

# SINGAPORE'S RESILIENCE: 2022 FUNDING UPDATE

Venture funding in Singapore-based startups remained relatively robust in 2022 despite mounting challenges such as soaring inflation and the global monetary tightening that followed the end of the worldwide liquidity glut witnessed in 2021.

Although investors have generally turned cautious amid a changing global investment climate, Singapore's tech ecosystem continues to serve as a springboard for innovative businesses looking to tap the domestic, regional, and international markets. The value of early-stage deals in Singapore, for instance, maintained its growth trajectory as investors competed for promising Seed and Series A-stage startups, pushing the median investment ticket size to new heights.

The negative impact of the shift in investor sentiment was more visible among late-stage startups. Despite a relatively stable deal volume, the total value of funding in this category dropped slightly as many crossover funds, which were active in late-stage investments, took a step back after their publicly-listed portfolios took a beating in the stock market rout.

Singapore's venture capital market will face testing times in 2023 as a global recession seems likely. High prices are set to hit consumption and, in turn, impact business growth, while investors are likely to tighten their purse strings as they prioritise robust unit economics and profitability.

That said, Singapore's venture-backed companies are well positioned to navigate the choppy waters ahead with the aid of a robust infrastructure, supportive government policies, and strong stakeholder commitment to producing cutting-edge innovations.

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## KEY FINDINGS

#### Singapore stays resilient

Following a bumper 2021, venture capital funding activities in Singapore slightly weakened in 2022 as investors turned more cautious on the back of a more challenging macro environment. The annual deal volume dropped 11% to 651, while the total deal value dipped 3% to \$10.99 billion [P.8]. The year's fundraising tally was shored up by a \$1.63 billion investment by Chinese tech giant Alibaba, increasing their overall stake in e-commerce firm Lazada. A closer look at the 2022 funding data shows that deal activity was on a downward trend since the first quarter of the year. Despite this, it was the second-best year in terms of deal volume and value, after 2021 when startups in the city-state had raised \$11.33 billion from 730 deals. Dealmaking activity in 2022 was also significantly stronger relative to 2020. The quarterly data, however, raises concerns over the potential for further slowdown this year.

#### **Best in the region**

Singapore maintained its lead as the top destination for venture capital investment in Southeast Asia in 2022 by a significant margin. The city-state accounted for 56% of total deal volume recorded in six of the largest economies in the region last year and 64% of the total deal value [P.9]. Outside Singapore, the drop in total funding value was even more significant last year, plunging by 42% year-on-year due to the absence of mega funding rounds in the five other markets that we track for this report, namely Indonesia, Malaysia, Philippines, Thailand and Vietnam. With the exception of Malaysia, all other markets saw an increase in total deal volume. This growth is largely attributed to the fact that most of these markets are still early in the development of their tech ecosystem relative to Singapore.

#### Valuations vary across funding stages

The year 2022 ushered in a new paradigm that saw private companies in Singapore bidding farewell to exuberant valuations. As investors shifted their focus from growth to sustainability, startups were forced to revisit their pricing expectations. This change was reflected in varying degrees across different funding stages. Early-stage investments — classified as funding up to Series B rounds — saw an 8.2% year-on-year drop in volume but recorded a 12.3% increase in proceeds. In contrast, the total value of late-stage funding dropped by 11.7%, despite deal volume remaining nearly flat [P.10]. The median value of Seed rounds surged 82.4% to \$2.7 million last year, while that for Series A rounds jumped by 60% to \$10 million. Series B median value, however, dropped 14.3% to \$21 million. Similarly, Series C rounds' median value also dropped 14.3%, while Series D saw a 66.1% drop as private valuations started to mimic the decline in public markets [P.11].

#### New unicorns in the hood

Singapore saw a smaller number of companies achieving unicorn status in 2022 relative to the previous year. The city-state accounted for four of the nine Southeast Asian tech companies that surpassed \$1 billion in valuation last year. This compares to 11 in 2021, when the entire region clocked a total of 24 unicorns, the highest on record, on the back of the global liquidity glut that followed the COVID-19 pandemic [P.15]. Home interior and renovation platform Livspace became the first Singapore-headquartered firm to announce its unicorn status last year with a \$180 million Series F in February. Marketing tech firm Insider joined the club shortly thereafter with a \$121 million Series D round. They were followed by gaming-focused e-payments firm Coda Payments, which raised a \$690 million Series C round, and digital health firm Biofourmis with a \$320 million Series D round.



## KEY FINDINGS

#### **Smart nation maintains growth trajectory**

Among the four strategic domains specified under Singapore's RIE2025 efforts, investments in businesses that fall under the Smart Nation and Digital Economy domain continued to show improvement in 2022 as their total deal value increased 3% year-on-year to \$9.04 billion. In line with the overall trajectory of funding activities, however, the total deal volume dropped by 1.5%. Investment in Manufacturing, Trade and Connectivity increased by 36% in terms of deal volume and 15% in terms of value, reflecting a sign of improving supply bottlenecks and the resumption of productive activities. The end of COVID-19 restrictions, however, appeared to lower investors' appetite for startups classified under the Human Health and Potential domain, particularly those focusing on healthtech and edtech as daily activities gradually returned to normalcy in 2022. Separately, investment into Urban Solutions and Sustainability saw a 60% drop in deal volume, but nearly doubled in value as companies achieved higher stages of development [P18].

#### Focus on deep tech pays off

Singapore's investments in scientific discoveries and engineering innovation are paying off handsomely. Although the city-state saw a lower deal volume at 127 and a total value of \$1.95 billion of deep tech deals in 2022, more companies were able to attain higher levels of maturity. At least 21 startups graduated from Seed to Series A, amassing \$643 million in fresh capital, while seven completed Series B rounds worth \$356 million. At least two companies focused on advanced biomedical technologies, Biofourmis and MiRXES, secured late-stage funding with a \$320 million Series D and \$87 million Series C respectively [P.25]. The growth in funding for blockchain-powered DeFi startups, although not considered a part of deep tech for this report, can also be attributed to Singapore's early investment in blockchain technology, a key deep tech field, alongside biotechnology, artificial intelligence, advanced manufacturing and others.

#### Sailing through choppy waters

The worsening macroeconomic outlook has led to an unfavourable environment for fundraising and exits. At the same time, investors have amassed record dry powder in the past 24 months and are unlikely to pause investments. In fact, savvy venture capitalists may see the challenging macro environment in 2023 as an opportune time to take advantage of sober valuations and cherry-pick tomorrow's winners. Venture funding for companies working on the next wave of technologies and driving future disruptions and growth is unlikely to dry up. Singapore-based startups will also be aided by a growing inflow of global funds vying for alternative assets outside China and India. The city-state's fostering of its deep tech ecosystem is likely to contribute positively to its fundraising performance this year.

#### A new normal

There is a clear consensus among fund managers that business risks have heightened as many global economies are faced with perilously slow growth teetering on the edge of recession. Some, however, argue that the worst may already be behind for countries in Southeast Asia, as China reopens at a faster-than-expected rate to provide a much-needed boost to global economic growth. Fund managers also expect interest rate hikes by the US Federal Reserve to taper, with potential cuts to follow in 2024. They also perceive the current environment to be a healthier one for the development of sustainable businesses as frothy valuations are out and both investors and startups have sharpened their focus on business fundamentals and profitability. Singapore, with its rich ecosystem of talent, infrastructure and government support, is well positioned to weather the current headwinds and accelerate its journey towards becoming a world-leading knowledge-based, innovation-driven economy, they opine.



### NOTE FROM THE AUTHORS



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This report focuses on fundraising by Singapore-based private companies in 2022 and offers a comparison with the performance of their counterparts in the rest of Southeast Asia.

All data cited in this report is based on industry reports, company announcements, media reports, regulatory filings and DealStreetAsia's research.

Considering the opaque nature of the Southeast Asian market, we strive to constantly update our data to ensure accuracy. If you spot an error or inaccuracy, please let us know here: andi@dealstreetasia.com

### METHODOLOGY AND DEFINITIONS

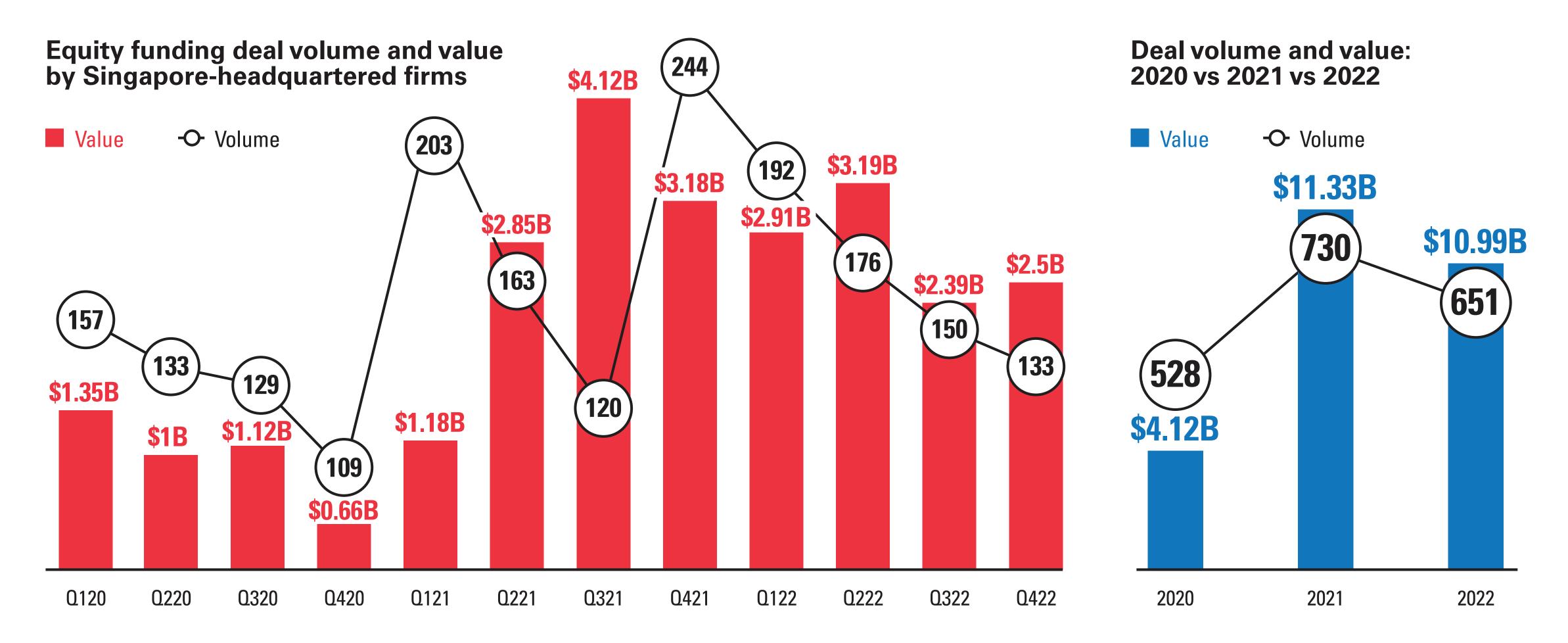
- For the purpose of this report, deals refer primarily to equity funding rounds. Debt funding, bridge loans, initial coin offerings (ICO) and grants are excluded.
- ASEAN 6 refers to Singapore, Malaysia, the Philippines, Thailand, Vietnam, and Indonesia.
- Companies are classified according to their headquarters.
- Deep tech covers a broad range of verticals, including quantum computing, biotechnology, medtech, cell-based protein, blockchain, and autonomous mobility.
- Singapore deals funded by accelerator/incubator programs where the amounts are undisclosed are classified as seed rounds.
- The themes covered in this report are aligned to Singapore's Research, Innovation and Enterprise 2025 plan, which highlight areas of strategic importance to Singapore. These are:
- Manufacturing, Trade and Connectivity: Besides manufacturing sectors, it includes trade and connectivity sectors (examples include aviation, sea transport, logistics and wholesale trade).
- Human Health and Potential: This includes enhancing development during pregnancy and early childhood, augmenting learning outcomes, and fostering healthy and meaningful longevity. Most health tech firms fall under this theme.
- Urban Solutions and Sustainability: This theme addresses new challenges in sustainability and resilience, including climate change, decarbonisation, healthy cities, and transformation of our built environment.
- Smart Nation and Digital Economy: This refers to capabilities to prepare the populace for opportunities in the digital space and the transformation of enterprises.
- For clarity, and the avoidance of doubt, all monetary values listed in this report are in US dollars.



