

COVER STORY

Tan (right) speaking to Charles Li, CEO of Hong Kong Exchanges and Clearing, at Razer's listing ceremony at HKEX



SGX versus HKEX

Singapore companies are continuing to list in Hong Kong, drawn by the hope of better liquidity and higher valuations. Are they really better off there? What can Singapore do to raise its game?

BY CHAN CHAO PEH

Mark Liew, chief operating officer at PrimePartners Corporate Finance (PPCF), recalls some of his friends talking excitedly about having bought shares in **Razer** when the maker of computer gaming accessories got listed in Hong Kong in November last year. Knowing his friends typically invested in profitable, dividend-paying stocks in Singapore, Liew tried to warn them that Razer had a far more risky profile. "Eh, loss-making," he said. But his friends were not deterred. "Yah, yah, I know, but Hong Kong lah," one of them replied.

"If Razer came to Singapore, they wouldn't say that," Liew says. Co-founded by Singaporean Tan Min Liang, Razer sold shares in an IPO in Hong Kong at HK\$3.88, putting the company's value at HK\$35 billion (\$5.9 billion). Buoyed by a retail over-subscription rate of 290 times, the stock quickly hit HK\$5.49 on its trading debut on Nov 13 before closing at HK\$4.58. But Liew's scepticism about the sustainability of this valuation was not unfounded.

Shares in Razer have since tumbled nearly half from their peak, to trade at 25.7% below its IPO price as at March 29.

Still, the fact that a hot technology company like Razer, which has headquarters in Singapore and San Francisco, chose to be listed in Hong Kong, and achieved a lofty valuation when it initially hit the market, continues to burnish Hong Kong's reputation as a capital-raising centre. And, while Singapore has established itself as a leading listing venue for real estate investment trusts, it is continuing to lose listings of growth-oriented companies to Hong Kong.

Now, as economic growth and capital-raising activity pick up across the world, competition between the stock exchanges of Singapore and Hong Kong is likely to remain intense. Last year, there were 25 new listings on the Singapore Exchange — about twice the number in 2016. Yet, in the same year, there were 17 companies based in Singapore — including Razer — that chose to go public in Hong Kong instead of their home market.

Three of these 17 companies — **LHN**, **ISDN Holdings** and **Centurion Corp** — already had a listing in Singapore but still opted for

a listing in Hong Kong. Eight of the remaining 14 Singapore companies that were listed in Hong Kong last year chose to do so on the Growth Enterprise Market, or GEM. In the first six weeks of this year, another four local companies have opted for an IPO in Hong Kong. Two more — **CNMC Goldmine Holdings** and **Singapore Kitchen Equipment** — have announced plans to do so too.

To be sure, Singapore companies should not be expected to get listed in their home market if their capital-raising needs are better served elsewhere. Indeed, Singapore investors are themselves becoming more internationally minded, and using local trading and wealth management platforms to obtain exposure to a vast array of opportunities overseas. "If the market is not as liquid [in Singapore], if I think I can get a better valuation [and] more investor interest in another market, why wouldn't I explore that?" says Liew.

Carol Fong, CEO of brokerage firm CGS-CIMB Singapore, observes that as recently as five years ago, more than 90% of a Singapore client's trades would have been in local stocks. Now, about 30% of the trades are in US or Hong

Kong stocks. "Trends and appetites have changed. Investors are now a lot more educated; they see what's happening in the world," she says.

The attraction of Hong Kong is that it is a hub for Chinese capital, and its stock market offers plenty of opportunity to gain exposure to China's growth potential. "Ultimately, Hong Kong is seen as a proxy for China," says Goh Tee Leng, fund manager at Heritage Global Capital Fund. By contrast, the Singapore market is viewed as a proxy for its own local economy, he adds. "Therefore, most of the capital flow would be to Hong Kong rather than to Singapore, resulting in better liquidity and valuations."

