

Transaction Trail

A look at mergers, acquisitions, private equity or venture capital deals and initial public offerings (IPOs) in Singapore, Malaysia and Indonesia

Annual Issue 2018

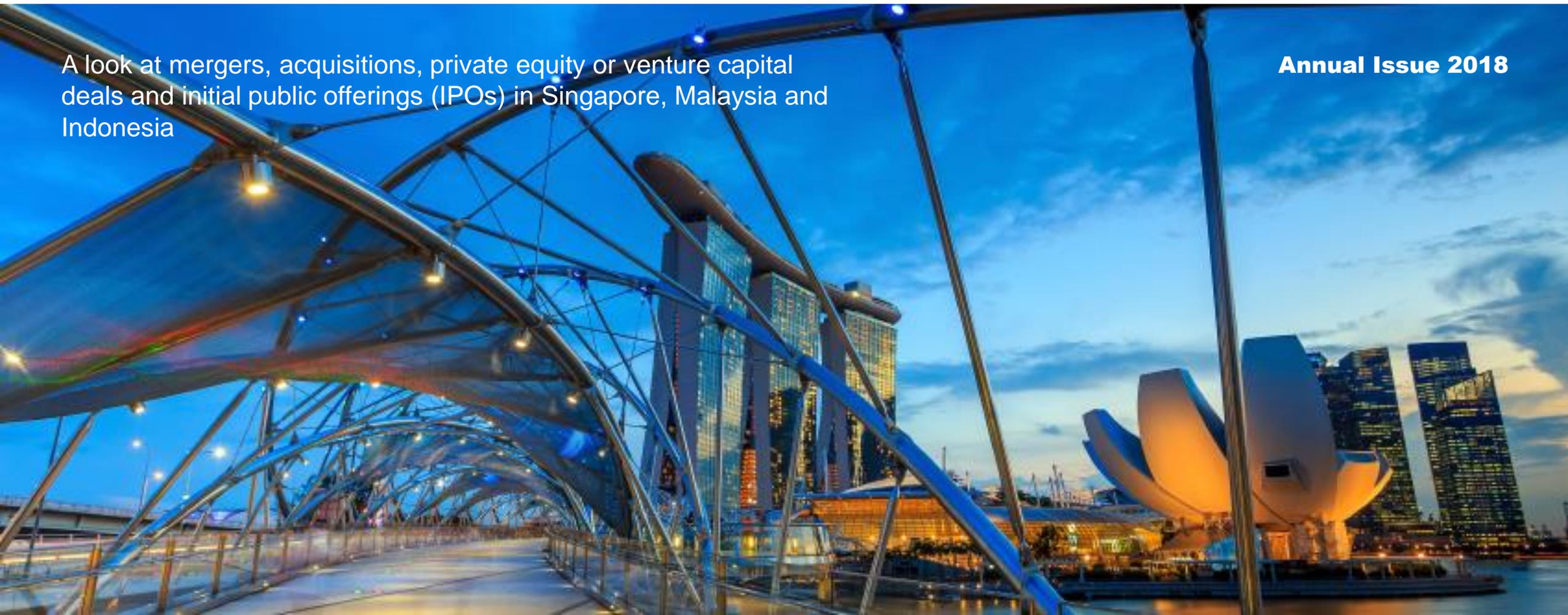


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Welcome Note

Welcome to Duff & Phelps Transaction Trail Annual Issue for 2018. As we publish our seventh Annual Issue this year, we are deeply grateful for the continued interest, encouragement and support shown by our readers over the years. This edition of 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 2018*.

Global M&A activity in 2018 maintained similar levels witnessed in 2017, continuing the momentum from H2-2017, with deal values reaching US\$2.0 trillion in H1-2018 alone. Despite the backdrop of higher interest rates and ongoing trade disputes, global M&A transaction value in 2018 managed to surpass 2017 levels at US\$3.5 trillion, with 39,651 transactions. (Source: Bloomberg).

During 2018, the region witnessed record levels of deal activity with over US\$136 billion of value from M&A, PE/VC and IPO, surpassing the historic highs (of approx. US\$130 billion) achieved in 2017. While the M&A market has maintained momentum in 2018, the growth was driven by an increase in high value outbound Sovereign Wealth Fund (SWF) deals from Singapore, supported by domestic M&A activity in the region.

Singapore continues to be the driving force behind the M&A, PE/VC and IPO deals in the region, contributing over US\$100 billion to the value. There have been about 10 plus deals, in 2018, valued at over a billion US dollars each.

Approximately 82% of the M&A value in Singapore has come from outbound acquisitions and this includes a robust level of activity by SWF’s. BFSI (Banking, Financial Service and Insurance) was the top sector overtaking Real Estate, which took second spot this year. Along with the Materials sector, the top 3 sectors accounted for approx. 67% of total M&A deal values in Singapore.

The PE/VC investments in Singapore in 2018 were below the record deal values achieved in 2017 (which were driven by two mega buyouts) at US\$6.6 billion. However, the activity has been considerably strong in 2018 witnessing higher deal volume at 154 deals compared to 125 deals in 2017 and the deal values in 2018 being significantly higher than years prior to 2017.

The IPO capital raised in Singapore has been lackluster in 2018 raising US\$523 million, and is significantly lower compared to US\$3.7 billion IPO capital raised in 2017 (which was driven by a sizeable listing by NetLink Trust).

Malaysia has seen a significant reduction in deal activity with total deals in M&A, PE/VC and IPO valued at US\$12.5 billion in 2018 compared to the record levels last year with deal values at US\$20.3 billion. This could be due to political changes and businesses taking a wait-and-watch approach on strategic growth initiatives. However, we have seen the momentum pick up towards the end of the year with a few notable transactions.

On the other hand, the deal landscape was fairly active in Indonesia, which witnessed several sizeable transactions across traditional as well as new economy sectors. The M&A, PE/VC and IPO values for 2018 in Indonesia have more than doubled to US\$19.5 billion, compared to US\$9.6 billion last year.

Looking back over 7 years of tracking transactions in the region, we are intrigued to see certain dynamic shifts in the transaction landscapes and especially note the cyclicity of some of these changes. A notable change has been in the overall deal values as well as the size of the transactions, which have substantially increased over time, especially for Singapore. The appetite for outbound transactions as well as the number of mega deals continues to grow. On the other hand, the sectors driving M&A have shifted from traditional sectors to more new economy sectors and now slowly trending back to traditional sectors.

One of the most impactful trends has been felt in the PE/VC investment space, and we can proudly say that our region has now come of age in its ability to attract more alternative investment funds as evidenced by a significant growth in dollar values invested. While the growth has been dramatic in the internet and technology-related sectors, there have been several high value investments in traditional sectors as well, especially through buy-out deals. We are also witnessing several new funds being successfully raised with a dedicated Southeast Asia investment focus and increasing allocations from global funds to the region.

It will be interesting to observe how the future unfolds amidst such growth opportunities, changes to asset-allocation strategies, regulatory changes, trade tensions and other global uncertainties.

We hope you enjoy reading this report and we look forward to your feedback.

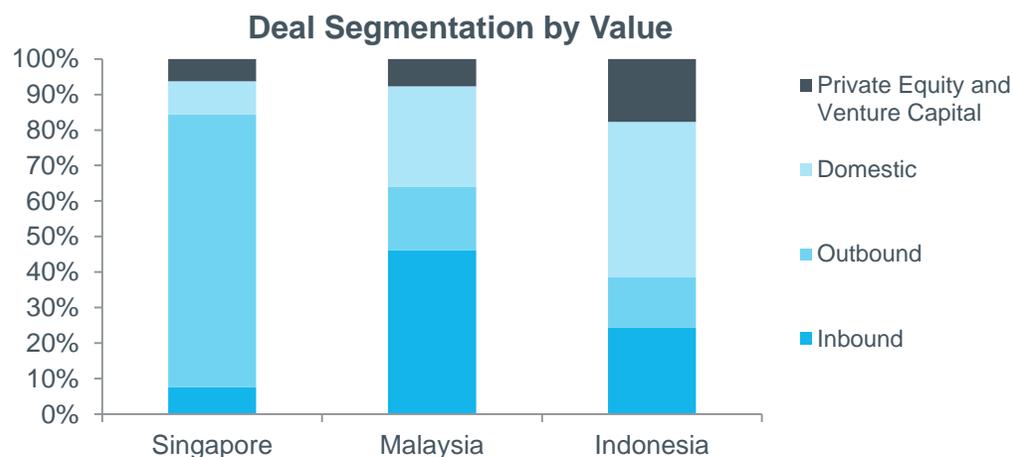


Srividya C. Gopalakrishnan
Managing Director
Duff & Phelps Singapore Pte Ltd

Annual 2018 Deal Round-Up

Deal Summary	Singapore		Malaysia		Indonesia		Grand Total	
	Deal Vol.	Deal Value (US\$ Mn)	Deal Vol.	Deal Value (US\$ Mn)	Deal Vol.	Deal Value (US\$ Mn)	Deal Vol.	Deal Value (US\$ Mn)
2018 (YTD Nov' 18)								
Inbound	143	7,985	93	5,726	76	4,457	312	18,167
Outbound	315	81,140	57	2,209	13	2,613	385	85,962
Total Cross border	458	89,125	150	7,935	89	7,069	697	104,129
Domestic	230	9,912	188	3,504	41	8,038	459	21,454
Total Merger and Acquisitions	688	99,037	338	11,439	130	15,108	1,156	125,583
Regional Deals							55	1,753
Net Total Mergers and Acquisitions							1,101	123,830
Private Equity and Venture Capital	154	6,592	33	953	37	3,249	224	10,794
Total M&A, PE & VC	842	105,628	371	12,392	167	18,357	1,325	134,624
Initial Public Offerings (IPOs)	15	523	22	150	57	1,106	94	1,779
Total M&A, PE & VC, IPOs	857	106,151	393	12,542	224	19,462	1,419	136,403

The overall transaction value in the region saw yet another record high set in 2018 with over US\$136 billion, exceeding historic record levels achieved in 2017 of US\$130 billion, and was driven by high value outbound SWF deals.



Deal Highlights

A total of 1,419 M&A, PE/VC investments, IPO deals were recorded in Singapore, Malaysia and Indonesia (the “region”) during 2018* (defined as the period between December 2017 and November 2018) with a combined value of US\$136.4 billion.