# VENTURE CAPITAL MARKETS ACTIVITY

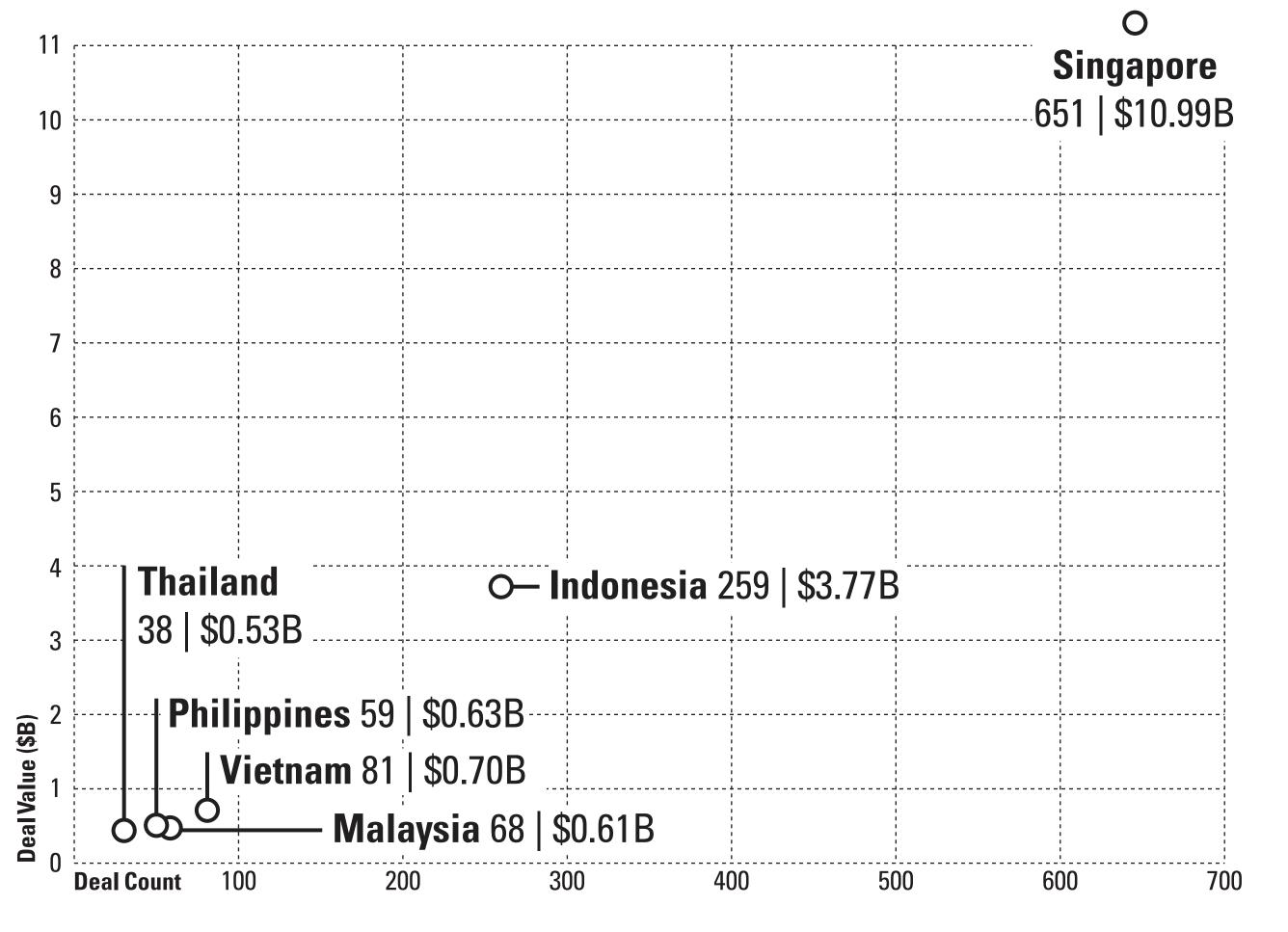


#### Deal volume, value dip in 2022 amid tighter conditions

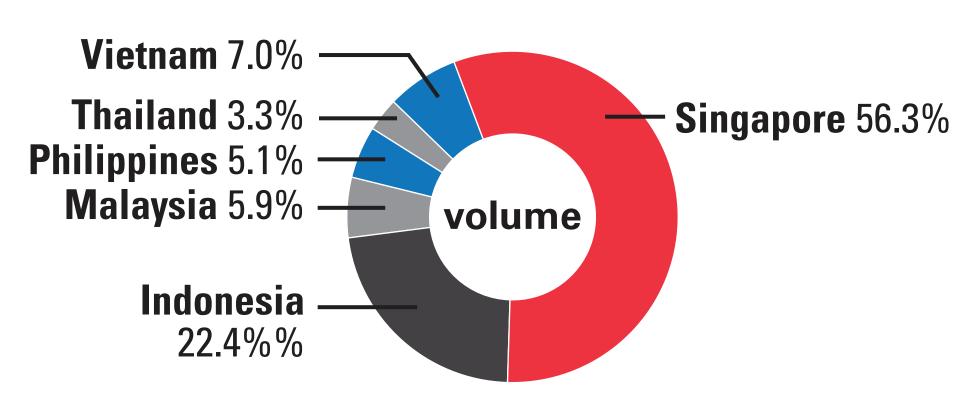


#### Singapore dominates share of equity funding in SE Asia

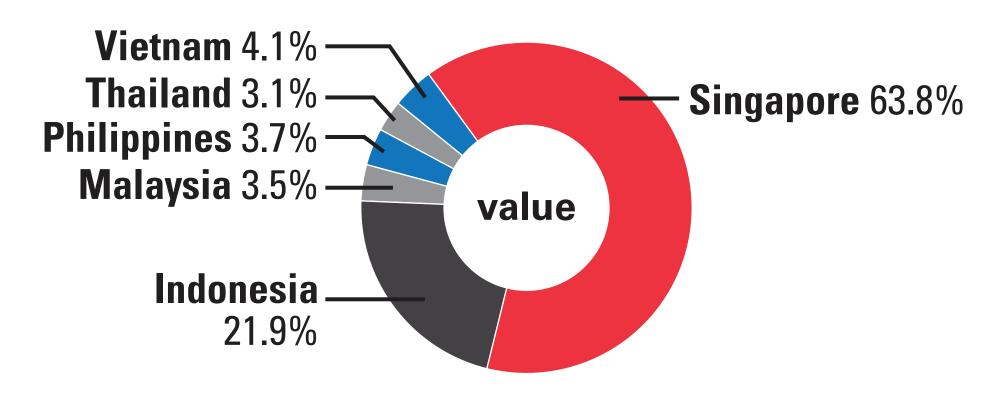
#### Deal volume and value per market in 2022



#### Share of deal volume per market in 2022



#### Share of deal value per market in 2022

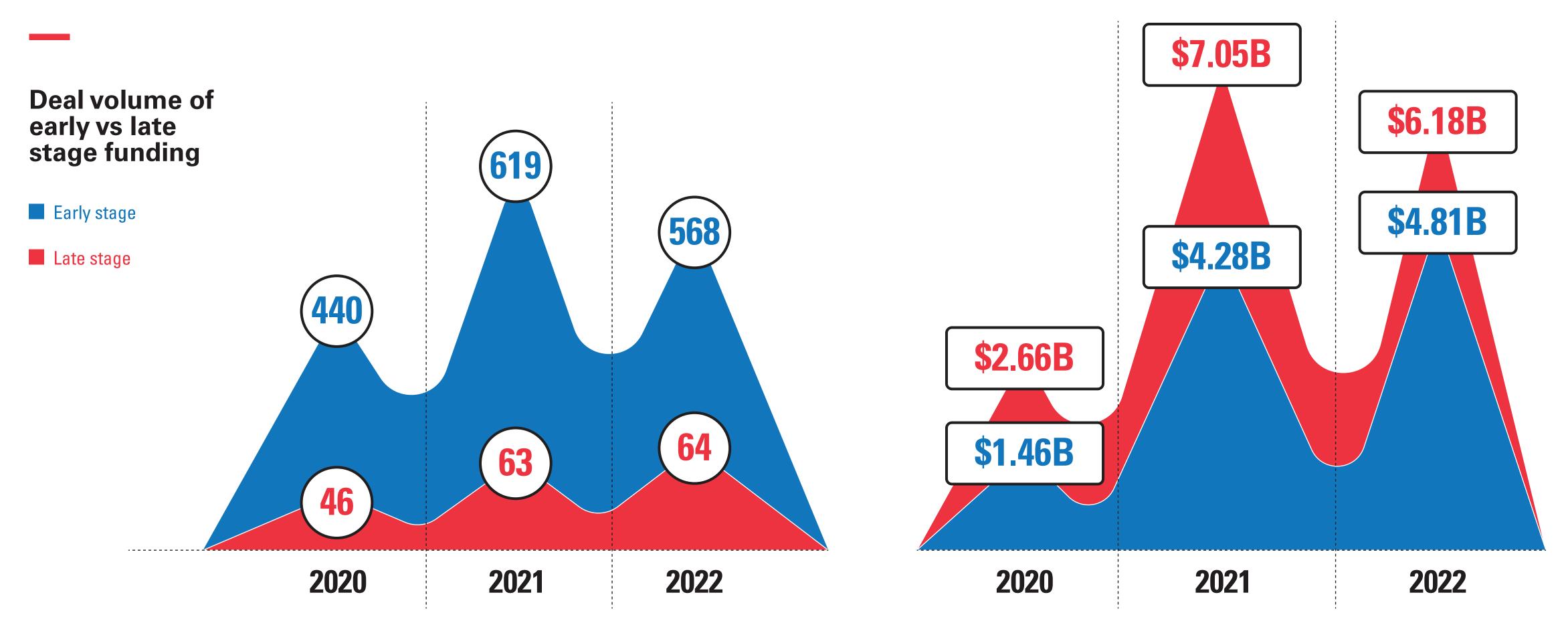




# Early-stage funding maintains upward trajectory

#### Deal value of early vs late stage funding

Early stage Late stage







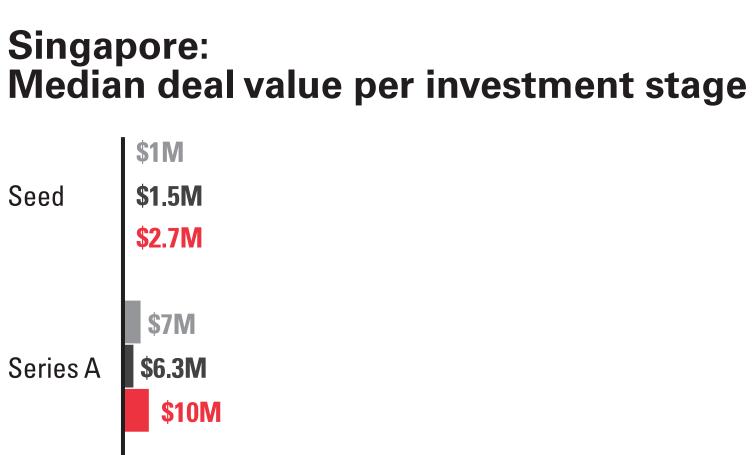
Early-stage deals refer to seed through Series B rounds. Late-stage refers to Series C and above rounds. Data excludes deals with unspecified funding stages.

