

Transaction Trail Report

A look at mergers, acquisitions, private equity, venture capital deals and initial public offerings in Singapore, Malaysia and Indonesia.



Annual Issue 2020

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Welcome Note

Welcome to the *Duff & Phelps Transaction Trail Report 2020* issue. The report covers mergers and acquisitions (M&A), private equity/venture capital (PE/VC) investments and initial public offerings (IPOs) in Singapore, Malaysia and Indonesia (the "Region") for 2020* and provides a perspective of global transactions and a special feature on the technology transaction landscape in the Region. As we publish our ninth annual edition of the report, we observe how different this year has been. While past crises have affected specific industries, sectors or regions, the COVID-19 pandemic has had a wide-ranging impact across industries around the world.

Global M&A activity declined in 2020 to a value of US\$2.7 trillion, with over 39,000 transactions, compared to US\$3.6 trillion and over 46,000 transactions in 2019 (source: Bloomberg), against the backdrop of the pandemic and other geopolitical uncertainties.

During 2020, the Region witnessed a substantial US\$84 billion of transaction value from over 1,000 deals covering M&A, PE/VC investments and IPOs, showing significant resilience against the pandemic, albeit at a 17% reduction in deal value compared to 2019. There have been 15 M&A deals in the Region in 2020, valued at over one billion USD each, as compared to 10 in 2019.

Singapore continues to be in the forefront driving M&A, PE/VC and IPO deals in the Region, contributing over US\$65 billion in value. Approximately two-thirds of the M&A value in Singapore has come from outbound acquisitions, followed by domestic M&A at 22%. Real estate was the top sector this year contributing to about 38% of M&A value, driven by consolidation in the sector as well as overseas acquisitions by Singapore investors. The energy sector took the second spot at 19%, followed by banking, financial services and insurance (BFSI) in third place.

PE/VC investments in Singapore generated considerable activity, although at a lower value of about US\$5.2 billion during the period (US\$6.5 billion in 2019), dominated by the technology sector with 56% of M&A value. Singapore's IPO capital in 2020 witnessed a significant decline at just over US\$900 million raised, less than half of the amount raised in 2019, largely due to market uncertainty owing to the pandemic.

Malaysia has continued to see its deal activity slow in 2020 with total deals in M&A, PE/VC and IPOs valued at US\$5.9 billion, continuing the decline from 2019 (total deal value of US\$10.7 billion) and from the record levels witnessed in 2017 (US\$20.3 billion). Indonesia has shown an increase across outbound and domestic M&A transactions as well as PE/VC investments and IPO capital raised, with overall deal values at US\$13.5 billion in 2020 compared to US\$9.5 billion in 2019, owing to regulatory requirements and technology sector investments.

Businesses across the world have faced serious challenges this year arising from the pandemic, including lockdowns, travel restrictions, uncertainty on valuations, transactions being cancelled or renegotiated, impairment losses and bankruptcies. The robust level of deal activity at US\$84 billion in the Region in 2020, despite these challenges, is a testament to the criticality of transactions and investments to the strategic growth and sustenance of the Region's businesses.

It is interesting to observe that the reasons driving the transactions are varied for different industries—growth in the technology sector, consolidation and price advantage in the real estate sector and regulatory requirements in the minerals and metals industry. The most prominent change in the deal landscape over the years has been the Region's sustained ability to attract significant PE/VC investments, led by the growth in the technology sector, accounting for 66% of investments for the Region and almost 80% for Indonesia in 2020.

We have also witnessed a surge in unicorns from the Region, some that have gone public in global markets and more that are looking to go public or acquire other businesses. This year, we have seen the rise of the special purpose acquisition company (SPAC) structures in the Region that have successfully raised funds from global IPOs to invest in private businesses. SPACs have the potential to change the transaction landscape globally as well as in the Region, by adapting the hybrid model that encompasses M&A, PE/VC and IPO all in one.

Going forward, while we expect the impact of the pandemic to last for several more months, businesses have adapted to the new normal of doing transactions. With this view and considering the political changes in the U.S., a possible improvement in the U.S.-China relationship, more political stability, continued increase in technology adoption and increased availability of capital resources in the Region, we can continue to expect strong transaction activity. We hope you enjoy reading this report and we welcome your feedback, comments and suggestions.

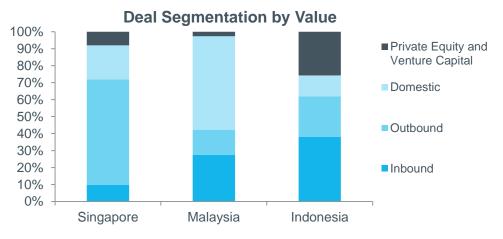


Srividya Gopal Managing Director Duff & Phelps, Singapore

Annual 2020 Deal Round-Up

Deal Summary	Singa	pore	Mala	ysia	Indo	nesia	Grand	l Total
		Deal Value				Deal Value		Deal Value
2020 (YTD Nov' 20)	Deal Vol.	(US\$ Mn)	Deal Vol.		Deal Vol.	(US\$ Mn)	Deal Vol.	(US\$ Mn)
Inbound	107	6,351	48	1,493	32	4,982	187	12,826
Outbound	235	39,918	42	814	8	3,118	285	43,850
Total Cross border	342	46,269	90	2,307	40	8,100	472	56,675
Domestic	140	12,907	164	2,995	22	1,610	326	17,512
Total Merger and Acquisitions	482	59,176	254	5,302	62	9,710	798	74,187
Regional Deals							45	1,061
Net Total Mergers and Acquisitions							753	73,125
Private Equity and Venture Capital	149	5,153	26	145	74	3,357	249	8,655
Total M&A, PE & VC	631	64,329	280	5,447	136	13,067	1,002	81,781
Initial Public Offerings (IPOs)	9	944	15	478	48	397	72	1,819
Total M&A, PE & VC, IPOs	640	65,274	295	5,925	184	13,464	1,074	83,600

The Region witnessed a substantial level of transactions valued at US\$84 billion in 2020, although lower compared to US\$100 billion during 2019.



Deal Highlights

A total of 1,074 M&A, PE/VC investments and IPO deals were recorded in the Region* during 2020** with a combined value of US\$83.6 billion.

Singapore recorded total M&A deal volume of 482 deals during this period, valued at US\$59.2 billion, compared to US\$72.4 billion in 2019. Outbound deals in 2020 amounted to approx. US\$40 billion and accounted for about 67% of the total deal value, compared to 66% in 2019, followed by domestic deals (22% of total deal value) which amounted to US\$12.9 billion. Inbound deals accounted for 11% of total transacted value.

During the same period, Singapore witnessed 149 PE/VC investments amounting to approximately US\$5.2 billion.

Capital raised from IPO listings in Singapore were noticeably lower this year, with US\$944 million in IPO capital raised for 2020 which is significantly below 2019 (US\$2.3 billion).