Singapore recorded a total M&A deal volume of 688 deals during this period, valued at US\$99.0 billion, compared to US\$75.4 billion in 2017. Outbound deals accounted for about 82% of the total deal value compared to 72% in 2017, followed by domestic deals (10% of total deal value) which stayed at US\$9.9 billion compared to US\$9.6 billion in 2017. Inbound deals accounted for 8% of total transacted value.

During the same period, Singapore witnessed 154 PE/VC investments amounting to approximately US\$6.6 billion.

IPO listings in Singapore were significantly below levels reached in 2017, with IPO capital raised in 2018 amounting to approx. US\$523 million compared to US\$3.7 billion for 2017.

Malaysia recorded a total of 338 M&A deals during the year, valued at US\$11.4 billion, where inbound deals accounted for majority of deal value by capturing a share of 50%. This is lower than US\$17.6 billion for last year.

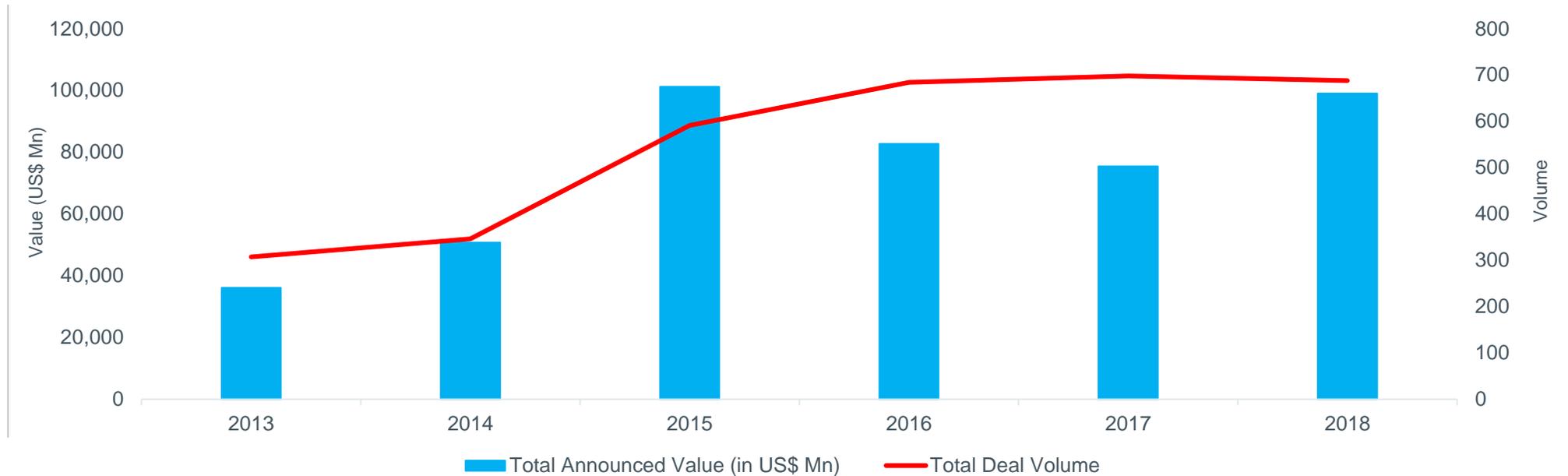
Indonesia recorded an increase in M&A deal value for 2018 with M&A deals amounting to approximately US\$15.1 billion compared to US\$6.6 billion in 2017.

Regional PE/VC investments were fairly active with 224 PE/VC investments in the region for 2018 accounting for a total of US\$10.8 billion in 2018.

Singapore 2018 Deal Round-Up

M&A deal volume has maintained its momentum over the past three years, with growth in 2018 driven by high-value outbound SWF deals from Singapore

Singapore M&A Yearly Trend Analysis

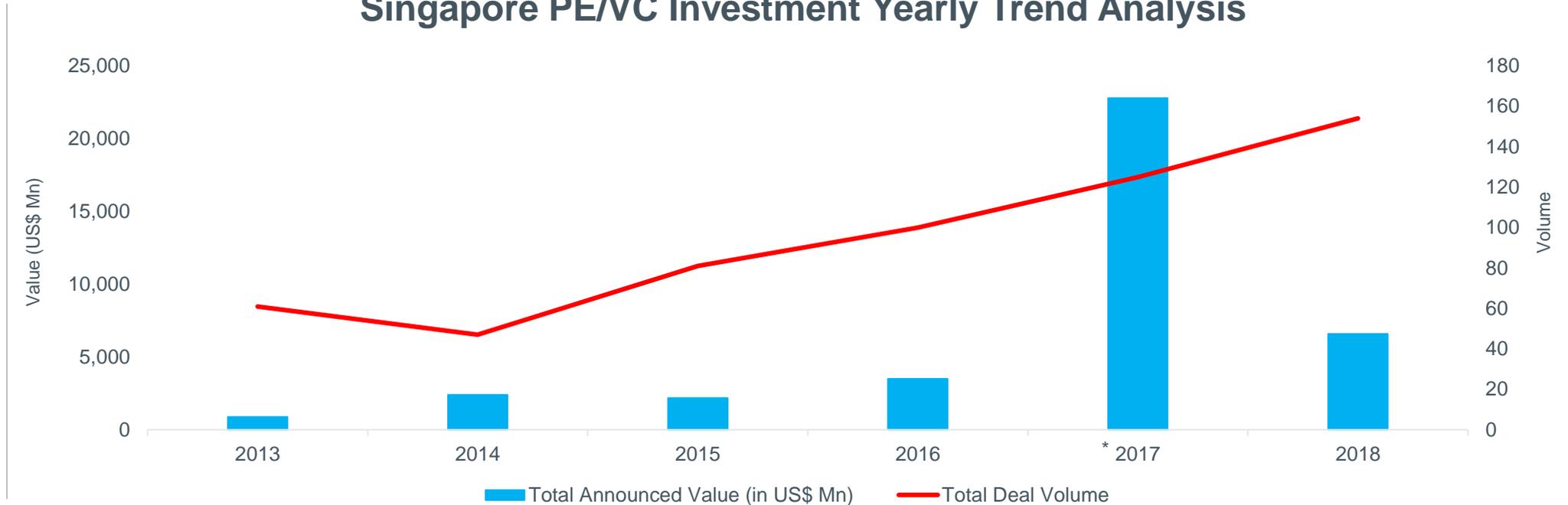


2013		2014		2015		2016		2017		2018	
Value (US\$ Mn)	Volume										
36,129	307	50,728	346	101,171	591	82,712	684	75,436	698	99,037	688

Singapore 2018 Deal Round-Up

PE/VC investment in 2018 remained fairly active but was below the record high, set in 2017, with 154 PE/VC investments accounting for a total of US\$6.6 billion in 2018.

Singapore PE/VC Investment Yearly Trend Analysis



2013		2014		2015		2016		2017		2018	
Value (US\$ Mn)	Volume										
883	61	2,400	47	2,182	81	3,503	100	22,787	125	6,592	154

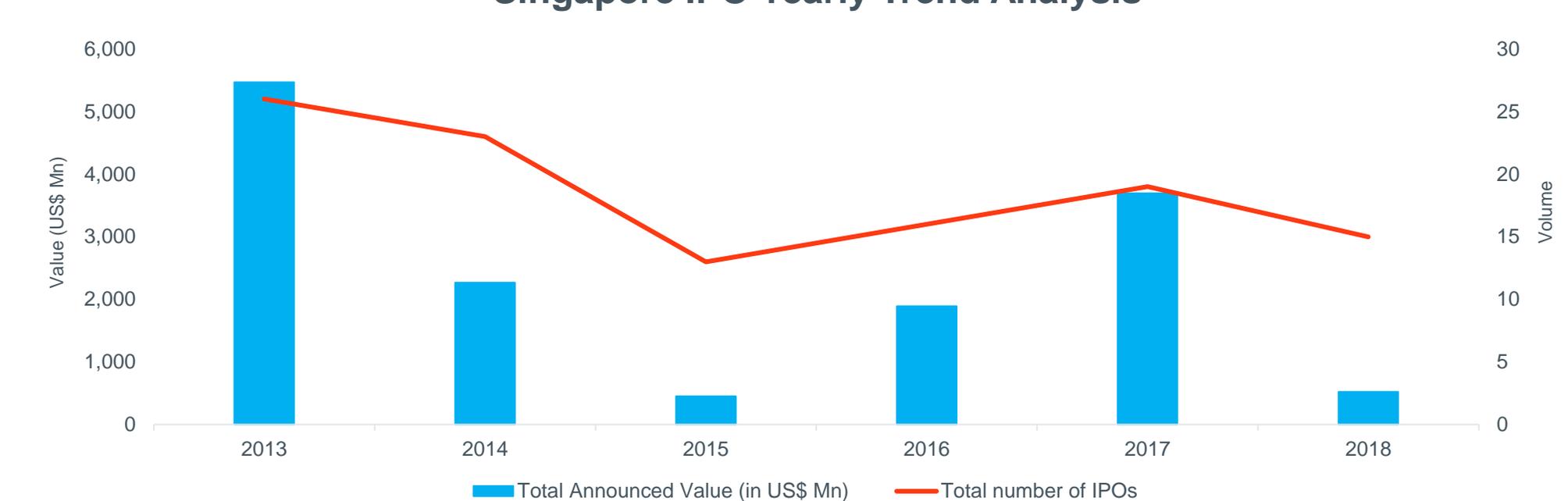
* 2017 driven by sizeable PE/VC buyouts, including the privatization of Global Logistic Properties Limited, and the acquisition of Equis Energy which accounted for more than 70% of PE/VC deal value in Singapore

Singapore 2018 Deal Round-Up

IPO performance saw a significant decline for 2018 compared with some of the earlier years.

2018 witnessed a total of 15 IPOs raising a total capital of US\$523 million.