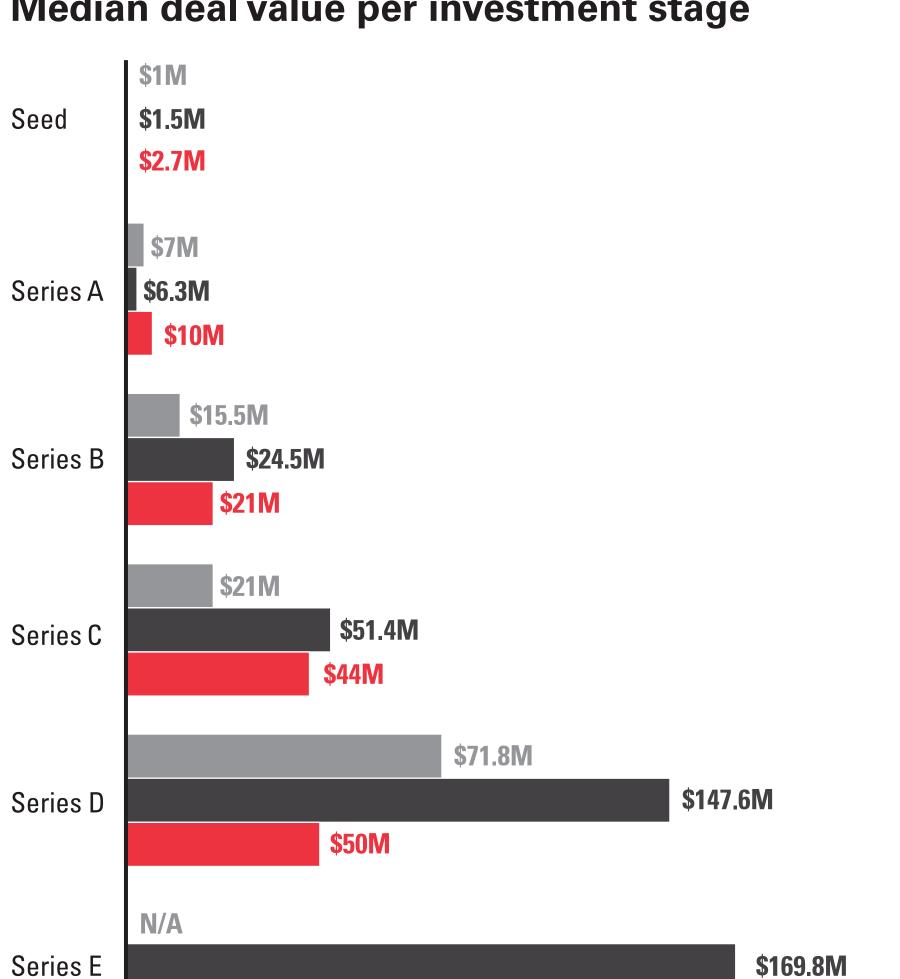
#### Seed and Series A deals see median value rise across the region



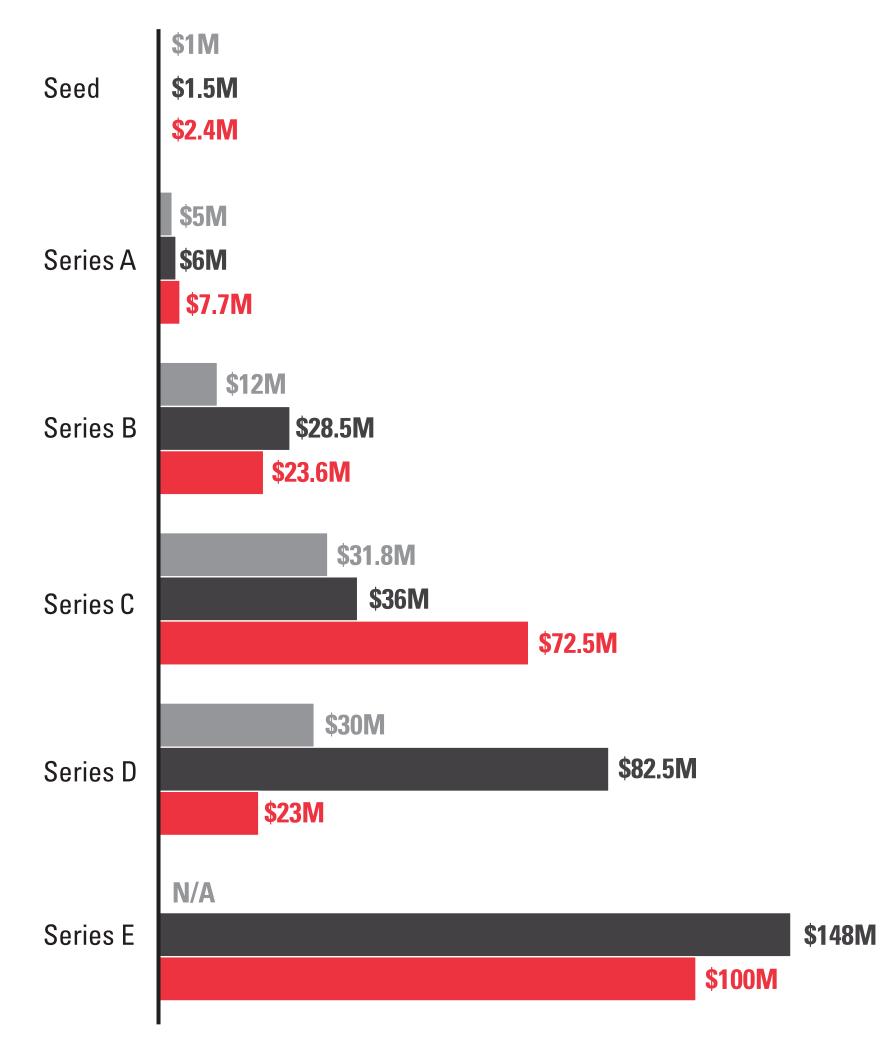
2021

2022





#### Asean 5\*: Median deal value per investment stage



Early-stage deals refer to seed through Series B rounds. Late-stage refers to Series C and above rounds. Data excludes deals with unspecified funding stages.





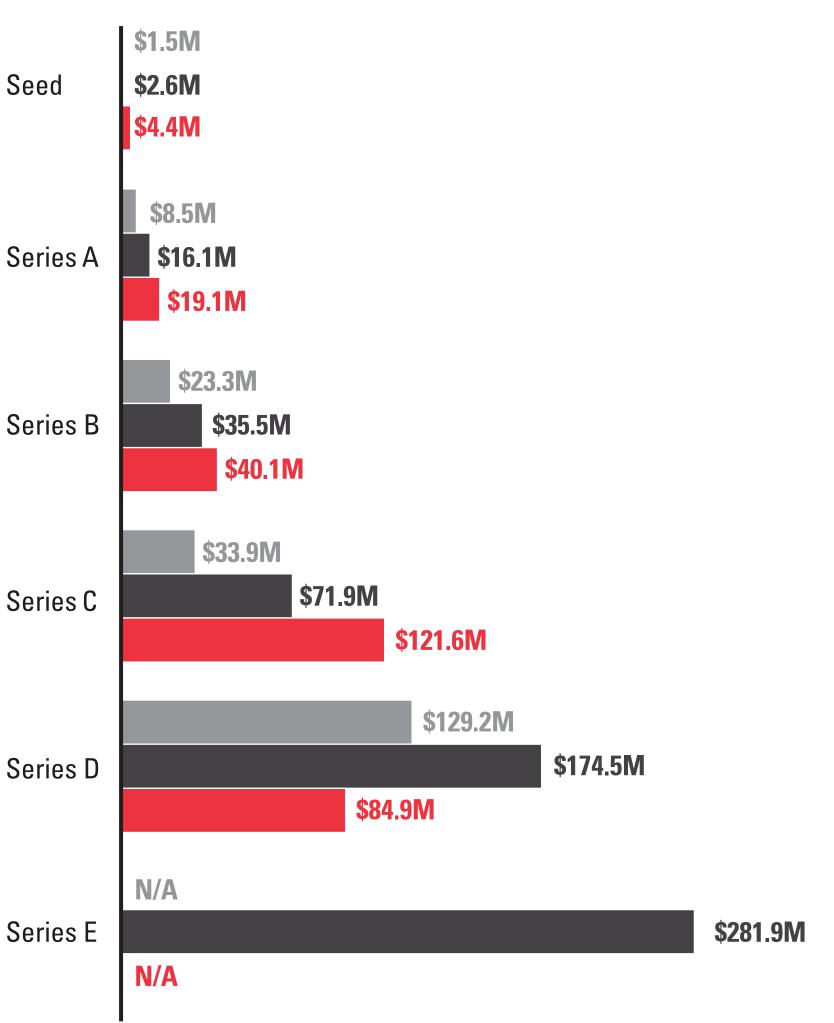
# Seed rounds get bigger as investor appetite grows for early-stage deals



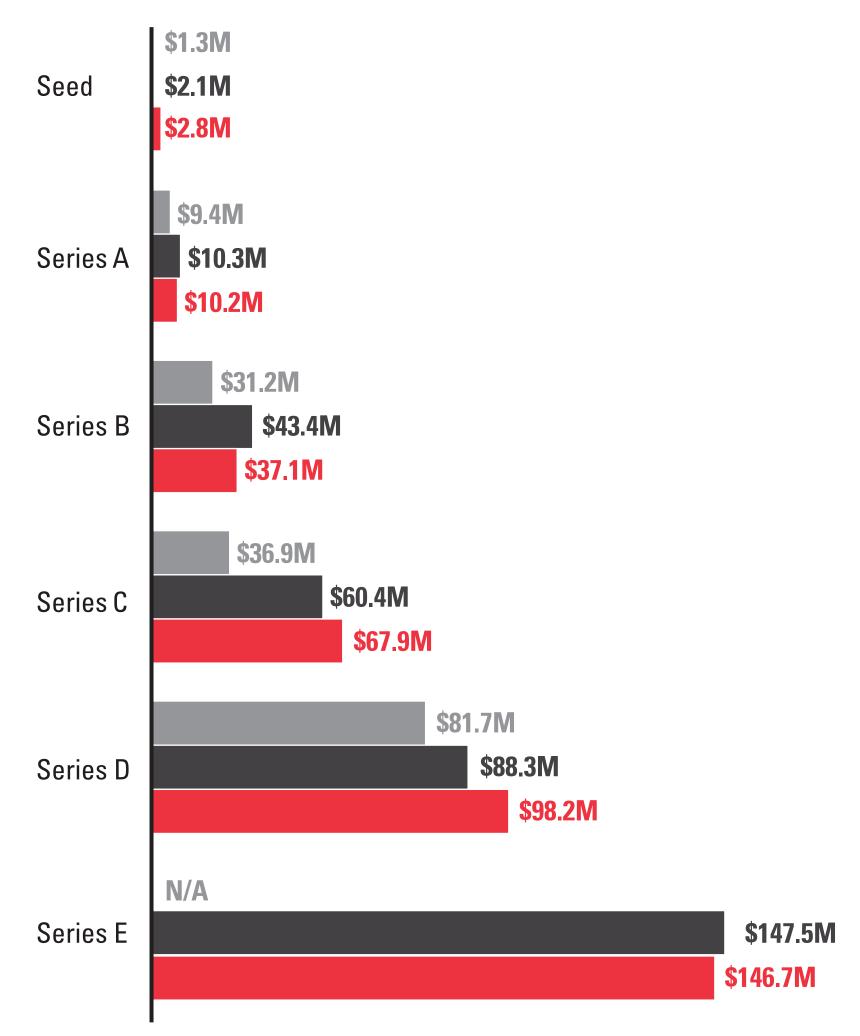
2021

2022





#### Asean 5\*: Average deal value per investment stage

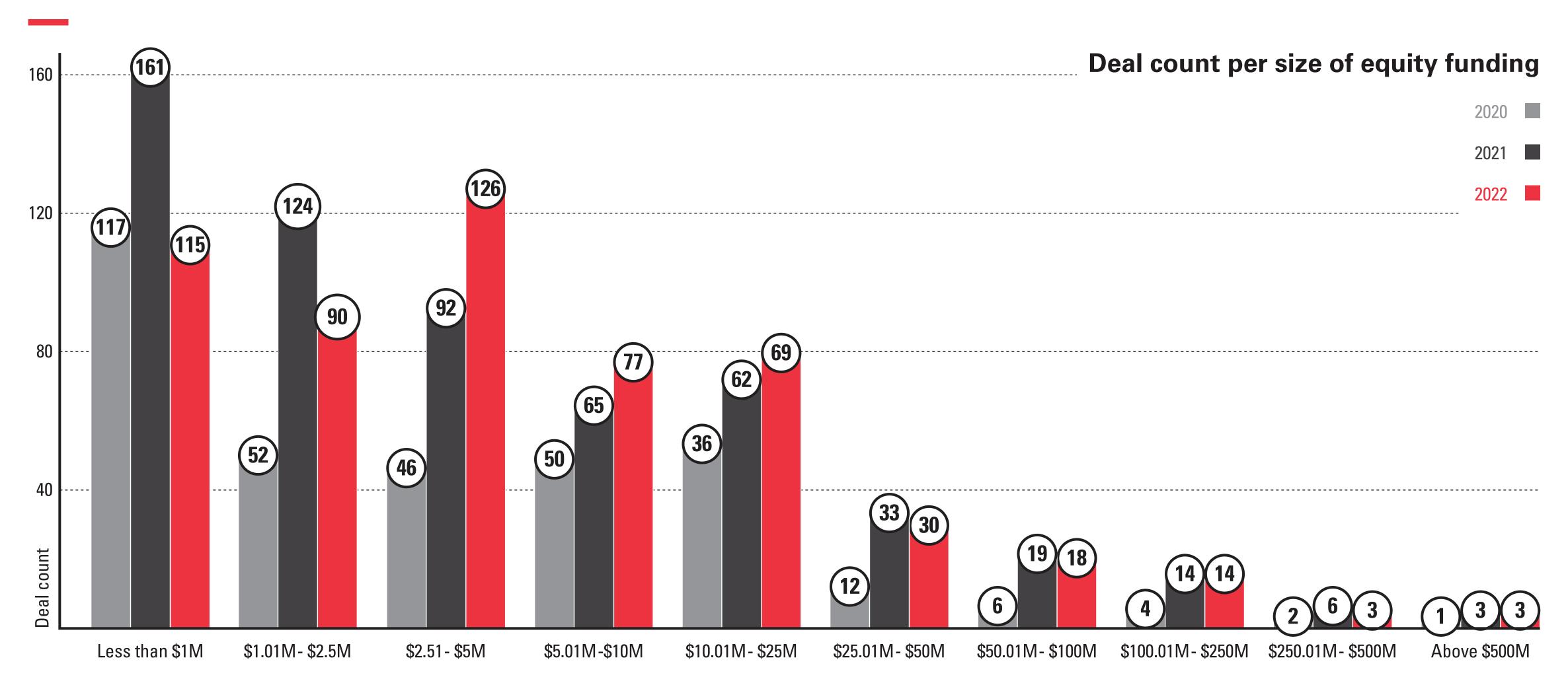


Early-stage deals refer to seed through Series B rounds. Late-stage refers to Series C and above rounds. Data excludes deals with unspecified funding stages.





