**	**263**	**309**

Funding by stage



Funding by industry



Source: Morgan Creek, except table, which is 36Kr

Mi were ranked as the "top 10 active CVCs in China in 2018 (by investment frequency)".

From 2009 to 2018, China's CVC investment in information software and technology services accounted for 40% of all capital, with the manufacturing industry falling to second place with 13%, according to the Wall Street Journal (WSJ).

China's CVC investments focus on startups, with almost half of the capital flowing into angel and Series A rounds. Strategic acquisitions and mergers and acquisitions (M&A) also account for a substantial proportion at 27%. The distribution of CVC investment rounds in China shows a barbell investment approach: either very early in a company's lifecycle, where the corporate investors are looking at accessing frontier technologies, or very late, where investors are looking for strategic tie-ups. An example of the latter is Tencent's $215m investment in JD.com in 2014, to enhance and improve the e-commerce sector. As part of the agreement, Tencent also gave two of its e-commerce holdings to JD.com and promoted JD.com's services prominently on its WeChat mobile messaging platform, the WSJ reported.

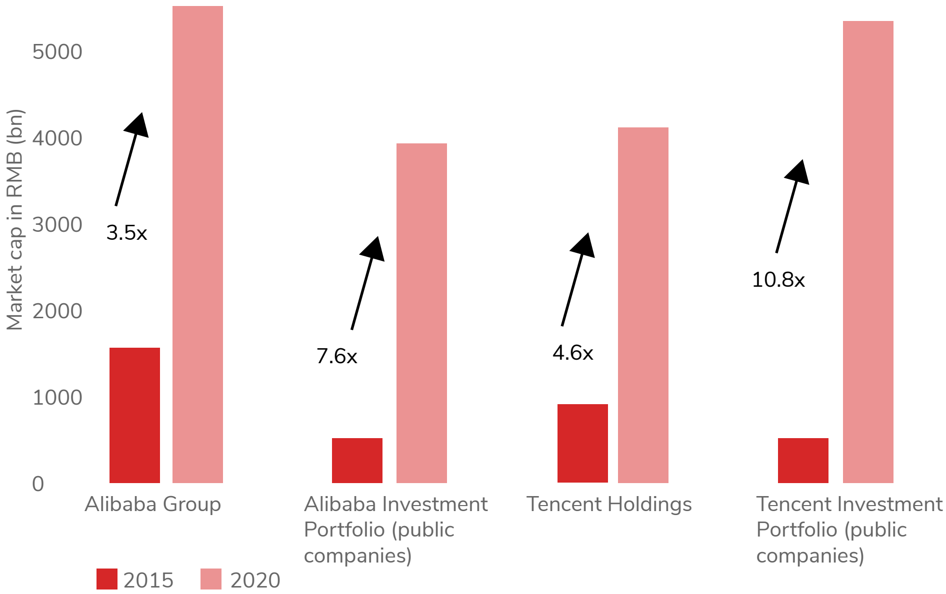
We will focus on the two most active CVC investors in China: Tencent and Alibaba.

Tencent's CVC

Over the past decade, Alibaba's and Tencent's investments have resulted in an ecosystem worth almost RMB10 trillion in combined market value; Alibaba's public investment market portfolio is worth RMB4 trillion and Tencent's is worth RMB5.4 trillion.

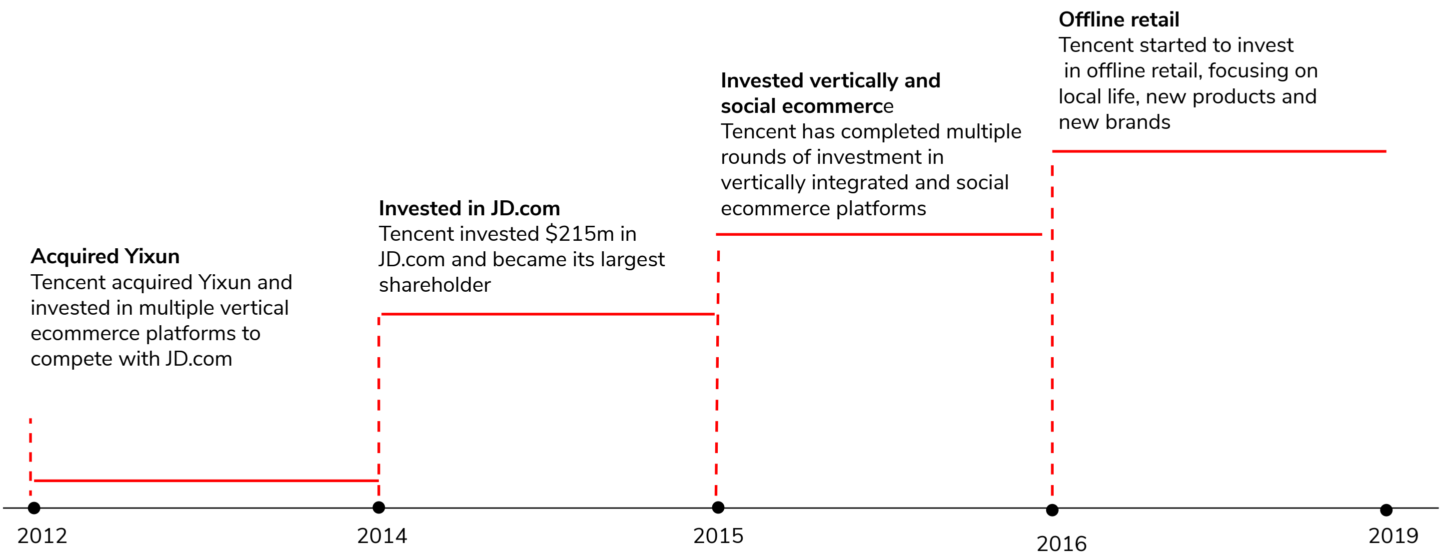
Tencent set up its investment and M&A department in 2008, and in 2011 established its industry CVC fund with RMB5bn in assets under management. Tencent CVC's investment strategy is to strengthen its primary business and to discover potential market disruptors through its investments. Tencent aims to hold controlling stakes in its core gaming and

Alibaba Group vs Tencent Holdings market cap



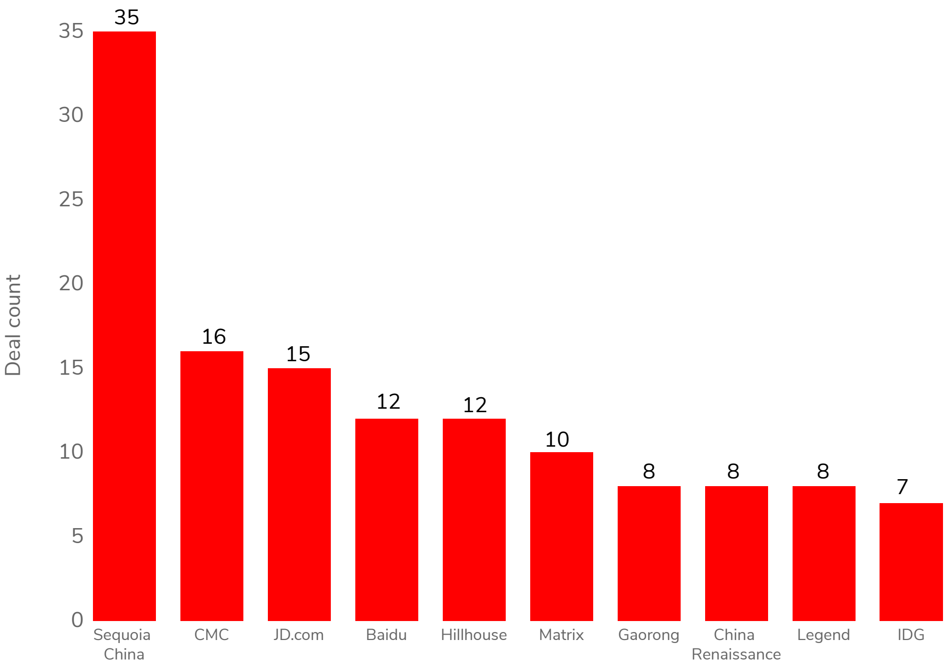
Source: Yahoo Finance, company reports

Tencent's evolution



Source: Morgan Creek

Institutions with the most co-investments with Tencent



Source: Morgan Creek

entertainment/communications industries, and minority stakes in non-core sectors, including fintech, enterprise services, e-commerce, artificial intelligence (AI), healthcare and education.

Tencent controls significant consumer traffic through its WeChat ecosystem, which has 1.2 billion monthly active users (MAU) as of Q3 2020, according to China Internet Watch.

It is working actively to monetise that consumer base with 43 of the 90 portfolio companies Tencent has invested in over the past decade in the e-commerce space. Tencent has also focused on social e-commerce and mini e-commerce programmes to leverage its WeChat ecosystem, creating an internal app marketplace. To strengthen its offline retail presence, Tencent invested RMB4.2bn into Yonghui Superstores, the fifth-biggest supermarket in China. This investment has allowed Tencent to direct online traffic to Yonghui's online to offline retail stores Chaoji Wuzhong (Super Species) to compete with Alibaba's Hema Xiansheng.

In 2018, Tencent adjusted its organisational structure once again when it added a platform and content business group and a cloud and smart industry business group after the company made investments in business to business (B2B).companies. Tencent believes that the technologies and business models it has developed and utilised in its consumer businesses may have wider applications in B2B sectors including transportation, AI, logistics, and robotics. Compared with other CVCs, Tencent tends to invest in the relatively early stage companies and has close relationships with VC and PE funds including Sequoia China, CMC, and Hillhouse Capital. Tencent also partners JD and Baidu's CVC programmes closely.