Singapore IPO Yearly Trend Analysis

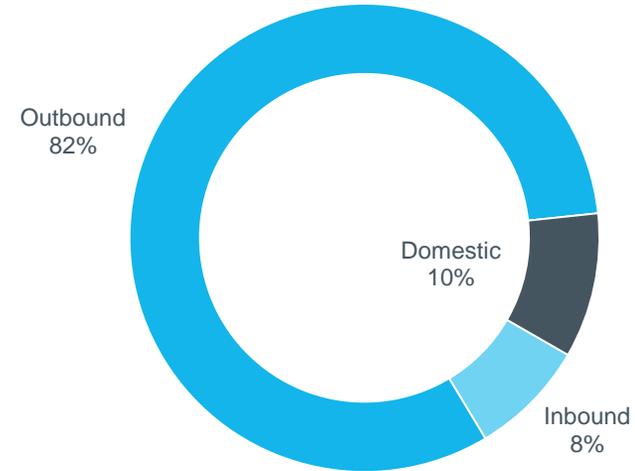


2013		2014		2015		2016		2017		2018	
Capital Raised (US\$ Mn)	Listing Volume										
5,469	26	2,270	23	451	13	1,893	16	3,695	19	523	15

Overview of Singapore M&A Activity



M&A Deal Value - % Share

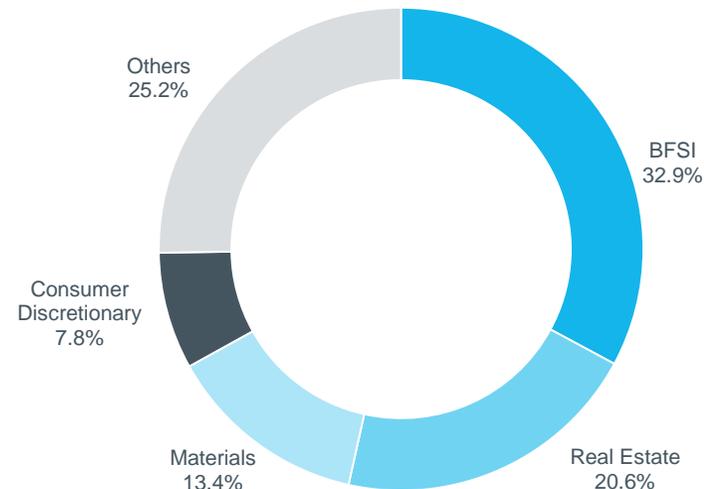


A total of 688 M&A transactions took place in 2018, with a total announced value of US\$99.0 billion.

BFSI was the dominant sector in 2018 with a total deal value of US\$32.6 billion accounting for approximately a third of total value.

Real Estate sector was the next most active sector which accounted for approximately 20% of the total value and was the top sector for domestic M&A deals in Singapore.

M&A Deal Value by Sector



Inbound

Top Sector:
Utilities



Outbound

Top Sector:
BFSI



Domestic

Top Sector:
Real Estate

Overview of Singapore M&A Activity

Top M&A Deals in Singapore during 2018

Acquirer	Target	Target Sector	Value (US\$ Mn)	% Stake Acquired	Type
GIC Pte Ltd and others*	Thomson Reuters Corp (F&R business)	BFSI	17,000	55	Majority
Temasek Holdings Pte Ltd, GIC Pte Ltd and others*	Ant Financial Services Co Ltd	BFSI	14,000	Not disclosed	N/A
GIC Pte Ltd, The Carlyle Group and others*	Akzo Nobel NV (Specialty Chemicals unit)	Materials	12,538	100	Acquisition
GIC Pte Ltd and others*	AccorInvest	Consumer Discretionary	5,400	57.8	Majority
Temasek Holdings Pte Ltd	Bayer AG	Healthcare	3,707	3.6	Minority
GIC Pte Ltd, Elliott Management Corp and others*	FirstEnergy Corp	Utilities	2,500	Not disclosed	N/A
GIC Pte Ltd	Vinhomes Joint Stock Company	Real Estate	1,300	Not disclosed	N/A

*Others refers to a consortium of investors.

GIC, and Temasek Holdings along with its consortium partners, continue to dominate the top M&A deal value rankings with significant outbound investments made in the BFSI, Materials and Healthcare sectors. Notable deals include the investment by GIC and its consortium partners into the Financial & Risk business of Thomson Reuters earlier this year.

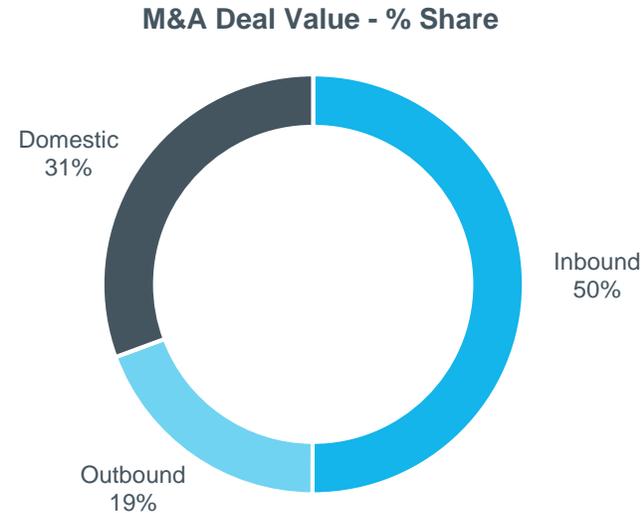
Overview of Singapore M&A Activity

Top M&A (Non-Sovereign Wealth Fund) Deals in Singapore during 2018

Acquirer	Target	Target Sector	Value (US\$ Mn)	% Stake Acquired	Type
San Miguel Corp	Masin-AES Pte Ltd	Utilities	1,900	100	Acquisition
ESR-REIT	Viva Industrial Trust	Real Estate	1,080	100	Acquisition
Ho Bee Land Ltd	Frasia Properties Sarl	Real Estate	863	100	Acquisition
CapitaLand Ltd	16 multifamily properties	Real Estate	835	100	Acquisition
PT Barito Pacific Tbk	Star Energy Group Holdings Pte Ltd	Energy	755	67	Majority

Excluding SWF deals, significant deal activity in 2018 included San Miguel Corp's acquisition of Masin-AES Pte Ltd for US\$1.9 billion, ESR-REIT's merger with Viva Industrial Trust for US\$1.1 billion, Ho Bee Land's property acquisition in the UK for US\$863 million, and Capitaland's acquisition of a multifamily property portfolio in the US for US\$835 million.

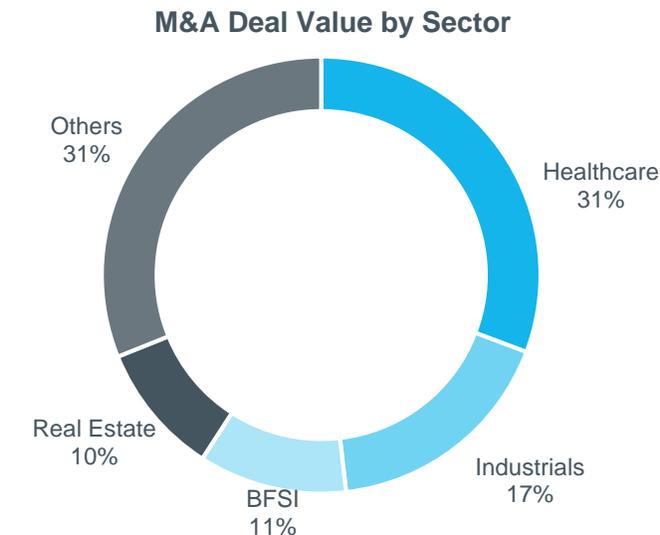
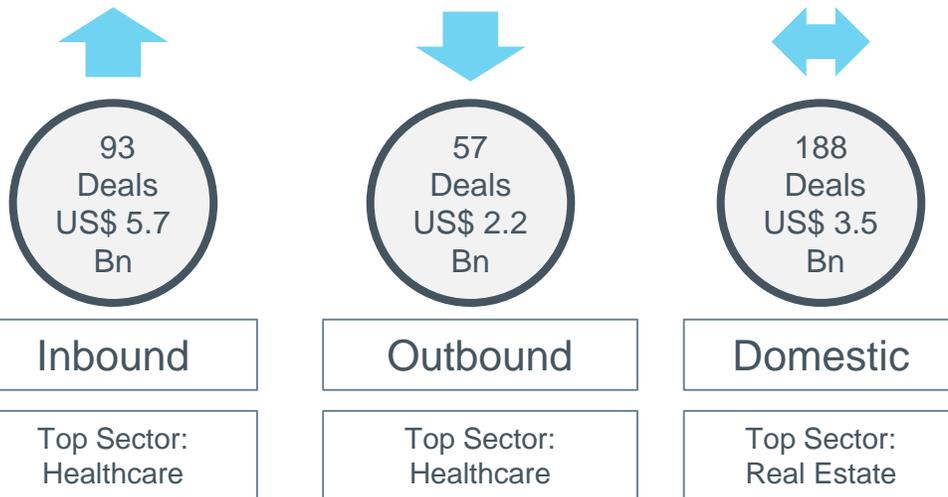
Overview of Malaysia M&A Activity



Malaysia witnessed M&A deal values at US\$11.4 billion, which was below 2017 and 2016 levels.

The Healthcare sector in Malaysia witnessed high-value inbound and outbound M&A deal activity, with Real Estate continuing to be the top sector for domestic M&A.

The two largest M&A transactions in 2018 for Malaysia were the acquisition by Mitsui & Co Ltd of a 16% stake in IHH Healthcare Bhd from Khazanah National Bhd; and the acquisition of a 30% stake in Acibadem Saglik Yatirimlari Holding AS by IHH Healthcare Bhd.



