

THE STRAITS TIMES

# Asia report

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- Outrage in Hong Kong
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US-CHINA

# Trading blows



The raging US-China trade war is seeing companies move their production bases from China to South-east Asia, and economies slowing down. How bad will it get?

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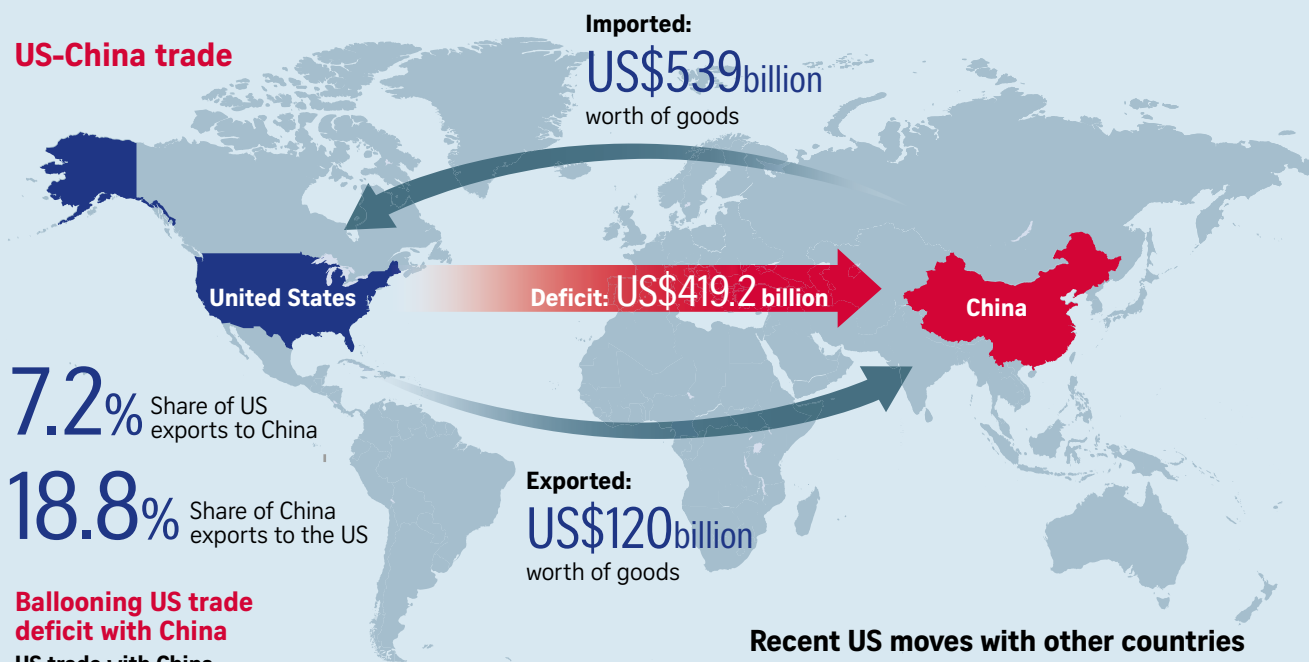


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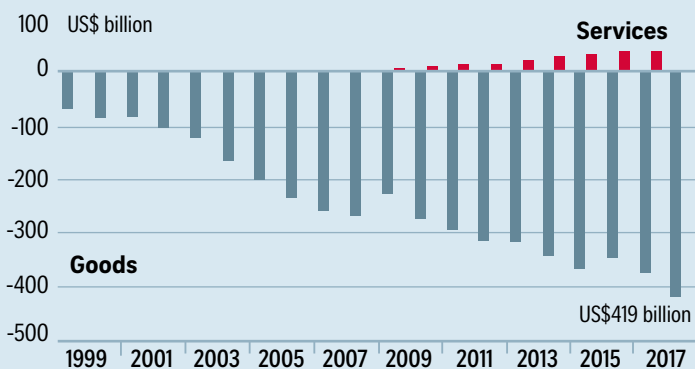
# US-China trade gap

The United States' trade deficit has widened to US\$621 billion (S\$843 billion) for all of 2018, and its gap with China has grown to a record US\$419.2 billion. US President Donald Trump has made reducing the deficit with China a target of his administration, but economists say that looking at deficits in isolation provides a myopic view of both countries' economic linkages. Tariffs, which President Trump has imposed on China are a blunt instrument that may hurt US companies' competitiveness as well.



## Ballooning US trade deficit with China

### US trade with China



## Recent US moves with other countries

**With Japan:** The US rapped Japan for its "substantial edge" over its trade, calling for parity and more investment. President Trump said he hoped to make a big announcement on trade in the next few months, with a deal he hopes will address the trade imbalance. In mid-June, Japan's Economy Minister Toshimitsu Motegi said the two countries have been sorting out issues and will meet again.

**With India:** The US said it will terminate India's preferential market access to it as of June 5. This status exempts billions of dollars worth of Indian products from US tariffs, and is part of a deepening clash over India's protections for its market. India has decided to raise tariffs on imports of 29 goods from the United States after having deferred the move several times since announcing it last year, media reported on June 15.



Washington is adamant on reducing its trade deficit with China

Source: DBS Photo: REUTERS STRAITS TIMES GRAPHICS



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# 38

**Sustainability**

Galapagos: El Nino rocks the cradle of biodiversity



ST PHOTO: MARK CHEONG

# 4

**Cover Story**

Investment floods Vietnam but exposes limits of its economy

China investment poised to help Cambodian bicycle industry pedal ahead

US-China trade war starts to bite in Singapore

US-China trade war: Will tech world of the future look like the past?



# 12

**Opinion**

When China drew level with the US, but missed some opportunities



# 14

**US-China: The Way Forward**

US & China must avoid path of conflict

The choice for South-east Asia isn't between the US and China



# contents

# 26

## **Special Report**

Carrie Lam likely to lead a weakened govt just when Hong Kong needs a strong hand

ST PHOTO: LIM YAOHUI

# 22

## **Opinion**

No sweet spot for Singapore in US-China tensions

# 29

## **Special Report**

Uncertainty may lead to outflow of funds from city

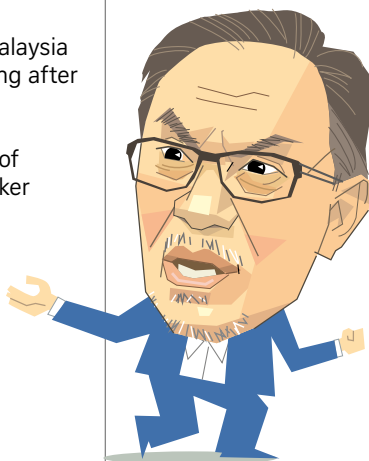
# 32

## **Country Report**

Anwar-Azmin feud over Malaysia gay sex videos seen cooling after Mahathir's exit promise

Abe negotiates minefield of bias as he plays peacemaker

India plays cricket to gain edge in geopolitics



# 44

## **Smart Cities**

Going underground – Singapore's new frontier



# 49

## **Lifestyle**

Robots at your service

# 52

## **Big Picture**

Swimming in a plastic ocean





Vendors all ready for business at a wholesale fruit and vegetable market in Hanoi on June 7.

PHOTO: AGENCE FRANCE-PRESSE

## Cover Story

# US-CHINA TRADE WAR

# Investment floods Vietnam but exposes limits of its economy

## JEFFREY HUTTON

Regional Correspondent  
In Hanoi



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AT THE QUE VO INDUSTRIAL PARK, AN HOUR'S drive north of Hanoi, GoerTek's gambit to skirt American tariffs is taking shape.