Malaysia recorded a total of 254 M&A deals during the year, valued at US\$5.3 billion. Domestic deals comprised more than half (at 57%) of the total transaction value.

Indonesia recorded an improvement in M&A deal values for 2020 with 62 M&A deals amounting to US\$9.7 billion (compared to US\$7.2 billion in 2019).

Regional PE/VC investments also witnessed a decline in 2020 with 249 PE/VC investments in the region accounting for approximately US\$8.7 billion in deal value.

Singapore 2020 Deal Round-Up

Singapore M&A Yearly Trend Analysis

"Singapore's M&A transaction landscape is largely driven by crossborder deals, which have been deeply impacted by the pandemic. In spite of this, Singapore M&A has shown healthy levels of activity in 2020."

- Ashish McLaren, Director, Duff & Phelps

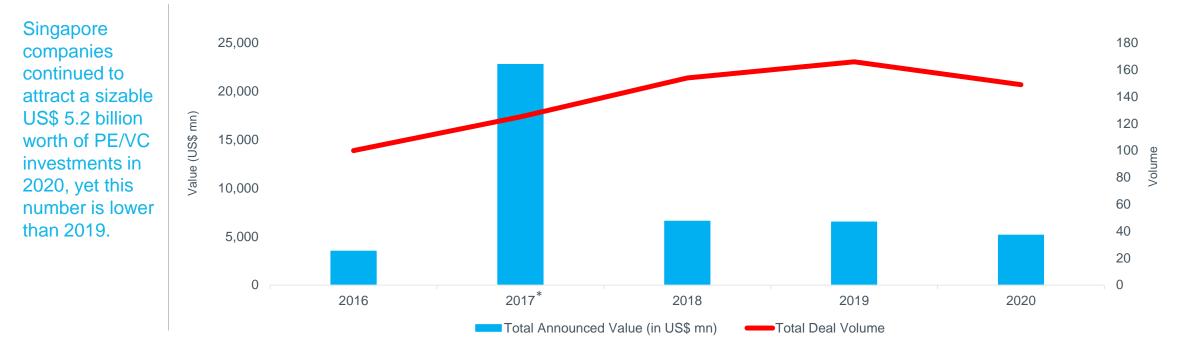


201	2016 2017		2017 2018		8	201	9	2020	
Value	Volume	Value	Volume	Value	Volume	Value	Volume	Value	Volume
(US\$ mn)		(US\$ mn)		(US\$ mn)		(US\$ mn)		(US\$ mn)	
82,712	684	75,436	698	99,037	688	72,430	630	59,176	482

Singapore's M&A deal value and volume have been the lowest in the last several years due to considerable disruption to business and transaction activities caused by the COVID-19 pandemic.

Singapore 2020 Deal Round-Up

Singapore PE/VC Investment Yearly Trend Analysis

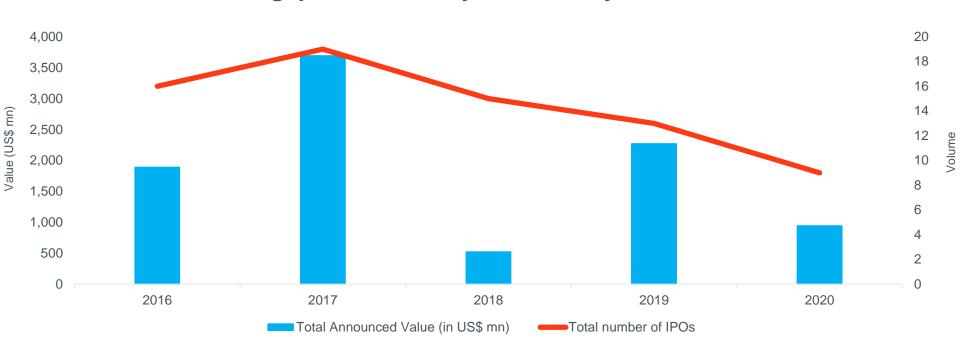


201	2016 2017		017 2018		8	201	9	2020	
Value	Volume	Value	Volume	Value	Volume	Value	Volume	Value	Volume
(US\$ mn)		(US\$ mn)		(US\$ mn)		(US\$ mn)		(US\$ mn)	
3,503	100	22,787*	125	6,592	154	6,510	166	5,153	149

* Peak during 2017 driven by sizeable PE/VC buyouts, including the privatization of Global Logistic Properties Limited, and the acquisition of Equis Energy which accounted for more than 70% of PE/VC deal value in Singapore.

Duff & Phelps

Singapore 2020 Deal Round-Up



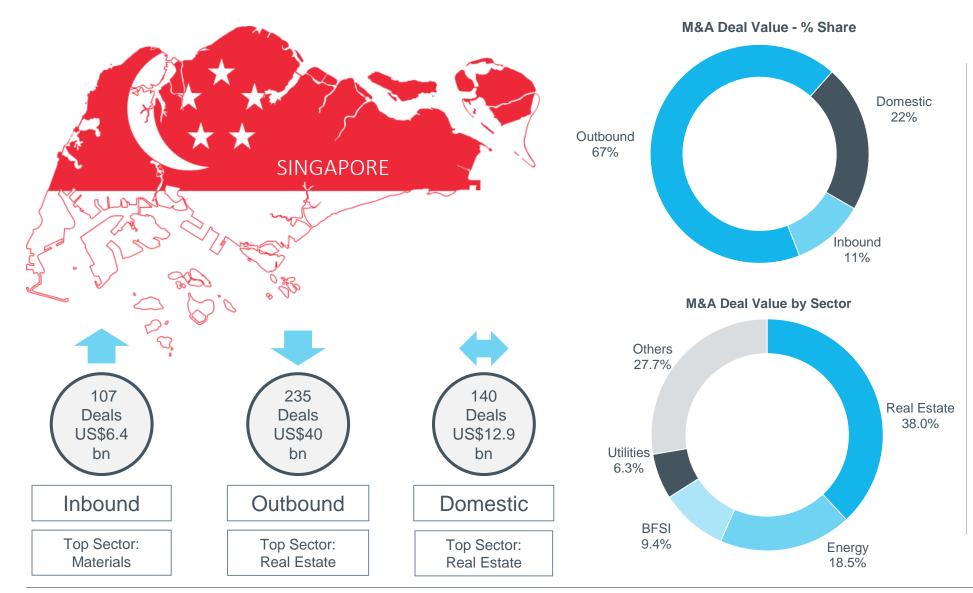
Singapore IPO Yearly Trend Analysis

2016 2017 2018 2019 2020 Capital Listing Listing Capital Listing Capital Listing Capital Capital Listing Raised Volume Raised Volume Raised Volume Raised Raised Volume Volume (US\$ mn) (US\$ mn) (US\$ mn) (US\$ mn) (US\$ mn) 1,893 16 3,695 19 523 15 2,273 13 944 9

IPO capital raised in Singapore during 2020 declined from 2019 levels due to the significant market uncertainties posed by the pandemic.