#### Share of \$5M - \$20M deals rises in 2022



The deal value on the X axis is not indicative of the funding stage.





#### Southeast Asia's unicorn club adds 10 new members

moglix LIVSPACE QUEST matrixport patsnap **CODA**PAYMENTS PropertyGuru BIGO LIVE
LIVE YOUR MOMENTS **NanoFilm** JUSE Acronis CARRO biofourmis **boli**tech **C** carousell  $R \wedge Z \equiv R$ ONE Championship\* ninja trax INSIDER MUIN **E** EMERITUS Garena Lazada **HyalRoute Singapore Companies** 2013 2014 2015 2016 2017 2020 2021 2018 2022 2019 **Rest of SE Asia Companies MO** kepi kenangan mynt finance for all gojek M Bukalapak **VNLIFE** JD.ID NUC traveloka ascend ajaib DANA **SKY MAVIS** money Ovo gopay tokopedia airasia digital xendit bliblicom VØYNGER EXPRESS tıket com **CAR**SOME akulaku redivo Buy now, Pay later FLASH



#### Top 20 2022 equity funding deals in SE Asia

HQ	Organization Name	Vertical	Туре	Value	Investors (not exhaustive)
Singapore	Lazada Group	E-commerce	Corp. round	\$1,633M	Alibaba Group
Singapore	Coda Payments	Fintech	Series C	\$690M	GIC, Insight Partners, Smash Ventures
Singapore	Amber Group	Fintech	Series B + C	\$500M	Temasek, Pantera Capital, Tiger Global; Fenbushi Capital
Singapore	Princeton Digital Group	Software and IT	Equity round	\$500M	Mubadala, Ontario Teachers' Pension Plan, Warburg Pincus
Singapore	Oona Insurance	Fintech	Equity round	\$350M	Warburg Pincus
Singapore	Biofourmis	Healthtech	Series D	\$320M	General Atlantic, Openspace Ventures, Intel Capital Corp.
Singapore	Bolttech	Fintech	Series B	\$300M	Activant Capital, B. Riley Venture Capital, PCCW Group, Tokio Marine
Indonesia	Xendit	Fintech	Series D	\$300M	Accel, Coatue, EV Growth, Intudo Ventures, Tiger Global
Malaysia	Carsome	E-commerce	Series E	\$290M	65 Equity Partners, Qatar Investment Authority, SeaTown International
Thailand	LINE MAN Wongnai	E-commerce	Series B	\$265M	BRV Capital, Bualuang Ventures, GIC, LINE Plus Corporation
Singapore	Moglix	E-commerce	Series F	\$250M	Alpha Wave Global, Tiger Global, Ward Ferry Management
Singapore	800 Super Holdings	Waste management	Equity round	\$218M	Keppel Asia Infrastructure Fund, Keppel Infrastructure Holdings Pte Ltd
Singapore	Envision Digital	Greentech	Series A	\$210M	GIC, Sequoia Capital China
Philippines	Voyager Innovation	Fintech	Venture round	\$210M	SIG Venture Capital, EDBI, First Pacific Company, KKR
Indonesia	DANA Wallet Indonesia	Fintech	Corp. round	\$200M	Sinar Mas Group
Singapore	Livspace	Architecture and design	Series F	\$180M	KKR, Ingka Group, Jungle Ventures, Venturi Partners
Malaysia	TNG Digital (Touch N' Go)	Fintech	Venture round	\$168M	AIA Group, Ant Group, Lazada Group, Touch n Go
Singapore	Sun Cable	Greentech	Series B	\$151M	Grok Ventures, Squadron Energy
Vietnam	Sky Mavis	Gaming	Series C	\$150M	Accel, Andreessen Horowitz, Animoca Brands, Binance
		· ·		4	

Series C



Singapore

Fintech

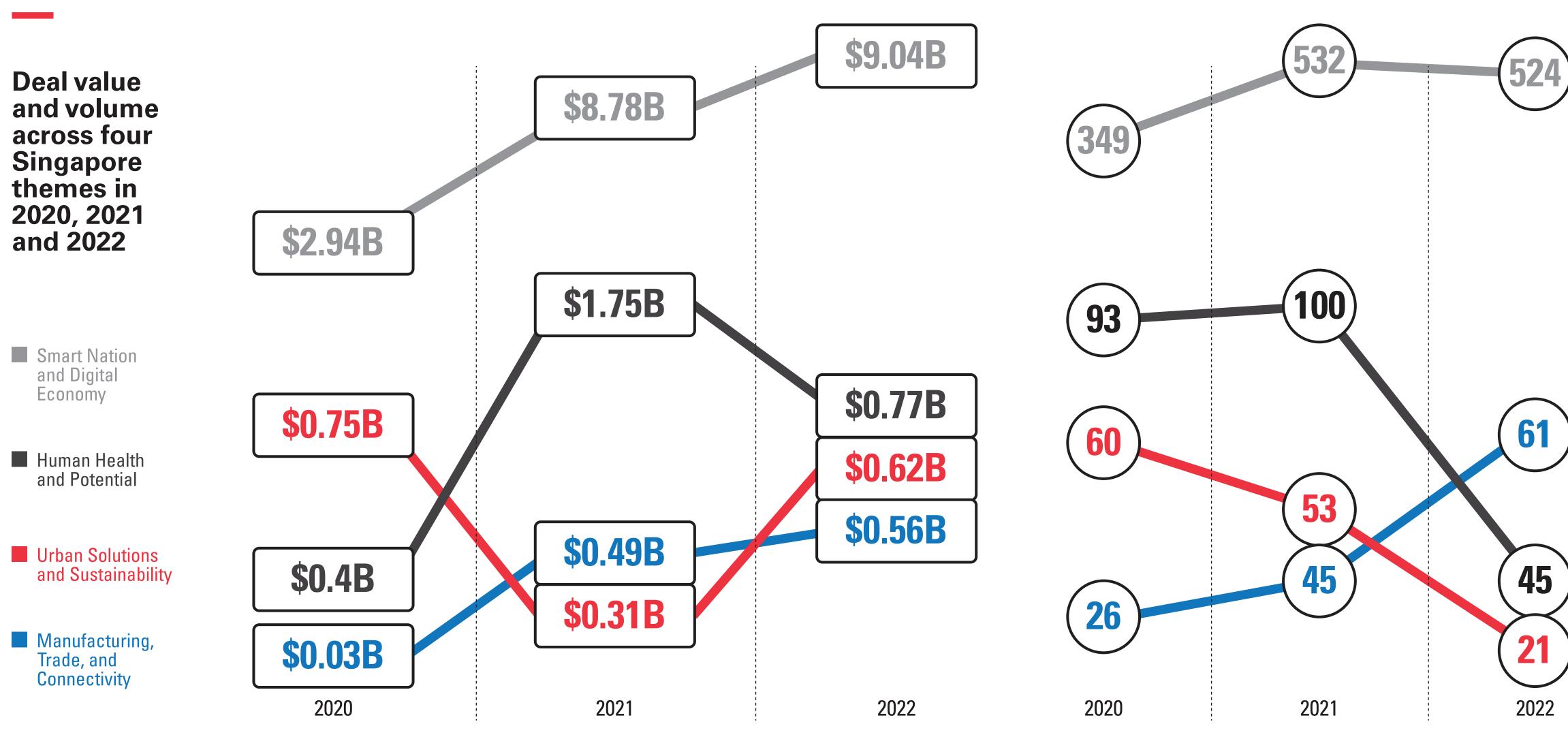
Funding Societies (Modalku)

Indies Capital Partners, Rapyd Ventures, SoftBank Vision Fund, VNG

# FUNDING BY SINGAPORE THEMES



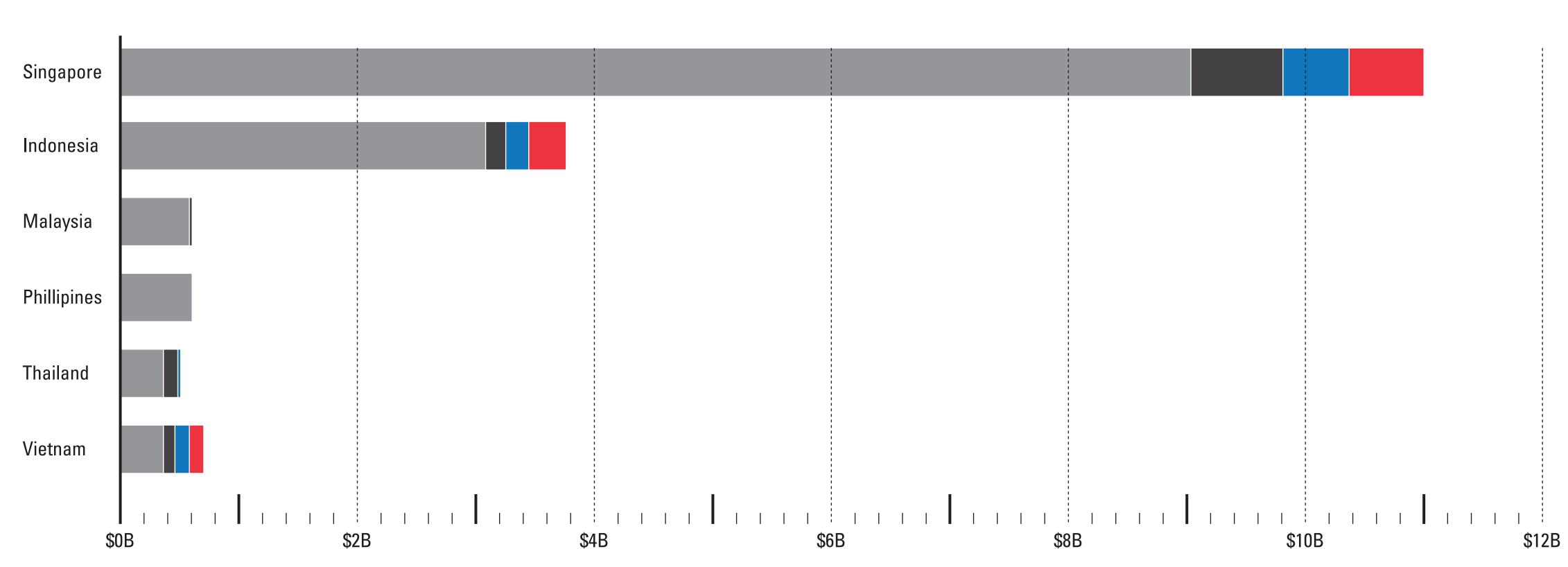
#### Innovation drives deals across four strategic themes