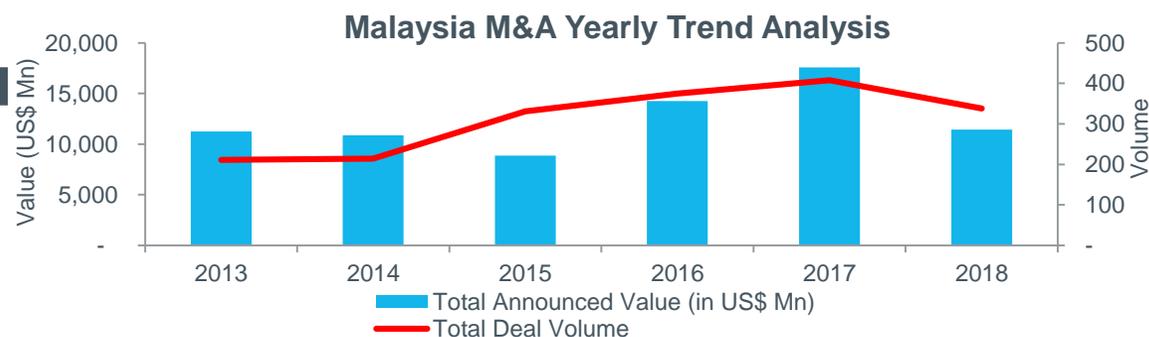
Overview of Malaysia M&A Activity

Top M&A Deals in Malaysia during 2018

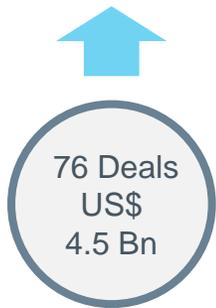
Acquirer	Target	Target Sector	Value (US\$ Mn)	% Stake Acquired	Type
Mitsui & Co Ltd	IHH Healthcare Bhd	Healthcare	2,000	16	Minority (Increasing stake from 16.9% to 32.9%)
IHH Healthcare Bhd	Acibadem Saglik Yatirimlari Holding AS	Healthcare	705	30	Majority (Increasing stake from 60% to 90%)
OMV AG	Sapura Upstream Sdn Bhd	Energy	625	50	Majority
Pengurusan Aset Air Bhd	Syarikat Pengeluar Air Sungai Selangor Sdn Bhd (SPLASH)	Utilities	616	100	Acquisition
IHH Healthcare Bhd	Fortis Healthcare Ltd	Healthcare	584	31*	Minority
Incline B IrishCo One Ltd	Red Aircraft Holdings 2 Co., Ltd	Industrials	549	100	Acquisition
Fly Aladdin Holdings Limited	Red Aircraft Holdings 3 Co., Ltd, Red Aircraft Holdings 4 Co., Ltd	Industrials	453	100	Acquisition
Albukhary Corp Sdn Bhd	Sabah Forest Industries Sdn Bhd	Materials	310	100	Acquisition

*IHH Healthcare Bhd may further increase its stake in Fortis Healthcare Ltd through on-going Mandatory General Offer.

2013		2014		2015		2016		2017		2018	
Value (US\$ Mn)	Volume										
11,243	211	10,871	214	8,870	331	14,253	375	17,573	408	11,439	338



Overview of Indonesian M&A Activity



Inbound

Top Sector:
BFSI



Outbound

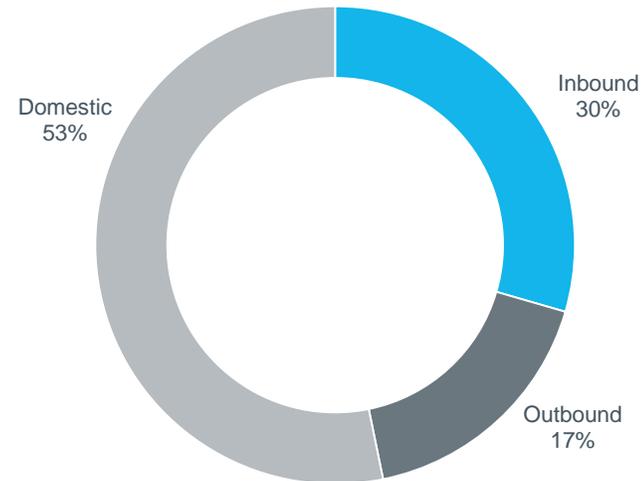
Top Sector:
Energy



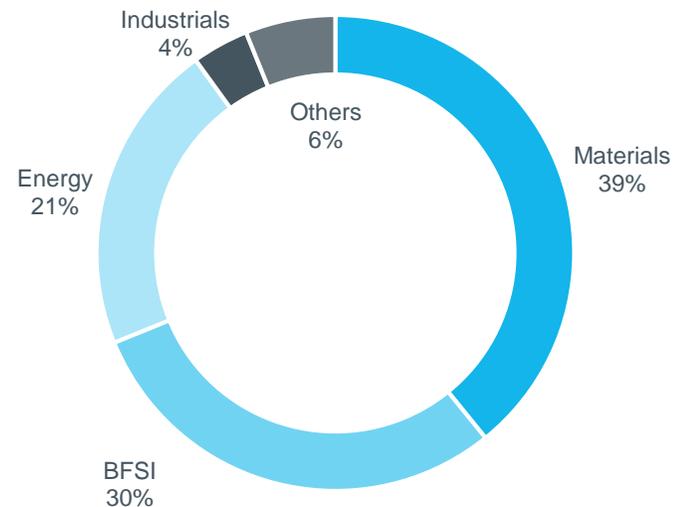
Domestic

Top Sector:
Materials

M&A Deal Value - % Share



M&A Deal Value by Sector



M&A deal volume reached a total of 130 deals in Indonesia with a total announced deal value of approximately US\$15.1 billion. Domestic M&A took up the majority share (53%) of total deal value.

Materials was the largest sector in value terms (reaching approximately US\$5.9 billion in 2018), followed by the BFSI and Energy sectors.

Overview of Indonesian M&A Activity

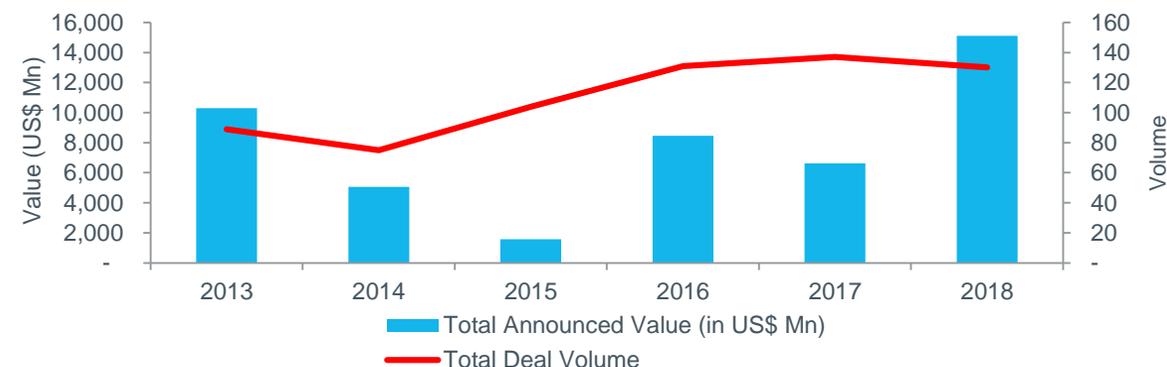
Top M&A Deals in Indonesia during 2018

Acquirer	Target	Target Sector	Value (US\$ Mn)	% Stake Acquired	Type
PT Indonesia Asahan Aluminium Tbk	Grasberg Mine	Materials	3,850	90.6	Acquisition
Mitsubishi UFJ Financial Group Inc	PT Bank Danamon Indonesia Tbk	BFSI	2,363	40	Minority
Perusahaan Gas Negara Persero Tbk	PT Pertamina Gas	Energy	1,150	51	Majority
PT Adaro Energy Tbk	Kestrel Underground Coal Mine	Energy	1,080	38	Minority
PT United Tractors Tbk	PT Agincourt Resources	Materials	918	95	Acquisition
PT Semen Indonesia Persero Tbk	PT Holcim Indonesia Tbk	Materials	917	81	Majority

2013		2014		2015		2016		2017		2018	
Value (US\$ Mn)	Volume										
10,306	89	5,065	75	1,570	104	8,449	131	6,618	137	15,108	130

Indonesia deal activity in 2018 reached a record of US\$15.1 billion in deal value, and was supported by sizeable deals in the Materials sector where foreign shareholders have sold significant stakes to Indonesia-based acquirers.

Indonesia M&A Yearly Trend Analysis



Private Equity / Venture Capital Investment Snapshot in the Region

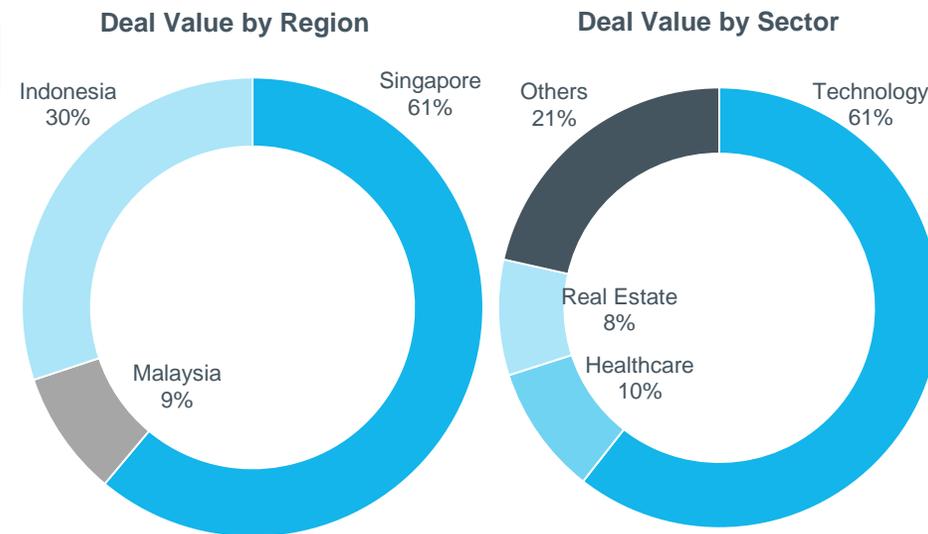
Top PE/VC Deals in the region for 2018

Investor(s)	Investee	Sector	Country	Investment Value (US\$ Mn)
Toyota Motor Corp, Macquarie Group Limited, Mirae Asset Capital Co., Ltd. and others*	GrabTaxi Holdings Pte Ltd	Technology	Singapore	2,000
Dianping.com, KKR & Co LP, Tencent Holdings Ltd and others*	PT GO-JEK Indonesia**	Technology	Indonesia	1,500
SoftBank Group Corp and others*	PT Tokopedia	Technology	Indonesia	1,000
Bain Capital Private Equity LP	DSM Sinochem Pharmaceuticals Pte Ltd	Healthcare	Singapore	582
Allianz Real Estate	Ocean Financial Centre	Real Estate	Singapore	390
Standard Chartered Private Equity Ltd and others*	Tat Hong Holdings Ltd	Industrials	Singapore	311
CVC Capital Partners Ltd	Munchy Food Industries Sdn Bhd	Consumer Staples	Malaysia	283
YY Inc and others*	Bigo Technology Pte Ltd	Technology	Singapore	272
Hyundai Motor Co, Kia Motors Corp	GrabTaxi Holdings Pte Ltd	Technology	Singapore	250

* Others refers to a consortium of investors.