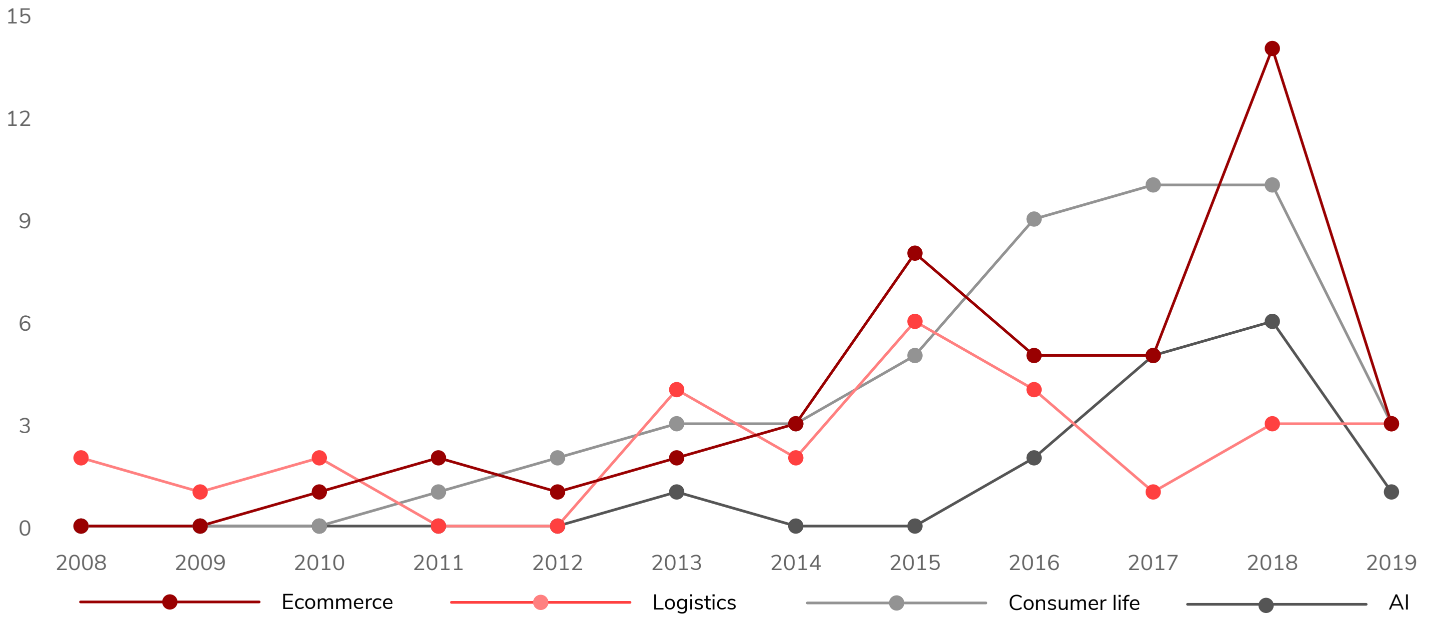
Alibaba's CVC

Alibaba Group, which was founded in 1999, has grown into a diverse company with business segments spanning e-commerce, cloud computing, media and entertainment. Alibaba's main products today include Taobao, Tmall, Alicloud, 1688, Alimama,and Cainiao. Alibaba's strategic investment department was established in 2008 with the mission of creating strategic and long-term financial value through investments, M&A and expansion, and to become a core force in the e- ecosystem. Alibaba aims to make majority or control investments, with the goal of ultimately integrating these portfolio companies into its own core businesses.

Alibaba acts as the sole or lead investor in the vast majority (approximately 70%) of Alibaba's CVC investments. Many of these companies start out receiving minority equity investments from Alibaba in early financing rounds before eventually being acquired by Alibaba, reflecting its cautious approach to its portfolio investments. Alibaba prefers starting with a minority equity investment to test out the product or service for potential synergies with its platform. When the strategic value of the portfolio company increases, Alibaba will choose whether to invest more capital in the company, acquire the company outright or take no further action. For example, in May 2013, Alibaba bought a 28% stake of map app Gaode for $294m, which made it Gaode's largest shareholder; in 2015, Alibaba acquired the company for $1.05bn. Another example of this strategy is when Alibaba invested in food delivery platform Ele.me four times, including two separate investments of over $1 billion each, before buying the company outright for

Alibaba's investment strategy

Alibaba's deals in specific sectors



Source: Morgan Creek

$9.5bn in April 2018, according to Forbes.

The investment focus of Alibaba mirrors its core businesses in the e-commerce, logistics, and consumer sectors. It invests in numerous e-commerce platforms to achieve cross-platform cooperation and to further expand its reach. It also invests in logistics platforms to further build upon Alibaba's logistics network, and utilises IT to support the development of downstream express delivery enterprises around its e-commerce platform. As more enterprises upload their data on the cloud, Alibaba continues to build data centres and invest in cloud computing.

Alibaba also makes timely strategic adjustments to its portfolio companies, with Alibaba's acquisition of Xiami being a prime example. After acquiring Xiami in 2013, Alibaba made significant changes to the senior management team, which changed the culture and incentives and ultimately led to it being shut down in early 2021, according to Techcrunch. Alibaba once considered merging Xiami and another streaming platform, NetEase Music, to compete with Tencent Music, but the merger ended up not going through. Instead, in 2019, Alibaba led a $700m financing round in NetEase Cloud Music, effectively betting on NetEase as a standalone company and abandoning the Xiami venture. NetEase Cloud Music has seen successful synergies with Alibaba's other businesses including Youku, Alipay and Alibaba Pictures, while Xiami never successfully integrated with Alibaba's other businesses. Although the volume of CVC deals for both Alibaba and Tencent is similar, the fate of their respective portfolio companies differs primarily in how the companies channel user traffic. After Alibaba acquires a product, it will channel all the product traffic to its e-commerce platforms, such as Taobao, and attempt to capitalise on the increased traffic; after this initial capitalisation, the product is abandoned in many cases. In contrast, after Tencent acquires a product, it will channel its existing traffic (WeChat, QQ, and so on) into the new product, which drives growth in the product and helps it avoid obsolescence or abandonment. Despite these different methodologies, the two tech titans continue to dominate CVC space in China.

Innovative region

Corporates journey to South Africa

- Leading ecosystem on the continent
- Long history of entrepreneurial support
- CVCs focusing on financial, services and consumer

By Liwen-Edison Fu
Supplements editor

South Africa is one of the “Kings”, the fastest-growing digital economies on the continent: Kenya, Ivory Coast, Nigeria, Ghana and South Africa.
The acronym was coined by Ghana-based venture capitalist Eric Osiakwan, a concept he described as being similar to Asian Tigers in the 1990s, which advanced in areas including technology and innovation-fuelled entrepreneurship.

The country came first in investment-focused publication fDi’s inaugural African Tech Ecosystems of the Future ranking published earlier this year. The list also gave the country first place for Economic Potential, Startup Status and Business Friendliness.

Though tarred by corruption allegations, South Africa has a long history of entrepreneurship support. For example, technology incubator Cape Innovation and Technology Initiative was founded in 1999 and has backed more than 3,000 entrepreneurs and supported their startup projects.

Corporate venture capital (CVC) activities, however, are nascent in South Africa, although one of the largest and most successful corporate venturing groups, Prosus Ventures (formerly Naspers Ventures), has its roots in South Africa-based media group

Naspers, which invested in China-headquartered internet technology producer Tencent in 2001.

Compared with its peers on the continent, South Africa has a robust budget in research and development spending and a strong track record in venture capital deals.

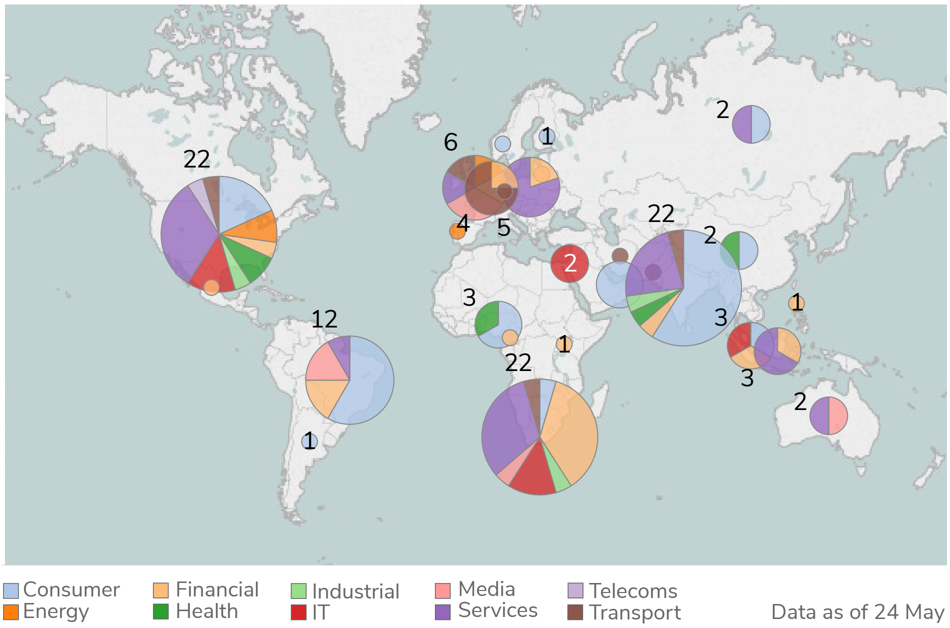
Global corporate VCs in South Africa have focused on financial technology and services. The latter encompasses accommodation and travel, human resources, education, business and legal consultancy services, communication and market research services, logistics and supply chain services, real estate, classifieds and review platforms, as well as other subsectors.

Naspers is the most prolific investors in the local ecosystem through its Naspers Foundry subsidiary, and is joined by financial services firm Standard Bank, reinsurance firm Hannover's Lireas Holding subsidiary and mobile network operator MTN Group.

Financial services firm Nedbank, telecommunications group Orange, brand management services provider Smollan, investment firm Umkhathi Wethu and internet technology group Alphabet are also among the most active investors in South Africa, as are insurance firm Axa, pharmaceutical company Cipla, investment bank Goldman Sachs, digital payment processor MFS Africa and foundry equipment producer Norican.