In 2020, there were a total of 9 IPOs in Singapore that raised US\$944 million.

Overview of Singapore M&A Activity



A total of 482 M&A transactions took place in 2020, with a total announced value of US\$59.2 billion.

Real estate was the dominant sector in 2020 with a total deal value of US\$22.5 billion and was also the top sector for both outbound and domestic M&A deals in Singapore.

Real estate was followed by the energy and BFSI sectors in terms of M&A deal values for Singapore.

Overview of Singapore M&A Activity

Top M&A Deals in Singapore During 2020

Acquirer	Target	Target Sector	Value (US\$ mn)	% Stake Acquired	Туре
GIC Private Limited and Others*	ADNOC Gas Pipeline Assets LLC	Energy	10,100.0	49	Minority
CapitaLand Mall Trust	CapitaLand Commercial Trust	Real Estate	6,127.2	100	Merger
GIC Private Limited and Others*	Pacific Gas and Electric Corp.	Utilities	3,250.0	18	Minority
Singapore Life Pte. Ltd.	Aviva Ltd	BFSI	1,974.0	100	Merger
GIC Pte Ltd	LG Holdings HK Ltd	Real Estate	1,146.5	100	Acquisition
GLP Pte Ltd	Central and Eastern Europe Logistics Portfolio	Real Estate	1,080.0	100	Acquisition
Gebrueder Knauf Verwaltungsgesellschaft KG	USG Boral Building Products Pte. Limited	Materials	1,015.0	50	JV Stake Acquisition
GIC Pte Ltd and Others*	Convex Group Ltd	BFSI	1,000.0	Not disclosed	N/A
Temasek Holdings Pte. Ltd and Others*	Beijing Zhenguanyu Science and Technology Co., Ltd.	Technology	1,000.0	Not disclosed	N/A
Parc1 Tower II (Seoul)	ARA Asset Management	Real Estate	897.0	100	Acquisition

*Others refers to a consortium of investors.

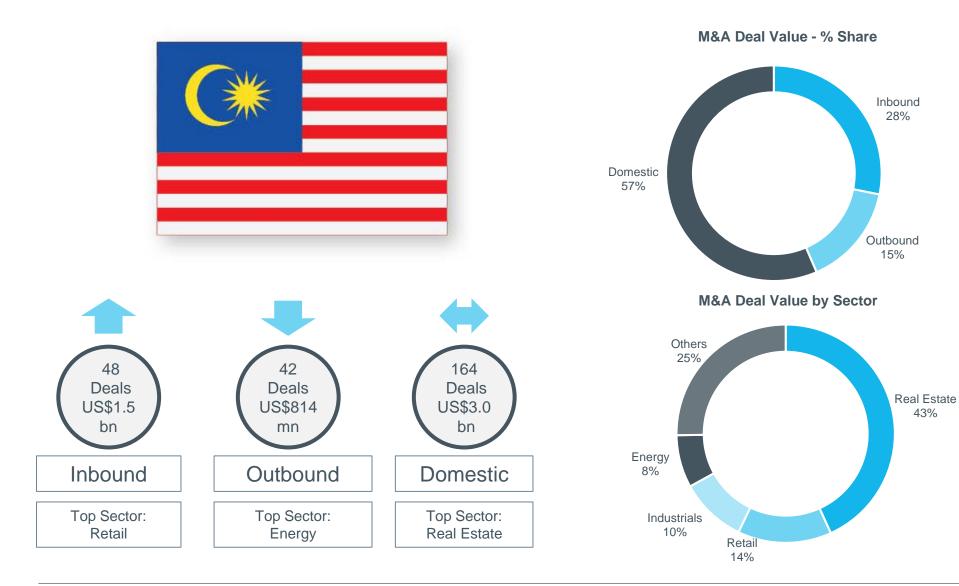
GIC, together with its consortium partners, continues to dominate the top M&A deal value rankings with significant outbound investments made in the energy, utilities and real estate sectors. Notable deals include the acquisition of a 49% stake by GIC (and its consortium partners) in ADNOC Gas Pipeline Assets LLC for an aggregate value of approx. US\$10 billion in June.

Top M&A (Non-Sovereign Wealth Fund) Deals in Singapore During 2020

Acquirer	Target	Target Sector	Value (US\$ mn)	% Stake Acquired	Туре
CapitaLand Mall Trust	CapitaLand Commercial Trust	Real Estate	6,127.2	100	Merger
Singapore Life Pte. Ltd.	Aviva Ltd	BFSI	1,974.0	100	Merger
GLP Pte Ltd	Central and Eastern Europe Logistics Portfolio	Real Estate	1,080.0	100	Acquisition
Gebrueder Knauf Verwaltungsgesellschaft KG	USG Boral Building Products Pte. Limited	Materials	1,015.0	50	JV Stake Acquisition
Parc1 Tower II (Seoul)	ARA Asset Management	Real Estate	897.0	100	Acquisition

Excluding sovereign wealth fund (SWF) deals, significant deal activity in 2020 included the merger of CapitalLand Mall Trust and CapitaLand Commercial Trust to form CapitaLand Integrated Commercial Trust, the merger between Singapore Life Pte Ltd and Aviva Singapore for approx. US\$2 billion and the acquisition of 50% joint venture (JV) stake in USG Boral Building Products by Germany-based Gebr Knauf KG for approx. US\$1 billion.

Overview of Malaysia M&A Activity



Malaysia witnessed M&A deal value at US\$5.3 billion, which is below 2019 levels but in line with regional trends.

The real estate sector in Malaysia had the highest M&A deal value, followed by the retail sector which witnessed high value inbound M&A deal activity.

The two largest M&A transactions in 2020 for Malaysia were the acquisition by Charoen Pokphand Foods PCL of a 100% stake in Tesco Stores Malaysia Sdn Bhd and the acquisition of Tuaspring power plant and associated assets by YTL Power International Bhd.