#### **Smart Nation and Digital Economy tops SE Asia activities**

#### Deal value across four Singapore themes in Asean 6 economies in 2022

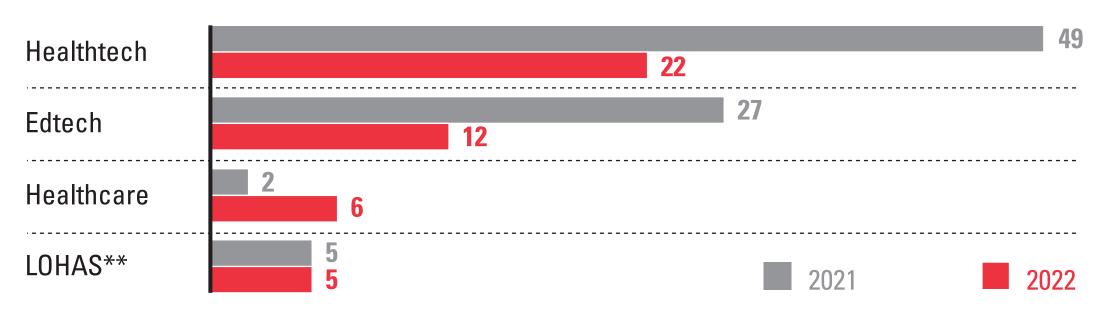




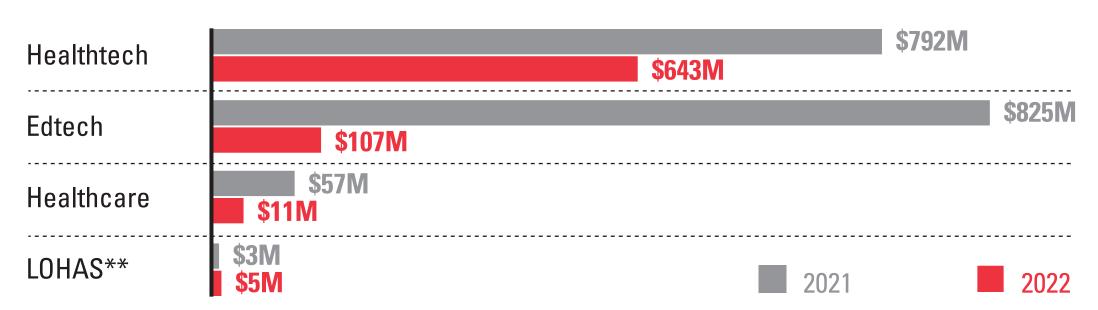


#### Healthtech comes of age in Singapore

#### Top verticals under Human Health and Potential themes in Singapore by deal count in 2022



#### Top verticals under Human Health and Potential themes in Singapore by value in 2022



#### **Top 10 Human Health and Potential deals**

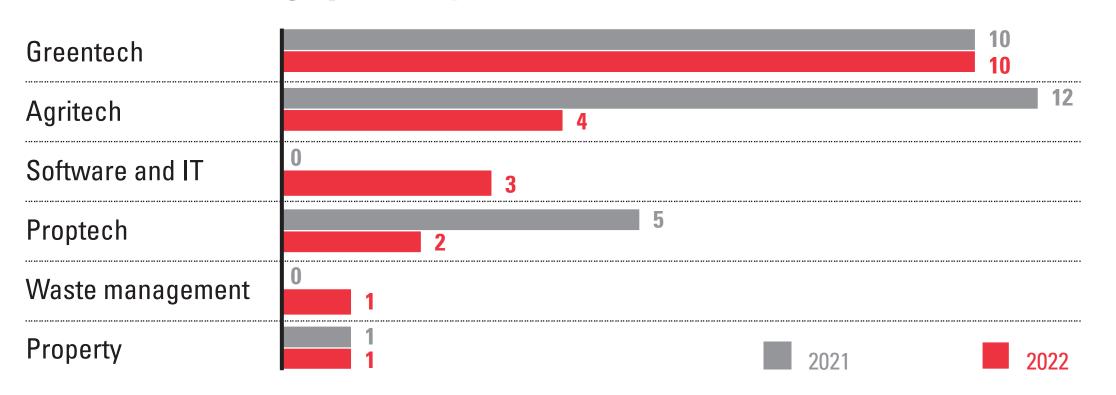
Company	Vertical	Funding stage	Value	Investors (not exhaustive)
Biofourmis	Healthtech	Series D	\$320M*	General Atlantic, Openspace Ventures, Intel Capital Corp.
TessaTherapeutics	Healthtech	Series A	\$126M	Polaris Partners, EDBI, Heliconia Capital, Temasek
TauRx Pharmaceuticals	Healthtech	Series A	\$119M	Undisclosed
MiRXES	Healthtech	Series C	\$87M	CDG Capital, New Horizons Venture Capital, Openspace Ventures
Cialfo	Edtech	Series B	\$60M	Tiger Global, Seek Ventures, Square Peg Capital
AxcinsysTherapeutics	Healthtech	Seed	\$15M	Trinity Innovation Bioventure Singapore
ImmunoScape	Healthtech	Venture- unclassified	\$14M	Anzu Partners, Amgen Ventures, EDBI
Nalagenetics	Healthtech	Series A	\$12.6M	Intudo Ventures, Dexa International, Diagnos Laboratories
Manabie	Edtech	Venture- unclassified	\$12M	Chiba Dojo, Genesia Ventures, Globis Capital Partners
Nas Academy	Edtech	Venture- unclassified	\$12M	BECO Capital, Pitango Venture Capital

<sup>\*</sup>Biofourmis has allotted \$220 million in paid-up capital for the Series D round according to Singapore's Accounting and Corporate Regulatory Authority (ACRA).

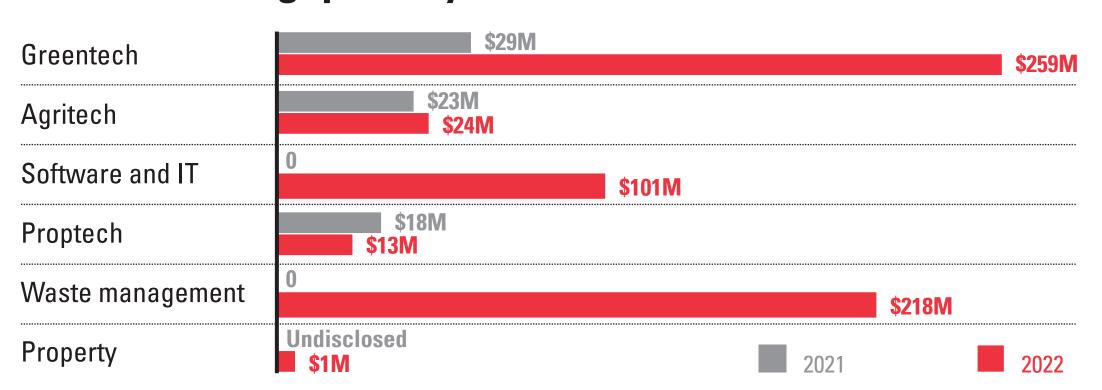


#### Funding for green transition grows

#### Top verticals under Urban Solution and Sustainability themes in Singapore by deal count in 2022



#### Top verticals under Urban Solution and Sustainability themes in Singapore by value in 2022



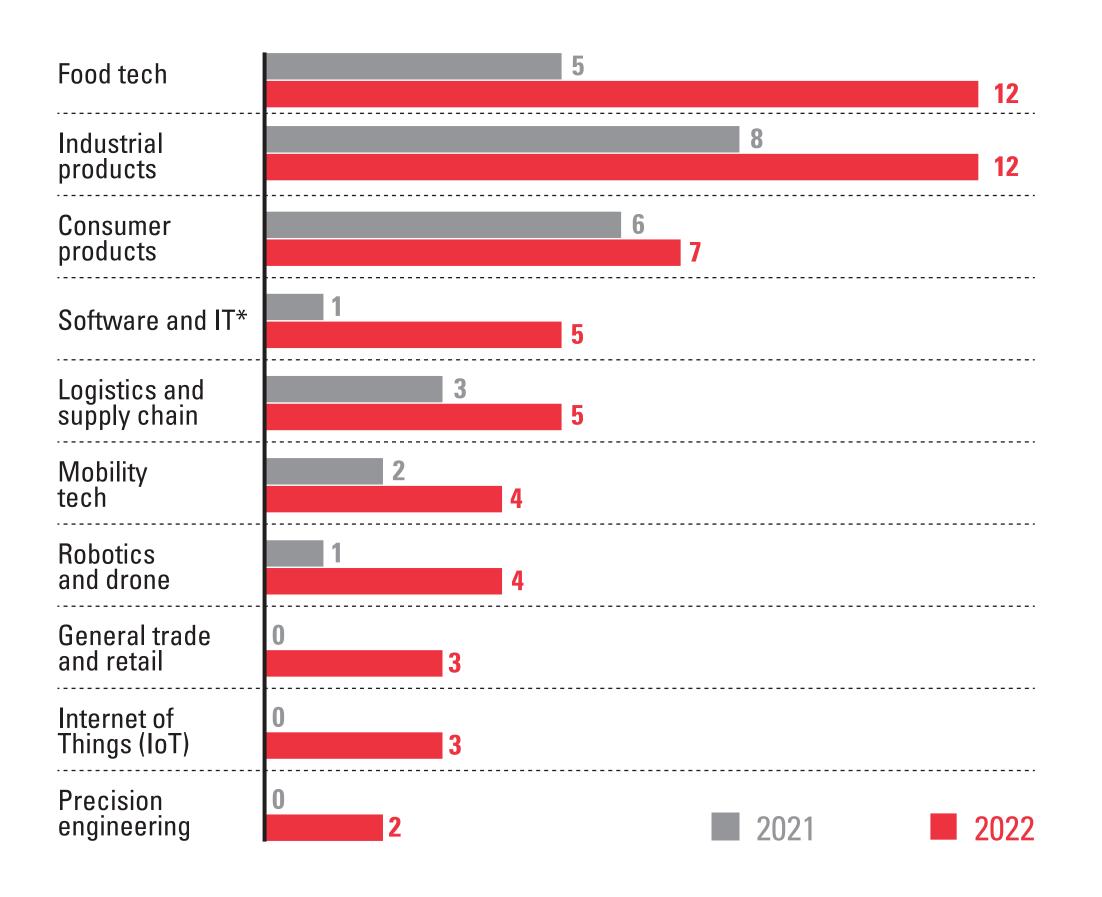
Top 10 Urban Solutions and Sustainability deals

Company	Vertical	Funding stage	Value	Investors (not exhaustive)
800 Super Holdings	Waste management	Equity round	\$218M	Keppel Asia Infrastructure Fund
Sun Cable	Greentech	Series B	\$151M	Grok Ventures, Squadron Energy
RubiX Networks	Software and IT*	Equity round	\$100M	LDA Capital
Sunseap	Greentech	Corp. Round	\$90M	EDP Renewables
<b>Nutrition Technologies</b>	Agritech	Series A	\$20M	Hera Capital, Openspace, SEEDS Capital
Propseller	Proptech	Series A	\$12M	Hustle Fund, Vertex Ventures SEA and India, Vulpes Ventures
Green Li-ion	Greentech	Series A2	\$12M	SOSV, Entrepreneur First, GS Holdings
Archisen	Agritech	Series B	\$3M	Pine Venture Partners
Billion Bricks	Greentech	Seed	\$2.5M	Thakral Group, Rumah Group, Engie
SunGreenH2	Greentech	Seed	\$2M	Apsara Investments, Entrepreneur First, SGInnovate

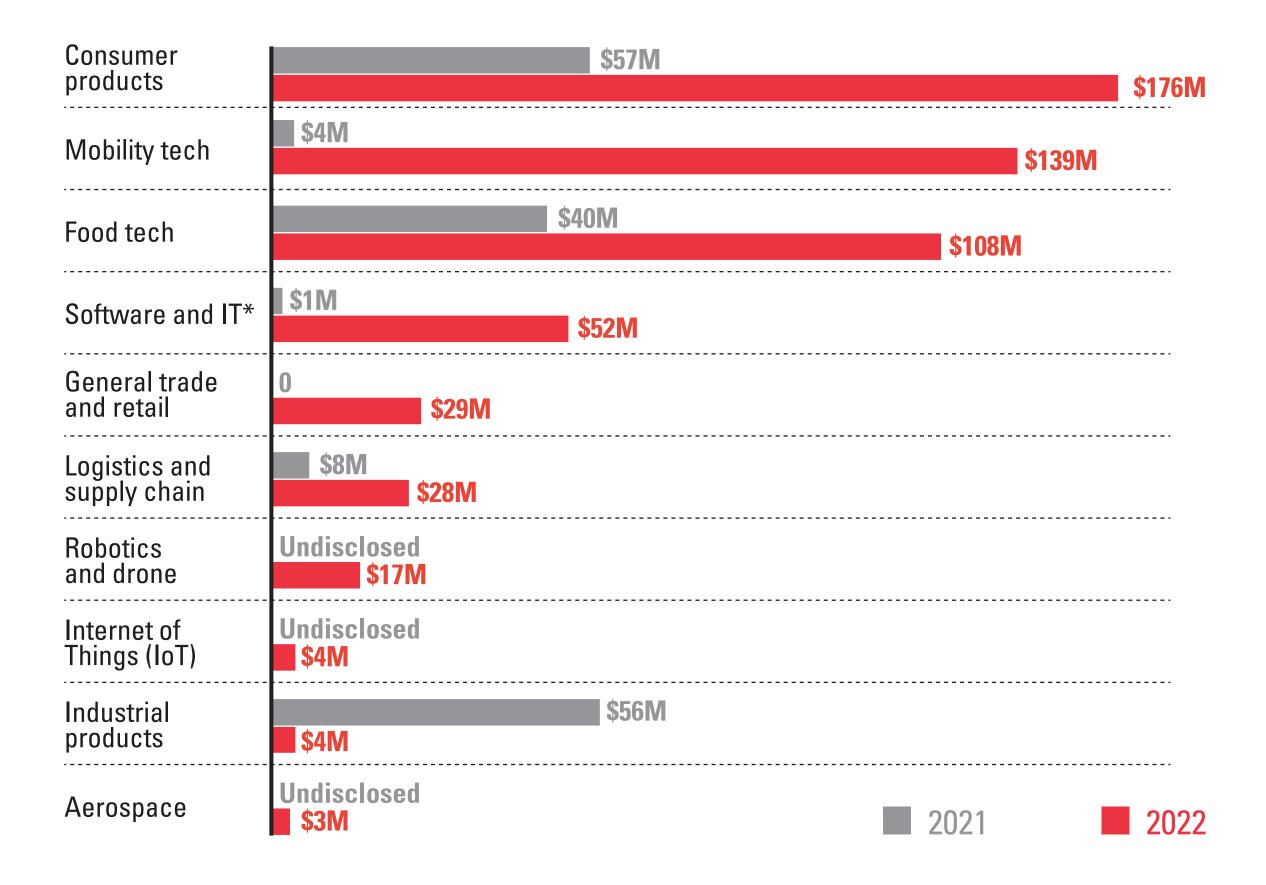


#### Manufacturing gets primed for growth

Top verticals under Manufacturing, Trade and Connectivity themes in Singapore by deal count in 2022