Last year, the Chinese company, which makes AirPods earphones, became the first Apple supplier to say it would shift some production out of China. It has since vastly expanded its presence in Vietnam with a US\$260 million (S\$356 million) facility.

Seen from the road, the six factories on the 18,000 sq m plot appear to dwarf all else in the park. Its neighbours include Japan's Canon and Taiwan's Foxconn. GoerTek has an existing factory about three blocks away making conventional wired earphones.

Thanks to its proximity to China, cheap labour, a raft of trade pacts as well as ongoing efforts to liberalise its economy, Vietnam stands to benefit

from the intensifying trade war between China and the United States.

Just a couple of months ago, Seattle-based Brooks Sports said it would move its running shoes and apparel production to Vietnam from China. Swedish furniture giant Ikea too has indicated to local suppliers that it wants to rely less on China's furniture makers.

Vietnam's registered foreign direct investment (FDI) has surged by nearly 70 per cent so far this year, especially in labour-intensive industries like electronics, furniture and apparel. Investment in its textile industry, which employs 2.5 million people across 7,000 companies, totalled US\$17.5 billion, up from US\$15.9 billion a year ago.

"The trade war has been very good for us," said

Ms Nguyen Thi Hong Thu of the Vietnam Textile and Apparel Association (Vitas), the government body that oversees the industry.

The administration of US President Donald Trump, in May, levelled additional tariffs of 25 per cent on Chinese products worth US\$200 billion. China retaliated with tariff hikes of its own on US\$60 billion of American goods. Mr Trump has threatened to impose tariffs on another US\$300 billion worth of Chinese goods.

Still, despite Vietnam's gross domestic product (GDP) growing by more than 7 per cent last year, to US\$240 billion, Vietnam's economy is still half of Thailand's.

## NOT A PERFECT SUBSTITUTE

Infrastructure bottlenecks, persistent anti-China sentiment among Vietnamese and a limited domestic industrial base of raw materials and services make the country an imperfect substitute for its northern neighbour.

There is a lack of skilled labour as well. Garment makers operating in Vietnam pay on average US\$300 a month to workers – about half the going rate in China, according to data from Vitas.

“You can find the cost savings but not the quality,” said Mr Maxfield Brown, a consultant with Dezan Shira and Associates, which helps clients set up businesses in markets across Asean including in Vietnam.

Mr Le Duy Anh, general director of local furniture maker Xuan Hoa, told The Straits Times: “The Chinese have much better supply chains that can affect the quality of the final product. In comparison, Vietnam has advantages in labour price but the Chinese have advantages in labour quality.”

Mr Anh's company makes car seats for a Toyota affiliate and is in advanced talks with Ikea to supply office furniture.

Producers are also forced to import raw materials, which exposes them to exchange rate risks.

Exports of shirts and sneakers and other apparel will surge more than 10 per cent to a record US\$40 billion this year, according to Vitas data. But the country will need to import six million tonnes of spun fabric – triple its domestic capacity.

Vietnam's trade deficit widened in May to US\$1.3



Garment makers in Vietnam pay workers an average US\$300 a month – about half the going rate in China. PHOTO: REUTERS



Workers at a shoe factory in Dong Van Town, in northern Vietnam. Proximity to China, cheap labour, a raft of trade pacts and ongoing efforts to liberalise its economy have helped Vietnam benefit from the US-China trade war. PHOTO: REUTERS

billion from US\$810 million a year earlier.

“This is a benefit and a challenge for us because currently we are having trouble finding enough material and we have to import more,” said Vitas' Ms Thu through an interpreter, referring to the increase in exports.

While infrastructure is in the works, including a US\$15 billion north-south motorway and a third ring road around Ho Chi Minh City, congestion is getting worse. Merchandise from the province of Binh Duong, home to the biggest industrial zones in the south, must traverse about 100km through parts of downtown Ho Chi Minh City, including trendy District Two, on its way to the deep-water port of Cat Lai to the south of the city.

Vietnam ranked 45th in the World Bank's 2018 logistics survey that measures 160 countries on the basis of timeliness, quality infrastructure and ease of Customs procedures. By comparison, Singapore ranked seventh while China was 27th.

## VIETNAM-CHINA TENSIONS

Chinese investment in Vietnam can be risky business.

In 2014, China deployed a massive oil rig into waters around the disputed Paracel Islands, touching off protests and looting of businesses in Hanoi thought to be Chinese-owned but were often those belonging to Taiwanese or even Japanese investors.

High-profile Chinese investments in Vietnam have also attracted negative publicity.

The yet-to-be-completed Cat Linh-Ha Dong railway project in Hanoi, first agreed to in 2008, has suffered numerous delays and is two-thirds over budget. The government blamed China Railway Sixth Group, which was appointed by China according to the terms of a loan agreement between the two countries, for lacking the “experience in putting the line into commercial operation.”

Last year, police rounded up dozens of protesters in Hanoi when news emerged that the government was setting aside three special economic zones offering 99-year leases that critics say would disproportionately benefit China.

“There's real tension,” said Ms Pilar Dieter, senior partner at Shanghai-based supply chain consultancy

**Exports of shirts and sneakers and other apparel will surge more than 10 per cent to a record US\$40 billion this year, according to Vitas data. But the country will need to import six million tonnes of spun fabric – triple its domestic capacity.**

”



YCP Solidiance. "This notion of a Chinese invasion is becoming a point of contention."

Vietnam's FDI from China has more than tripled so far this decade to roughly US\$2.4 billion last year. In the garment industry alone, Chinese investment last year more than doubled to US\$300 million from 2017, according to Vitas data.

But Chinese investment usually does little to benefit local industry and can come with few environmental safeguards, said Ms Thu.

"We aren't fully on board with China FDI," Ms

Thu said. "There's no investment in infrastructure. They just want to jump in."

A warmer embrace of Chinese investment hinges on China dialling back the incursions into Vietnamese territory, said Dr Huong Le Thu, a professor in strategic studies at the Australian National University. This seems unlikely, though.

"China has built expectations at home that it is strong," Dr Thu said.

"The degree to which tensions ease will depend on how ambitious and confident China is." **SI**

## *Vietnam stands to win as foreign investments rise*

Trade war or not, Vietnam's patchwork of free trade agreements, liberalisation and already close trading relationship with both China and the United States ensures that, for now at least, the country of 96 million people probably wins, whether relations between Beijing and Washington thaw or remain in deep freeze.

"I have an optimistic view that Vietnam's foreign direct investment (FDI) inflows will continue to increase in the future," said Dr Lam Thanh Ha, senior lecturer in economics at the Diplomatic Academy of Vietnam.

"Maintaining reform of the investment and business environment and choosing quality investment projects still have important implications."

During the five months to May, investments from Hong Kong and China, including from Apple supplier GoerTek, added up to nearly US\$1 billion (S\$1.37 billion) in realised capital compared with US\$7.3 billion in total, Vietnam government data shows.

The inflow of capital has touched off a scramble for resources such as industrial property.

Vietnam Singapore Industrial Park, a joint venture between Singapore's Sembcorp Development and Vietnam state-owned company Becamex IDC, attracted US\$14.2 billion in investment by 822 companies across the eight properties it manages throughout the country, up from US\$12.9 billion at the end of last year.

Mr Kelvin Teo, chief executive of Sembcorp Development, said: "We continue to receive inquiries for land because of the

trade tensions between the US and China, and the interest has extended to our other industrial park in the region too."