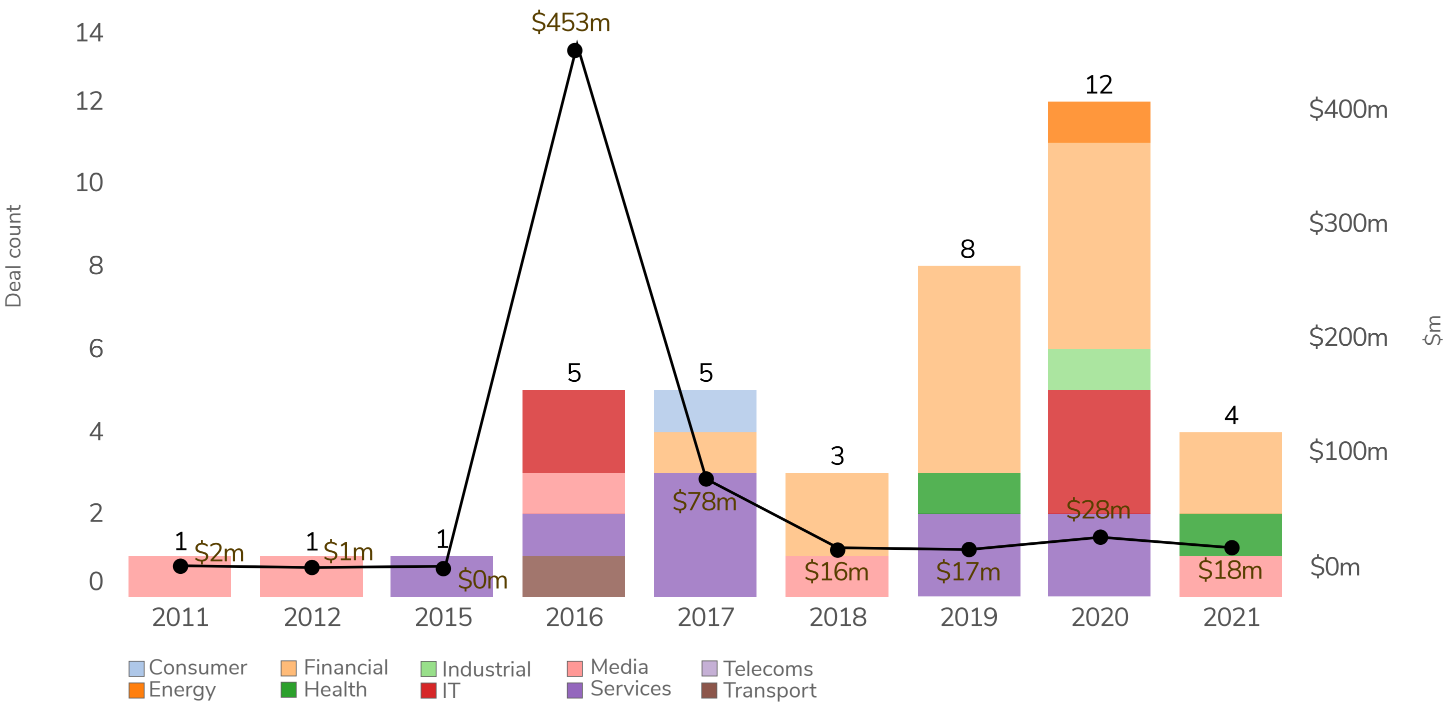
The largest deal involving a South Africa-headquartered corporate venturer was a $326m round

Global view of deals by South African corporates



Data as of 24 May

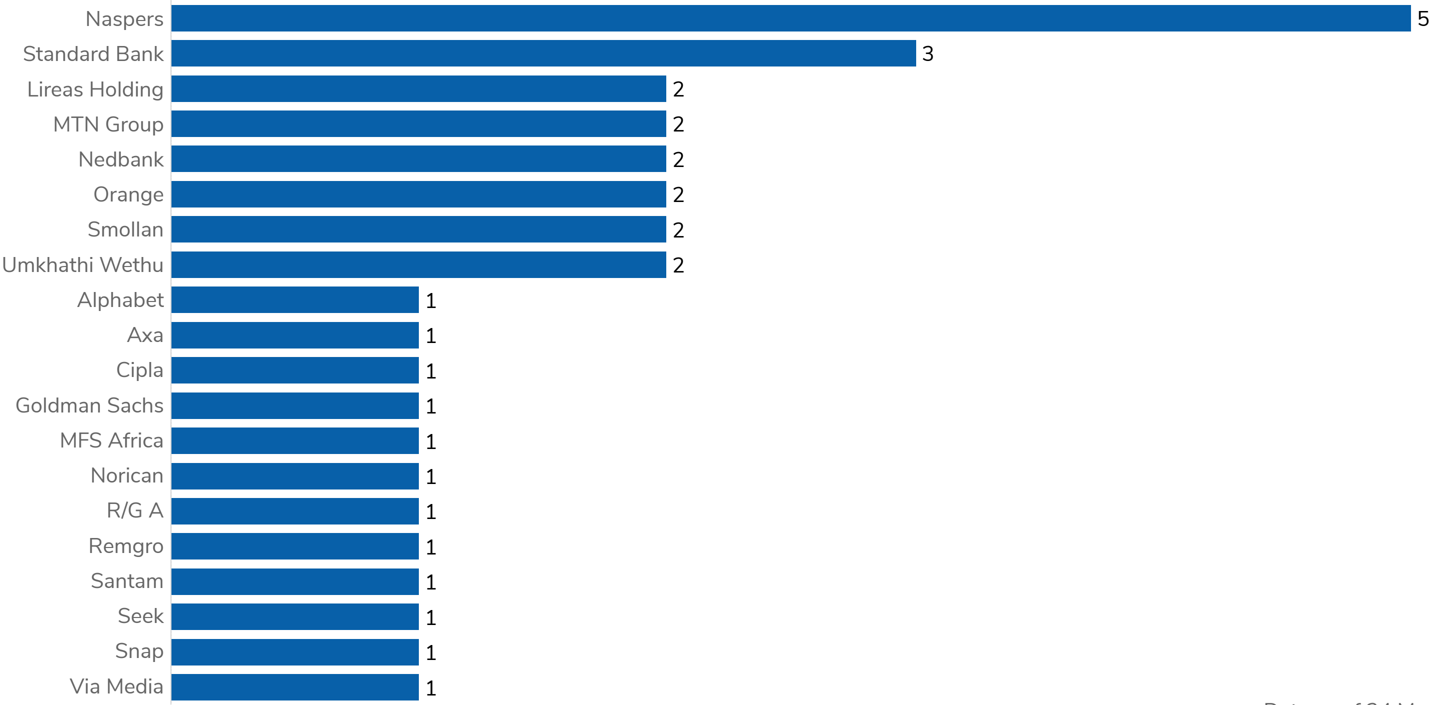
Corporate-backed deals in South Africa businesses



Source: GCV Analytics

Data as of 24 May

Top corporate investors in South African businesses



Data as of 24 May

Top corporate-backed rounds in South Africa-based businesses 2011-2021

Portfolio Company	Location	Sector	Round	Round Size ($m)	Co-Participant List
Africa Internet Group	South Africa	IT	Undisclosed	326	Axa | Goldman Sachs | MTN Group | Rocket Internet
Africa Internet Group	South Africa	IT	Stake purchase	85	Orange
Takealot	South Africa	Consumer	Stake purchase	71.9	Naspers
TravelStart	South Africa	Services	Undisclosed	40	Amadeus Capital Partners | MTN Group
Yoco	South Africa	Financial Services	B	16	Accion Frontier | FMO - Netherlands Development Finance Company | Orange | Partech Ventures | Quona Capital | Velocity Capital Advisors
Aerobotics	South Africa	Industrial	B	8.3	Naspers
HearX	South Africa	Health	Undisclosed	8.3	Bose | Futuregrowth Asset Management | Havaíc | Sphere Holdings
WhereIsMyTransport	South Africa	Services	A	7.5	Alphabet | Global Innovation Fund | Goodwell Investments | Liil Ventures | Nedbank | Toyota
DataProphet	South Africa	IT	A	6	Industrial Development Corporation of South Africa | Knife Capital | Norican
Carry1st	South Africa	Media	Undisclosed	6	Akatsuki | Konvoy Ventures | Raine Ventures | Riot Games | TTV Capital
WeThinkCode	South Africa	Services	Undisclosed	4.6	BCX

Source: GCV Analytics

raised by Africa Internet Group (AIG) in 2016, which was co-led by MTN, alongside e-commerce group and technology incubator operator Rocket Internet and Goldman Sachs. Axa also provided cash for the deal.

AIG was formed as a partnership of Rocket Internet, MTN and telecommunications company Millicom, and ran Jumia, the Germany-headquartered, Africa-focused online marketplace, until December 2018. Jumia went public four months later on the New York Stock Exchange.

E-commerce platform Takealot also secured a notable round sized at R960m ($71.9m) in April 2017, which was backed by Naspers. Takealot was formed by the acquisition of e-commerce company Take2 by asset manager Tiger Global Management and entrepreneur Kim Reid in 2010. It runs as an e-commerce service that sells a diverse range of consumer goods. The corporate eventually acquired the portfolio company a year later, getting 96% of its stake.

Online travel agency TravelStart received $40m in early 2016 from MTN and investment firm Amadeus Capital Partners. Originally founded in Sweden in 1999, TravelStart spun off its African holdings into a new business in 2010. It runs a specialised service that helps travellers book holiday packages using a variety of payment methods.

Payment technology developer Yoco, on the other hand, obtained $16m in series B funding from Orange's Digital Ventures unit. The round was led by VC firm Partech Ventures and included Dutch development bank FMO, Accion Frontier Inclusion Fund (managed by Quona Capital) and Velocity Capital. Yoco has developed a point-of-sale payments system that connects to a tablet or smartphone to enable small businesses to accept card payments.

Agriculture tools supplier Aerobotics raised $17m in a series B round in January 2021 led by Naspers Foundry, which invested alongside Cathay AfricInvest Innovation, FMO: Entrepreneurial Development Bank and Platform Investment Partners. Its technology helps track and assess the health of crops. It secured $610,000 in seed capital from 4Di Capital and Savannah Fund in 2017.

Hearing-oriented digital health technology developer HearX raised $8.3m in a February 2021 round from Bose Ventures, which invested on behalf of hi-fi equipment producer Bose. The round included Futuregrowth Asset Management, Havaíc and Sphere Holdings.