#### Top verticals under Manufacturing, Trade and Connectivity themes in Singapore by value in 2022







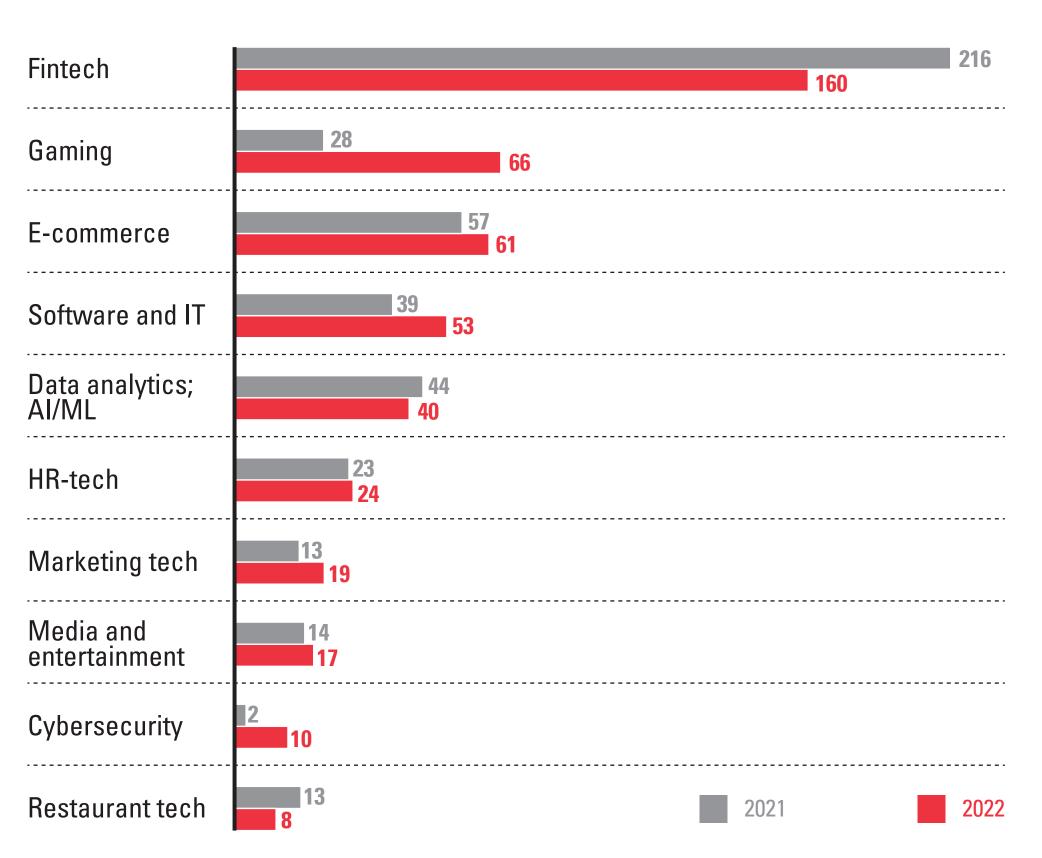
#### Series A stage dominates top 10 manufacturing deals

#### **Top 10 Manufacturing, Trade and Connectivity deals**

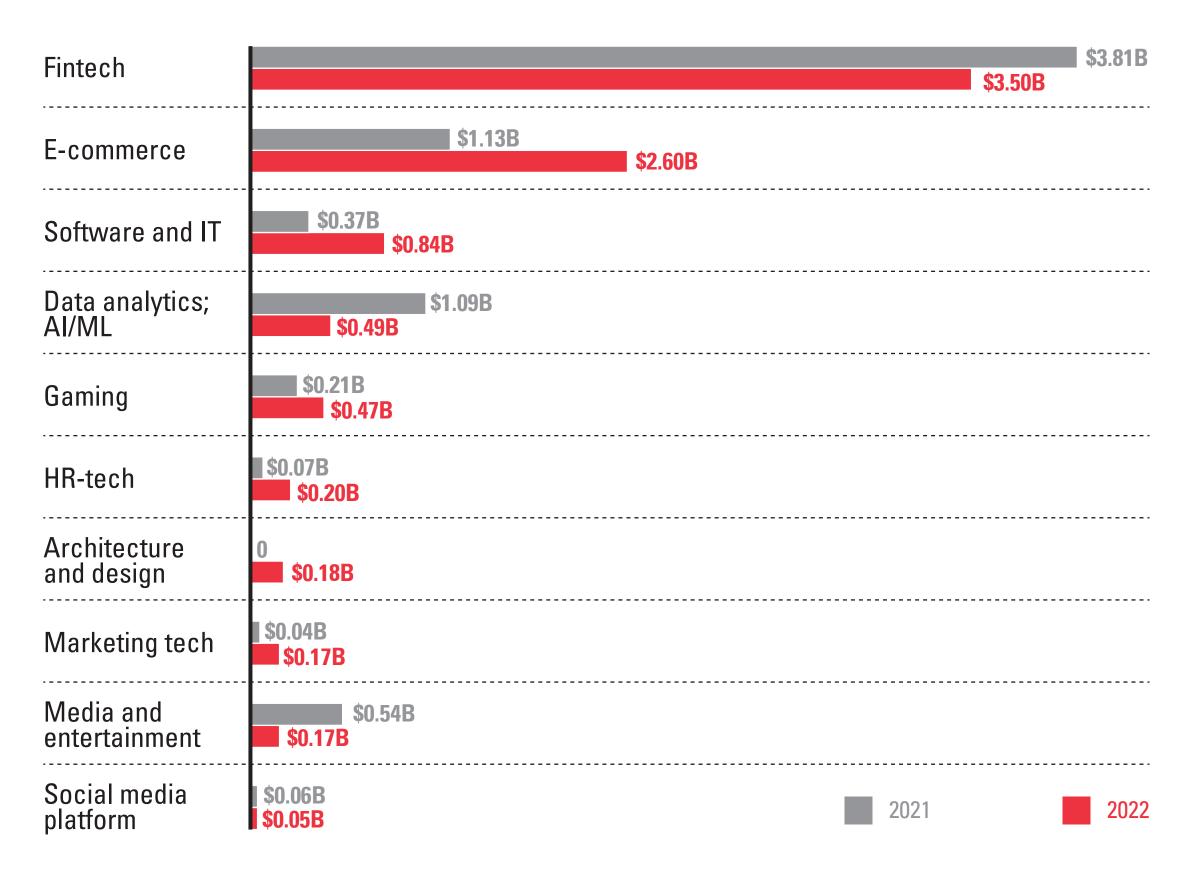
Company	Vertical	Funding stage	Value	Investors (not exhaustive)
Next Gen Foods	Foodtech	Series A	\$100M	Alpha JWC Ventures, GGV Capital, MPL Ventures, Temasek Holdings
Beam	Mobility tech	Series B	\$93M	AC Ventures, Affirma Capital, Sequoia Capital India
Oatside	Consumer product	Series A	\$65M	GGV Capital, Temasek Holdings
Believe	Consumer Product	Series A	\$55M	Accel, IIFL Asset Management, Jungle Ventures, Venturi Partners
Vetreska Future	Consumer product	Venture- unclassified	\$50M	Quest FoF
Neuron Mobility	Mobility tech	Series B	\$44M	GSR Ventures, Square Peg Capital
WIZ.AI	Data analytics; AI/ML	Series A	\$20M	Gaorong Capital, GGV Capital, Insignia Ventures Partners, Singtel Innov8
Mighty Jaxx	Consumer products	Series A	\$20M	East Ventures, KB Investment, Teja Ventures
CyberConnect	Software and IT*	Series A	\$15M	Animoca Brands, Sky9 Capital
Janio Asia	Logistics and distribution	Series A+	\$14M	Vertex Growth Fund, Vertex Ventures Southeast Asia and India

# Fintech gets the lion's share of funding within Smart Nation and Digital Economy

Top verticals under Smart Nation and Digital Economy themes in Singapore by deal count in 2022



#### Top verticals under Smart Nation and Digital Economy themes in Singapore by value in 2022





#### Fintech and e-commerce dominate Smart Nation and Digital Economy funding

#### **Top 10 Smart Nation and Digital Economy deals**

Company	Vertical	Funding stage	Value	Investors (not exhaustive)
Lazada Group	E-commerce	Corp. round	\$1,633M	Alibaba
Coda Payments	Fintech	Series C	\$690M	GIC, Insight Partners, Smash Ventures
Princeton Digital Group	Software and IT	Equity round	\$500M	Mubadala, Ontario Teachers' Pension Plan, Warburg Pincus
Amber Group	Fintech	Series B + C	\$500M	Fenbushi Capital, Tiger Global, Temasek, Tru Arrow Partners
Oona Insurance	Fintech	Equity round	\$350M	Warburg Pincus
Bolttech	Fintech	Series B	\$300M	Tokio Marine
Moglix	E-commerce	Series F	\$250M	Tiger Global, Alpha Wave Global
Envision Digital	Greentech	Series A	\$210M	Sequoia Capital China, GIC
ShopBack	E-commerce	Series F	\$190M	Westpac Banking Corp., 65 Equity Partners, Asia Partners
Livspace	Architecture and design	Series F	\$180M	KKR, Venturi Partners, Jungle Ventures, Venturi Partners

# SINGAPORE ASADEP TECHHUB



#### Healthtech shores up deep tech investments

Singapore is one of the top innovation hubs across the world, ranking consistently among the top 10 countries on the Global Innovation Index (GII). The city-state moved up to rank seventh in the 2022 edition of GII, which also found it to be number one in the world on innovation indicators such as government effectiveness, ICT access, venture capital investors and high-tech manufacturing.

Singapore also continues to make progress in developing its deep tech ecosystem. Some of the startups incubated in the city-state have drawn the interest of sophisticated fund managers, including private equity firms, marking an important milestone in what is a long-haul journey.

In April last year, private equity firm General Atlantic led a \$300 million funding round for digital health company Biofourmis. The round was upsized to \$320 million in August as Intel Capital joined the

Series D extension. In April, MiRXES, a biotech company specialising in mRNA design, also announced an \$87 million Series C funding.

Singapore has also witnessed accelerated growth in areas such as biopharma, Al diagnostics, robotics, synthetic biology and alternative foods.

Although many deep tech companies managed to graduate to the next stage of funding, total deal volume and value fell by 36% and 24%, respectively, last year from historic highs in 2021. Overall, deep tech companies accounted for 18% of all funding secured by Singapore-based companies throughout 2022, not far below 22.5% in the previous year.