Overview of Malaysia M&A Activity

Top M&A Deals in Malaysia During 2020

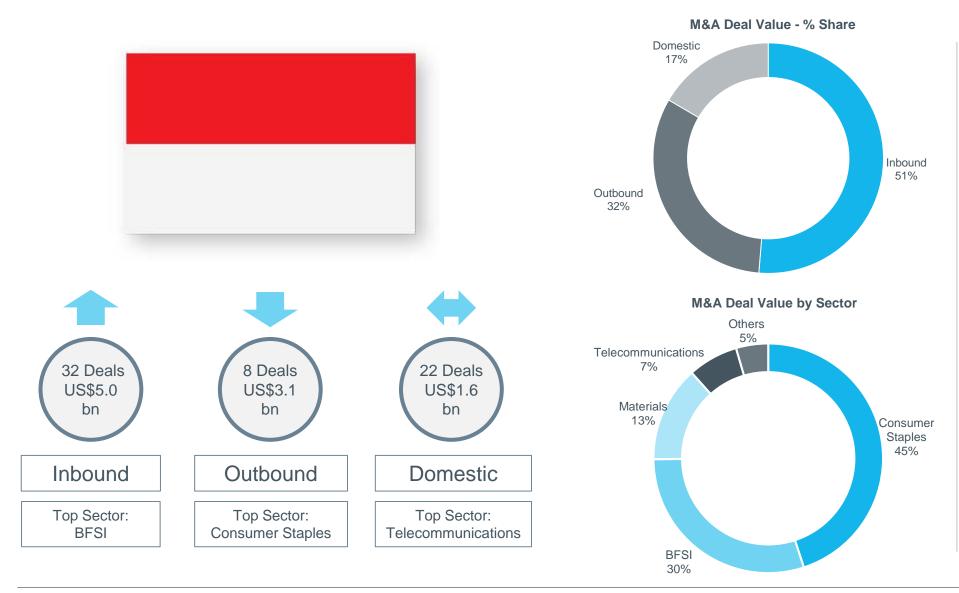
Acquirer	Target	Target Sector	Value (US\$ mn)	% Stake Acquired	Туре
Charoen Pokphand Foods PCL and Others*	Tesco Stores Malaysia Sdn Bhd	Retail	700.0	100	Acquisition
YTL Power International Bhd	Tuaspring Power Plant and Associated Assets	Energy	235.7	100	Acquisition
UOA Real Estate Investment Trust	UOA Corporate Tower	Real Estate	167.6	100	Acquisition
DBE Gurney Resources Bhd	Blossom Eastland Sdn Bhd	Real Estate	152.1	100	Acquisition
Yinson Holdings BHD	Ezion Holdings Ltd	Industrials	150.0	63	Majority
Hope Education Group Co., Ltd.	Inti Education Holdings Sdn. Bhd	Education	140.0	62	Majority
Esteel Enterprise Pte. Ltd.	Antara Steel Mills Sdn Bhd	Materials	128.0	100	Acquisition
Petroliam Nasional Berhad	ACME Solar Holdings Ltd (100 MW of solar power assets in Karnataka)	Energy	109.0	Not disclosed	N/A

201	2016 2017		2018		201	9	2020		
Value	Volume	Value	Volume	Value	Volume	Value	Volume	Value	Volume
(US\$ mn)		(US\$ mn)		(US\$ mn)		(US\$ mn)		(US\$ mn)	
14,253	375	17,573	408	11,439	338	8,940	253	5,302	254

* The total transaction value for Tesco Stores (Thailand) Ltd and Tesco Stores Malaysia Sdn Bhd and any respective subsidiaries as part of the transaction by Charoen Pokphand Foods PCL amounted to US\$10.6 billion.



Overview of Indonesian M&A Activity



A total of 62 M&A transactions were completed in Indonesia with total announced deal value of approximately US\$9.7 billion. Inbound M&A took up the majority share with 51% of total deal value.

Consumer staples had the highest deal value by sector exceeding US\$4 billion in 2020, mainly due to sizeable M&A deals such as the acquisition of Pinehill Co Ltd by PT Indofood CBP Sukses Makmur Tbk, and the acquisition of PT Softex Indonesia by Kimberly-Clark Corp.

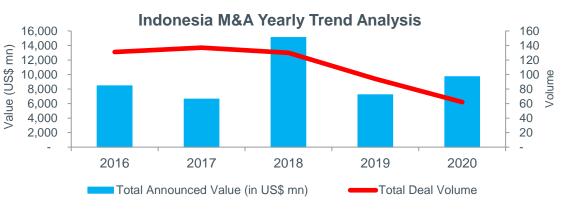
Overview of Indonesian M&A Activity

Top M&A Deals in Indonesia During 2020

Acquirer	Target	Target Sector	Value (US\$ mn)	% Stake Acquired	Туре
PT Indofood CBP Sukses Makmur Tbk	Pinehill Co Ltd	Consumer Staples	2,998.0	100	Acquisition
Kimberly-Clark Corp	PT Softex Indonesia	Consumer Staples	1,200.0	100	Acquisition
PT Dayamitra Telekomunikasi	6050 telecommunication towers	Telecommunications	688.0	100	Acquisition
Nickel Mines Ltd	PT Angel Nickel Industry	Materials	490.0	70	Majority
Indonesia Asahan Aluminium Persero PT	PT Vale Indonesia Tbk	Materials	388.8	20	Minority
Taiheiyo Cement Corp	PT Solusi Bangun Indonesia Tbk	Materials	220.0	15	Minority

201	2016 2017		2018		2019		2020		
Value (US\$ mn)	Volume	Value (US\$ mn)	Volume	Value (US\$ mn)	Volume	Value (US\$ mn)	Volume	Value (US\$ mn)	Volume
8,449	131	6,618	137	15,108	130	7,201	94	9,710	62

Indonesia M&A deal values in 2020 increased from US\$7.2 billion in 2019 to US\$9.7 billion, defying the declining Regional trend. However, deal activity was lower in 2020, with 62 deals compared to 94 deals in 2019.



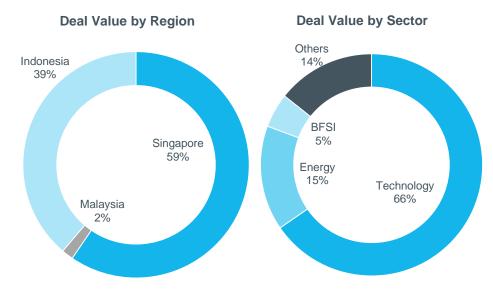
Private Equity / Venture Capital Investment Snapshot in the Region

Top PE/VC Deals in the Region for 2020

Investor(s)	Investee	Sector	Country	Investment Value (US\$ mn)
Abu Dhabi Investment Authority and Others*	Equis Development Pte Ltd	Energy	Singapore	1,250.0
Investor Consortium	PT Aplikasi Karya Anak Bangsa (GoJEK)	Technology	Indonesia	1,200.0
Mitsubishi UFJ Financial Group Inc	Grab Holdings Inc	Technology	Singapore	706.0
Ontario Teachers' Pension Plan Board, Warburg Pincus LLC	Princeton Digital Group Pte Ltd	Technology	Singapore	360.0
Temasek Holdings Pte Ltd, Alphabet Inc	Tokopedia PT	Technology	Indonesia	350.0
Value Partners and Others*	AMTD Digital	Technology	Singapore	285.0
Intouch Holdings PCL and Others*	Ninja Logistics Pte Ltd	Technology	Singapore	279.0

* Others refers to a consortium of investors-

Regional PE/VC	2016		2016 2017		20	2018		2019		2020
Deal summary	Deal Volume	Deal Value (US\$ mn)								
Singapore	100	3,503	125	22,787	154	6,592	166	6,510	149	5,153
Malaysia	27	1,135	23	1,037	33	953	31	1,556	26	145
Indonesia Total	33 160	1,474 6,112	35 183	2,395 26,219	37 224	3,249 10,794	81 278	1,379 9,445	74 249	3,357 8,655



There were 249 PE/VC investments in the Region in 2020 with a combined value of approximately US\$8.7 billion. The technology sector continues to attract significant PE/VC investments in the Region, with investor consortiums comprising of both PE/VC funds and corporate venture capital.