Vietnam has also rekindled efforts to pare back its state-owned sector, which comprises 30 per cent of the economy. The government is selling down its stake in big state-owned firms, including Vietnam Airlines and Vietnam National Petroleum Group.

To some extent, the country's accession to the World Trade Organisation in 2007 as well as recent free trade agreements have provided leverage for reformers to liberalise the economy.

Vietnam will have preferential access to big markets with the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP), which took effect in January, as well as the upcoming free trade agreement with the European Union.

The value of registered investment from China surged from less than US\$400 million in 2008 to US\$2 billion in 2016, which means some of this overseas investment was coming to Vietnam regardless, said Dr Ha.

That means the country can be choosy.

"In the long term, the rise of FDI from China comes from the trend of shifting capital outflows of its own businesses," Dr Ha said.

"Vietnam's FDI attraction must be conducted in a selective manner, rather than attracting FDI at all costs."

– Jeffrey Hutton

## *China investment poised to help Cambodian bicycle industry pedal ahead*

### **TAN HUI YEE**

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A BRAND NEW FACTORY IS EMERGING ON A 20ha plot in Phnom Penh as part of a plan to shift production of millions of bicycles from China to Cambodia.

How fast it is completed, however, will depend on the meeting between US President Donald Trump and Chinese President Xi Jinping at the G-20 summit in Japan, if it ever happens.

"If the meeting goes very well, they will go ahead at one pace," said Mr Arnold Kamler, chairman of US bicycle company Kent International, as he explained the calculations made by his Chinese

bicycle supplier Shanghai General Sports.

"If it really looks like that thing is completely falling apart, they will go into warp speed."

Mr Trump, who raised duties on US\$200 billion (S\$273 billion) worth of Chinese imports the previous month, has threatened tariffs on another US\$300 billion worth of goods if Mr Xi does not meet him at the G-20 summit.

While Vietnam, Taiwan and Chile have been identified by analysts as the biggest beneficiaries of diverted US-China trade, manufacturing hubs



like Cambodia are seeing greater interest from Chinese firms trying to relocate their operations to get around punitive US tariffs.

The kingdom has a bicycle industry that enjoys tariff-free access to both the US and European Union.

Last year, factories in Cambodia's special economic zones produced 1.4 million bicycles worth US\$287 million, with 64 per cent headed for the EU. Another 7.3 per cent of Cambodia's bicycle exports are bound for the United States.

A Straits Times check with Cambodia's Ministry of Commerce found at least two new Chinese-controlled bicycle firms that had set up shop recently.

Evergrand Bicycle (Cambodia) was registered in November last year, while XDS Bicycle (Cambodia) was registered three months ago.

Most of the bicycles made by Shanghai General Sports is produced for Kent, which sells some three million sets to retailers such as Walmart and Target every year.

If its factory in Cambodia is built at full speed, the Chinese manufacturer could be producing 50,000 bicycles a month by the middle of next year, Mr Kamler told The Straits Times.

"The plan is over the next three to four years. They will reduce the size of their factory in China by about 50 per cent to 60 per cent," Mr Kamler said.

Any remaining US-bound bicycles still produced in China will be subject to an eye-watering 36 per cent duty.

But Cambodia is facing its own headwinds.

The EU in February launched a process to suspend Cambodia's trade privileges after Prime Minister Hun Sen cracked down on his political opponents.

Amid sustained Western pressure over its human rights record, Phnom Penh has leaned increasingly on Beijing, whose investment in Cambodia accounted for 41.3 per cent of all foreign direct investment and 77 per cent of bilateral debt last year.

Between 2017 and last year, Chinese investment in Cambodia doubled in value to US\$3.3 billion.

"China's investments come with no conditions," said Dr Chap Sotharith, a board member of the Cambodian Institute for Cooperation and Peace, a research institute. "It's not like investments from the US."

But this means that economic tremors from a slowdown in China are amplified in Cambodia, the third smallest economy in Asean. Growth in Cambodia's real estate sector, for example, slowed after Beijing tried to control Chinese debt and halt a slide in the yuan's value.

"Approved investments into construction projects declined last year, partly due to weaker external demand particularly from China, following the US-China trade tension and China's restrictions on outbound investments in the real estate sector," a report from Cambodia's central bank stated in April.

The government, mindful of the potential damage from a protracted trade war on the Cambodian economy, is striving to improve its trade competitiveness, Cambodia's Minister for Economy and Finance Aun Pornmoniroth was quoted by Khmer Times as saying earlier this month. **ST**



The Kent bicycle production lines at Shanghai General Sports in Kunshan in China's Jiangsu province. If its factory in Cambodia is built at full speed, the Chinese manufacturer could be producing 50,000 bicycles a month by the middle of next year. PHOTO: REUTERS

## Trade Briefs

### Asean agrees on common vision for Indo-Pacific region

BANGKOK – Asean leaders announced a collective vision for the Indo-Pacific region on June 23, in an attempt to reclaim the geopolitical narrative amid the strategic rivalry between China and the United States.

The non-binding statement foregrounds an inclusive and "rules-based framework" to "help to generate momentum for building strategic trust and win-win cooperation in the region".

While mentioning neither the US nor China by name, the document says: "The rise of material powers, i.e. economic and military, requires avoiding the deepening of mistrust, miscalculation and patterns of behaviour based on a zero-sum game."

– The Straits Times

### China tells top global CEOs it will 'further open up'

BEIJING – Chinese Premier Li Keqiang vowed on June 20 to further open up China's economy during a meeting with CEOs of top global companies amid simmering trade tensions with the United States.

Washington and other trade partners have long complained about the uneven playing field foreign companies encounter in China, theft of intellectual property and entry barriers that allow state-backed companies to dominate crucial sectors of the economy.

During the meeting in Beijing with heads of 19 multinational companies, Mr Li pledged to make China more

attractive to foreign investors.

"We welcome more and more foreign investment to come to China," Mr Li told the group representing the Global CEO Council.

– AGENCE FRANCE-PRESSE



PHOTO: REUTERS

### Google moving hardware production out of China

TAIPEI – Alphabet Inc's Google is moving some production of Nest thermostats and server hardware out of China, avoiding punitive United States tariffs and an increasingly hostile government in Beijing, sources said.

Google has already shifted much of its production of US-bound motherboards to Taiwan, averting a 25 per cent tariff, they said.

While US officials have pinpointed Chinese-made motherboards as a security risk, Google didn't bring that up during discussions with its suppliers, they said. Tariffs have also pushed American-bound production of its Nest devices to Taiwan and Malaysia, the people said.

– BLOOMBERG

# US-China trade war starts to bite in Singapore

**TAN EE LYN**

Senior Correspondent



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AT A FACTORY IN TUAS, COMPANY MANAGER Michael is seeing his inventory of raw materials for the production of semiconductor chips pile up.

“Semiconductor production is practically dead. I have three times the inventory that I need,” said Michael, who was using a pseudonym because he was not authorised by his company to speak publicly.

He added: “Everyone is now putting their business decisions on hold and not making new orders because they don’t know what will happen to the trade war.”

Effects of the tit-for-tat trade war between the United States and China are starting to bite in Singapore. From factory managers to industry representatives, accounts are beginning to emerge of falling orders and sales, reduced factory activity and hiring freezes.

The spat, which began last year, intensified when US President Donald Trump imposed higher tariffs of up to 25 per cent on US\$200 billion worth of Chinese goods and threatened to levy duties on all remaining US\$300 billion worth of Chinese imports. Beijing retaliated with tariff hikes on a revised list of US\$60 billion worth of US goods.