Healthtech companies alone racked up \$643 million, or a third of the total deep tech funding, the largest vertical among companies classified as

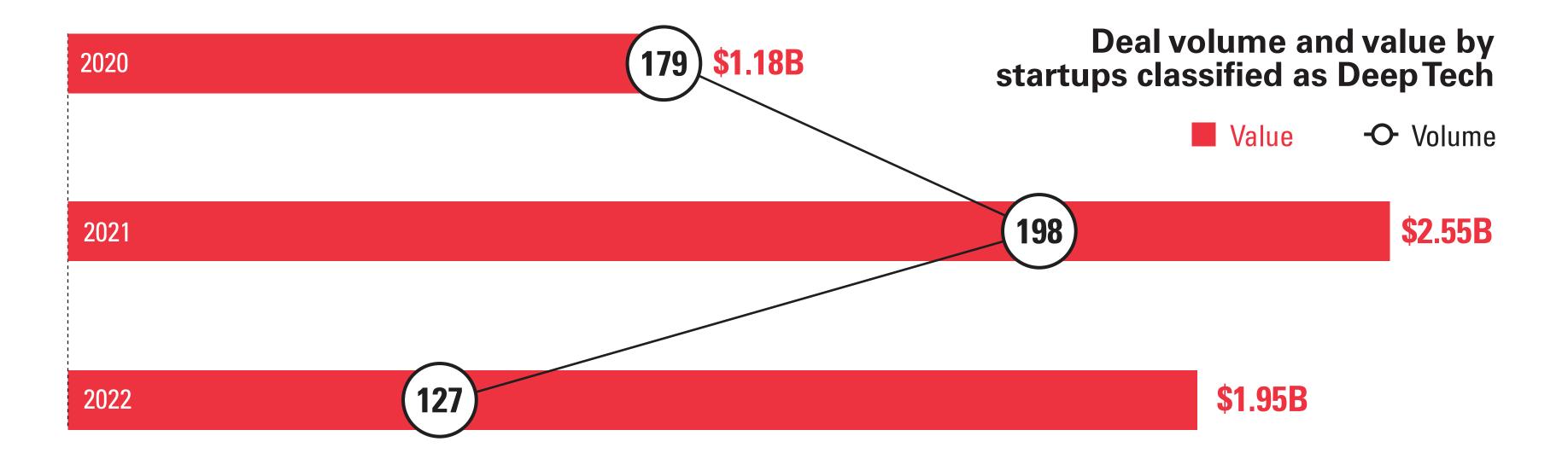
deep tech. Led by Sun Cable's \$151 million Series B round, greentech emerged as the second largest vertical in deal value with \$259 million in proceeds.

In evaluating the health of a deep tech ecosystem, we must also look at the pipeline of new ventures. Singapore's deep tech startups closed 116 early-stage deals in 2022, indicating a strong pool of new businesses. Of these, 31 deals were sub-\$1 million, 41 were Seed stage deals, 21 were Series A and 7 were Series B.

With an ample supply of early-stage startups, we expect more deep tech companies in Singapore to enter growth-stage development this year as they benefit from a supportive tech ecosystem and extended government support in the area of funding for research and innovation.

SINGAPORE AS A DEEP TECH HUB

# Deep Tech lures the interest of larger investors



#### Select Deep Tech deals in 2022 by Singapore companies

Company	Vertical	Funding stage	Value	Investors (not exhaustive)
Biofourmis	Healthtech	Series D	\$320m	General Atlantic, Openspace Ventures, Intel Capital Corp.
Sun Cable	Greentech	Series B	\$151m	Grok Ventures, Squadron Energy
TessaTherapeutics	Healthtech	Series A	\$126m	Polaris Partners, EDBI, Heliconia Capital, Temasek
TauRx Pharmaceuticals	Healthtech	Series A	\$119m	Undisclosed
RubiX Networks	Software and IT	Equity round	\$100m	LDA Capital
Next Gen Foods	Food tech	Series A	\$100m	Alpha JWC Ventures, GGV Capital, MPL Ventures, Temasek Holdings
MiRXES	Healthtech	Series C	\$87m	CDG Capital, New Horizons Venture Capital, Openspace Ventures
Neuron Mobility	Mobility tech	Series B	\$44m	EDBI, GSR Ventures, Square Peg Capital
<b>Nutrition Technologies</b>	Agritech	Series A	\$20m	PTT Public Company, Hera Capital, Seeds Capital
WIZ.AI	Data analytics; Al/ML	Series A	\$20m	Gaorong Capital, GGV Capital Singtel Innov8

<sup>\*</sup>Biofourmis has allotted \$220 million in paid-up capital so far this year for the Series D round according to Singapore's Accounting and Corporate Regulatory Authority (ACRA).





FOR SINGAPORE AND SEASIA



#### Singapore banks on technological edge amid rough global waters

It takes no fortune teller to predict that the business environment will become more challenging this year. The World Bank, the IMF, and the Asian Development Bank have all lowered their global growth predictions for 2023 as recessionary pressures mount.

As an economy with among the highest trade-to-GDP ratio in the world, Singapore is particularly susceptible to fluctuations in global demand, particularly in light of ongoing disruptions to supply chains due to geopolitical tensions. The worsening of the global financial environment, with rising inflation and interest rates in major advanced economies, further exacerbates the difficulties facing the Singaporean economy. These factors present a significant risk to the private capital market and the technology ecosystem, making it increasingly important for businesses to become more agile and strategic in their decision-making.

As the fundraising environment becomes more challenging, Southeast Asia's private capital markets will likely be dominated by investors who demand greater downside protection and a clear path to profitability before committing to term sheets. The struggle for survival will force many startups to be weeded out this year — some will fail, while others will be absorbed by well-established competitors. These changes will mark a new stage of growth for startups in the region, as the market will be left with businesses that have strong foundations and sustainability, making them more appealing to investors when the proverbial dust settles.

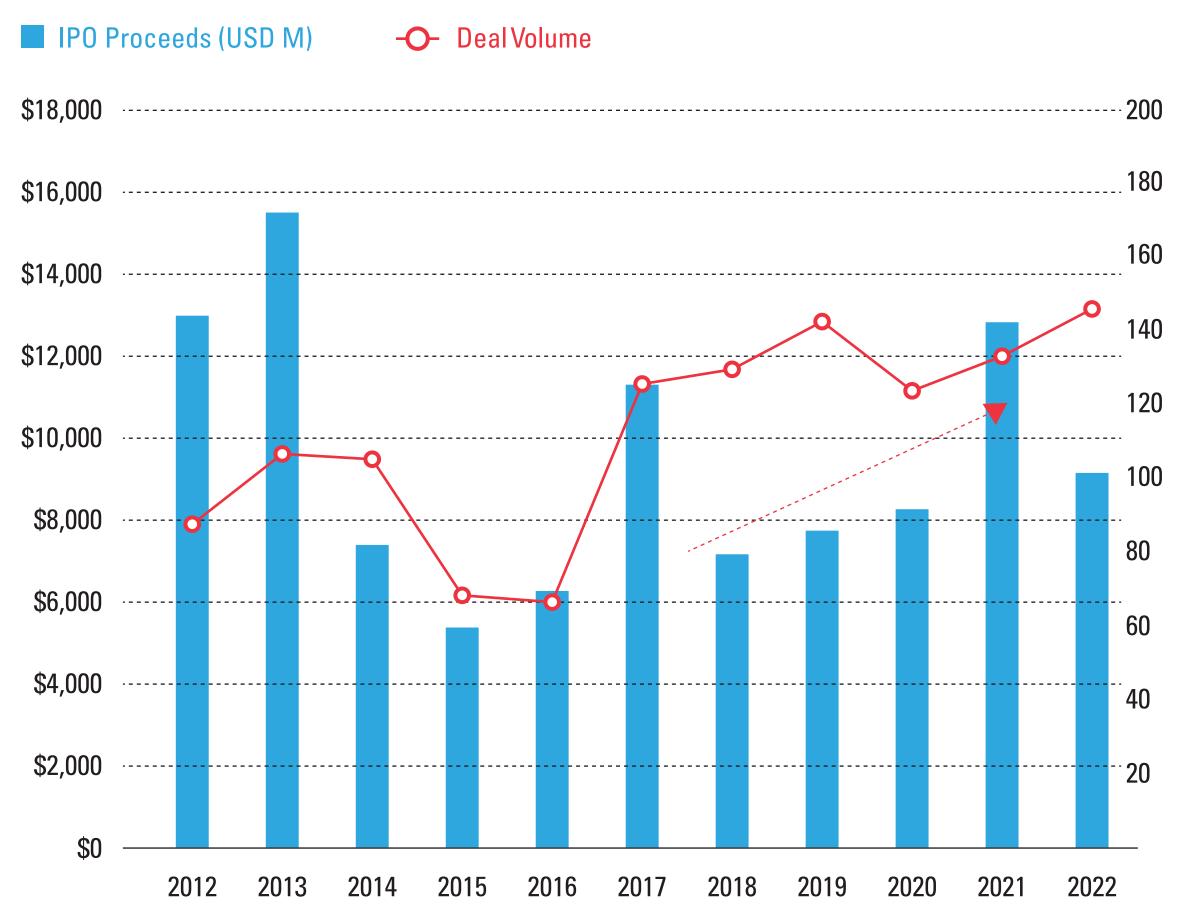
Singapore-based startups have access to top-notch soft and hard infrastructures. Despite the worldwide tightening of liquidity, obtaining capital is easier in the city-state compared to other financial centres in Asia. This, along with its favourable tax policies, supportive business environment, and high standard of living, will continue to attract entrepreneurs and highly skilled talent from across the world.

Another significant factor that will allow the city-state to have an edge in sailing through an unfavourable global climate is the development of its deep tech ecosystem. Thanks to continued investments by local universities and the Singaporean government through vehicles such as SEEDS Capital and SGInnovate, many startups have become sophisticated operators and have secured fresh private capital based on their innovations. Aided by impact-conscious investors, family offices and foundations, Singapore's deep tech startups should emerge as an even more vital pillar in the local tech ecosystem this year.

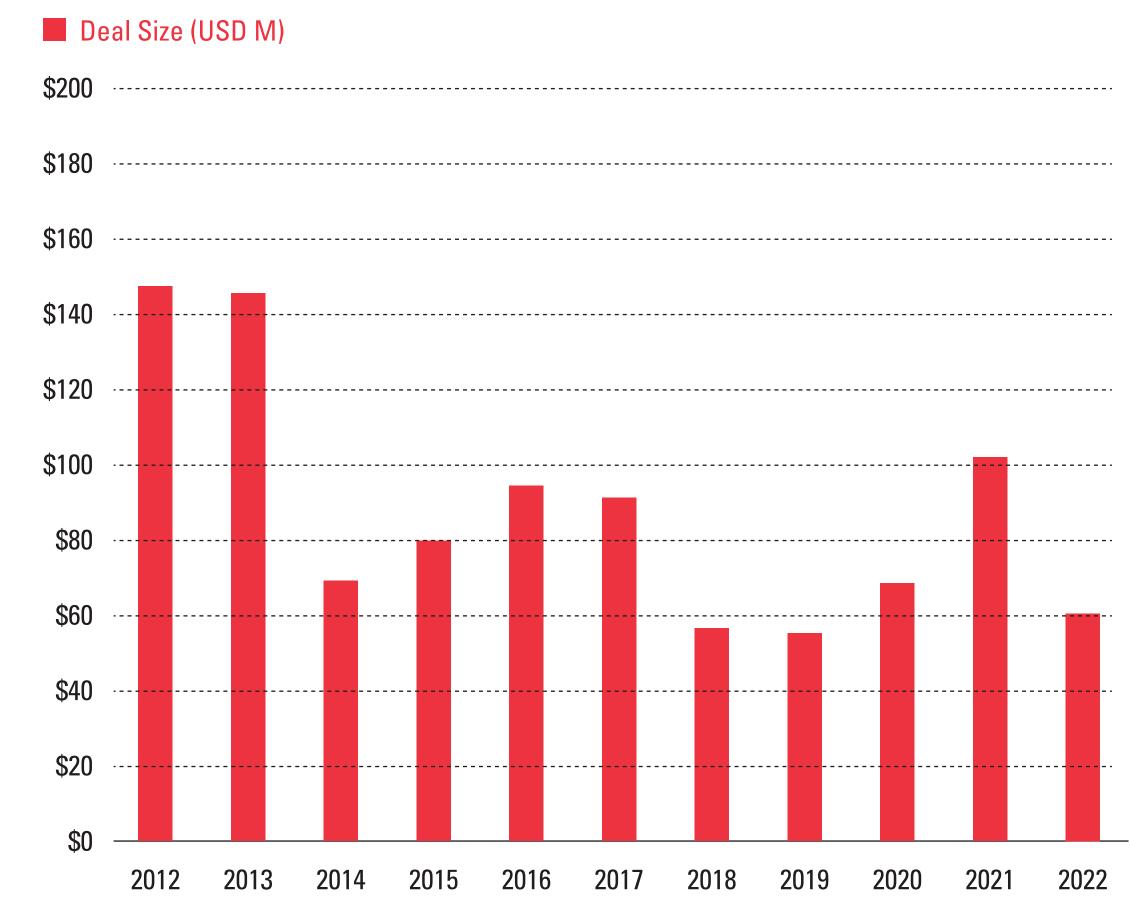


#### Number of IPOs in 2022 higher than 2021

#### SE Asia: IPO Proceeds (USD Million) and Volume



#### Average Deal Size Asia IPO (USD Million)







# INSIDER INSIGHTS





Tan Kaixin
General Manager
SEEDS Capital

Amid delays in new funding rounds and depressed valuations in 2022, startups and investors prioritised cost-cutting and placed greater emphasis on business viability and pathway to profitability. Deep tech ventures that are characteristic of higher capital requirements and longer paths to profitability took a hit as investors adopted a more cautious approach.