As it is, Hong Kong has a far wider and deeper market than Singapore by most measures. At end-2017, there were 2,118 companies listed in Hong Kong with a total market value of HK\$34 trillion. There are 746 companies listed in Singapore with a combined market value of around \$1 trillion. The average daily value of securities traded in Hong Kong during the year was HK\$88.3 billion, or \$14.8 billion, more than 10 times SGX's \$1.1 billion for the financial year ended June 2017. And,

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DEALOGIC, BLOOMBERG

Recent equity fundraisings by Singapore companies in Hong Kong

LISTING DATE	NAME	INCORPORATION JURISDICTION/ LISTING LOCATION	IPO PRICE (HK\$)	AMOUNT RAISED (US\$ MIL)	RETAIL SUBSCRIPTION RATE (TIMES)	FIRST-DAY CHANGE (%)	SHARE PRICE AS AT MARCH 29 (HK\$)	PRICE CHANGE FROM IPO (%)	PER (TIMES)	MARKET VALUE (HK\$ MIL)	AVERAGE DAILY VOLUME (MIL SHARES)	DESCRIPTION
2018												
Feb 12	Xinghua Port Holdings (listing by way of introduction)	Singapore/ HK Main Board	Opened at HK\$1.69	NA	NA	-24.9	1.280	- 24.2	11.39	1,042	2.3	Owns ports in China. Spun out of cement maker Pan-United Corp, whose shareholders received distribution in specie.
Jan 19	IAG Holdings	Cayman/ GEM	0.65	8	17.5	4.6	0.490	- 24.6	NA	196	9.2	Manufactures chips and systems used by the medical diagnostics industry
Jan 16	ZACD Group	Singapore/ GEM	0.32	20	6.8	1.6	0.295	- 7.8	5.47	590	6.7	Holds a Capital Markets Services licence from the Monetary Authority of Singapore but is also active in various real estate investment activities
Jan 16	ISP Global	Cayman/ GEM	0.35	9	10.0	122.9	0.600	71.4	NA	480	9.0	Supplies and installs sound-related systems for hospitals, such as nurse call systems, and also intercoms and public address systems for schools

LISTING DATE	NAME	INCORPORATION JURISDICTION/ LISTING LOCATION	IPO PRICE (HK\$)	AMOUNT RAISED (US\$ MIL)	RETAIL SUBSCRIPTION RATE (TIMES)	FIRST-DAY CHANGE (%)	SHARE PRICE AS AT MARCH 29 (HK\$)	YTD CHANGE (%)	PER (TIMES)	MARKET VALUE (HK\$ MIL)	AVERAGE DAILY VOLUME (MIL SHARES)	DESCRIPTION
2017												
Dec 29	LHN	Singapore/ SGX Catalist; HK Main Board	1.90	10	4.9	71.1	1.000	- 69.2	NA	402	4.4	Provides property management and car park management services. Is targeting the co-working space in China.
Dec 12	Centurion Corp	Singapore/ SGX Mainboard; HK Main Board	3.18	15	17.8	1.9	3.000	- 2.6	12.00	2,522	0.6	Owns and runs student and worker dormitories in Singapore, the US and Malaysia
Dec 11	Solis Holdings	Cayman/ HK Main Board	0.85	23	111.9	- 18.8	0.960	60.0	18.00	806	13.6	Holding company whose key Singapore subsidiary is Sing Moh. Focuses on mechanical and electrical engineering.
Nov 17	GT Steel Construction Group	Cayman/ GEM	0.54	8	115.2	- 5.6	0.285	- 6.6	NA	136	1.89	Independent structural steel fabricator whose previous projects include Mandarin Gallery and the Senoko waste-to-energy plant
Nov 15	Shuang Yun Holdings	Cayman/ HK Main Board	0.56	18	15.2	50.0	1.990	- 1.5	100.64	1,990	7.7	Contractor focusing on road works. Also rents out equipment. Claims second-highest revenue among all Singapore road works companies in 2016.
Nov 16	Indigo Star Holdings	Cayman/ GEM	0.60	8	1.6	46.7	0.900	1.1	17.88	360	3.4	Provides concrete work services
Nov 13	Razer	Cayman/ HK Main Board	3.88	608	290.2	18.0	2.880	- 25.4	NA	25,985	27.2	Gaming peripherals maker with a cult following among gamers. Has made forays into the smartphone market as well.
Oct 18	C&N Holdings	Cayman/ GEM	0.44	9	20	2.3	0.300	- 9.1	NA	192	5.8	Logistics company providing both transport and storage services
Oct 17	Kakiko Group	Cayman/ HK Main Board	0.52	20	169.4	5.8	2.260	264.5	179.62	2,780	15.3	Started as building contractor but has since expanded into other areas such as worker dormitories and IT services
Oct 13	RMH Holdings	Cayman/ GEM	0.48	9	43.6	41.7	0.425	- 26.7	15.24	255	4.9	Owns Dermatology & Surgery, a private dermatology practice in Singapore with three clinics
Sept 22	Cool Link (Holdings)	Cayman/ GEM	0.55	11	26.7	7.3	0.475	58.3	NA	285	7.3	Food products distributor supplying anything from packaged drinks to ice cream. Ship chandlers are its key customers.
Sept 12	BHCC Holding	Cayman/ HK Main Board	0.50	13	549.8	40.0	0.435	29.9	9.19	348	9.4	Building contractor whose previous projects include Changi Airport Terminal 4 and MediaCorp's headquarters
July 13	TOMO Holdings	Cayman/ GEM	0.73	11	0.678	-13.7	1.690	- 15.5	2.82	760	2.9	Provides seat belts, passenger seat upholstery and other car parts and accessories. IPO's retail tranche was undersubscribed.
July 17	Omnibridge Holdings	Cayman/ GEM	0.45	9	2.2	5.6	2.140	122.9	NA	1,284	5.6	Provider of human resource services in Singapore and Hong Kong
June 9	Nexion Technologies	Cayman/ GEM	0.48	9	1.9	Flat	0.510	- 16.4	29.28	306	5.5	Provides cyber infrastructure and cyber security solutions for large clients across Southeast Asia
March 24	SHIS	Cayman/ HK Main Board	0.70	26	127.0	38.6	0.700	53.9	24.86	726	6.6	Provides construction services. Focused on integrated building services including maintenance and installation of various building systems.
Jan 12	ISDN Holdings	Singapore/ SGX Mainboard; HK Main Board	1.25	6	1,891.0	10.4	1.250	- 0.8	8.61	493	0.4	Precision parts manufacturer. Also runs an industrial property and has a stake in an Indonesian power plant.