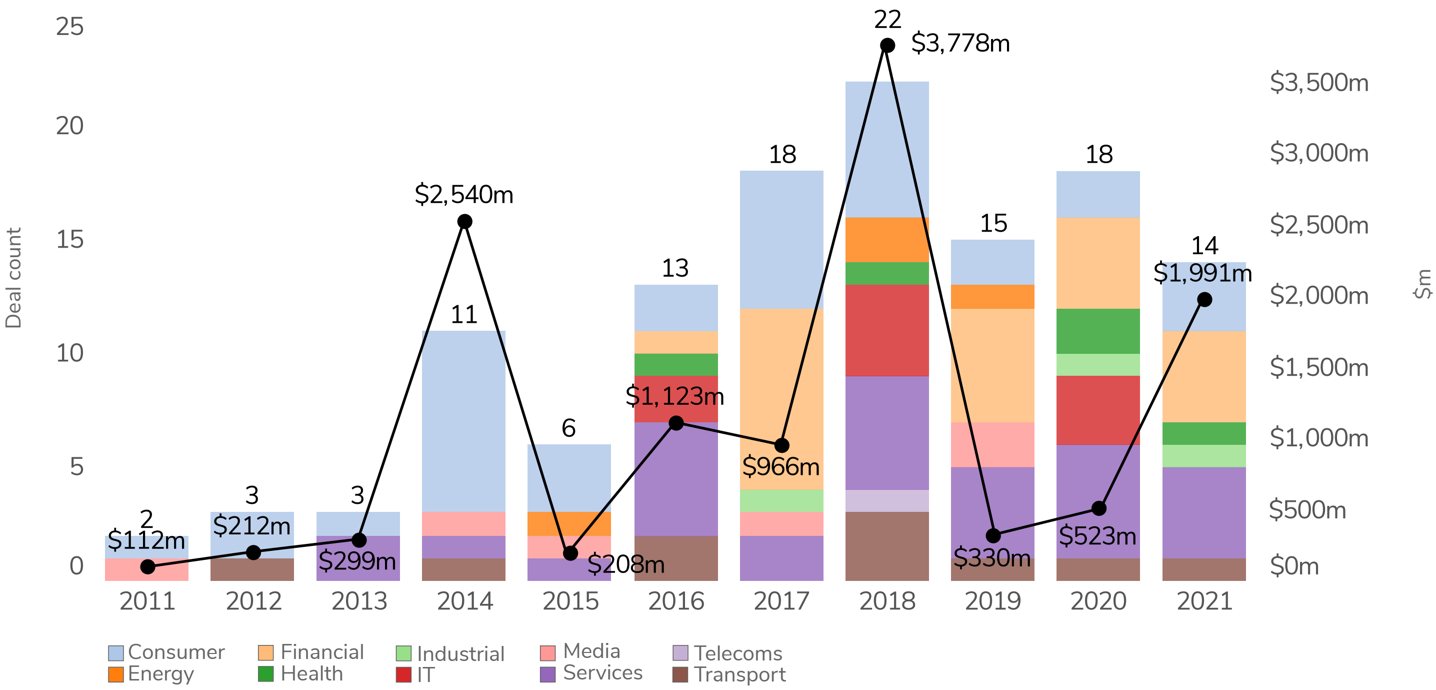
Mass-transport management software provider WhereIsMyTransport received $7.5m in a series A round in March 2020 featuring Toyota Tsusho Corporation, the trading arm of carmaker Toyota, as well as fellow corporate investors Google, Nedbank and Liil Ventures. The round was co-led by Global Innovation Fund and Goodwell Investments, WhereIsMyTransport having already raised a total of $5m from aerospace manufacturer Bombardier, Liil Ventures, Goodwell, Global Innovation Fund, Omidyar Network and Horizon Ventures as of January 2019.

Social game publisher Carry1st

Exits from corporate-backed South Africa-based enterprises 2011-2021

Portfolio Company	Sector	Round	Round Size	Exiting investors
Fundamo	Financial Services	Acquisition	$110m	HBD Venture Capital | Remgro | Sanlam
MXit	Media	Acquisition	$60m	Naspers
Beyonic	Financial Services	Acquisition		Barclays

Deals by South African corporates



Source: GCV Analytics

Data as of 24 May

Top deals backed by South Africa corporates 2011-2021

Portfolio Company	Location	Sector	Round	Round Size ($m)	Co-Participant List
Swiggy	India	Consumer	E and beyond	$1bn	Coatue | DST Global | Hillhouse Capital Management | Meituan-Dianping | Naspers | Tencent | Wellington Management
FlipKart	India	Consumer	E and beyond	$1bn	Accel Partners | DST System | GIC | Iconiq Capital | Morgan Stanley | Naspers | Tiger Global Management
FlipKart	India	Consumer	E and beyond	$700m	DST System | Greenoaks Capital | Iconiq Capital | Naspers | Qatar Investment Authority | Steadview Capital | Tiger Global Management
Wolt	Finland	Consumer	Undisclosed	$530m	83North | Coatue | DST Global | EQT Ventures | Goldman Sachs | Highland Europe | Iconiq Capital | KKR | Naspers | Tiger Global Management | Vintage Investment Partners
Letgo	USA	Consumer	Undisclosed	$500m	Naspers
iFood	Brazil	Consumer	Undisclosed	$500m	Innova | Movile | Naspers
Byju's	India	Services	Undisclosed	$400m	Canada Pension Plan | General Atlantic | Naspers
Fair.com	USA	Transport	Undisclosed	$385m	CreditEase | Exponential Ventures | G Squared | MMI Holdings | Munich Re Ventures | SoftBank
PharmEasy	India	Health	Undisclosed	$350m	Caisse de dépôt et placement du Québec | Fidelity | Lightrock | Naspers | Temasek | Think Investments | TPG
Africa Internet Group	South Africa	IT	Undisclosed	$326m	Axa | Goldman Sachs | MTN Group | Rocket Internet

Source: GCV Analytics

raised $6m in May 2021 in a round that included video game developer Riot Games and mobile game publisher Akatsuki's AET Fund. Konvoy Ventures led the round, which also featured Raine Ventures and TTV Capital. It followed an undisclosed amount of seed capital from Musha Ventures in 2020 and $2.5m in seed funding from smartphone maker Transsion's Future Hub, CRE Venture Capital, Perivoli Innovations, Chandaria Capital, Lateral Capital and Kam Kronenberg III in May the same year to take its overall funding to $4m.

Coding school WeThinkCode received R60m ($4.6m) in 2017 from BCX, a digital technology subsidiary of telecommunications company Telkom. The capital was provided as part of a partnership that involved Telkom companies hosting 40 WeThinkCode interns a year for three years, expanding the startup's Johannesburg office and launching a new campus in Cape Town.

Corporate-backed deals in the country have also yielded significant financial results. Fundamo, a financial services technology provider backed by local companies including financial services group Sanlam and conglomerate Remgro, was acquired for $110m by credit card provider Visa in 2011.

VC firm World of Avatar acquired a 90% stake in mobile social network and chat application MXit for R500m ($60m) in 2011 that enabled Naspers's Myriad International Holdings unit to exit.

Digital payment processor MFS Africa acquired Beyonic, a business management system and graduate of an accelerator backed by financial services firm Barclays, in July 2020.

Top deals backed by South Africa-headquartered corporates have included food delivery service Swiggy, e-commerce marketplace Flipkart, food and consumer goods delivery service Wolt, mobile commerce platform Letgo, online food delivery platform iFood, online education provider Byju, mobile car-buying platform Fair.com, online pharmacy PharmEasy and the local AIG.

Deal volume involving local corporates topped at 22 transactions in 2018 with a combined $3.8bn in funding, while this year it has so far logged about $2bn across 14 deals. CVCs have focused on services and financial technology startups, followed by the consumer sector.

Global Impact Venturing

Eli Lilly counts up Sixty8 Capital contribution

> **Fund will back startups led by under-represented groups**
> **Sixty8 is partnering Allos Ventures**
> **Paul Ehlinger will join the former as venture partner**

By Jordan Williams
Reporter

Eli Lilly has helped Sixty8 Capital hold a first close for its $20m fund, which the venture capital firm will use to back startups led by members of typically under-represented communities.

The fund has also secured capital commitments from financial services firms First Internet Bank and Bank of America as well as 50 South Capital, The Indiana Next Level Fund and the Central Indiana Community Foundation.

The US-based firm is industry-agnostic but focusing on companies led by founders from under-represented groups in entrepreneurship, such as women, black and Latinx people and members of the LGBTQ+ community.

It will deploy the fund by investing 25 to 30 pre-seed and seed-stage companies with a geographical emphasis on the Midwest, providing between $250,000 and $500,000 per deal.

Sixty8 has partnered fellow VC firm Allos Ventures for the fund and Paul Ehlinger, a principal at Allos, will join Sixty8 as a venture partner. One of its first investments is in Qualifi, the US-based developer of a recruitment software platform.

Philip Johnson, senior vice-president and treasurer at Eli Lilly, said: "Diverse and historically under-represented founders struggle to obtain capital to form and build their businesses.

"Lilly's investment in Sixty8 Capital is representative of our broader efforts to use our financial and human capital to create lasting change that makes life better for people in the communities we serve."

Global University Venturing

Where there is innovation, there is hope

- Social aspects to spinouts are increasingly important
- Several funds and projects have been set up recently
- Startups target everything from computing to agtech

By Thierry Heles
Editor, Global University Venturing

Environmental, social and corporate governance are increasingly important factors when setting up spinouts and investing in them, guests have been telling sister publication Global University Venturing on its podcast, Talking Tech Transfer, over the past several months. Social enterprises and other types of non-profit companies are also having a moment at institutions as illustrious as University of Oxford and University College London.

London School of Economics and Political Science is leading a project called Aspect –A Social Sciences Platform for Entrepreneurship, Commercialisation and Transformation – that focuses exclusively on commercialising research emerging from social sciences departments. Its membership has grown to 19 universities, including York, Sheffield and Manchester – whose heads of tech transfer all spoke to GUV for a feature on the north of England in the April issue.

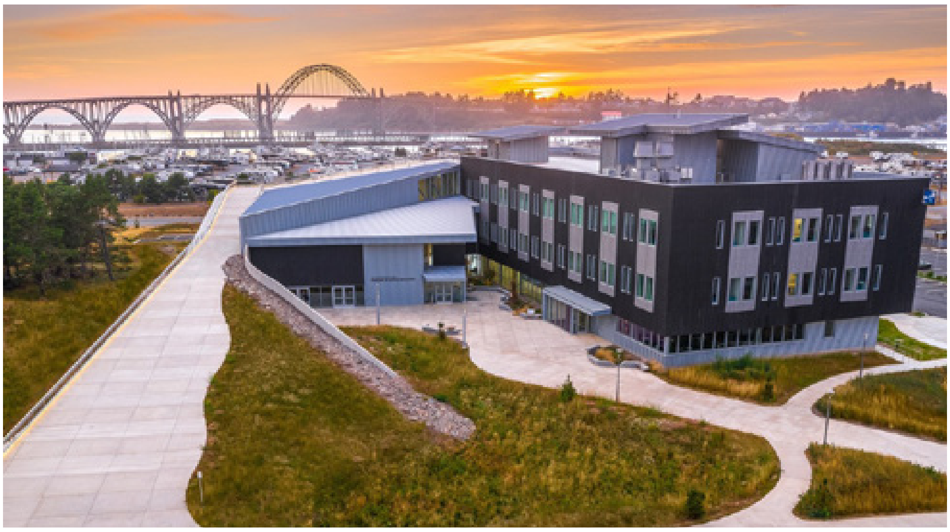
Oxford, which is also a member of Aspect, has long been a pioneer in commercialising social sciences – Mark Mann took home the GUV award for Personality of the Year 2019 for his work in the area – and a recent analysis by its tech transfer office, Oxford University Innovation (OUI), showed it had

24 active companies working in the cleantech space. It is hardly a surprise then that OUI partnered venture capital firm Global Accelerated Ventures this past quarter to set up a $25m special purpose investment vehicle targeting conservation-focused startups. A venture studio will aim to launch between 13 and 20 companies tackling climate change challenges over the next two years – challenges that range from biodiversity loss, the energy crisis and human food security to landscape change.