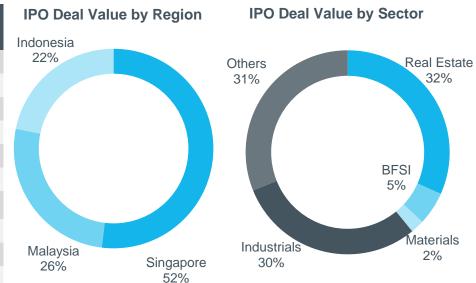
The technology sector was also the largest contributor for PE/VC deals, accounting for 66% of PE/VC deal value for the region and almost 80% for Indonesia.

IPOs in the Region

Top IPOs in the Region During 2020

Company Name	Capital Raised (US\$ mn)	Sector	IPO Exchange
Nanofilm Technologies International	375.1	Industrials	Singapore Exchange
MR DIY Group M Bhd	362.7	Retail	Bursa Exchange
United Hampshire US REIT	323.6	Real Estate	Singapore Exchange
Elite Commercial REIT	176.4	Real Estate	Singapore Exchange
Metro Healthcare Indonesia TBK	75.1	Healthcare	Jakarta Exchange
Credit Bureau Asia Ltd	40.2	BFSI	Singapore Exchange
InNature Bhd	27.8	Industrials	Bursa Exchange
Rockfields Properti Indonesia	26.1	Real Estate	Jakarta Exchange
Southern Cable Group Bhd	18.8	Industrials	Malaysia Exchange
Sejahtera Bintang Abadi Textil	16.5	Consumer Discretionary	Jakarta Exchange
Diamond Citra Propertindo Tbk	15.9	Industrials	Jakarta Exchange
Karya Bersama Anugerah Tbk PT	15.7	Real Estate	Jakarta Malaysia

Regional IPOs	2	016	201	17	20	18	20	19	20	20
Listings summary	Listing Volume	Capital Raised (US\$ mn)								
Singapore	16	1,893	19	3,695	15	523	13	2,273	9	944
Malaysia	11	214	14	1,647	22	150	24	229	15	478
Indonesia	14	907	26	625	57	1,106	45	867	48	397
Total	41	3,014	59	5,967	94	1,779	82	3,369	72	1,819



IPO listings in Singapore were significantly lower in 2020, with less than half of the amount raised compared to prior 2019, largely due to market uncertainty caused by the pandemic.

However, IPO listings in Malaysia for 2020 saw an improvement with US\$478 million total capital compared to US\$229 million during 2019.

4,000 50,000 45,000 3,500 40,000 3,000 35,000 2,500 30,000 Volume 2,000 25,000 20,000 1,500 15,000 1.000 10,000 500 5,000 0 2015 2016 2017 2018 2019 2020 Deal Value (in US\$ bn) Total Deal Volume

Global M&A Yearly Trend Analysis

During 2020 there were a total of 39,137 transactions, representing an aggregate deal value of US\$2,734 billion.

Global M&A activity declined during 2020, against the backdrop of the COVID-19 pandemic and other geopolitical uncertainties.

20	15	20	16	20	17	20	18	20	19	20	20*
Value	Volume										
(US\$ bn)		(US\$ bn)		(US\$ bn)		(US\$ bn)		(US\$ bn)		(US\$ bn)	
3,761	38,861	3,398	40,178	3,224	43,071	3,702	45,625	3,614	46,971	2,734	39,137

Source: Bloomberg

Duff & Phelps * 2020 Global M&A deal value and volume is between January 2020 to November 2020.

Value (US\$ bn)

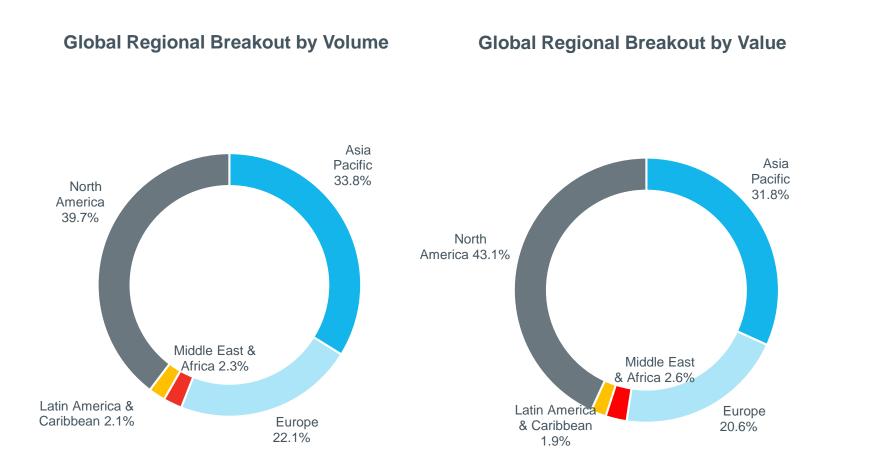
During 2020 there were two consecutive periods of decline (Q1 2020 and Q2 2020) for M&A deal volumes and values, with a steep decline of 46% in deal values for Q2 2020.

Notwithstanding the uncertainty around the global economy, along with the impact of COVID-19 on M&A deal activity, there are signs of recovery based on the strong performance during Q3 2020 (+156% increase in deal value).



Q3 2	2019	Q4 2	2019	Q1 2	2020	Q2 2	2020	Q3 2	2020
Value	Volume								
(US\$ bn)		(US\$ bn)		(US\$ bn)		(US\$ bn)		(US\$ bn)	
735	11,784	938	12,659	693	11,018	377	9,228	966	11,038

Global M&A Quarterly Trend Analysis



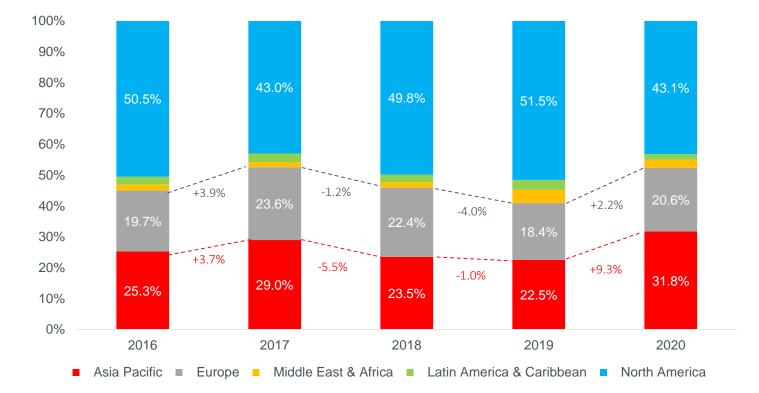
Approximately 43% of global deal value in 2020 occurred in North America (as compared to 51.5% in 2019).