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2016												
Dec 16	Anacle Systems	Singapore/ GEM	0.74	10	NA	18.9	0.630	- 12.5	478.56	251	0.3	Energy management systems company. IPO had no public tranche.
Dec 2	CMON	Cayman/ GEM	0.23	10	NA	1,330.4	0.232	1.8	15.56	419	1.6	Publisher of board games such as <i>Zombicide</i> . IPO had no public tranche.
Oct 31	Zheng Li Holdings	Cayman / GEM	0.40	6	NA	1,090.0	1.270	62.8	325.64	635	1.6	Provides maintenance and modification services for cars, with a focus on luxury makes. IPO had no public tranche.
July 15	SingAsia Holdings	Cayman / GEM	1.00	8	4.3	50.0	5.300	48.4	NA	6,625	1.7	Provides workers training and recruitment, as well as cleaning services
June 8	Chuan Holdings	Cayman/ HK Main Board	0.88	33	509.0	6.8	0.375	- 14.8	8.85	388	2.5	Contractor that specialises in earthworks, operates via key subsidiary CL Construction
June 1	BOC Aviation	Singapore/ HK Main Board	42.00	1,126	37.6	Flat	46.650	12.0	7	32,376	0.7	Formerly called Singapore Aircraft Leasing Enterprise. Name was changed in 2006 following acquisition by Bank of China.
April 6	Weiyee Holdings (listing by way of introduction)	Singapore/ HK Main Board	NA	NA	NA	24.3	3.680	35.8	4.97	721	0.2	Property developer that once had a dual-listing in Singapore

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IPO expenses in Hong Kong can be twice Singapore's

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there are more than 622 brokerages licensed to trade securities in Hong Kong, versus about 26 securities trading members in Singapore.

But have Singapore companies that ventured to Hong Kong for listing actually benefited from lasting premium valuations? Is there a downside to going public in Hong Kong? What sorts of companies do well?

A mixed bag

Certainly, there are plenty of examples of Singapore companies that garnered massive market values immediately after getting listed in Hong Kong. But their share prices have typically been very volatile. And, the premium valuations have not always lasted (see accompanying table).