Some investors, like Chalmers Ventures – the incubator and venture arm of Chalmers University of Technology in Gothenburg, Sweden, actively encourage portfolio companies to pursue the United Nations' Sustainable Development Goals. Chief executive Sara Wallin spoke to Talking Tech Transfer in April.

Also in late April, Main Sequence Ventures, the Australia-based venture firm set up by Commonwealth Scientific and Industrial Research Organisation (CSIRO), collected A$250m ($194m) for its second fund that will continue to focus on key objectives including feeding 10 billion people; humanity-scale healthcare; increasing industrial productivity; developing next-generation computing; and accessing space. The second fund will also add a sixth remit to the firm's mission: decarbonisation.

Martin Duursma, the Main Sequence partner who will lead the effort on decarbonisation technologies, explained the firm's decision: "We are entering a transformational and critical decade for addressing climate change globally; Australia has a natural opportunity to develop the solutions that help everyone forge a path to net zero.



Oregon State University is one of several to join the Generation Food Rural Partners

"Our ingenuity and deep science background as a nation will be pivotal in building a clean hydrogen industry, adapting heavy industry, decarbonising our energy grids and developing new ways to capture and sequester carbon. We are determined to help uncover the scientific discoveries, turn them into real, tangible technologies and accelerate their potential so we can reverse our climate impact and avoid a climate catastrophe."

In the US too there are mounting efforts – thanks to the change in government also at a political level – to tackle the next crisis. One notable recent example is Big Idea Ventures, a firm focused on early-stage alternative protein investing, launched by Generation Food Rural Partners in late January with North Carolina State University as an inaugural partner and a goal to raise $125m to commercialise agtech research in rural communities. Earlier this month, it expanded that partnership dramatically by adding Louisiana State University, Oregon State University, Penn State University, Purdue University, Tufts University, University of Hawai'i, University of Illinois at Urbana Champaign, University of Massachusetts Amherst and Worcester Polytechnic Institute.

Of course, covid is not behind us – and the heart-breaking news from India shows the worst may yet be to come for humanity despite good vaccination progress in many western nations – but multiple vaccines now exist, freeing up universities and researchers to ask which crisis to solve next. It can be disheartening to realise that there is no shortage of crises from which to choose but consider these words from former US vice-president Al Gore, who said at the Bloomberg Green Summit earlier this week he was "very optimistic that we are crossing the political tipping point right now".

He added: "We are in the early stages of a revolution that has the magnitude of the industrial revolution. Many are saying it is the biggest investment opportunity of all history."

It seems increasingly obvious that institutional investors are not willing to miss it, especially if those opportunities come out of university labs.

Data

May deals rise 30% on last year

> Higher deal numbers and dollars vs in 2019
> Higher number of exits than the same month last year
> Funding initiatives down in number but up in dollars

By Kaloyan Andonov
Analyst

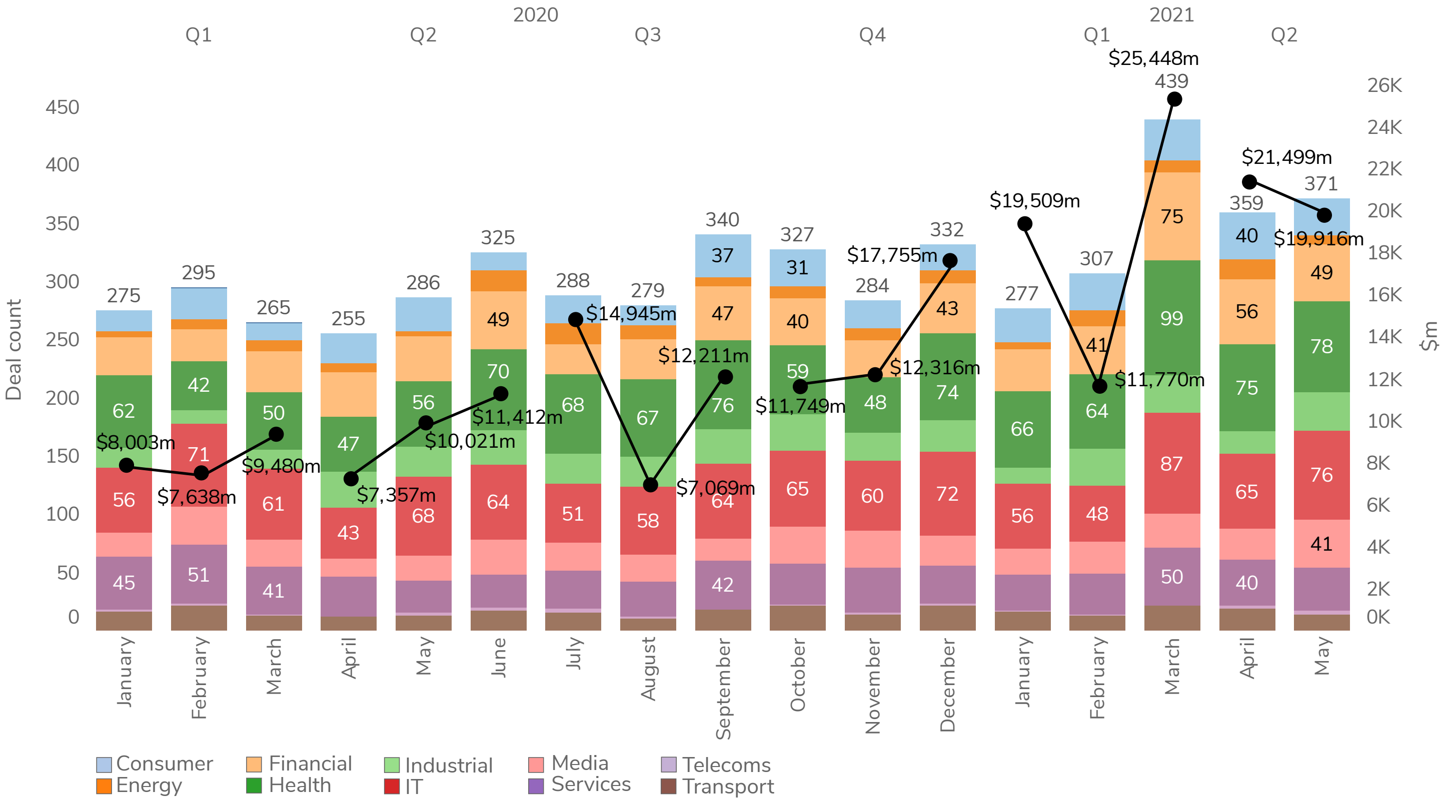
Optimism around the world's recovery from the pandemic continued in the corporate venturing arena through May, with deals, exits and funding all up on the same month in 2020.

Funding initiatives dropped to 20 from April's 54 but the close of SoftBank's Vision Fund 2 on $30bn ensured a dramatic rise in capital devoted to corporate venture investing.

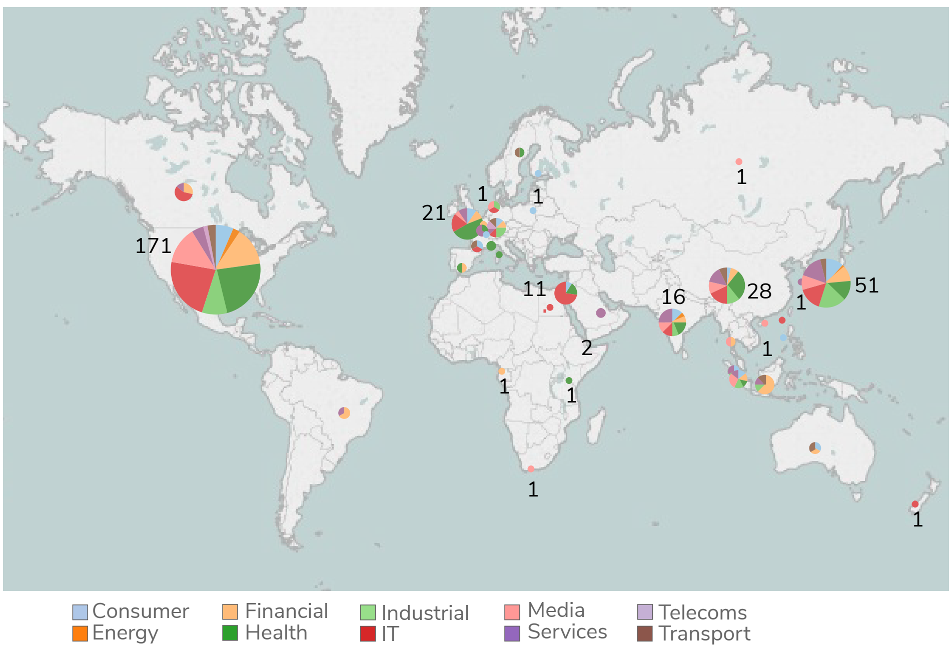
Deals	Exits	Funding initatives
371	58	20

Deals by month

According to GCV Analytics, in May the number of corporate-backed deals from around the world was 371, nearly 30% higher than the 286 rounds from the same month last year. Investment value stood at nearly $19.92bn in total estimated capital – nearly twice as much as the $10bn of May 2020.



Global view of deals

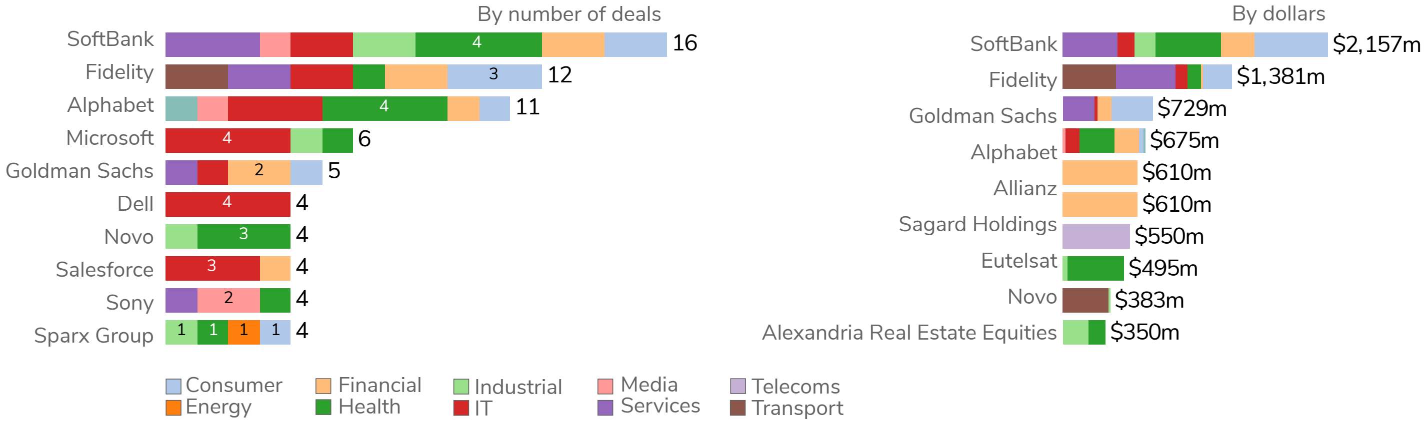


The US came first in the number of corporate-backed deals, hosting 171 rounds, while Japan was second with 51 and China – third with 28.