Caught in the cross hairs is Singapore, where some of its exports are being hit, said industry observers.

Factories here which manufacture products for Chinese companies that would eventually be shipped to the US are especially hit. Many such as Michael’s factory have pressed the pause button and are churning at less than full capacity.

Others are making contingency plans. Mr John Kong’s business, which buys raw materials from Taiwan to build steel floors and aluminium roofing here, is not yet affected, but he is already looking

Observers say Singapore has been caught in the cross hairs of the trade war, with some exports affected. Factories which make products for Chinese firms that would eventually be shipped to the US are especially hit.

PHOTO: LIANHE ZAOBAO



for other supply sources for fear that China will act against the island, a US ally.

The impact is beginning to filter down to Singapore workers.

The Ministry of Manpower’s (MOM) latest statistics released on June 13 show that 3,230 employees were retrenched in the first quarter of this year, up from 2,510 in the previous quarter and 2,320 in the same period a year ago. The jump was driven by manufacturing, and it affected mainly production and related workers in the electronics sector. Among retrenched residents, the bulk of the affected workers were professionals, managers, executives and technicians.

DBS senior economist Irvin Seah saw the retrenchment figure as being linked to slowing economic growth. “What is causing the down cycle (locally) is also contributed by the trade war,” said Mr Seah, who added that there would be a time lag before the effects of the trade war between the world’s two largest economies can be fully felt.

## NO CHRISTMAS CHEER

End-of-year orders for the holiday season would usually have piled in by mid-June.

But this year, manufacturers are not getting the usual bulk of orders due to a fall in demand, said Mr Ang Wee Seng, executive director of the Singapore Semiconductor Industry Association.

With higher tariffs raising prices, demand for consumer goods has taken a hit and the trickle-down effect is now being seen especially in the semiconductor business, which produces parts that are necessary for many electronic goods.

“With the trade war, overall product demand drops because people are wary of the price uptick in the US,” said Mr Ang.

“The demand is just not there, they still have





A view of the Pasir Panjang container terminal. ST FILE PHOTO

orders, but they are not sufficient. So, you don't get the full loading of the factory. From the factory's standpoint, this is an underutilised capacity."

Raw material suppliers to the semiconductor industry are hurting too. An unusually strong boom for semiconductor chips in 2017 resulted in companies forecasting more raw material demand last year – only for industry players to see a cyclical slowdown that was made worse by uncertainties caused by the trade war.

A recent meeting of human resource personnel from the semiconductor industry confirmed that some companies were freezing headcount. This is usually the first course of action to control costs.

"When human resources tell you there is a headcount freeze, you know the company is on red alert mode where it needs to reduce and control its costs," said Mr Ang, adding that companies would "hire only to backfill critical resources during this period."

According to the Economic Development Board, Singapore's precision engineering cluster output fell 12.5 per cent in the January to April period versus the same period a year ago, while its electronics cluster output fell 3.2 per cent in the first four months of this year, compared with the same period last year.

## RIPPLE EFFECTS

Some industry members see more uncertainties ahead if the trade war drags out. Singapore's manufacturing sector accounts for about 20 per cent of the economy, with high-tech industries such as semiconductor and precision engineering being important pillars of the sector.

"There is a generic slowdown in the market, and the semiconductor industry in general is not going through the growth it had last year," said Mr Rajan Rajgopal, president of DenseLight Semiconductors,

a company that designs and manufactures photonic optical light source products.

Mr Kurt Wee, president of the Association of Small and Medium Enterprises, said there were no clear signs yet of fallout from the trade war, but it was possible in the next few quarters due to an overall fall in trade.

"If the downturn were to happen, the first sectors (to be affected) would be manufacturers and logistics and supply chains. Then it is going to impact business, consumer consumption and demand – that will take two to three quarters after that. If the trade war continues to have negative effects and gains momentum in a negative way, we will be looking at an uncertain 12 to 18 months going ahead and some contraction," he added.

In May, the Ministry of Trade and Industry lowered Singapore's gross domestic product growth forecast for this year to 1.5 per cent to 2.5 per cent, from 1.5 per cent to 3.5 per cent, after "taking into account the performance of the Singapore economy in the first quarter, as well as the weaker external demand outlook."

The weaker economy may have already claimed some of its early victims. Laboratory technical officer Sunny Liew was retrenched in May when the fertiliser company he was working for decided to move its operations to Malaysia, where overheads and wages would be lower. The firm converts animal waste to fertiliser and sells its products to countries in the region, such as Malaysia and Brunei.

"I am still healthy, I can still work and I want to make good use of my polytechnic diploma in environmental and chemical process engineering," said Mr Liew, 70, who added that retirement was not on the cards for him because he is still active and wants to continue working.

Commenting on the latest labour figures, a Ministry of Trade and Industry spokesman said that even though the economy slowed, the labour market in Singapore continued to hold up in the first quarter of the year.

MOM figures showed total employment (excluding foreign domestic workers) as having grown by 10,700 in the first quarter. This was higher than the growth in the first quarter of last year (400), but lower than that in the fourth quarter of last year (14,700) due to seasonal factors.

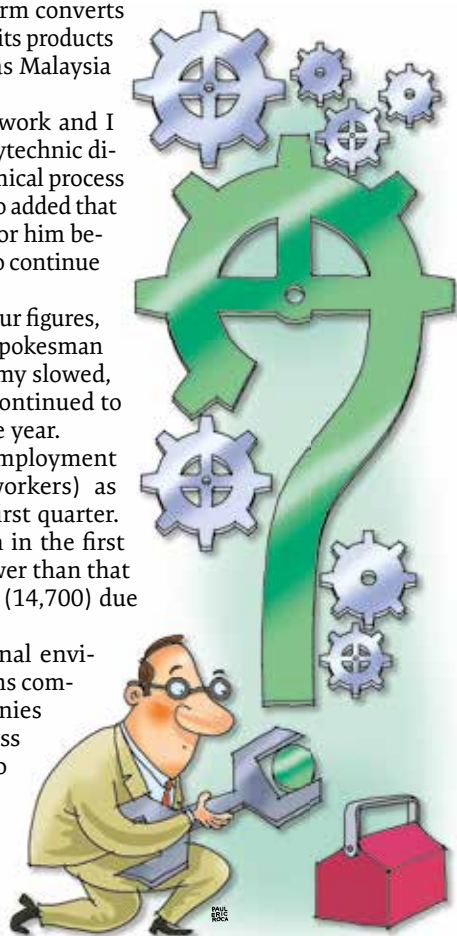
"Given the challenging external environment, the Government remains committed to supporting our companies to enhance their competitiveness by building their capabilities to access new markets, adopting technologies to remain relevant and upskilling their staff," the spokesman said. **ST**

– Additional reporting by Sue-Ann Tan

**Factories in Singapore see reduced activity amid slowing orders and some firms freezing hiring.**

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ST FILE ILLUSTRATION



# US-China trade war: Will tech world of the future look like the past?

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Tech Editor



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**Experts say the aggressive move by the US could also splinter the hardware universe as China develops its own components to wean itself off third parties like Intel, Qualcomm, Xilinx and Broadcom... This means the world could end up with two hardware and software ecosystems, possibly leading to inter-operability issues reminiscent of the past.**



TALK OF A BIFURCATED TECH WORLD – WITH China's Huawei on the one side and American companies like Google and Apple on the other – echoed along the information superhighway following a decision by Google to limit the software services it provides to Huawei Technologies in the latest twist in the US-China trade war.