For instance, board games maker **CMON**, which sold shares at an IPO at 23 HK cents, saw its stock price hit HK\$3.29 at its trading debut on Dec 2, 2016. Ng Chern Ann, founder, chairman and CEO of the company, was worth a cool HK\$2 billion during the weekend that followed. But the euphoria did not last. By Dec 23, 2016, shares in the company behind games like *Zombicide* had crashed to 18.5 HK cents. On March 29 this year, the stock closed at 23.2 HK cents, which is an unremarkable 15 times earnings. The market value of Ng's 609.2 million shares was HK\$140 million.

A more recent example would be property management firm **LHN**, which sought a listing in Hong Kong last year partly because of its business expansion plans. The company has been acquiring rights to manage car parks in Hong Kong, and is planning to expand into the co-working space market in China. The company sold shares at its IPO at HK\$1.90. On Jan 4, its fourth trading day on the Hong Kong bourse, the stock hit a high of HK\$4.81. By March 29, the stock had collapsed to HK\$1.

Some Singapore companies that have listed in Hong Kong have not displayed such extreme volatility, though. **BOC Aviation**, which was the former Singapore Aircraft Leasing Enterprise before it was bought by Bank of China, has been on a gentle upward climb since its listing in June 2016. With a market value of HK\$32.4 billion, BOC Aviation is also currently the largest of the Singapore companies to have recently been listed in Hong Kong. Shares in BOC Aviation are also trading at a seemingly reasonable seven times earnings, and offer a fairly high yield of 7%.

There is actually a wide variation in valuations across the Singapore companies that were listed since 2016. At one extreme is **Anacle Systems**, which is involved in energy management systems. Its shares are trading at 478.6 times earnings. Other richly priced counters include luxury car servicing provider **Zheng Li Holdings**, which is trading at 325.6 times earnings; building contractor **Kakiko Group**, which is trading at 179.6 times earnings; and road works contractor **Shuang Yun Holdings**, which is trading at 100.6 times earnings. Then, there is HR service provider **SingAsia Holdings**, which commands a market value of more than HK\$6 billion despite making a loss recently.

At the other end of the spectrum are the likes of seat-belt maker **TOMO Holdings**, which is trading at just 2.8 times earnings. There is also asset manager **ZACD Group**, which is trading at 5.5 times; precision engineering and power company **ISDN Holdings**, which is trading at 8.6 times; and earthworks contractor **Chuan Holdings**, which is trading at 8.9 times.

One interesting phenomenon of Singapore companies that were listed in Hong Kong recently is that a good number reported losses shortly after hitting the market, because of the cost of their IPO. Among them is **GT Steel Construction Group**, which has the smallest



PPCF's Liew says Singapore's corporate finance players should focus less on competing with one another and more on growing the overall industry pie



SAC Capital's Ong says any company contemplating a 'list and sell' strategy must be mindful of execution risks

market value in the segment, of just HK\$136.8 million. For FY2017 ended Dec 31, it reported a 21% rise in revenue of \$27.9 million and net loss of \$411,000, versus earnings of more than \$3.2 million the previous year. Among its cost items was listing fees of nearly \$3.9 million.

Elsewhere, logistics company **C&N Holdings** said it incurred listing expenses of \$3.11 million in FY2017 ended Dec 31, which led to a loss of \$406,000. Excluding the listing fees, the company would have reported earnings of \$2.7 million, versus \$3.3 million for FY2016. Similarly, HR service provider **Omnibridge Holdings** attributes the losses of \$1.3 million in FY2017 ended Dec 31 to listing expenses of \$1.7 million. If that one-off fee is stripped out, the company would have been \$400,000 in the black, compared with earnings of \$1.4 million for FY2016.

IPO fees are, of course, a non-recurring expense. And, they could be well worth it if they enable the company to garner a sustainably

To be sure, Singapore companies should not be expected to get listed in their home market if their capital-raising needs are better served elsewhere. Indeed, Singapore investors are themselves becoming more internationally minded, and using local trading and wealth management platforms to obtain exposure to a vast array of opportunities overseas.