Source: GCV Analytics

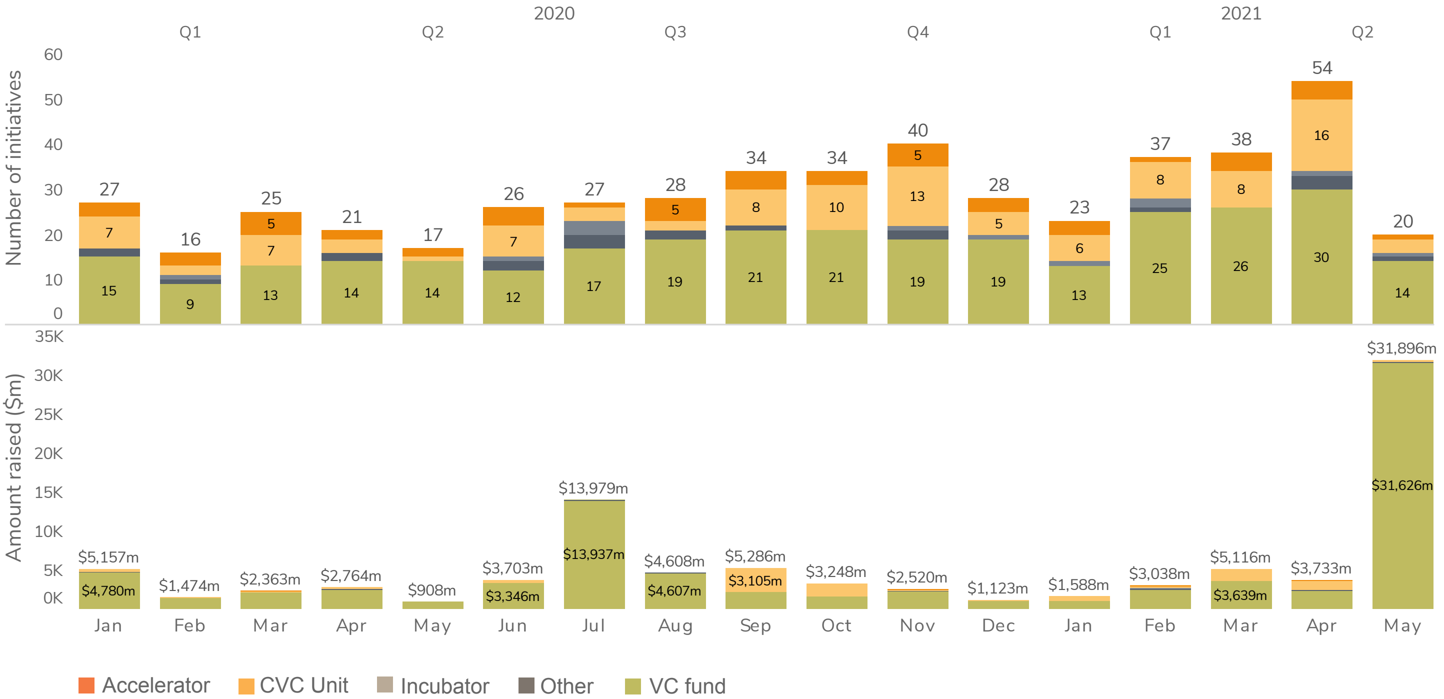
Top investors

The leading corporate investors by number of deals were telecommunications and internet group SoftBank, financial services group Fidelity and diversified internet conglomerate Alphabet. In terms of involvement in the largest deals, SoftBank was on the top of the list along with Fidelity and investment bank Goldman Sachs.



Funding initiatives

GCV Analytics reported 20 corporate-backed funding initiatives, including VC funds, new venturing units, incubators, accelerators and other. This figure was lower than the previous months of this year, though slightly higher than May 2020, which had registered 17 initiatives. The estimated capital rose significantly due to SoftBank's Vision Fund 2 reaching $30bn.

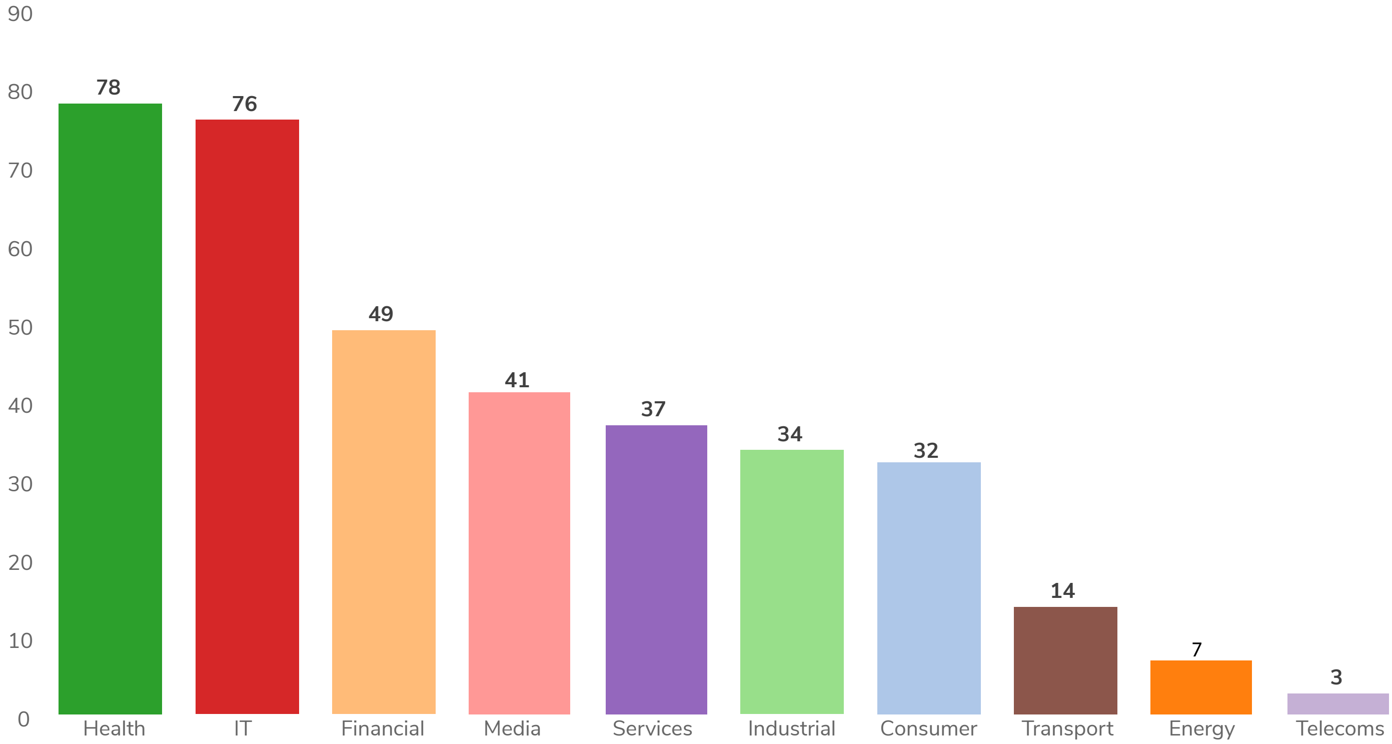


Source: GCV Analytics

Deals

By sector

Emerging businesses from the health, IT, financial and media sectors led in raising the largest number of rounds in May 2021. The most active corporate venturers came from the financial, IT, media and industrial sectors.



Heatmap

	Financial Services	IT	Media	Industrial	Health	Services	Consumer	Telecoms	Energy	Transport
North America	73	43	26	21	25	16	15	15	11	5
Asia	45	18	18	24	10	21	18	13	3	7
Europe	17	6	9	8	12	3	6	4	1	1
Middle East	7	5	1	1	1	1		1		
Australia and NZ	3								1	
Africa	2		1							
South America	2					1		2		
Eastern Europe	1									

Source: GCV Analytics

Top 10 deals

Portfolio company	Location	Sector	Round	Round size ($m)	Co-Participant List
Perch	USA	A	Consumer	$775m	SoftBank | Spark Capital | Victory Park Capital (VPC)
WealthSimple	Canada	Undisclosed	Financial Services	$610m	Alkeon Capital | Allianz | Base10 Partners | Dragoneer Investment Group | DST Global | Greylock Partners | Iconiq Capital | iNovia Capital | Meritech Capital Partners | Plus Capital | Redpoint Ventures | Sagard Holdings | Steadfast Venture Capital | TCV | TSV | undisclosed investors
OneWeb	USA	Stake purchase	Telecoms	$550m	Eutelsat
Noom	USA	E and beyond	Health	$540m	Novo | Oak HC/FT | RRE Ventures | Samsung | Sequoia Capital | Silver Lake | Temasek
ContentSquare	USA	E and beyond	IT	$500m	BlackRock | Bpifrance | Canaan Partners | Eurazeo | Highland Europe | KKR | SoftBank
Beta Technologies	USA	Undisclosed	Transport	$368m	Amazon | Fidelity | RedBird Capital | undisclosed investors
Back Market	France	D	Consumer	$335m	Daphni | Eurazeo | General Atlantic | Generation Investment Management | Goldman Sachs | Groupe Arnault
Dingdong Maicai	China	D	Consumer	$330m	SoftBank
Vinted	Lithuania	E and beyond	Consumer	$303m	EQT Ventures | Hubert Burda | Insight Partners | Lightspeed Venture Partners | Sprints Capital
Bowery Farming	USA	C	Industrial	$300m	Alphabet | Amplo | Fidelity | Gaingels | General Catalyst | GGV Capital | Groupe Artémis | private investors | Temasek

Source: GCV Analytics

1 US-headquartered e-commerce holding company Perch completed a $775m series A round led by SoftBank's Vision Fund 2. The round also featured venture capital firm Spark Capital and alternative investment manager Victory Park Capital. It is the largest series A closed by a US-based company, according to Perch. Founded in November 2019, the company is acquiring direct-to-consumer e-commerce brands, particularly third-party merchants on online marketplace Amazon, in a bid to build a diversified online retail offering. It has bought more than 70 brands so far and targets category leaders with the potential to scale their businesses.