Google made the alarming announcement on May 20 after a Trump administration order the previous week to restrict the Chinese telecommunications giant from buying American technology and components.

Google's move means future versions of smartphones made by Huawei that run on the Android operating system will lose direct technical support, as well as early access to security patches and software updates.

It will also mean that proprietary Google apps such as PlayStore, Gmail, Google Maps and YouTube – which are popular with users – will not be pre-loaded on Huawei devices, deterring users who value convenience above everything else.

Other US hardware firms Intel, Qualcomm, Xilinx and Broadcom will also stop supplying parts to Huawei until further notice – cementing the digital wall between China and the US.

How might the tech world the way we know it change?

## ALTERNATE UNIVERSE

A splintered tech world is not totally unfamiliar to most people. China has already created an alternate universe for apps and services behind its great firewall designed to keep out foreign companies' influence on domestic tech consumption.

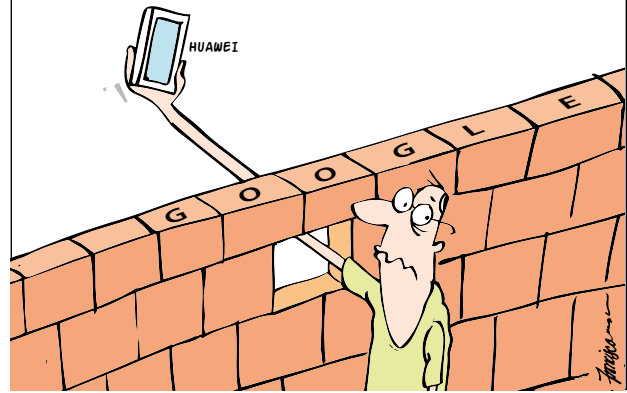
Experts say the aggressive move by the US could also splinter the hardware universe as China develops its own components to wean itself off third parties like Intel, Qualcomm, Xilinx and Broadcom... This means the world could end up with two hardware and software ecosystems, possibly leading to inter-operability issues reminiscent of the past.

What began in 1999 – when Chinese tech giant Tencent created the QQ instant messaging service to rival ICQ, then owned by American firm AOL – started a slew of me-too inventions. These include:

- Baidu, the equivalent of Google for online search activities;
- Weibo, which rivals micro-blogging platform Twitter;
- Youku, the equivalent of Google-owned video hosting service YouTube; and
- Renren, which is similar to social networking service Facebook.

Some Chinese firms have even surpassed their American counterparts in innovation. Take Tencent's popular instant messaging platform WeChat, which has integrated micro-banking functions to allow in-

## HUAWEI/GOOGLE FALL OUT



ST ILLUSTRATIONS: MANNY FRANCISCO

chat payment. It is used by more than 900 million people and is a central cog of Chinese digital life.

Meanwhile, its American equivalent, Facebook-owned WhatsApp, is still beta testing in-app payment in India.

Existing Huawei smartphones will continue to have access to Google apps and services, as well as security updates. But Huawei may not be able to update the Android software to the next version promptly, if at all.

## INTER-OPERABILITY AT STAKE?

Experts say the aggressive move by the United States could also splinter the hardware universe as China develops its own components to wean itself off third parties like Intel, Qualcomm, Xilinx and Broadcom.

Ms Seema Shah, a senior global investment strategist at asset management firm Principal Global Investors, said: "Ultimately, this tech war could prompt a medium-term acceleration of growth for China."

This means the world could end up with two hardware and software ecosystems, possibly leading to inter-operability issues reminiscent of the past.

"Think of the early generation of mobile communications, where consumers needed to change phones when they went from country to country," said Mr Ramakrishna Maruvada, a regional telecoms analyst at Daiwa Capital Markets.

Up until the late 2000s, people in many parts of Asia and Europe still had to switch from using their GSM (global system for mobile communications) mobile phones to those based on the CDMA (code-division multiple access) standard when they travelled to Japan and the US.

Devices then were expensive due to the lack of economies of scale – in engineering capabilities as well as sales opportunities.

The danger now is that, in some cases, buyers



from around the world might have to choose between US-or China-made technologies.

Dr Chua Hak Bin, an economist at Maybank Kim Eng, said: "The US may force countries to choose sides."

It would be similar to how the Trump administration used tariff concessions to prevent its biggest trading partners Canada and Mexico from having a free-trade agreement with China.

China's Huawei is also barred from selling 5G mobile network technologies to US companies. So far, only Australia, New Zealand and Japan have openly supported the US campaign against Huawei.

Experts believe it would be a major setback to global progress if nations were forced to take sides; there would be no balance of power.

"Is it better to live in one big pond with two big fish or to live in one of two small ponds each with a big fish?" asked technology lawyer Bryan Tan of Pinsent Masons MPillay.

"In a small pond, you would have to live under the whims of the big fish in the pond. There will be no more democratisation and it would just be a power play."

Mr Aloysius Cheang, Asia-Pacific executive vice-president of the London-based think-tank Centre for Strategic Cyberspace + International Studies, warned of the dawn of a technology cold war.

"If the world fractures into two economic camps, it would reverse the efforts to integrate China into the world economy over the past few decades," he said. [ST](#)

## Decoupling of US, Chinese economies likely inevitable

A YEAR AGO, THE SEPARATION OF THE AMERICAN and Chinese economies seemed a distant fantasy of China hawks in Washington.

Today, decades of deepening economic interdependence between the United States and China are being undone, said national security experts.

Trade and investment flows are being reduced, supply chains rerouted and research and innovation ecosystems becoming less integrated, said Dr Ely Ratner, deputy national security adviser to then Vice-President Joe Biden from 2015 to 2017.

"Despite protests from different quarters, the facts are happening on the ground, some of it potentially irreversible," Dr Ratner said on June 14 at the annual conference of the Washington-based Centre for a New American Security (CNAS), where he is executive vice-president.

The decoupling is being driven by wider political and economic forces and will not stop even if US President Donald Trump and Chinese President Xi Jinping reach a deal to end the trade war between their countries, said experts.

"There's no ability for (Mr Trump) to shut it all down without a very advanced directive," said CNAS energy, economics and security programme director Elizabeth Rosenberg.

"Regulations, law enforcement, diplomacy, research exchange, visas, currency – there's a huge array of policy instruments in play that are pushing us towards decoupling across many areas," she added.

American Enterprise Institute resident scholar Derek Scissors said separating the two economies is not actually Mr Trump's primary

intent, though there are factions of the White House pushing for it.

Giving an overview of intra-White House politics, Dr Scissors described how members from the national security community want to stop supporting Chinese military improvements directly and indirectly, which requires some decoupling. Another group, which is associated with Treasury Secretary Steven Mnuchin, wants more from the Chinese but not at the cost of a major confrontation, he added.