PICTURES: ALBERT CHUA/THE EDGE SINGAPORE



CGS-CIMB Singapore's Fong says the company is in a good position to capture the two-way flow of capital between China and Asean



RHT Capital's Khong suggests that more foreign sponsors should be attracted to function in Singapore

high valuation, which is often the aim of Singapore companies pursuing a Hong Kong listing. In its prospectus, GT Steel said that the sector valuation for engineering and construction companies listed in Hong Kong averaged 94.7 times, versus a mere 12.1 times in Singapore.

Expensive proposition?

For companies that fail to attain a good valuation in Hong Kong, the higher cost of going public would seem to be a drawback. IPO expenses in Hong Kong can be twice Singapore's. Companies that seek a listing in Hong Kong while maintaining listed status in Singapore are taking on an even more expensive proposition, with very little guarantee of a return.

"When it comes to the capital market, there is no guarantee that issuers will enjoy higher valuations and trading volumes when they dual-list," says Ong Hwee Li, CEO of SAC Capital. The annual listing fee for the Hong Kong

Main Board is a minimum of HK\$145,000 a year for companies with a market value of HK\$200 million or less. Those with a market cap of more than HK\$5 billion are subject to an annual listing fee of HK\$1.2 million. SGX's Mainboard listing fee is comparable, at between \$35,000 and \$150,000.

For companies that genuinely want to raise equity capital, rather than simply obtain a better valuation, the cost of seeking a listing in Hong Kong ought to be measured against the cost of raising funds in their home market. According to some corporate finance professionals, issuing new shares in Singapore can be expensive. Besides the cost of placing out new shares, shares also tend to be issued at a discount of about 10% to their prevailing market price. "You hardly see a secondary fund raising at a premium to the market price," says PPCF's Liew.

Is the cost of raising equity ultimately worth it? Why is the cost of an IPO in Hong Kong higher than in Singapore? Is the big run-up upon listing worth the higher fees in Hong Kong?

Speaking on the record, many people in the corporate finance trade say it is the capital requirements and micro fundamentals of individual companies, rather than the market where they list, that ultimately drive fundraising decisions as well as valuations. And, IPO fees in Hong Kong tend to be higher because of generally higher salaries and rents in that market.

However, casual conversations and news reports suggest that the explosive trading debuts of stocks in Hong Kong are often the result of manipulation, which has been useful in drawing listing aspirants. Some also suggest that many listings in Hong Kong are really "shell planting" exercises, where there is a pre-existing agreement for the listed company to eventually be turned into a reverse takeover vehicle. By some accounts, such exercises can yield millions of dollars in profits for owners of even very small companies that go public in Hong Kong.

The Edge Singapore has not been able to find any hard evidence of these practices. And, there is nothing to say that such activities do not happen in Singapore too. But companies pursuing such strategies face significant risks, says Ong of SAC. "Any company contemplating a 'list and sell' strategy must be mindful of execution risks such as investigations [and] changes in rules."

Enlarging the pie

So, is Singapore doomed to play second fiddle to Hong Kong as a capital-raising centre? What can it do to create a livelier stock market and attract more listings?

You Weiren, senior analyst at iFast, notes that SGX has been pursuing several initiatives to maintain and improve its competitive position. It is moving towards allowing companies with dual-class shares to be listed, which might attract promising young technology companies. SGX has also introduced shorter settlement periods and is looking into creating a stock trading link with Bursa Malaysia. "SGX is certainly not going down without a fight," says You.

With major economies around the world now experiencing a rare period of synchronised growth and capital-raising activity beginning to take off, Singapore's corporate finance players should focus less on competing with one another and more on growing the overall industry pie, according to Liew. "If you are not going to grow the pie, then good luck killing one another."

The way Liew sees it, Singapore does not have a local economy that is large enough to constantly spawn sizeable public-listed companies. It also cannot compete directly with New York, London and Hong Kong for the biggest global IPOs. But it could create a niche for

itself by focusing on relatively young companies looking to raise their first round of equity capital from public investors. Over time, these companies might well choose to move on to a bigger market, Liew explains.

Among the companies that PPCF has brought to Singapore is **The Trendlines Group**. The Israeli company identifies and incubates innovation-based medical and agricultural technology companies, each of which it may subsequently exit through an IPO or sale. More recently, PPCF oversaw the listing of **Memories Group**, a tourism-focused company based in Myanmar that was spun out of **Yoma Strategic Holdings**.