Asia Pacific was a key contributor to global deal volumes and values during 2020, accounting for 32% of global M&A values (vs. 22.5% in 2019).

Europe accounted for 21% of global M&A values in 2020, improving its share of global deal values compared to 2019 (18% of deal value).

Overall, North America witnessed its share of total global M&A deal value reduce during 2020, in line with the higher contribution by Asia Pacific and Europe over the same period.

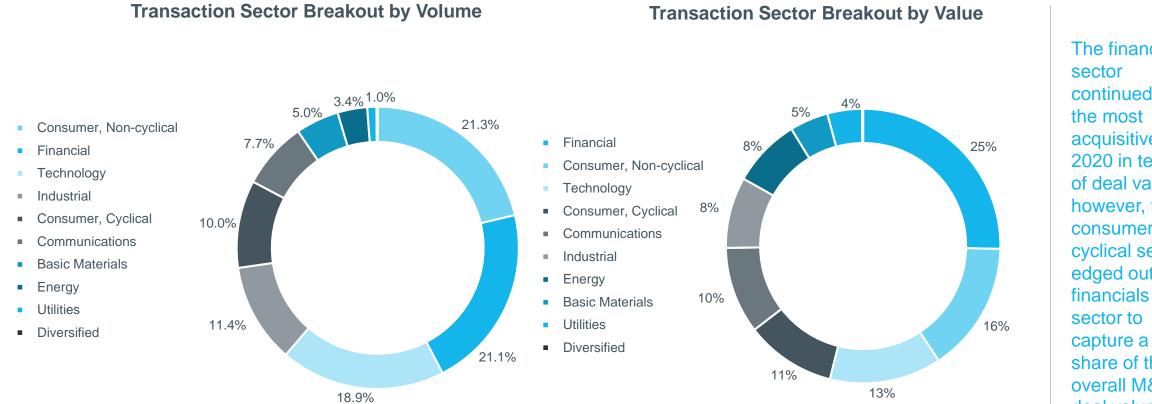
Asia Pacific witnessed its highest share of contribution to global M&A deal values over the past five years, exceeding the previous high attained in 2017 (29% of deal value).



Global Regional Breakout by Value/Trend Analysis

Top 10 Global M&A Deals During 2020

Acquirer	Target	Target Sector	Target Region	Value (US\$ mn)	Proposed Stake Acquisition (%)	Туре
China Oil & Gas Pipeline Network Corp	PetroChina Pipelines Co Ltd and Others	Energy, Utilities	China	48,333	N/A	N/A
S&P Global Inc	IHS Markit Ltd	Consumer, Non-cyclical	Britain	43,534	100	Merger
Nippon Telegraph & Telephone Corp	NTT DOCOMO Inc	Communications	Japan	40,268	33.8	Acquisition
AstraZeneca PLC	Alexion Pharmaceuticals Inc.	Consumer, Non-cyclical	U.S.	37,421	97.1	Acquisition
NVIDIA Corp	ARM Ltd	Technology	Britain	34,450	100	Acquisition
Advanced Micro Devices Inc	Xilinx Inc	Technology	U.S.	32,721	100	Acquisition
Russian Federation	Sberbank of Russia PJSC	Financial	Russia	32,131	50	Majority
Aon PLC	Willis Towers Watson PLC	Financial	Britain	31,440	100	Acquisition
Seven & i Holdings Co Ltd	Speedway LLC	Consumer, Cyclical	U.S.	21,000	100	Acquisition
Analog Devices Inc	Maxim Integrated Products Inc	Technology	U.S.	19,762	100	Acquisition



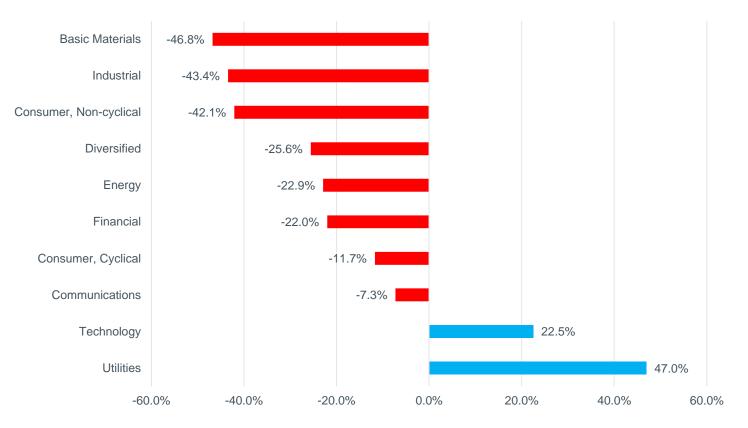
The financial continued to be acquisitive in 2020 in terms of deal value; however, the consumer noncyclical sector edged out the financials capture a large share of the overall M&A deal volume.

Most industry sectors witnessed lower global transaction deal value in 2020, with the sharpest decline in the basic materials and industrial sectors.

However, the robust M&A deal value performance in 2020 can be attributed to the technology and utilities sectors (increased 23% and 47% respectively). This is unsurprising given their defensive nature, along with the higher demand for technology during the current COVID-19 pandemic.

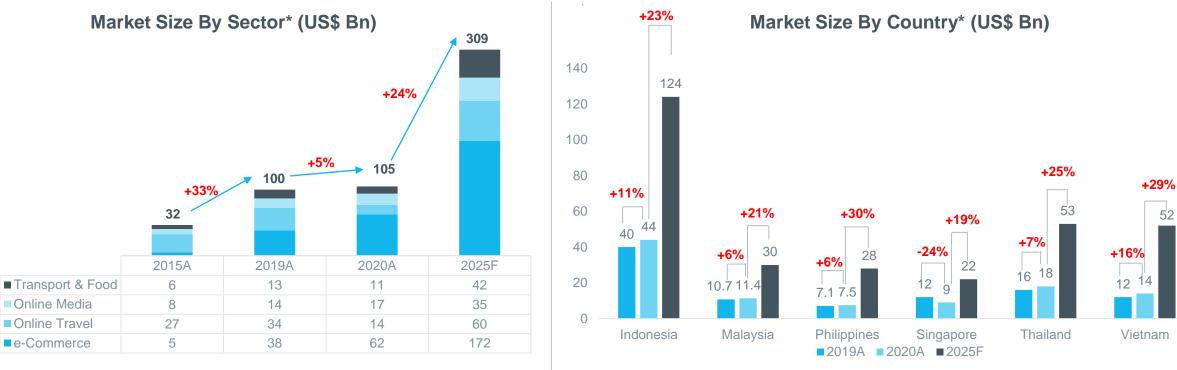
Transaction Sector Performance Analysis

% Change in Deal Value (2020 vs. 2019)