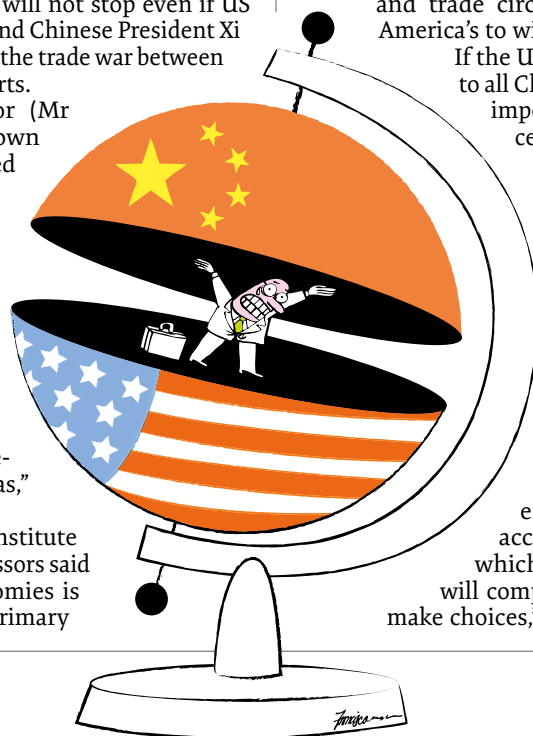
Mr Trump is closer to Mr Mnuchin's camp than he is to the decoupling camp, said Dr Scissors, because the President primarily wants more US exports to China. "The twist is if he doesn't get those, he'll push us down the road to decoupling."

Dr Scissors also said that decoupling would hamstring the Chinese economy, echoing the dominant view in Washington foreign policy and trade circles that a trade war was America's to win.

If the US applied 25 per cent tariffs to all Chinese imports and no other importers, it would lose 0.14 per cent of its GDP growth in 2017 terms, he estimated.

Ms Rosenberg said the uncertainty about what Mr Trump would do was making traders and investors jittery, and manufacturers to move operations outside of China to insulate themselves from risk.

"Technology controls, trade controls, sanctions, or controls on the flow of energy do have the effect of accelerating this decoupling, which won't just be bilateral. It will compel the rest of the world to make choices," she said. [ST](#)



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**Even if a sort of truce is reached on the trade issue, the dynamics set in motion will continue. We are in for an extended period of change in relations.**

”

– Obama Administration National Security Adviser Tom Donilon

# When China drew level with the US, but missed some opportunities

Acting US Defence Secretary Patrick Shanahan and Chinese Minister of National Defence Wei Fenghe shaking hands during a ministerial roundtable hosted by Singapore's Defence Minister Ng Eng Hen at the Shangri-La Dialogue on June 1.  
PHOTO: KEVIN LIM



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IN MANY WAYS, THE 18TH SHANGRI-LA Dialogue in Singapore will be remembered as the regional event where China drew level with the United States – optically at least.

Chinese delegations to the annual Shangri-La Dialogue have tended to complain about not getting enough air time to voice their thoughts, compared with the Americans.

In turn, the International Institute for Strategic Studies, the conference organiser, has consistently responded that if the level of Chinese representation was high enough, so would the platform be.

This year, China sent its defence minister to the premier security summit after a gap of eight years.

Given the platform of an exclusive opening plenary on the summit's third day, General Wei Fenghe on June 2 turned in a masterly performance, calmly defending Chinese positions and displaying neither anxiety nor alarm over his country's rapid deterioration in ties with the US.

While US Acting Defence Secretary Patrick Shanahan had generally avoided calling out China in his own speech the previous day, Gen Wei had no such qualms. In his opening lines, he laid out the scenario.

“We hold different views with the US on several issues, and firmly oppose its wrong words and actions concerning Taiwan and the South China Sea,” said the Chinese defence minister, mincing no words.

It was a message tailored equally for an audience both at home and abroad. Unlike Mr Shanahan, who did not seem to relish the post-speech engagement with the 600 ministers, military brass and analysts assembled, Gen Wei had the air of a man who had all morning for them.

His domestic audience saw a general fully capable of defending China; the global assembly in the Shangri-La ballroom saw an officer neither overly concerned by the situation nor shying away from it.

The 18th Shangri-La summit, which concluded on June 2, was held under the overhang of a geopolitical situation that seems to be getting more clouded by the day.

As Singapore Defence Minister Ng Eng Hen said in his conference-closing remarks, the events of the month past, particularly the breakdown of trade talks between the US and China, and the tariff and technology barriers being swiftly erected, “have altered the trajectory of this region into an



altogether different orbit.”

A year ago, we were “hoping” that nothing would go wrong, a key summit figure told me on the sidelines. This time, he said, that has turned to “fearing” that a lot could yet go wrong.

While saying he did not expect anyone to take sides in the US-China struggle for dominance, Mr Shanahan, while calling for a network of allies and partners in the region, made it clear he expected them to foot more of the defence bill, and build common platforms with the US. This, he said, was also the way to future prosperity.

Eager to get out of the way, it is getting evident that many countries are gently shifting positions, or if nothing else hurrying to take a centrist line.

For instance, Australia, a treaty ally of the US, spoke up for continued American economic and strategic engagement with the region, but some observers took note that its defence minister Ms Linda Reynolds omitted to mention a “US-led” regional security order. While this may well be an oversight by a person only four days into her job, the world will be watching to see if it presages a deeper course correction.

South-east Asia, with deep economic and military ties to the US, and close ethnic and trade links with giant neighbour China, has its work cut out to balance the competing pulls.

Indonesian Defence Minister Ryamizard Ryacudu spoke on June 2, of the great common threats facing Asean, and the “deterrence” that the region, with a combined population of 620 million and men in uniform numbering 2.3 million, could bring to face down these threats.

But, given the vast disparities between maritime and mainland South-east Asia, and with strategic orientations varying so widely between nations, any form of a common defence platform is not at all realistic.

That said, it is evident that the region needs to have a serious discussion about what the Philippines’ Defence Secretary Delfin Lorenzana described as the possibility of “sleep-walking into another international conflict.”

Unable to jell militarily, the region has no option but to stand by and allow a widening band of outside players to enter the arena in the name of security, irking stalwarts such as Malaysian Prime Minister Mahathir Mohamad.

Ms Florence Parly, the French Minister of the Armed Forces, made a particular point of the Charles de Gaulle carrier strike group tethered at Changi Naval Base to insist her country will have its say in the “building blocks of a global confrontation taking shape in Asia.”

This, she said, was a “question of principle when rules are no longer the boundary of ambition.”

As cool as Gen Wei was, the Chinese defence minister missed an opportunity to address such sentiments and offer more soothing words to this troubled region.

China specialist Drew Thompson, a visiting

senior research fellow at the Lee Kuan Yew School of Public Policy, says he would have liked to hear more from Gen Wei on the notion that Chinese military modernisation has created a classic security dilemma whereby China’s actions to enhance its security has spread insecurity among its neighbours, and further afield.

On June 2, that was not forthcoming.

One opportunity Beijing has to match its words with deeds is to help the speedy conclusion of a quality Code of Conduct (COC) for the South China Sea. Once that is in place, and particularly if China were to yield on making it a legally binding document, South-east Asia would breathe a lot easier.

As of now, though, a legally binding COC seems a distant possibility. **ST**



HEADING OFF A GLOBAL CLASH

## A challenge for The Straits Times readers

**Calling for steps and actions to manage a transition to a new global order.  
An essay contest organised by The Straits Times,  
in partnership with Harvard's Kennedy School.**

How the United States and the world relate to a rising China is one of the great challenges today.

This is your opportunity to help suggest pathways that might be taken to manage a transition to a new global order and make the world a safer place to live in.

Write an essay in no more than 600 words on “Can the US and China escape the Thucydides Trap?”.

The trap refers to the power dynamic that comes into play when an incumbent power is made anxious by an emerging rival.

ST editors will pick the top entries to be sent to Professor Graham Allison, an American political scientist and professor at the John F. Kennedy School of Government at Harvard, and author of the bestseller *Destined For War: Can America And China Escape Thucydides's Trap*, for his review.

The best essay wins a \$3,000 cash prize from The Straits Times.