Meanwhile, some players in the sector have merged to strengthen their competitive position and provide better service to their clients. In 2016, SAC Capital acquired its competitor Canaccord Genuity, which increased its headcount by around one-third. As a result of the acquisition, SAC now owns a bigger portfolio of continuing sponsorship clients, which gives it a bigger stream of recurring income.

SAC's CEO Ong says the combined firm is selective in taking on new business, focusing on clients where there is assurance of a sustained relationship. Some of the about 10 IPO deals that Canaccord had in the pipeline are not being pursued. SAC has also set up a team of analysts to produce research on its clients, to ensure they remain engaged with the market after listing. "We're really putting in the resources to do the work," says Ong.

Khong Choun Mun, CEO of RHT Capital, suggests that more foreign sponsors should be attracted to function in Singapore. By doing so, they will bring in companies from their home markets to be listed on SGX. "Those sponsors will help the Catalyst market grow faster and diversify more," he says.

Elsewhere, some brokerages have expanded their regional footprint. On Jan 18, leading Chinese brokerage **China Galaxy Securities Co** completed the purchase of its 50% stake in CIMB Securities International. The new entity, called CGS-CIMB Securities, excludes CIMB Securities offices in Malaysia, where the deal is still pending regulatory approval. According to Fong, CGS-CIMB is in a good position to capture the two-way flow of capital between China and Asean.

Does such a joint venture have a real advantage when just about every brokerage firm already offers investors online access to key regional markets? Fong likens the CGS-CIMB partnership to a marriage rather than a casual romantic relationship. "With a boyfriend, you can bed many different partners, the commitment and confidence created in the investing public are a bit different. Whereas if you are wedded to a husband, the commitment to make it work, the trust, the confidence level are a lot stronger," she says.

CGS-CIMB aims to boost its regional business not just in trading but also corporate advisory work. For example, CIMB managed the demerger and listing of **Xinghua Port Holdings** in Hong Kong early this year. Now, as Chinese companies acquire assets in Asean, Fong figures that CGS-CIMB will be in a strong position to help some of them get listed in the region. "The natural sequence of events would be that if they own Asean assets, they would want to be listed somewhere in the Asean region. So, it is not a question of, say, Chinese companies that can't get listed in Hong Kong or China coming to Singapore. If they have Asean businesses, it makes sense to get listed [in Singapore]," she says.

Indeed, if the capital market activity across the whole region fires up, the long-standing competition between Singapore and Hong Kong might be viewed in a different light, with the gains made by one not necessarily coming at the expense of the other. **E**

How do the Singapore and Hong Kong markets compare on potential market manipulation?

BY JOAN NG

The rise in the share prices of **Blumont Group**, **LionGold Corp** and **Asiasons Capital** (now known as **Attilan Group**) made some investors rich. Trading in those three stocks added to the Singapore Exchange's liquidity. Coupled with strong interest in other penny stock counters, the market looked like it was in good health.

Then, in 2013, the three stocks plunged. It turned out that they had been subject to market manipulation. Investor interest in small- and mid-caps dried up. And remisiers complained their clients had lost confidence in the Singapore market.

Nearly five years after the event, many questions surrounding the penny stock saga remain unanswered. Among them, how exchanges can best protect investors from stock market manipulation and whether or not local investors are worse off than their regional peers.

Recent research from the CFA Institute and CFA Singapore suggests that SGX is doing a decent job. CFA analysed data on price, volumes and announcements in the six-year period between 2011 and 2016 to investigate if local equities are prone to manipulation related to corporate announcements. The study found potential instances of manipulation. However, these instances were not statistically significant enough to indicate the presence of widespread market manipulation.

"We don't claim to cover every type of market manipulation," says Chan Fook Leong, one of the named authors of the report. The other is Guruprasad Jambunathan. "Those such as Blumont and Asiasons, which happen over a period of a couple of months or even years, [would not be covered]."

Alan Lok, one of the contributors to the report, adds that it can be difficult to determine if price and volume movements are due to market manipulation or are just ordinary market movements. "To qualify as abnormal behaviour — without going into the technical details — just means that you need to have a certain number within a sample showing positive symptoms," he says. "It's just like a doctor trying to determine whether you have normal fever or dengue fever. He has to gauge whether you have more symptoms than a normal patient."