** Go-Jek is reported to be finalizing a US\$2.0 billion funding round in December 2018, at a valuation of US\$10.0 billion.

Regional PE/VC	2014		2015		2016		2017		2018	
	Deal Volume	Deal Value (US\$ Mn)								
Singapore	47	2,400	81	2,182	100	3,503	125	22,787	154	6,592
Malaysia	13	1,084	21	46	27	1,135	23	1,037	33	953
Indonesia	6	230	26	460	33	1,474	35	2,395	37	3,249



PE/VC deals transacted in 2018 amounted to 224 deals with combined deal value of approximately US\$ 10.8 billion. For most large PE/VC investments in the Technology sector, investors included both VC funds and corporates. Singapore was the largest contributor in the region with total deal value of approximately US\$6.6 billion.

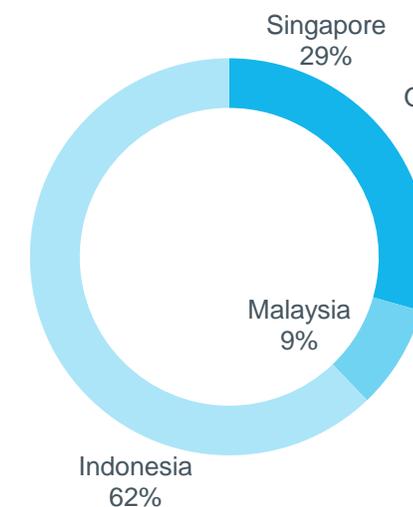
Technology was the top contributing sector for PE/VC deals in the region, accounting for 61% of deal values followed by Healthcare and Real Estate sectors.

Initial Public Offerings in the Region

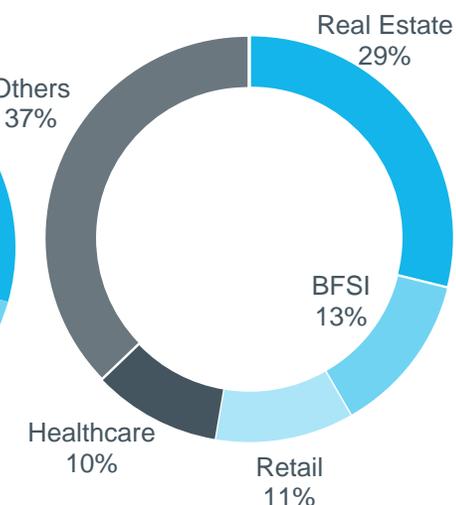
Top Initial Public Offerings in the Region during 2018

Company Name	Capital Raised (US\$ Mn)	Sector	IPO Exchange
Sasseur Real Estate Investment Trust	300	Real Estate	Singapore Exchange
PT Bank Brisyariah Tbk	96	BFSI	Jakarta Exchange
PT Medikaloka Hermina Tbk	94	Healthcare	Jakarta Exchange
PT Map Aktif Adiperkasa Tbk	63	Retail	Jakarta Exchange
PT Indonesia Kendaraan Terminal Tbk	60	Industrials	Jakarta Exchange
PT Surya Pertiwi Tbk	59	Materials	Jakarta Exchange
MNC Studios International Tbk	57	Consumer Discretionary	Jakarta Exchange
Pollux Properti Indonesia Tbk	55	Real Estate	Jakarta Exchange
PT Bank Tabungan Pensiunan Nasional Syariah Tbk	55	BFSI	Jakarta Exchange
Koufu Group Ltd	55	Retail	Singapore Exchange
PT Asuransi Tugu Pratama Indonesia Tbk	50	BFSI	Jakarta Exchange
Mi Equipment Holdings Bhd	49	Industrials	Bursa Malaysia

IPO Deal Value by Region



IPO Deal Value by Sector



IPO listings in Singapore and Malaysia for 2018 were significantly below their 2017 levels, with total capital raised of US\$523 million and US\$150 million respectively.

Indonesia recorded a new high for IPO listings over the past five years, with US\$1.1 billion capital raised during 2018.

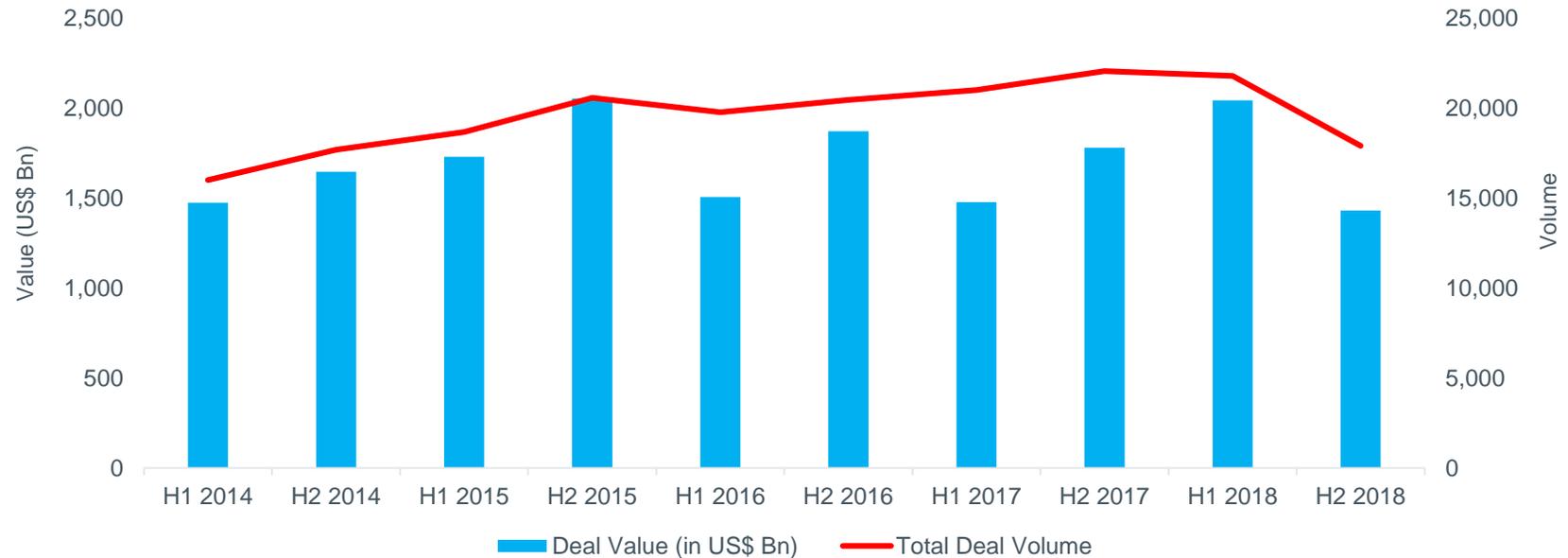
Regional IPOs	2014		2015		2016		2017		2018	
	Listing Volume	Capital Raised (US\$ Mn)								
Singapore	23	2,270	13	451	16	1,893	19	3,695	15	523
Malaysia	13	1,011	8	744	11	214	14	1,647	22	150
Indonesia	19	636	13	765	14	907	26	625	57	1,106

Special Features I: Global M&A Trends

During 2018 there were a total of 39,651 transactions, representing an aggregate deal value of US\$3,472 billion.

Global M&A deal activity edged higher in 2018 in terms of deal value but witnessed a drop in number of M&A transactions compared to 2017.

Global M&A Half-Yearly Trend Analysis

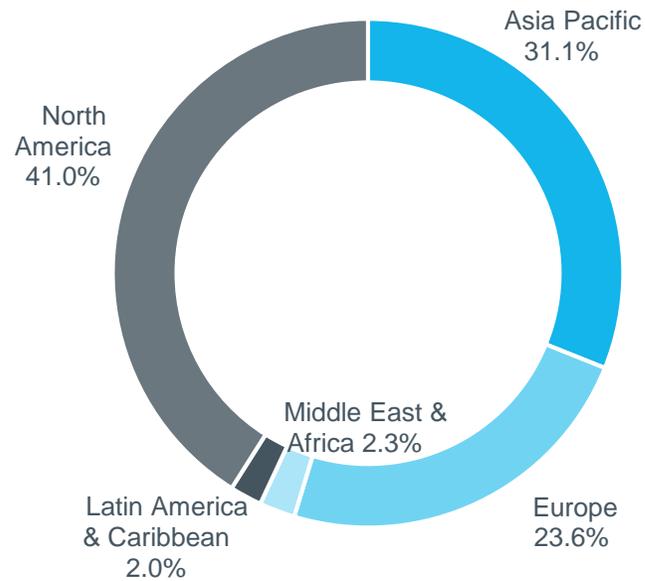


2014		2015		2016		2017		2018	
Value (US\$ Bn)	Volume								
3,118	33,668	3,779	39,200	3,374	40,192	3,255	43,023	3,472	39,651

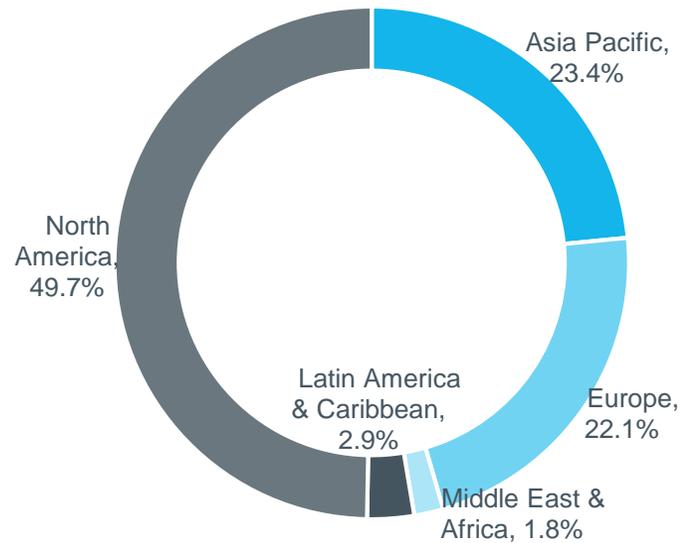
Source: Bloomberg

Special Features I: Global M&A Trends

Global Regional Breakout by Volume



Global Regional Breakout by Value



Approximately 41% of global deal volume and 50% of deal value occurred in North America for 2018.