Southeast Asia's US\$100 bn Internet Economy

- Southeast Asia's (SEA) internet economy is expected to reach US\$309 bn by 2025, implying a CAGR of 24% from US\$105 bn in 2020.
- COVID-19 has accelerated digital transformation and online spending. SEA added 40 mn new internet users in 2020 to reach 400 mn total internet users compared to 260 mn in 2015.
- E-commerce remains SEA's largest sector valued at US\$62 bn. During 2020, e-commerce, online media and food delivery sectors witnessed accelerated growth due to COVID-19 offsetting the contractions in online travel and transport sectors.
- Indonesia is SEA's largest internet economy and is expected to reach US\$124 bn by 2025 or 40% of SEA's internet economy.



*Based on Internet Economy Gross Merchandise Value (GMV) Source: e-Conomy SEA 2020 report by Google, Temasek, Bain & Company

Top 10* Tech Start-up Deals in the Region During 2020

Target	Acquirer/Investor	Target Country	Target Sub-Sector	Proceeds* (US\$ Mn)	Deal Type
PT Aplikasi Karya Anak Bangsa (GoJEK)	Private Investor	Indonesia	Software	1,200.0	Investment
Grab Holdings Inc	Mitsubishi UFJ Financial Group Inc	Singapore	Transportation	706.0	Investment
Princeton Digital Group Pte Ltd	Ontario Teachers' Pension Plan Board, Warburg Pincus LLC	Singapore	Software	360.0	Investment
AMTD Digital	Value Partners, Greater Bay Area Homeland Investments, Vision Knight Capital, Ariana Capital, Maoyan Entertainment and Infinity Power	Singapore	Software	285.0	Investment
Traveloka Indonesia PT	Private Investor	Indonesia	Internet	250.0	Investment
PropertyGuru	TPG, KKR	Singapore	Real Estate	220.0	Investment
Grab Holdings Inc	STIC Investment Inc	Singapore	Transportation	200.0	Investment
Grab Holdings Inc	TIS Inc	Singapore	Transportation	150.0	Investment
Ruangguru.com	General Atlantic LLC, Private Investor, GGV Capital	Indonesia	Internet	150.0	Investment
Trusty Cars Pte Ltd (Carro)	Mitsubishi Corp and MS&AD Ventures	Singapore	Software	110.5	Investment

Over the last six years, the technology sector has been one of the largest contributors to deal making activity in the Region. PE/VC investment in the Region's technology sector increased to about 8.5 times from US\$672 million in 2015 to US\$5.7 billion in 2020. Software and transportation sub-sectors dominated the technology deals during 2020. Indonesian unicorns continue to attract investments, as investors look to have a stake in the Region's largest internet economy.

*Based on disclosed funding and investors

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Unicorns of SEA^[1]

- SEA is home to 11 unicorns, of which five are based in Indonesia.
- VNPay, an online payments company based in Vietnam, was a new unicorn added during 2020.
- Traveloka raised a down round at a c.17% lower valuation due to decline in the travel sector as a result of COVID-19
- Emerging SEA unicorns include Carousell, Circles.Life, Iflix, PropertyGuru and Zilingo

Company	Business Description	Incorporation	HQ Country	Valuation* (US\$ mn)	Fund Raised* (US\$ mn)
Grab Holdings	Online platform for on-demand booking	2012	Singapore	14,900	10,300
Go-Jek	Online platform for on-demand booking	2010	Indonesia	12,500	6,200
Tokopedia	Online marketplace	2009	Indonesia	9,000	2,800
Traveloka	Online travel aggregator	2012	Indonesia	2,750 ^[2]	1,200
OVO	Online payment provider	2017	Indonesia	2,900	Undisclosed
Bukalapak	Online marketplace	2011	Indonesia	2,500-3,000	150
Trax	Computer vision solutions	2010	Singapore	1,300	387
One Championship	Sports media platform	2011	Singapore	Undisclosed	336
Revolution Precrafted	Developer of prefabricated properties	2015	Philippines	1,000	15
VNG	Online content platform	2004	Vietnam	1,600	1
VNPay	Online payment provider	2007	Vietnam	Undisclosed	300



"The digital world has been accelerated thanks to the pandemic, giving a boost to ventures in edtech, digital finance, and healthcare technology." – Former CEO and Chairman of Tech Unicorn

^[1] Based on disclosed unicorns, excluding ex-unicorns, which have been listed, such as Sea Ltd and Razer, Lazada, which was acquired by Alibaba and Bigo, which was acquired by YY Inc. ^[2] Disclosed valuation of US\$2,750 mn for primary fundraising and US\$2,400 mn for secondary sale. *Based on disclosed figures (rounded-up). Data as of 30 November 2020.

Source: CNBC, TechCrunch, DealStreetAsia and Tech In Asia

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China Continues to Strengthen its Position as a Unicorn-Hub and Tech IPO Destination

Beijing Leads Global Unicorn Rankings

• As of August 2020, Beijing is the world's unicorn capital with 93 unicorns. China comes second to the U.S, with 39% or 227 out of the 586 unicorns globally and is home to half of the global top 10 tech unicorns.

Top 5* Tech Unicorns of China

Company	Sector	Incorporation	Valuation* (US\$ bn)
Ant Financial	Fintech	2014	200
ByteDance (Toutiao)	Social Media	2012	140
Didi Chuxing	Transportation	2012	62
Kuaishou	Social Media	2011	28.6
JD Digits	Fintech	2012	19.2

 Ant Financial (Alibaba's fintech platform), which was expected to dual list on the STAR ^[1] Market and HKEX ^[2], suspended its IPO in November 2020, due to China's new lending rules. It was expected to be the largest global IPO ever.

^[1] STAR refers to Science and Technology Innovation Board of the Shanghai Stock Exchange ^[2] HKEX refers to Hong Kong Stock Exchange

^[3] Red Chip refers to a company based in Mainland China but incorporated internationally and listed in Hong Kong.

*Based on disclosed figures (rounded-up). Data as of 30 November 2020. Source: *STAR Market website, CB Insights, PitchBook* and *Hurun Report*

Shanghai's STAR^[1] Market Establishes Its Position as Top Global IPO Destination

- Shanghai's STAR Market was among the top global IPO venues during 2020.
- Launched in 2019, STAR Market is a sub-market of the Shanghai Stock Exchange. It permits listings of loss-making technology companies, including pre-revenue biotech companies, and stock offerings or depository receipts of Red Chip^[3] companies.
- Semiconductor Manufacturing International Corp's US\$7.5 bn secondary listing on the STAR Market in July 2020 was the largest IPO in China since 2010. Upcoming IPOs on the STAR Market include ByteDance, Didi Chuxing, JD Digits and Kuaishou.