2 Canada-based digital investment platform developer Wealthsimple received C$750m ($610m) in funding from investors including Allianz X, a subsidiary of insurance group Allianz, at a valuation of almost $4.1bn. Meritech Capital and Greylock Partners co-led the round, which also featured DST Global, Sagard, Iconiq Capital, Dragoneer, TCV, iNovia Capital, Base 10 Partners, Redpoint Ventures, Steadfast Capital, Alkeon Capital Management, TSV, Plus Capital and multiple individuals. Wealthsimple offers an online service that allows users to invest in low-cost index funds while using technology to automate practices like rebalancing or tax loss harvesting. It has also added features to the platform such as high interest savings and commission-free trading.

3 Satellite operator Eutelsat Communications agreed to invest $550m in UK-headquartered satellite internet technology developer One Web, in return for a stake sized at about 24%. OneWeb is building a 648-satellite constellation intended to provide broadband coverage to remote areas from low orbit. The initial system is expected to be operational by the end of 2021 and it said Eutelsat's capital will take it most of the way towards its funding goal. The company had raised a total of $3.4bn from investors including SoftBank's Vision Fund, conglomerate Bharti Enterprises and satellite services provider Hughes Network Systems before filing for bankruptcy in March 2020. Bharti and the UK government to buy OneWeb's assets for $1bn in July the same year. SoftBank paid $350m for a 30% stake in the resurrected company in January 2021 while Hughes Network Systems invested $50m.

4 Noom, the US-headquartered creator of an online platform that guides healthy behaviour, secured approximately $540m in a series F round featuring pharmaceutical firm Novo and electronics manufacturer Samsung. Private equity firm Silver Lake led the round, which included Oak HC/FT, Temasek, Sequoia Capital and RRE Ventures, while Samsung participated through corporate

venture capital (CVC) unit Samsung Ventures. It reportedly valued the company at $3.7bn.

Founded in 2008, Noom has built a mobile platform which combines data analytics with human coaching to help users take steps to manage their weight, reduce stress and prevent diabetes. The funding has been earmarked for the company's international expansion plans and share repurchases.

5 US-based website analytics platform developer ContentSquare closed a $500m series E round led by Vision Fund 2 at a $2.8bn valuation. Bpifrance, Canaan, Eurazeo, Highland Europe, KKR and funds and accounts managed by BlackRock filled out the equity investors, while Sapiance Capital supplied debt financing.

Founded in France in 2012, ContentSquare has built software designed to help enterprises analyse their customers' digital behaviours in a bid to increase brand loyalty. Its client base includes some 700 users across 25 countries. The company has offices in New York and San Francisco, the UK, Germany, Israel and Japan. The cash will be used to improve its technology, consolidate its presence in Europe and the US, enter new markets across Asia and explore mergers and acquisitions.

6 US-based electric aviation technology developer Beta Technologies picked up $368m in a funding round backed by e-commerce and cloud computing company Amazon. Fidelity Management and Research led the round, which also featured Redbird Capital and undisclosed new and existing backers. Amazon contributed through its Climate Pledge Fund and the oversubscribed round reportedly valued Beta at $1.4bn.

Beta Technologies is working on electric vertical aircraft that can carry 1,500 pounds of cargo or up to six people, covering a distance of 250 nautical miles (463 kilometres) on a single charge. The funding has been allocated to continued development of Beta's electric propulsion systems and controls, and the construction of manufacturing facilities.

7 Back Market, a France-based refurbished electronic devices marketplace, secured $335m in a series D round featuring Aglaé Ventures, a VC firm sponsored by diversified holding firm Groupe

Beta Technologies raised $368m

Bowery is developing an indoor farming scheme

Arnault. Goldman Sachs Growth Equity, a division of investment bank Goldman Sachs, also took part in the round, which was led by growth equity firm General Atlantic. The round also attracted Generation Investment Management, Eurazeo and Daphni, and valued the company at $3.2bn. Back Market runs an online marketplace for refurbished electronic devices and home appliances. It screens each seller and requires proof of their refurbishment process, monitoring their performance in real time to ensure quality is maintained.

8 China-based grocery delivery app operator Dingdong Maicai closed a $330m series D-plus round led by SoftBank's Vision Fund. The company's overall funding now stands at more than $1bn. It most recently secured $700m in a series D round co-led by investment group DST Global and investment management firm Coatue.

Founded in 2017, Dingdong Maicai has built a grocery e-commerce platform it claims delivers fresh produce and seafood ingredients door-to-door in under 30 minutes. It has served more than 5 million households across 27 markets in its home country.

9 Vinted, the Lithuanian-headquartered operator of a second-hand fashion marketplace, picked up €250m ($303m) in a series F round featuring Burda Principal Investments, a subsidiary of media group Hubert Burda. The round was led by EQT Growth, a fund operated by investment firm EQT, at a $4.2bn valuation, and it included Insight Partners, Lightspeed Venture Partners and Sprints Capital.

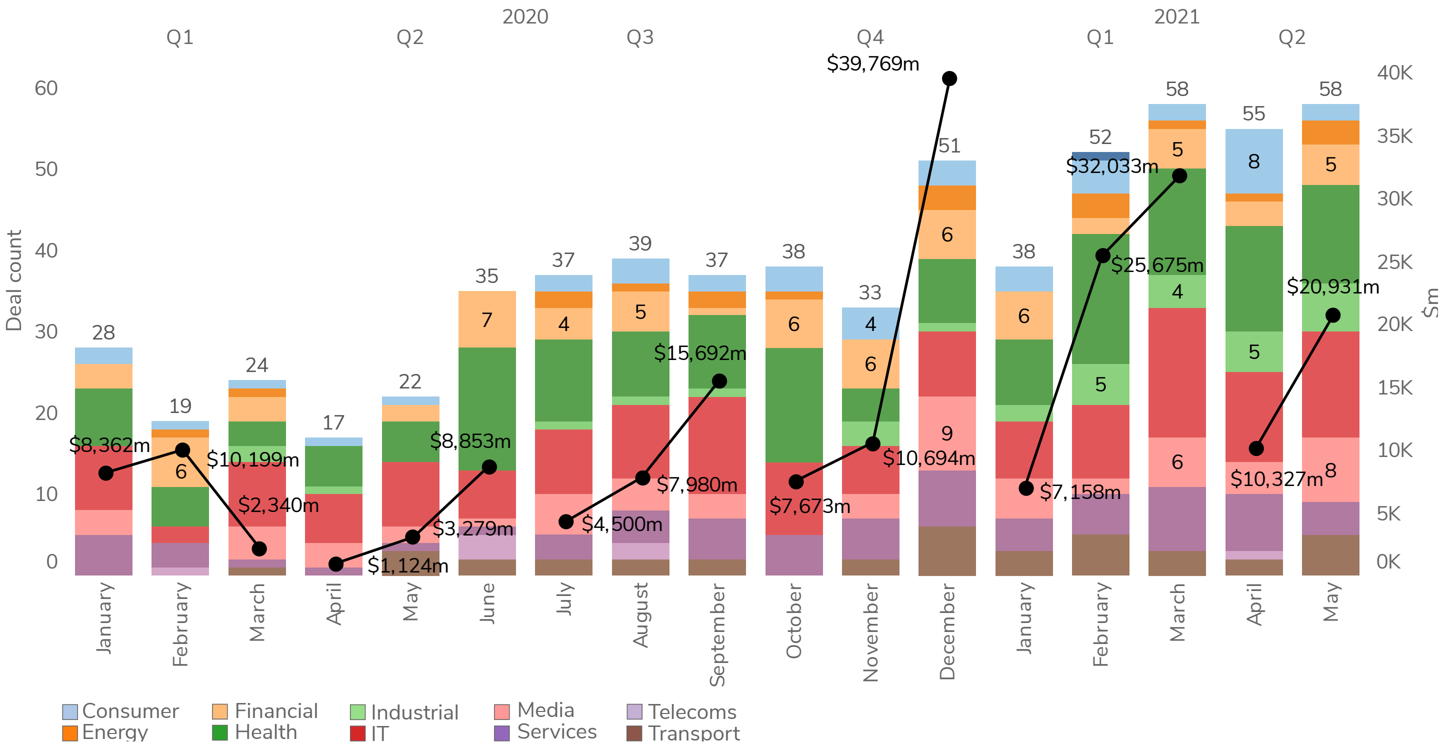
Founded in 2008, Vinted has built an online platform where users can buy and sell second-hand clothing and home goods. It has more than 45 million users located across 13 countries including the US, UK, France and Germany, and the cash will fund platform and technology development.

10 US-based vertical farming technology developer Bowery Farming raised $300m in series C funding from investors including GV, a corporate venturing subsidiary of Alphabet. Fidelity Management & Research led the round, which included Amplo, General Catalyst, GGV Capital, Groupe Artémis, Gaingels, Temasek and private investors José Andrés, Lewis Hamilton, Chris Paul, Natalie Portman and Justin Timberlake.

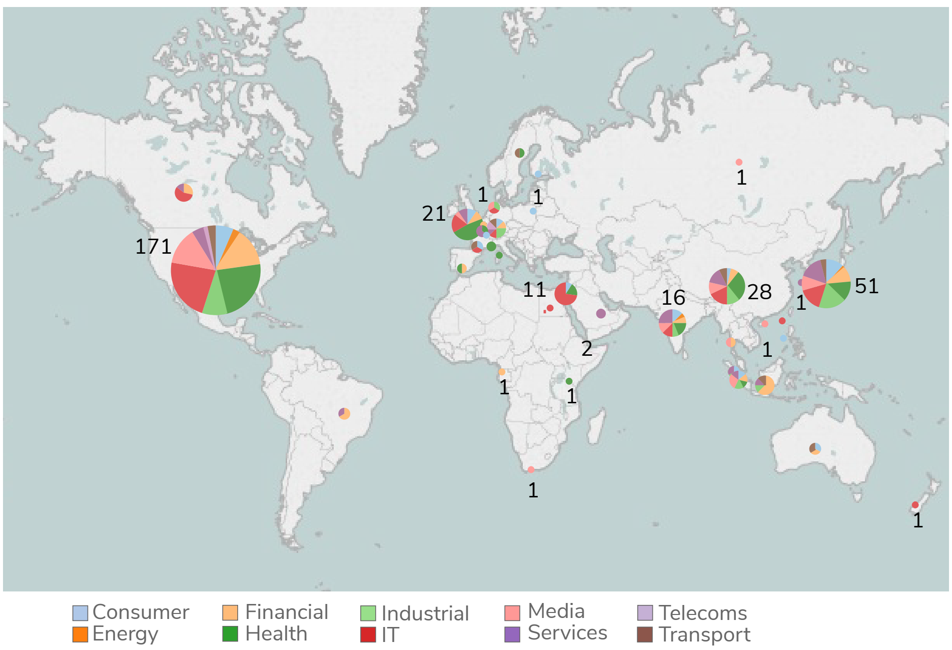
Bowery is developing a sustainable indoor farming scheme designed for cities. It has built a system dubbed BoweryOS that integrates artificial intelligence (AI), machine learning and computer vision-equipped software, hardware and sensors, reducing the water and land usage involved for growing greens.