Asia Pacific remained a key contributor ahead of Europe, accounting for 23% of global M&A values in 2018, but this was lower compared to 2017 where it had accounted for 29% of deal value.

Special Features I: Global M&A Trends

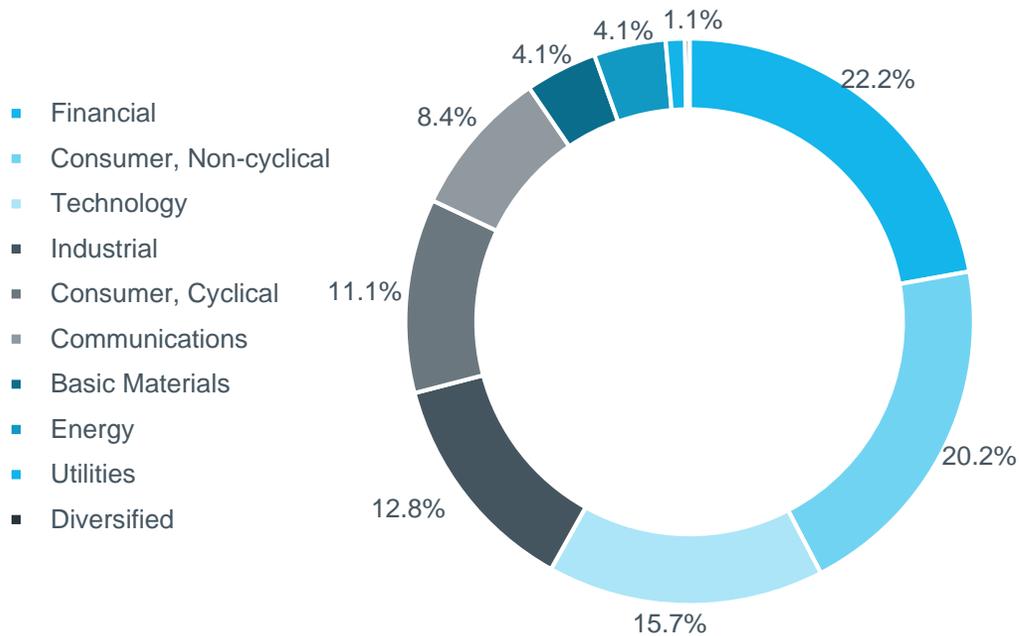
Top 10 Global M&A Deals during 2018

Acquirer	Target	Target Sector	Target Region	Value (US\$ Mn)	Proposed Stake Acquisition (%)	Type
Takeda Pharmaceutical Co Ltd	Shire PLC	Consumer, Non-cyclical	North America	79,700	100	Acquisition
Cigna Corp	Express Scripts Holding Co	Consumer, Non-cyclical	North America	67,000	100	Acquisition
T-Mobile US Inc	Sprint Corp	Communications	North America	57,806	100	Acquisition
Comcast Corp	Sky PLC	Communications	Europe	50,714	100	Acquisition
International Business Machines Corporation	Red Hat Inc	Technology	North America	31,803	100	Acquisition
Energy Transfer LP	Energy Transfer Operating LP	Energy	North America	27,500	100	Acquisition
Marathon Petroleum Corp	Andeavor	Energy	North America	23,300	100	Acquisition
Vodafone Group PLC	Liberty Global's Assets (Germany and Eastern Europe)	Communications	Europe	21,813	100	Acquisition
E.ON SE	Innogy SE	Utilities	Europe	21,528	76.8	Majority
Harris Corp	L3 Technologies Inc	Industrial	North America	19,552	100	Acquisition

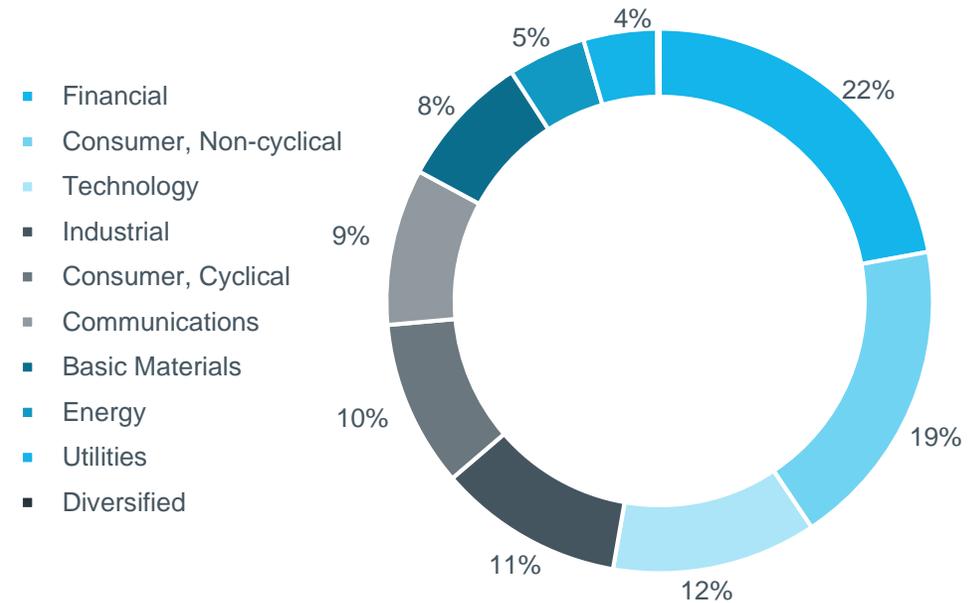
Source: Bloomberg

Special Features I: Global M&A Trends

Transaction Sector Breakout by Volume



Transaction Sector Breakout by Value



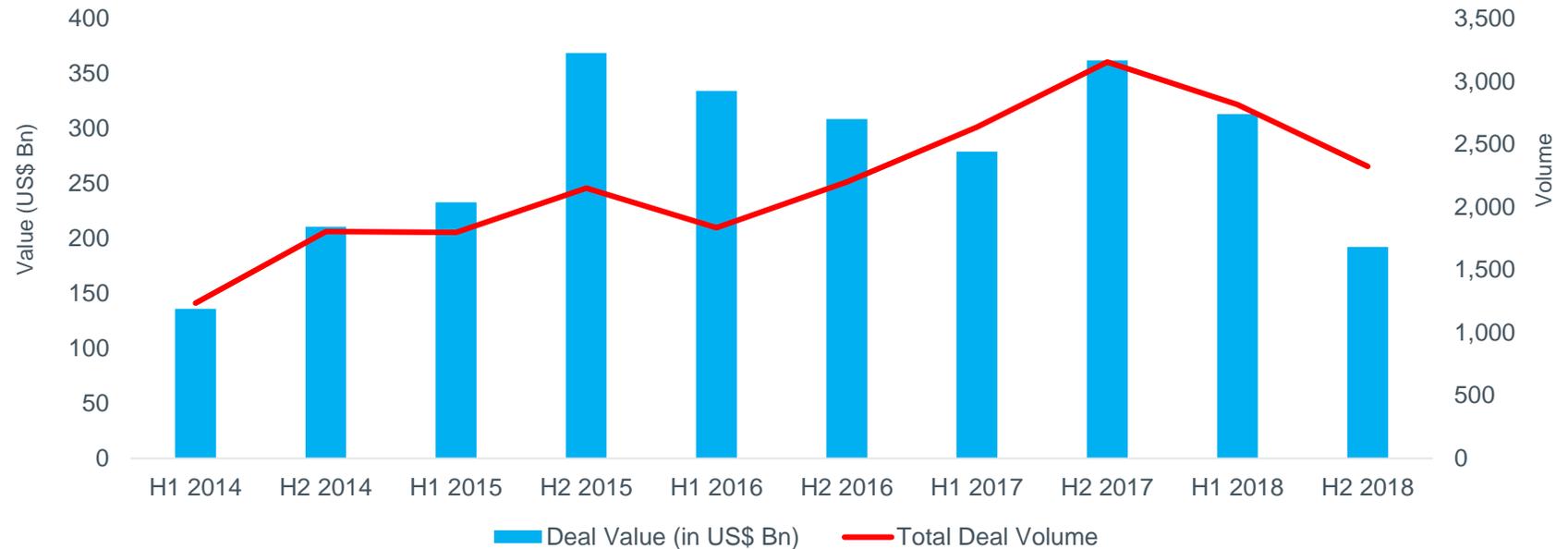
The Financial sector continued to be the most acquisitive in 2018 in terms of both volume and value, followed by the Consumer Non-cyclical sector.

Special Features II: China M&A Trends

Overall, China M&A witnessed a decline both in deal value and volume terms for 2018 compared to 2017.

Deal value declined by 21% to US\$506 billion, while deal volume declined by 11% to 5,140 deals in 2018.