However, there are silver linings. Global early-stage VC fundraising and funding activity remains fairly robust, signifying that dry power is still available in the market. Singapore also aims to continue supporting the growth of deep tech sectors via the Research, Innovation and Enterprise (RIE) 2025 plan, a national plan reflecting sustained, long-term commitment to R&D through economic cycles.

At SEEDS Capital, we committed more than S\$40 million and

catalysed S\$132 million in private funding into 36 early-stage startups in 2022, almost doubling the amount from 5 years ago. Healthcare startups continue to attract investors' interest, and sustainability-focused solutions are coming to the forefront and poised for strong growth on the back of soaring energy prices and climate-related concerns. Correspondingly, our new investments in Health and Biomedical Sciences, and Urban Solutions and Sustainability startups increased by at least 1.5 times compared to 2021. We also made our first investments in nascent technologies such as quantum computing.

Looking forward to 2023, we are committed to continuing our funding, alongside our Startup SG Equity co-investment partners, for promising deep tech startups in focus domains, which also include Advanced Manufacturing and Engineering, Agrifood Technologies, as well as emerging technologies such as Space Tech and Quantum Computing, to anchor Singapore as a deep tech hub for the region.



Hsien-Hui Tong
Executive DirectorInvestments,
SGInnovate

The three broad trends driving investments – sustainability, better supply chain management and a push towards greater self-sufficiency in critical economic factors such as energy and food – will remain largely the same in the coming year.

Singapore, being a highly connected economy, is not spared the effects of these trends and the local deep tech ecosystem and the startups that emerged last year are reflective of these trends. In this respect, deep tech verticals such as sustainability, agritech, advanced manufacturing, and biomedical remain healthy.

Countries are getting behind these trends and, through subsidies and grants, are facilitating their entry into the market. While deep tech startups are still likely to face a longer period to raise funds, they are not likely to be as severely impacted as those in sectors that were very frothy and highly speculative. Alongside these trends, however,

has now been added the complexity brought on by higher interest rates and inflation. This has inevitably led to a search for investments with a higher return. Early-stage venture has benefited from this trend, and global figures show that Series A and B investment remains robust while later-stage investments are seeing a fall in investor interest.

Deep tech has benefited as a sector that provides high potential returns as it tackles the world's most complex problems. Recent breakthroughs in nuclear fusion and quantum computing have sparked renewed investor interest in verticals such as these. The support structure for deep tech startups in Singapore is quite a comprehensive one. Promising research from our local universities can apply for GAP [Graduate Assistance Programme], which can bring an idea from the lab to a proof of concept. Once a company is formed, our friends from EnterpriseSG have a comprehensive programme of grants that help startup founders from inception to the point at which they are ready to secure their first institutional investment.



Chua Kee Lock
Chief Executive
Officer,
Vertex Holdings

The market slowdown was felt in the latter part of 2022 in Southeast Asia. It takes some time before the decline in public markets starts reflecting in private markets, and we are beginning to see the cascading effects now. Private companies are relooking their valuations, capital deployments, fundraising strategy and business execution. This should continue up to the third quarter of 2023, and hopefully, we will observe a recovery towards the end of this year or in 2024.

Although there is available dry powder, many VCs in the region have over-invested in the last few years and will deploy the dry powder on their existing portfolio rather than make new investments. This will likely happen in the next 12 to 18 months.

In 2023, our focus remains unchanged – we will continue to look at software-as-a-service, consumer tech, healthtech and mobility.

Even in the current environment, we are seeing good entrepreneurs founding companies with disruptive business models. The only change in the ecosystem lies in valuations becoming a lot more reasonable compared to previous years.

The investment pace in Vertex
Ventures SEA & India has not slowed
down, but the difference lies in the
number of term sheets offered. In
2021, almost every company we
offered a term sheet had a
competing offer. In 2022, only one
company had a competing term
sheet. Entrepreneurs have stopped
shopping for term sheets.

2021 was about maximising valuations. But in 2022 and 2023, good entrepreneurs have understood the importance of raising money from the right investors and operations sustainability. Some VCs have done 50 deals in 2021 and are now doing zero, but we'll be consistent and continue to keep our investment pace.



Michael Blakey
Founder and
Managing Partner,
Cocoon Capital

The year 2021 was marked by an excessive proliferation of startups that secured funding at inflated valuations and intensified their cash burn to expedite growth. However, 2022 proved to be a turning point as the market began to revert to normalcy, with a reduction in the frequency of deals, a cooling off in valuations, and a growing number of flat and down rounds.

Although 2023 may present challenges, I believe the worst is behind us, and stability has been restored. Nevertheless, some companies may falter due to their inability to establish sound business models. However, we anticipate that the number of new deals will begin to grow in the fourth quarter of this year.

Our observation of the deep tech sector is that it is less affected by macro headwinds. These startups have more extended gestation periods, and revenue is not crucial to their early-stage development.
Whether in MedTech, clean tech or space tech, founders typically engage in extensive conversations with customers to address pressing needs, which usually takes several years before market launch.
Consequently, we observe that their valuations have not been excessively inflated.

One exciting trend we have noticed is the emergence of quality businesses founded by experienced individuals who have taken the plunge to launch new startups. These founders are typically former employees of tech companies with innovative ideas and robust business plans. It appears that firms are developing more conventionally, involving conducting more market validation and creating organisations with solid business plans. This is a positive development for the industry, and we are excited to see the quality of businesses created by these founders.



Chik Wai Chiew
CEO and
Executive Director,
Heritas Capital

Looking at the 12-month data of deal trends in 2022, it is clear that H2 2022 maintained a strong rebound from the lows in 2020 when COVID first hit but also saw a slight dip from the preceding few quarters. This is likely a reflection of investors factoring in new macro and geopolitical uncertainties. We observed general optimism as lockdowns eased in late 2021 and investors deployed dry powder to tap into the recovery, but caution set in again in H2 2022, and rightly so, as the perfect storm of factors dampened risk appetite.

Going into 2023, we see an initial recovery in investor sentiments as China has undertaken a rapid reopening, which will especially benefit Asian economies, as will become evident from the second quarter of this year. At the same time, Fed rate hikes are likely to taper, although interest rates will likely remain high for the rest of 2023 before potential cuts in 2024.

We believe venture investors expecting clearer skies ahead will be open to continue backing innovative ventures with a bottom-up thesis, while early

growth-stage startups may see an initial recovery of interests in the second half of 2023 onwards tied to the IPO market development. Beyond macro factors, we also observed major governance incidents, such as with Zilingo locally and FTX globally, and believe that investors will pay more attention to sound governance amidst a more subdued investment climate.

On the macro front, business risks have heightened as we can assume many of the global key economies are heading into slow growth or even recession. That said, we recognise that Singapore's innovation ecosystem remains vibrant, and the capability to commercialise technologies and nurture startups continues to grow. Newer capital providers, such as global and regional family offices looking to make early-stage bets, are also adding to the funding community. Taken in totality, we continue to see good deal flows for growth-stage ventures that seek funding with a more realistic valuation and are mindful of budgeting more time for fundraising and prioritising operational effectiveness.



Jussi Salovaara
Co-founder &
Managing Partner,
Antler

Despite the market slowdown in 2022, we maintain a strong sense of optimism regarding the long-term prospects for startups in Singapore and Southeast Asia at large. The foundations for building a better future and making a positive impact on the world are still solid. While the current environment presents challenges, this will inspire the most exceptional entrepreneurs to solve important problems and build stronger businesses.

The market had been active until the slowdown that began in the first quarter of last year, which has led many to hesitate in their outlook for the future, and rightfully so. What we do know for sure though, is that if you build a great business-capital and financing will not be a problem. However, it is possible that second-tier companies that are not yet fully established and previously had an easier time securing funding may now face some difficulties.

We view this market correction as a healthy development, as capital was

too easily accessed in 2021. We are hopeful that we are moving towards a new normal, with a stronger Southeast Asian ecosystem emerging. While an uptick in the market in 2023 is likely, startups need to focus more on achieving profitability and sustainability in their businesses. This will require a longer runway and a scrappier approach to managing capital. However, the fundamentals of success for startups remain the same no matter the market condition. That includes strong execution capabilities, clarity of thought, differentiation from competition, and a deep understanding of the problem being solved.

I'm bullish that Fintech is poised for continued growth, especially in Southeast Asia, where the middle class is rapidly expanding and pockets of populations are still underbanked. Logistics and commerce-enabling tech also hold great promise, along with generative AI. We are confident that together with our founders, we will continue to build great companies in Southeast Asia and globally.





Andrew D Ive Managing General Partner, Big Idea Ventures

Several trends have recently emerged in Singapore. We are seeing cell-based meat companies taking steps to establish their pilot plants within the city-state as they move towards scaling their businesses.

The last few years have been focused on the technologies and solving the blockers to scale for these protein sources. We have proven we can deliver bio-identical protein, and we are now moving to the next phase of sustainable meat, seafood and dairy production – scale. Several facilities, including the Protein Innovation Centre, a joint initiative by Bühler Group and Givaudan, have opened their doors to support the production of alternative proteins in the region. And we are discussing more to support the developing ecosystem. This is a crucial step to help food technology companies scale and further solidify the city-state's position as a food tech hub across Asia. The global map of protein producers will look very different in a decade, especially as countries follow Singapore's lead and commit to greater food security and more sustainable food sources.

At Big Idea Ventures, we are investing in innovative companies developing

solutions to scale these and related technologies – new fermentation methods (Mycosortia, Pullulo), Al-enabled micro fluids and connected bioreactors (Dynacyte Biosciences), microcarrier technology (Smart MCs), cell-based fats (ImpacFat), new sources of gelatin and collagen (Jellatech) and companies skipping the scaffolding challenges all together (Evolved Meats). These B2B solutions address key challenges for the industry and are the foundation for the next evolution of a great food industry.

Finally, here are a few predictions for 2023. We will see a continued correction in company valuations, and we will focus on those with world-changing intellectual property and a commitment to building a strong business model.

Investors who aren't familiar with the industry but who have been looking for quick returns will exit the market and leave it to those who have a deep understanding of the space, global view and deal flow.

Investors who truly understand the food space, the underlying technologies and the global landscape will continue to invest in great companies on behalf of corporations, family offices and high-net-worth individuals who are focused on strong long-term returns and sustainability.



Jeff Lin Senior Principal, iGlobe Partners

Over the past few years, we have witnessed accelerated growth in several deep tech sectors in Singapore, including biopharmaceuticals, diagnostics, robotics, synthetic biology, food, etc. The growth of the deep tech sector can be attributed to the many years of R&D investment made by the government and the tremendous amount of effort put in by A\*STAR and various universities in the areas of technology transfer and commercialisation. Venture builders and corporations have also played an important role in the building of deep tech startups.

Unlike typical startups in fintech, enterprise software, or digital space, a lot of deep tech ventures require even longer gestation periods before they can even launch their products and thus require a huge amount of funding and support from investors. This kind of large-size financing requires the support of a group of deep-pocket investors who understand the trends of the market and believe in the potential of the company.

A tighter macro environment means fundraising may be more difficult for deep tech startups in certain segments. It is advisable for deep tech ventures to ensure they have sufficient runway before the market recovers.

The Singapore government has launched numerous initiatives to foster the growth of deep tech startups. Various government agencies and government-linked entities such as Enterprise Singapore, NRF, EDB, Temasek, A\*STAR, SGInnovate and numerous accelerators, incubators and VCs like us have been playing an instrumental role in building the deep tech ecosystem.

The year 2023 will likely continue to face global macroeconomic headwinds, with geopolitical uncertainty as another major risk to consider. It seems a lot of VCs in Southeast Asia are getting cautious and have been slowing down, at least in the last couple of quarters. VCs are taking longer to complete their due diligence, which is actually the right thing to do.

However, even at this point of time, there are still some pretty big rounds being closed, like the 100 million euro financing for quantum computing firm PASQAL led by Temasek, which suggests some frontier tech sectors are relatively immune to the current market environment. It is advisable for startups to focus on reducing losses and be prepared for the VC funding market to take longer to recover than expected.





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Data assurance and integrity

Considering the opaque nature of the Southeast Asian market, we strive to constantly update our data to ensure accuracy. If you spot an error or inaccuracy, please contact Andi Haswidi, Head of Data and Research at andi@dealstreetasia.com.

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