Key Highlights - STAR Market

U.S. Tech IPOs Pick Up Despite COVID-19

- U.S. tech IPOs picked up in the second half of 2020, after a lull at the onset of the COVID-19 pandemic.
- Airbnb was the largest IPO in 2020, raising US\$3.5 bn at a US\$101.6 bn valuation in December 2020. This was more than five times the US\$18 bn valuation at its private funding round in April 2020 and three times the US\$31 bn valuation at its pre-COVID-19 funding round in 2017. Snowflake was the largest software IPO to-date, raising US\$3.4 bn at a US\$33.2 bn valuation in September 2020.
- Tech companies are considering new methods of listing, such as SPAC^[1] and direct listings, as compared to traditional IPOs. During 2020, 259 SPACs were listed, and notable direct listings included Palantir and Asana.
- Upcoming tech IPOs include Affirm, Roblox and Wish.



Top 5 U.S. Tech IPOs During 2020^[2]

^[1]SPAC refers to special purpose acquisition company

^[2] In terms of IPO funds raised. Data as of 15 December 2020.

* Based on disclosed figures (rounded-up)

Source: Bloomberg and TechCrunch

2020 - Year of the SPAC

- A SPAC, or blank check company, has no commercial operations and is formed strictly to raise capital through an IPO to acquire an existing company.
- SPAC structures have existed for several years but gained attention recently. According to NASDAQ, SPACs have grown to comprise more than a third of all IPOs. During 2020, 259 SPACs were raised, which is about four times the number raised in 2019, with over US\$81.1 bn chasing acquisitions.
- SEA has jumped onto the SPAC bandwagon during 2020. Notable SPACs include Aspirational Consumer Lifestyle Corp., which raised US\$225 mn on the NYSE in September 2020, Bridgetown SPAC, which raised US\$550 mn on NASDAQ in October 2020 to invest in new economy companies in SEA, and Singapore-based Tiga Acquisition, which raised US\$240 mn on the NYSE in November 2020.



Source: Duff & Phelps' SPAC Market Report Fall 2020, SPAC Research, Forbes and PitchBook

Key Highlights - SPACs During 2020

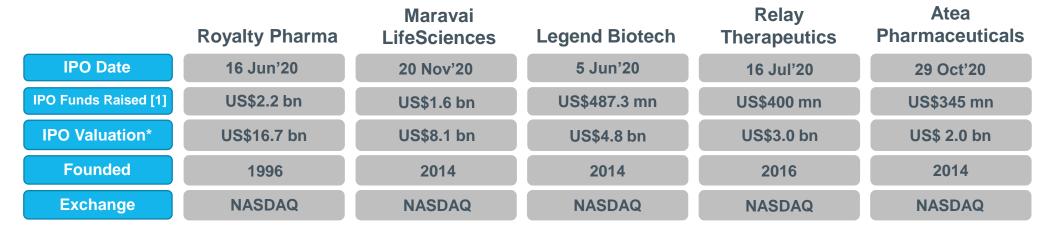
Live SPACs	Number of SPACs	Capital (US\$ bn)
Seeking Acquisition	209	68.7
Announced Acquisition	50	12.4
Total IPOs	259	81.1
Pre-IPO	55	11.6

Data as of 30 November 2020

"SPAC global IPO activity has soared past all time highs, with the number of IPOs year-to-date (ytd) at nearly 3x the 2019 total and proceeds ytd are greater than the aggregate from the last decade." – Duff & Phelps Market Report on Special Purpose Acquisition Companies, Fall 2020

U.S. Biotech IPOs Increase Driven by COVID-19

- U.S. Biotech IPOs have surged during 2020, driven by the heightened interest from investors in COVID-19 treatments and vaccines.
- NASDAQ has been the most established center for biotech IPOs. As of November 30, 2020, there were a total of 82 U.S. biotech IPOs during 2020—the highest number of U.S. biotech IPOs in the last five years.
- Royalty Pharma raised US\$2.2 bn as the largest biotech IPO during 2020 and the second largest biotech IPO ever. Its share price surged by 60% on its first day of trading.



Top 5 U.S. Biotech IPOs During 2020

In terms of IPO funds raised. Data as of 30 November 2020.
 *Based on disclosed figures (rounded-up)
 Source: Bloomberg, Business Insider and TechCrunch

- BFSI (Banking, Financial Services and Insurance) Includes banks, diversified financial services and insurance services
- Consumer discretionary Includes consumer durables, apparel, accessories and luxury goods, hotels, restaurants, and leisure
- **Consumer staples** Includes consumer-focused sectors such as food and beverages, breweries and distilleries, household and personal care products, and agricultural products
- Education schools, colleges and learning centers
- Energy Includes sub-classifications such as alternate energy, energy equipment and services, oil and gas drilling, and oil and gas equipment and services
- Healthcare Includes healthcare providers and services, healthcare equipment and supplies, and pharmaceuticals and biotechnology
- Industrials Broadly includes capital goods, construction and engineering, electrical equipment, industrial and trading conglomerates, commercial services and supplies, transportation services and infrastructure (includes air, marine and land transport)
- Materials Includes specialty and industrial chemicals, industrial gases, agricultural fertilizers and chemicals, metal and glass containers, paper and plastic products, metals and mining
- Media and communication Includes media, advertising, broadcasting and cable tv, movies and entertainment and publishing

- Professional services Includes consulting services, employment services, legal and professional organizations and environmental services
- **Real estate** Real estate management and development, REITs
- Retail Includes internet and catalog retail, multiline retail such as hypermarkets and supermarkets, and specialty retail
- SWF Sovereign wealth fund
- **Technology** Includes sub-classifications such as hardware, semiconductors, software, design, manufacturing and distribution of technology and technology services
- Telecommunication Includes telecommunication equipment and data service providers
- Utilities Power, water

Note: Due to rounding off, numbers presented throughout this report may not add up precisely to the totals provided and percentages may not precisely reflect the absolute figures.

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Annual Issue 2020 – Duff & Phelps' Transaction Trail Report is compiled based on deal information available during the December 2019 to November 2020 period for transactions in the Region.

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Editorial Team

Li Shang, Aanchal Kapoor, Kasvi Taneja, Tey Yuan Ting, Surabhi Arya

Contact Us

Duff & Phelps Singapore Pte Ltd 10 Collyer Quay #05-04/05 Ocean Financial Centre Singapore 049315 Board - +65 6589 9190 Fax - +65 6589 9199 www.duffandphelps.sg

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