China M&A Half-Yearly Trend Analysis

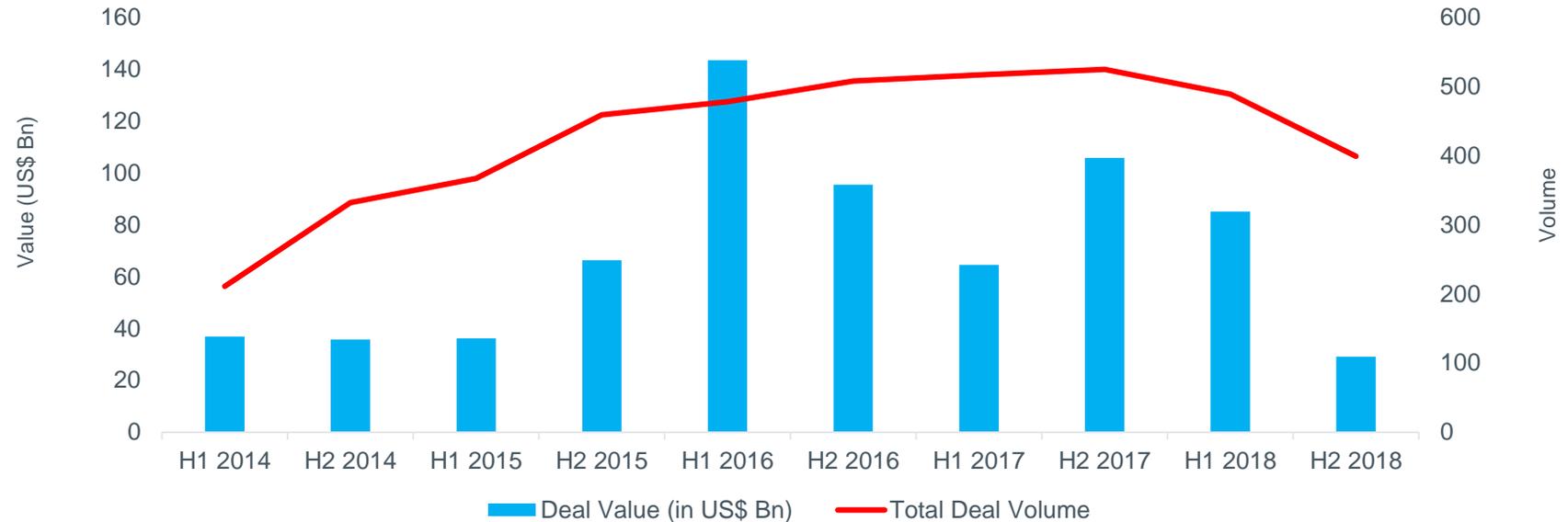


2014		2015		2016		2017		2018	
Value (US\$ Bn)	Volume								
347	3,041	602	3,949	643	4,037	641	5,792	506	5,140

Special Features II: China M&A Trends

China's outbound M&A witnessed a decline in deal value in 2018, that could be due to continued impact of regulations to curb capital outflows from China, and due to increased global scrutiny on such transactions.

China Outbound M&A Half-Yearly Trend Analysis



2014		2015		2016		2017		2018	
Value (US\$ Bn)	Volume								
73	543	103	826	239	986	170	1042	114	888

Special Features II: China M&A Trends

Top 10 China M&A Deals during 2018

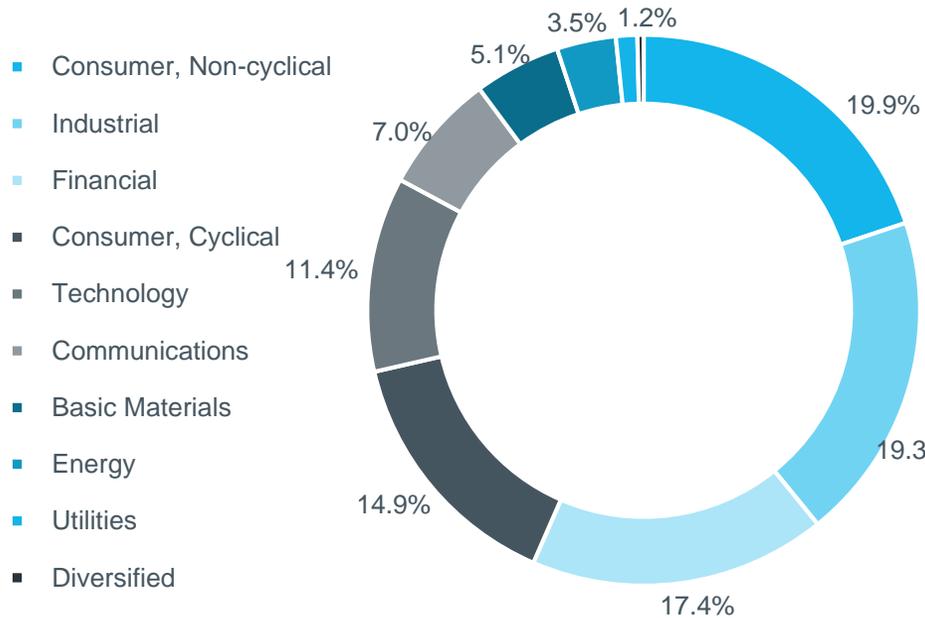
Acquirer	Target	Target Sector	Value (US\$ Mn)	Proposed Stake Acquisition (%)	Type
Temasek Holdings Pte Ltd, GIC Pte Ltd and others*	Ant Financial Services Co Ltd	Financial	14,000	Not disclosed	N/A
Wanhua Chemical Group Co Ltd	Yantai Wanhua Chemical Co Ltd	Basic Materials	8,200	100	Acquisition
Yunnan Baiyao Group Co Ltd	Yunnan Baiyao Holding Co Ltd	Consumer, Non-cyclical	7,290	100	Acquisition
Hanergy Mobile Energy Holding Group Ltd	Hanergy Thin Film Power Group Ltd	Technology	7,000	26	Acquisition (Increasing stake from 74% to 100%)
Tencent Holdings Ltd, Suning.com Co Ltd, and others*	Dalian Wanda Commercial Management Group Co Ltd	Financial	5,364	14	Minority
BAIC BluePark New Energy Technology Co Ltd	Beijing New Energy Automobile Co Ltd	Consumer, Cyclical	4,505	100	Acquisition
Zhejiang Century Huatong Group Co Ltd	Shengyue Network Technology Shanghai Co Ltd	Technology	4,340	100	Acquisition
Bayerische Motoren Werke AG	BMW Brilliance Automotive Ltd	Consumer, Cyclical	4,167	25	Majority (Increasing stake from 50% to 75%)
Tianqi Lithium Corp	Sociedad Quimica y Minera de Chile SA	Basic Materials	4,066	24	Minority
Xiamen Unigroup Xue Co Ltd	Xinjiang Production & Construction Corp Nongbashi	Basic Materials	3,563	100	Acquisition

*Others refers to a consortium of investors.

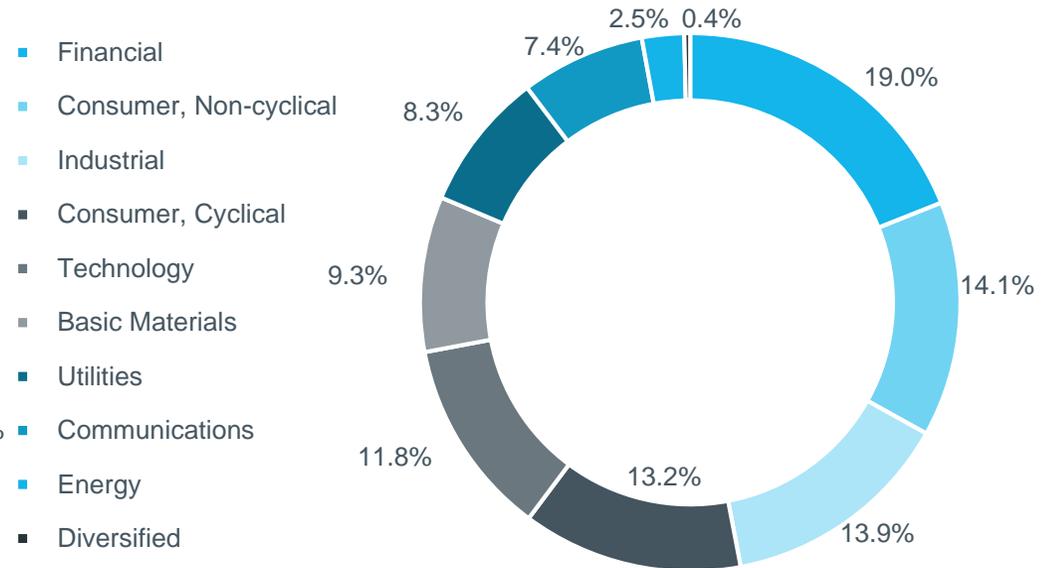
Special Features II: China M&A Trends

China M&A Trends

Transaction Sector Breakout by Volume



Transaction Sector Breakout by Value



The Consumer, Non-cyclical and Industrial sectors led the China M&A market in terms of the deal volume however, the Financial sector captured the larger deals in terms of overall deal value.

Special Features III: Tech Landscape

Top 10* Tech Start-up Deals in the Region during 2018

Target	Acquirer/Investor	Target Country	Target Sub-Sector	Proceeds (US\$ Mn)	Deal Type
GrabTaxi Holdings Pte Ltd	Toyota Motor Corp, Macquarie Group Limited, Hyundai Motor Co, Booking Holdings Inc and others*	Singapore	Transportation	2,450	Investment
PT GO-JEK Indonesia**	Dianping.com, KKR, Tencent Holdings Ltd, PT Astra International Tbk and others	Indonesia	Transportation	1,650	Investment
PT Tokopedia	SoftBank Group Corp and others	Indonesia	E-Commerce	1,000	Investment
Bigo Technology Pte Ltd	YY Inc and others	Singapore	Internet Services	272	Investment
One Championship	Temasek Holdings, Sequoia Capital and Greenoaks Capital	Singapore	Internet Services	166	Investment
PropertyGuru Pte Ltd	KKR & Co	Singapore	Internet Services	144	Investment
Trax Technology Solutions Pte Ltd	DC Thomson Ventures and Boyu Capital Advisory Beijing	Singapore	Information Technology	125	Investment
Carousell Pte Ltd	DBS Group Holdings Ltd, EDBI, 500 Startups and others	Singapore	Internet Services	85	Investment
ODX Pte Ltd	Pantera Capital Management, Andromeda Capital, Wavemaker Partners, Kenetic Capital Advisors and others	Singapore	Information Technology	60	Investment
Deskera Holdings Ltd	Susquehanna International Group, Cisco Investments, Jungle Ventures and others	Singapore	Information Technology	60	Investment

Over the last four 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 by approx. 10 times from US\$672 million in 2015 to US\$6.5 billion in 2018. Transportation and e-commerce sub-sectors constituted the top Technology deals during 2018.

* Based on disclosed funding and investors.

** Go-Jek is reported to be finalizing a US\$2.0 billion funding round in December 2018, at a valuation of US\$10.0 billion.