The winner will also get two places to The Straits Times Global Outlook Forum in November.

Send your entry for this ST contest to <http://str.sg/oV6P> by Oct 27, 6pm.

Details on the essay format and recommended background readings can be found here: [www.belfercenter.org/publication/searching-grand-strategy-meet-china-challenge](http://www.belfercenter.org/publication/searching-grand-strategy-meet-china-challenge)

**THE STRAITS TIMES**



## **US-China: The Way Forward**

**LEE HSIEN LOONG**

# **US & China must avoid path of conflict**

The world is in the throes of major geopolitical change as the Sino-US rivalry intensifies. Both great powers must adapt to changing realities and work for a peaceful transition, not upend the global system, says Singapore Prime Minister Lee Hsien Loong in his key address at the opening of the Shangri-La Dialogue on May 31. The text of his speech follows:

PHOTO ILLUSTRATION: ISTOCK, CHNG CHOON HIONG

### **LEE HSIEN LOONG**



WELCOME TO SINGAPORE AND TO THE 18TH edition of the Shangri-La Dialogue.

The view from Singapore and South-east Asia.

Our world is at a turning point. Globalisation is under siege. Tensions between the US and China are growing. Like everyone else, we in Singapore are anxious. We wonder what the future holds, and how countries can collectively find a way forward to maintain peace and prosperity in the world.

What can the history of South-east Asia tell us about avoiding upheavals and disasters in our path ahead? This year, Singapore is commemorating our Bicentennial.

Two hundred years ago, Stamford Raffles, an Englishman, landed in Singapore and founded a trading post here. The Dutch had already colonised the Dutch East Indies, so the British were actually latecomers to South-east Asia. Raffles was Lieutenant-Governor of Bencool, on the west coast of Sumatra. He saw the trade potential of the region, and decided

to look for a new outpost for the British East India Company, along the Strait of Malacca.

He chose Singapore, and that changed our destiny.

The Dutch protested Raffles' action furiously, but in vain. To preserve their monopoly, the Dutch had either prohibited foreign ships from operating in their ports, or imposed high tariffs. Raffles took a different approach. He set up Singapore as a free port. Trade boomed, and the settlement prospered. The more open approach of the British delivered superior results. Over the next century, South-east Asia was divided between the British, Dutch, Spanish, French, and later the Americans. Their rivalry was intense. No single colonial power dominated the whole region.

In the 20th century, the interests of big powers continued to intersect in South-east Asia. In 1941, Imperial Japan invaded French Indochina. The US retaliated with an oil embargo on Japan. This was the immediate trigger for the Pacific War. On the



same day that Japan bombed Pearl Harbour, they also attacked Malaya and Singapore. There followed for us the Japanese Occupation: three years and eight months of oppression, fear and misery.

During the Cold War, South-east Asia was again on the front line. The region was split between communist and non-communist states. Vietnam became the battlefield for a proxy war between the two camps. Meanwhile, China supported communist insurgencies and promoted armed revolution in the non-communist countries, including Malaysia and Singapore.

This was the backdrop when the five non-communist countries in South-east Asia – Indonesia, Malaysia, the Philippines, Singapore and Thailand – came together to form Asean in 1967.

It was a remarkable act of statesmanship. Several of the partners had a recent history of conflict with one another, and the wounds had yet to heal fully. But with Asean, the five countries eschewed conflict, and took the path of dialogue, cooperation and friendship. We integrated into the world economy, linked up with advanced countries, and thrived.

Meanwhile, the communist countries in Indochina were held back for decades by successive wars and the rigidity of their command economies.

After the Cold War ended, the US became the sole superpower. South-east Asia entered a new phase. The Indochinese wars finally ended, and the communist countries opened up. Earlier, Vietnam had invaded Cambodia, thus posing a serious threat to its non-communist neighbours. But now Vietnam joined Asean, together with Cambodia, Laos and Myanmar. It was a case of beating swords into ploughshares.

Over the next decades, South-east Asia benefited from a favourable external environment. The US was the dominant power in the Asia Pacific, and a stabilising security presence. International trade was expanding rapidly. Trade barriers came down, often led by the United States.

The Asean economies prospered through exported growth and foreign investments. International frameworks like the World Trade Organisation (WTO) and the UN Convention on the Law of the Sea (Unclos) established rules, managed conflict, balanced competing interests, and fostered cooperation between countries big and small.

Initially, China played only a minor economic role, but as its economy took off, it became a growing partner of the Asean countries, and a major participant in regional affairs.



## GREAT GAME OF OUR TIMES: US-CHINA RELATIONS

I recount this history to show that South-east Asia is no stranger to the great game of nations, and to offer some historical perspective to the current strategic situation.

The US-China bilateral relationship is the most important in the world today. How the two work out their tensions and frictions will define the



Prime Minister Lee Hsien Loong delivering his keynote address at the Shangri-La Dialogue on May 31, 2019.

ST PHOTO: JASON QUAH

international environment for many years to come. The relationship has already altered significantly. China has totally changed since it started opening up 40 years ago. Its GDP per capita has grown by more than 25 times in real terms. China is now the second largest economy in the world.

On many counts, China's growth is a tremendous boon, both to itself and the world. China has substantially transformed its backward, centrally planned economy into a middle-income, market-driven one, even though it is far from being a full market economy. More than 850 million Chinese people have been lifted out of poverty, an achievement unprecedented in human history.

China's development and success benefited the world too. China has become a massive production and manufacturing base, lowering costs for the world's producers, first for labour-intensive goods, and now increasingly for high value and technology-intensive production. It is also a huge market, importing everything from commodities and electronic components to aircraft and fine wines.

On the consumer side, billions of people worldwide buy all manner of products, from Barbie dolls and basketballs to drones and mobile phones, made in China, though often incorporating foreign components and technology.

Imagine, conversely, had China remained closed and undeveloped. A failing China would have exported many problems to the world, quite possibly still including armed revolution. Its huge population would have been resentful and restless at being left behind by other countries.

A generation ago, when China was still poor, Deng Xiaoping was asked by US President Jimmy Carter to allow more people to emigrate. He answered: "Well, Mr President, how many Chinese nationals do you want? Ten million? Twenty million? Thirty million?"



## RISE OF CHINA: ADAPTING TO NEW REALITIES

China's success has enabled the world to avoid this disastrous outcome. At the same time,

China's growth has shifted the strategic balance and the economic centre of gravity of the world, and the shift continues. Both China and the rest of the world have to adapt to this new reality.

China has to recognise that it is in a totally new situation created by its own success. China can no longer expect to be treated the same way as in the past when it was much smaller and weaker. China may still be decades away from becoming a fully developed advanced country, but it cannot wait decades before taking on larger responsibilities.

## COLLECTIVE EFFORT

**Small states like Singapore can do little to influence the big powers, but we are not entirely without agency. There are many opportunities for smaller countries to work together to deepen economic cooperation, strengthen regional integration, and build up multilateral institutions. This way, we can strengthen our influence as a group, and advance a collective position on issues that matter to us, be it trade, security or technology.**



– PM LEE, on how small states can help strengthen multilateral bodies.

Having gained much from the international system, China now has a substantial stake in upholding it, and making the system work for the global community.

Chinese leaders have spoken up strongly in support of globalisation and a rules-based international order. China must now convince other countries through its actions that it does not take a transactional and mercantilist approach, but rather an enlightened and inclusive view of its long-term interests.