Exits

Record highs were also tracked in exits. There were 58 exits involving corporate venturers as either acquirers or exiting investors in May. The transactions included 36 acquisitions, 13 other transactions (reverse mergers with Spacs), 8 initial public offerings (IPOs) and one merger.



Global view of exits



The exit count figure rose 65% versus the May 2020 figure (35). The total estimated exited capital stood at $20.93bn, considerably higher than the same month from last year ($3.28bn).

Source: GCV Analytics

Top 10 exits

Portfolio company	Location	Sector	Exit type	Acquirer	Exit size ($m)	Co-Participant List
JD Logistics	China	Services	IPO		$3.2bn	China Development Bank | China Life Insurance | China Merchants Group | China Structural Reform Fund | Hillhouse Capital Management | Industrial and Commercial Bank of China | JD.com | Sequoia Capital | Tencent
Ginkgo Bioworks	USA	Industrial	Other (reverse mergers/SPACs)		$2.51bn	Ark Investment Management | ArrowMark Partners | Baillie Gifford | Bain Capital | Berkshire Partners | Cascade Investment | Casdin Capital | Franklin Advisers | General Atlantic | Illumina | Morgan Stanley | Putnam Investments | Senator Investment Group | Soaring Eagle Acquisition Corp | T Rowe Price | Viking Global Investors
Divvy	USA	IT	Acquisition	Bill.com	$2.5bn	aCrew Capital | Hanaco | Insight Partners | New Enterprise Associates | PayPal | Pelion Venture Partners | Schonfeld Strategic Advisors | Whale Rock Capital
Better Mortgage	USA	Financial Services	Other (reverse mergers/SPACs)		$1.72bn	Activant Capital | American Express | Aurora Acquisition Corp | Novator Partners | Ping An Insurance | SoftBank
Oatly	Sweden	Consumer	IPO		$1.43bn	Blackstone | China Resources Group | Orkila Capital | Oyster Bay | private investors | Rabobank | Roc Nation | Strand Equity Partners | undisclosed investors | Verlinvest
Roivant Sciences	USA	Health	Other (reverse mergers/SPACs)		$600m	Dainippon Sumitomo | Eventide Asset Management | Fidelity | Montes Archimedes Acquisition Corp | Palantir Technologies | RTW Investments | SoftBank | Suvretta Capital Management | Viking Global Investors
Benson Hill Biosystems	USA	Industrial	Other (reverse mergers/SPACs)		$575m	Alexandria Real Estate Equities | Alphabet | BlackRock | Hedosophia | Lazard Asset Management | Post Holdings | Star Peak Corp II | Van Eck Associates Corporation
Tapas Media	USA	Media	Acquisition	Kakao Entertainment	$510m	500 Startups | Daum Communications | EN Investment | iD Ventures America | Kakao | Medici Investment | private investors | SBI Group | SK Telecom | Strong Ventures
Clever	USA	Services	Acquisition	Kahoot	$500m	Alphabet | Bessemer Venture Partners | Floodgate | GSV Capital | Lightspeed Venture Partners | private investors | Sequoia Capital | SoftTech VC | SV Angel | Y Combinator
ESS	USA	Energy	Other (reverse mergers/SPACs)		$500m	Acon S2 Acquisition Corp | BASF | Breakthrough Energy Ventures | Evergy | Fidelity | PTT Public Company Limited | SoftBank

Source: GCV Analytics

1 JD Logistics, the logistics offshoot of China-headquartered e-commerce group JD.com, floated on the Hong Kong Stock Exchange in a HK$24.6bn ($3.2bn) IPO. The offering comprised approximately 609 million shares priced at HK$40.36 each, towards the lower end of the IPO's HK$39.36 to HK$43.36 range.

Formed by JD.com as its delivery services arm, JD Logistics combines AI technology with a China-wide network of warehouses to deliver e-commerce products to customers within 24 hours. The IPO proceeds will go to strengthening its logistics infrastructure, part of a drive that has involved it opening 200 warehouses this year.

2 Ginkgo Bioworks, a US-based microbe engineering services provider that counts genomics technology producer Illumina as an investor, agreed to a reverse merger with Spac Soaring Eagle Acquisition Corp.

The deal valued the combined business at $17.5bn and included a $775m private investment in public equity (PIPE) financing co-led by Baillie Gifford, Putnam Investments and Morgan Stanley Investment Management's Counterpoint Global vehicle. The PIPE consortium featured accounts advised by Ark Investment Management as well as ArrowMark Partners, Bain Capital Public Equity, Berkshire Partners, Franklin Advisers, Cascade Investment, Casdin Capital, General Atlantic, Senator Investment Group, Viking Global Investors and funds and accounts advised by T Rowe Price.

Soaring Eagle raised $1.73bn through its own IPO in February The merged company will take its listing on the Nasdaq Capital Market. Founded in 2009, Ginkgo has created cellular programming technology used to grow organisms for industrial applications such as nutritional products, consumer goods and fragrances.

3 Financial management software producer Bill.com agreed to purchase payment management platform developer Divvy in a $2.5bn transaction enabling digital

Oatly produces oat-derived food products

payment processor PayPal and electronics wholesaler Hanaco to exit. The deal consists of $625m of cash and the rest in Bill.com shares. It came four months after Divvy secured $165m in series D funding from investors including PayPal subsidiary PayPal Ventures and Hanaco at a $1.6bn valuation.

Divvy's software platform allows businesses to efficiently track spending on expenses and corporate cards in real time while setting flexible limits. The deal will allow Bill.com to offer business customers accounts payable, accounts receivable and corporate card spend management options from a single place.

4 Better, the US-based digital mortgage services provider backed by corporates SoftBank and financial services and insurances companies American Express, Ping An, Citi and Ally Financial, agreed a reverse merger at a $7.7bn post-deal valuation. The company will join forces with SPAC Aurora Acquisition Corp, taking the position on the Nasdaq Capital Market it acquired in a $220m IPO in March.

The deal will be supported by $1.5bn in PIPE financing from SoftBank's SB Management subsidiary, Activant Capital and fellow investment firm Novator Capital, Aurora Acquisition Corp's sponsor. Founded in 2016, Better offers a range of services including commission-less mortgages which are informed by the company's Tinman data technology platform. It also provides realty services and title and homeowners insurance.

5 Oatly, a Sweden-based oat milk producer backed by talent and entertainment agency Roc Nation, floated on the Nasdaq Global Select Market in a $1.43bn IPO. The company issued almost 84.4 million shares priced at $17 each, at the top of the IPO's $15 to $17 range. The company most recently raised $200m in a July 2020 round led by investment management firm Blackstone that included Roc Nation and Rabo Corporate Investments, a corporate venturing vehicle for agriculture-focused banking group Rabobank.

Founded in 1994 to advance research at Lund University, Oatly provides oat milk and other oat-derived food products traditionally made from cow's milk, including ice cream, speciality coffees, yoghurt, cream, spread and custard.

6 Roivant Sciences, a US-based biopharmaceutical company backed by SoftBank and pharmaceuticals Sumitomo Dainippon Pharma and Dexxon, agreed a reverse merger at a combined $7.3bn valuation. It will merge with Montes Archimedes Acquisition Corp, a Spac sponsored by healthcare investment firm Patient Square Capital, which floated on the Nasdaq Capital Market in a $400m IPO in October.

Sumitomo Dainippon, SoftBank subsidiary SB Management and data analytics service provider Palantir Technologies all contributed to a $200m private investment in public equity (PIPE) financing supporting the transaction. Founded in 2014, Roivant has built a technology platform it uses to launch companies it refers to as ‘vants’ across a range of medical and healthcare areas. The proceeds from the deal are expected to fund its activities through 2024.

7 Benson Hill, a US-based food innovation technology developer backed by Alphabet, agricultural goods processor Louis Dreyfus Company and supermarket chain Emart, agreed to a reverse takeover. The company merged with Star Peak Corp II, a SPAC that listed on the New York Stock Exchange in a $350m flotation in January, at a valuation of approximately $1.35bn.

Van Eck Associates Corporation, Hedosophia, Lazard Asset Management, Post Holdings and funds and accounts managed by BlackRock provided $225m in private placement financing to support the deal along with existing Benson Hill backers and affiliates of Star Peak. Benson Hill’s technology platform combines artificial intelligence and big data technology with a range of breeding techniques, partnering corporates to develop new products. The transaction comes after approximately $244m in funding.

8 Kakao Entertainment, an subsidiary of internet group Kakao, agreed to buy US-based short-form fiction platform developers Radish and Tapas Media for a combined $950m, allowing several corporate investors to exit. It will purchase Tapas for about $510m, while Radish will be acquired in a $440m deal.

The deals followed the January 2021 merger of two Kakao subsidiaries: online content marketplace Kakao Page and record label and talent agency Kakao M. Founded in 2012, Tapas operates an online platform for ‘bite-sized’ webcomics and novels. Kakao Page increased its stake in the company to 40.4% through an investment of undisclosed size in November.

9 Learning platform developer Kahoot agreed to acquire US-headquartered digital learning software provider Clever for up to $500m in a deal that will enable Alphabet to exit. The transaction will be made up of an initial $435m combined with up to $65m in performance-based add-ons available, consisting of 82% cash and 18% Kahoot shares. Founded in 2012, Clever has built a secure portal used by almost 90,000 US schools that enables students to sign in to a range of learning apps using one digital ID. The deal is intended to boost Norway-headquartered Kahoot’s presence in the US, and Clever will integrate the company’s learning apps into its offering.

10 ESS, a US-based energy storage technology producer backed by SoftBank and chemical companies PTT Global, Evergy and BASF, agreed a reverse takeover with Spac Acon S2 Acquisition Corp. Acon S2 floated on in a $250m IPO on the Nasdaq Capital Market in September 2020, and the merged business will take its listing, the deal valuing ESS at $1.1bn. Fidelity led a $250m PIPE financing supporting the deal that included SB Energy, part of SoftBank, as well as chemicals producer BASF and Breakthrough Energy Ventures. ESS provides iron flow batteries for use in storing energy from commercial and utility-scale renewable energy systems.

Note: *Monthly data can fluctuate as additional data are reported after each issue of GCV magazine goes to press.*

ESS is an energy storage producer backed by SoftBank

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