Special Features III: Tech Landscape

Tech Start-ups in Southeast Asia

Unicorns of Southeast Asia

- Southeast Asia is home to 9 unicorns^[1], including Grab, Go-Jek, Traveloka, Tokopedia, Bukalapak, Revolution Precrafted, VNG, Trax and One Championship, of which 4 are based in Indonesia.
- Singapore-based Grab is the highest-valued unicorn in the region, followed by Indonesia-based Tokopedia.
- Grab is also the highest-funded unicorn in the region.

	Grab	Tokopedia	Go-Jek ^[2]	Traveloka	Trax	ONE Championship	Bukalapak	Revolution Precrafted	VNG
Business Description	Platform for on-demand booking	Online marketplace	Platform for on-demand booking	Online travel aggregator	Computer vision solutions	Sports media	Online marketplace	Developer of prefabricated properties	Online content platform
HQ Country	Singapore	Indonesia	Indonesia	Indonesia	Singapore	Singapore	Indonesia	Philippines	Vietnam
Valuation*	US\$ 11.0 Bn	US\$ 7.0 Bn	US\$ 5.0 Bn	US\$ 2.0 Bn	Undisclosed	Undisclosed	Undisclosed	Undisclosed	Undisclosed
Funds Raised*	US\$ 6.6 Bn	US\$ 2.3 Bn	US\$ 3.3 Bn	US\$ 500.0 Mn	US\$ 286.7 Mn	US\$ 266.0 Mn	Undisclosed	Undisclosed	Undisclosed

Tech IPOs in Southeast Asia

- Ayondo was the first fintech IPO on SGX in March 2018.
- Expected Southeast Asia tech unicorn IPOs in 2019 include Go-Jek and VNG.

^[1] Based on disclosed unicorns, excluding the ex-unicorns which have been listed, such as Sea Ltd and Razer, and Lazada which was acquired by Alibaba.

^[2] Go-Jek is reported to be finalizing a US\$2.0 billion funding round in December 2018, at a valuation of US\$10.0 billion.

*Based on disclosed figures (rounded-up)

Source: TechCrunch, DealStreetAsia and Tech In Asia

Special Features III: Tech Landscape

Singapore and Hong Kong Position Themselves As New Economy^[1] IPO Destinations

Singapore Exchange (SGX) Allows Dual-Class Share (DCS)^[2] Structures

- In June 2018, SGX permitted listing of companies with DCS structures, which are increasingly preferred by high-growth and tech companies. Safeguards have been placed to mitigate governance risks from DCS structures.

“DCS listings will broaden the range of investment options for investors and add vibrancy to Singapore's capital markets.”
– Spokesperson from Monetary Authority of Singapore

Earlier Initiatives by SGX

- SGX partnered with Infocomm Media Development Authority in 2017 to facilitate IPO process for tech startups.
- SGX has partnered with companies including, Crowdfunder Media, PwC's Venture Hub and Clearbridge Accelerator, to enable startups, and small and medium enterprises raise funds via crowdfunding.

^[1] New Economy includes sectors like internet, biotechnology and others.

^[2] Dual-Class Share (DCS) structures comprise a class of stock, often distributed to founding shareholders, that carries more voting rights than the ordinary shares sold to the public.

Source: Straits Times, Bloomberg, SGX and HKEX website

Hong Kong Exchange's (HKEX) New Regime to Attract New Economy IPOs

- In April 2018, HKEX added three new listing rules to the Main Board:
 - (i) To permit listings of biotech companies that do not meet the Main Board's financial eligibility tests;
 - (ii) To permit listings of companies with Weighted Voting Right or DCS structures; and
 - (iii) To establish a new concessionary secondary listing route for Greater China and international companies for a secondary listing in Hong Kong.

“The most relevant portion of the value-add that you get by listing in Hong Kong is that you get many of the same international investors that you get in London or New York, but you get the added advantage of the Chinese and Asian institutional investors as well.”
– Spokesperson from HKEX

Special Features III: Tech Landscape

Tech IPOs in Hong Kong

- Hong Kong is expected to top the global IPO rankings for 2018. Some of the largest blue chip companies listed on HKEX with diversified businesses, such as Tencent and Ping An, have sought spin-off listings to catalyze momentum. Such IPOs in Hong Kong include Ping An Good Doctor, and proposed IPOs of OneConnect (Ping An's fintech platform) and Lufax (Ping An's wealth management platform).

Top 5^[1] Tech IPOs in Hong Kong during 2018

	Xiaomi	Meituan Dianping	Ping An Good Doctor	Wise Talent Information Technology (Liepin.com)	Babytree Group
Business Description	Electronics and software company	E-commerce	Online healthcare platform	E-recruitment platform	Online parenting platform
IPO Date	9 Jul'18	19 Sep'18	4 May'18	29 Jun'18	27 Nov'18
IPO Funds Raised*	US\$ 5.4 Bn	US\$ 4.2 Bn	US\$ 1.1 Bn	US\$ 371.2 Mn	US\$ 217.4 Mn
IPO Valuation*	US\$ 48.5 Bn	US\$ 41.8 Bn	US\$ 7.4 Bn	US\$ 2.1 Bn	US\$ 1.5 Bn
Founded	2010	2015	2014	2011	2006
	First tech IPO under HKEX's new listing rules	World's largest e-commerce IPO since Alibaba's IPO in 2014	Spin-off IPO from Ping An and was 600 times oversubscribed	First human resources-focused tech IPO in Hong Kong	"Down-round" for investors as compared to its US\$ 2.0 billion valuation as of the last funding round in May 2018

[1] In terms of IPO funds raised
*Figures rounded-up

Source: Bloomberg, TechCrunch, Reuters and Channel NewsAsia

Special Features III: Tech Landscape

Global Surge in IPOs of Biotech Companies

Biotech IPOs in the US

- Nasdaq has been reported to be the most established center for biotech listings. In the first nine months of 2018, there were a total of 47 biotech IPOs, which was more than full-year 2016 and 2017, with more than US\$4.6 billion of funds raised.
- Moderna Therapeutics^[1] filed for IPO on Nasdaq in November 2018, which is expected to raise up to US\$500.0 million as the largest IPO for a VC-backed biotech company. It was valued at US\$7.0 billion as per its last funding round in February 2018.

Biotech IPOs in Hong Kong

- Under HKEX's new listing rules, in place since 30 April 2018, biotech companies without revenue or profit can apply for IPO.
- Asclepis Pharma^[2] was the first biotech IPO on HKEX in July 2018, where it raised US\$399.8 million at a US\$2.0 billion valuation.
- Nasdaq-listed BeiGene^[2] was the first biotech secondary listing on HKEX in August 2018, where it raised US\$903.0 million at a 1.6% discount to its US closing share price of US\$181.7.
- Innovent Biologics was the largest biotech IPO on HKEX, where it raised US\$484.9 million at a US\$2.1 billion valuation.

^[1] Economic Development Board of Singapore (EDBI) is an investor into the company

^[2] Government of Singapore Investment Corporation (GIC) is an investor into the company

^[3] In terms of IPO funds raised

*Figures rounded-up

Top 5^[3] Biotech Primary Listings in Hong Kong during 2018

Company	IPO Date	IPO Funds Raised*	IPO Valuation*	HQ Country
Innovent Biologics	31 Oct'18	US\$ 484.9 Mn	US\$ 2.1 Bn	China
Asclepis Pharma	1 Aug'18	US\$ 399.8 Mn	US\$ 2.0 Bn	China
China Isotope & Radiation	6 Jul'18	US\$ 220.1 Mn	US\$ 0.9 Bn	China
Hua Medicine	14 Sep'18	US\$ 113.6 Mn	US\$ 1.1 Bn	China
Fusen Pharmaceutical	11 Jul'18	US\$ 53.0 Mn	US\$ 0.2 Bn	China

Special Features III: Tech Landscape

IPOs of Global Tech Unicorns

US IPOs of Global Tech Unicorns

- During 2018, two out of the top five US tech IPOs were China-based unicorns, i.e. iQIYI and Pinduoduo.
- China-based Tencent Music is planning its IPO in December 2018, after witnessing delays due to market conditions.
- Expected tech IPOs in 2019 include Airbnb, Uber, Lyft, Palantir, Slack and Pinterest.

Global Tech Unicorns Exploring Unconventional Methods of Fund Raising

- Direct listing without engaging underwriters, such as Spotify's listing on NYSE.
- Initial Coin Offerings (ICOs), preferred by cryptocurrency ventures, bypass the rigorous and regulated process of fund raising through IPOs and institutional investors.

Top 5^[1] U.S. IPOs of Global Tech Unicorns during 2018

	Spotify	iQIYI	PagSeguro Digital	Pinduoduo	GreenSky
Sub-Sector	Music streaming	Video streaming	Fintech	E-commerce	Fintech
IPO Date	3 Apr'18	23 Mar'18	24 Jan'18	26 Jul'18	23 May'18
IPO Funds Raised*	US\$ 9.2 Bn	US\$ 2.3 Bn	US\$ 2.3 Bn	US\$ 1.6 Bn	US\$ 874.0 Mn
IPO Valuation*	US\$ 29.5 Bn	US\$ 12.7 Bn	US\$ 5.6 Bn	US\$ 23.8 Bn	US\$ 4.3 Bn
Primary Exchange	NYSE	Nasdaq	NYSE	Nasdaq	Nasdaq
HQ Country	United States	China	Brazil	China	United States

[1] In terms of IPO funds raised

*Figures rounded-up

Source: TechCrunch, S&P Cap IQ and Tech In Asia

Sector Definitions

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

Sector Definitions

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, Technology Services

Telecommunication — Includes Telecommunication Equipment and Data Service Providers

Utilities — Power, Water

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

Disclaimer

Duff & Phelps's Transaction Trail is compiled from various information sources, including but not limited to industry sources and press and media releases. Duff & Phelps is not responsible for the accuracy or completeness of these information sources. All transactions are shown as reported without independent verification.

Annual Issue 2018 – Duff & Phelps's *Transaction Trail* is compiled based on the deal information available during the December 2017 to November 2018 period for transactions in the region.

Editorial Team

Ashish McLaren, Li Shang, Aanchal Kapoor, and Beausean Tan

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

For more information about our global locations and services, please visit:

www.duffandphelps.sg

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