No broad-based manipulation

In its study, CFA categorised stock announcements into 15 categories and 106 subcategories. The stock prices and trading volumes of the companies making these announcements were compared over pre-announcement, post-announcement and average comparable periods. Price returns were calculated on absolute, relative and beta-adjusted bases, and stock movements tracked over one, two, three, five and seven days. The study also analysed if stocks in some sectors or subsectors were more prone to manipulation, or if factors such as market capitalisation, listing board and operational domicile were statistically significant.

The study did find an increase in average returns and average volumes in the period around announcements, suggesting potential market manipulation. In particular, volumes and returns tended to spike two days prior to an announcement, on the day of the announcement and on the day after. However, there was a lot of variability in the data, and a high coefficient of variation suggested



Chan (left, with Lok (centre) and Guruprasad): We don't claim to cover every type of market manipulation

that actual returns for many stocks deviated significantly from the average return. This makes it difficult to conclude that there is broad-based market manipulation across stocks.

Announcements relating to changes in shareholdings were preceded by significant outperformance. But this is to be expected, given that a change in interest would naturally result in share price movements. Announcements related to new business, private placements, dividends, legal action, share capital and listing updates were also associated with higher returns. However, a validation study that compared potential manipulated cases with the overall universe did not turn up enough instances of variation to suggest some specific types of announcements are prone to manipulation.

As a result, CFA concludes that "current regulations, including market surveillance mechanisms, are robust and effective in ensuring the integrity of the Singapore equity market".

More studies needed

This latest CFA study follows another 2015 study on portfolio pumping in Singapore. The study analysed stock price movements from 2003 to 2013. It found excess returns at year-ends, but no evidence that these were due to portfolio pumping activities. "We suspect that these results were due to the combination of the signalling effects of enforcement actions and relevant reforms in the regulatory framework, making portfolio pumping an expensive affair," the study says.

Comparable research is not currently available on the Hong Kong market, although there appears to be interest in it. After their report on market manipulation was released, the authors say they were contacted by other exchanges asking if there was any intention to conduct similar research for their respective markets.

Regulators are generally interested in such research because it helps them figure out if their rules are working, says Lok. It also helps regulators pinpoint areas in which regulation needs to be improved, or figure out how best to tweak their rules. For instance, CFA recommends that SGX expand the categorisation of its corporate announcements so that it is easier to monitor the market and

detect potential manipulation.

There are, however, other studies that cover the Hong Kong market. One recent study, published by GMT Research in February, analysed the share price movements of the 6,000 largest companies in Asia during the 10 trading days before and after Jan 1. Sixteen of these stocks showed a more than 10% increase prior to the New Year and a more than 10% decline after. The list was dominated by companies listed in Hong Kong, says GMT. While Hong Kong-listed companies made up just 11% of the entire sample, they accounted for seven of the potentially manipulated stocks.

GMT repeated this analysis for the period before and after Jan 1, 2017. Fourteen Hong Kong-listed stocks met this same 10% share price movement criteria. And in the period before and after Jan 1, 2016, there were 18 companies with this exaggerated price movement.

"We suspect that the likely increase in the number of manipulated stocks in Hong Kong has to do with the opening of the Stock Connect between Hong Kong, Shanghai and Shenzhen in November 2015," says GMT. To be fair, GMT says the regulator may be handicapped. "It's very difficult for the Securities and Futures Commission of Hong Kong to prove share price manipulation beyond reasonable doubt — for a criminal conviction, or even on the balance of probabilities — for civil liability, given the use of proxies by those trying to create a false market. It's also likely that the Hong Kong Stock Connect makes it more difficult for the SFC to oversee mainland Chinese traders and monitor suspicious trading patterns. In other words, there appears to be a black hole in its regulatory oversight."

Hong Kong may now be facing its own penny stock scandal. On June 27, 2017, a group of connected stocks — part of a so-called Enigma network — plunged by as much as 90%. The network of 50 listed businesses had been highlighted by activist investor David Webb for its complex web of cross-shareholdings. In a speech in October last year, the executive director of SFC's enforcement division Thomas Atkinson said: "The SFC is now fully committed to using all the resources at its disposal in a coordinated manner to protect investors. Anyone who has been exploiting investors through this type of scheme should not underestimate our resolve to stop them."