For example, when China joined the WTO in 2001, its merchandise trade accounted for only 4 per cent of world trade. Since then China's share has almost tripled, to 11.8 per cent. This is why the trade arrangements and concessions that China negotiated when it joined the WTO are no longer politically wearable for other countries.



### CHINA: GREAT POWER, GREAT RESPONSIBILITIES

It is in China's own interest to prevent the international framework of trade from breaking down, and to implement timely changes that bring about greater reciprocity and parity with its trading partners, and that are more consistent with present-day China's more advanced state of development.

Similarly, in security, now that China is a major power with the second largest defence budget in

the world, its words and actions are seen differently.

To protect its territories and trade routes, it is natural that China would want to develop modern and capable armed forces, and aspire to become not just a continental but also a maritime power. At the same time, to grow its international influence beyond hard power, military strength, China needs to wield this strength with restraint and legitimacy.

Frictions will arise between China and other countries from time to time. The overlapping maritime claims in the South China Sea are one example. China should resolve these disputes peacefully, in accordance with international law, including Unclos. It should do so through diplomacy and compromise rather than force or the threat of force, while giving weight to the core interests and rights of other countries.

Then over time it will build its reputation as a responsible and benevolent power that need not be feared. Instead, China will be respected as a power that can be relied on to support a stable and peaceful region.

In the long term, this will allow China to continue to benefit from a conducive and friendly international environment, and enhance its influence and standing in the world.

The rest of the world, too, has to adjust to a larger role for China. Countries have to accept that China will continue to grow and strengthen, and that it is neither possible nor wise for them to prevent this from happening. China will have its own legitimate interests and ambitions, including to develop indigenously advanced technologies like infocomms and artificial intelligence.

As a major stakeholder in the international system, China should be encouraged to play commensurate and constructive roles in supranational institutions like the IMF, World Bank and WTO. If China cannot do so, it will create its own alternatives.



### NEW INTERNATIONAL RULES NEEDED

The US, being the preeminent power, has the most difficult adjustment to make. But however difficult the task, it is well worth the US forging a new understanding that will integrate China's aspirations within the current system of rules and norms.

New international rules need to be made in many areas, including trade and intellectual property, cyber security and social media. China will expect a say in this process, because it sees the present rules as having been created in the past without its participation. This is an entirely reasonable expectation.

The bottom line is that the US and China need to work together, and with other countries too, to bring the global system up to date, and to not upend the system. To succeed in this, each must understand the other's point of view, and reconcile each other's interests.



Meanwhile, stresses and strains have built up between the two over multiple issues including cyber espionage, 5G technology, freedom of navigation, human rights and especially trade, where the two countries have reached an impasse.

If both sides treat their trade dispute purely on its own merits, I have no doubt their trade negotiators, who are highly competent, will be able to resolve it. But if either side uses trade rules to keep the other down, or one side comes to the conclusion that the other is trying to do this, then the dispute will not be resolved, and the consequences will be far graver than a loss of GDP.

The broader bilateral relationship will be contaminated. Other areas will inevitably be affected, including investments, technology, and people-to-people relations. Every action taken by one side will be seen as a direct challenge to the other, and will elicit a counter-action. We will all be headed for a more divided and troubled world.



### HARDENING OF ATTITUDES IN U.S. AND CHINA

Worryingly, this is starting to happen. Attitudes on both sides have been hardening. The US national security strategy and national defence strategy documents describe China as a “revisionist power” and America’s “strategic competitor.” The recent presidential executive order on securing the information and communications technology and services supply chain, states that it is aimed at “foreign adversaries.” It stopped just short of naming any particular country, but made quite clear what actions the US intends to take.

There is a growing bipartisan consensus in the US: that China has taken advantage of the US for far too long; that China has overtaken, or will soon overtake, the US in areas of advanced technology, such as artificial intelligence and some aspects of military technology, through underhand means; that instead of opening up and becoming more like the US, China has regressed in terms of political openness, and hence represents a challenge to American values and leadership.

Americans now talk openly of containing China, and to do so soon before it is too late, the way they used to talk about the USSR and the Soviet bloc. This negative view of China has permeated the US establishment. It is not confined to the White House or the administration, but is shared widely by Congress, the military, the media, academics and NGOs too. Those inclined to a more positive view of China have been marginalised.

Even US business sentiment towards China has soured. American businesses used to be the strongest supporters of China, because they benefited directly from China’s growth and economic opportunities. They had strongly advocated China’s accession to the WTO. When protectionist or nativist sentiments built up in the US, they were a balancing voice that

counselled good relations with China.

Now, that goodwill has all but evaporated. US businesses feel let down that China has not adjusted its policies on trade and investments, and in fact systematically disadvantages foreign businesses operating in China, while Chinese businesses operate uninhibited in the US. They want greater access to the China market, and not just to use China for their global supply chains.

This loss of goodwill on the part of an important constituency is a serious problem for China, which the Chinese have not fully appreciated or dealt with.

In China, views are hardening too. There are those who see the US as trying to thwart China’s legitimate ambitions – convinced that no matter what they do or concede on individual issues, the US will never be satisfied.



### FUNDAMENTAL PROBLEM: A LACK OF TRUST

They are alarmed by talk of a “clash of civilisations” between the US and China. They reject what they see as efforts by the US to impose its political system

and values on China.

This is coupled with a strong vein of nationalist fervour. Chinese television is rebroadcasting old movies of the Korean War, known in Chinese as 抗美援朝战争 – which means the war to resist America and assist North Korea. There is even a “US trade war song” circulating on the Internet, based on the theme music from a popular 1960s war movie about fighting the Japanese in the Sino-Japanese War!

Hardly anyone in China, whether in government, academia or the media, can be found who is prepared to speak up for a more positive and benign interpretation of the US’ intent.

The fundamental problem between the US and China is a mutual lack of strategic trust. This bodes ill for any compromise or peaceful accommodation. But to go down the present path would be a serious mistake on both sides. There is no strategic inevitability about a US-China face-off. But at the same time, if such a face-off does happen, it will be nothing like the Cold War.

First, there is no irreconcilable ideological divide between the US and China. China may be communist in political structure, but it has adopted market principles in many areas. The Soviets sought to overturn the world order. But China has benefited from, and by and large worked within, the framework of existing multilateral institutions.

During the Cold War, the communist bloc sought to export communism to the world. But China today is not attempting to turn other countries communist. Indeed, it is often criticised for being too willing to do business with countries and leaders regardless of their reputation or standing, citing non-interference in the internal affairs of other countries.

Second, China has extensive economic and trade links with the rest of the world. It is a major node in

## COOPERATION

**The bottom line is that the US and China need to work together, and with other countries too, to bring the global system up to date, and to not upend the system. To succeed in this, each must understand the other’s point of view, and reconcile each other’s interests.**



– PM LEE, on better US-China relations.

US President Donald Trump watching as China's Vice-Premier Liu He (left) and US Trade Representative Robert Lighthizer converse in the White House earlier this year. PM Lee Hsien Loong, in his speech at the Shangri-La Dialogue, pointed out that US-China relations will define the tenor of international relations for years to come. He said it is natural that the two powers will vie for power and influence, but competition should not inevitably lead to conflict.

PHOTO: AGENCE FRANCE-PRESSE



the world economy, unlike the USSR, whose economic links outside the Soviet bloc were negligible.

### WHAT U.S. ALLIES HOPE FOR

In fact, all of the US' allies in Asia, including Japan, South Korea, the Philippines, Thailand and Australia, as well as many of its friends and partners, including Singapore, have China as their largest trading partner. They all hope that the US and China will resolve their differences. They want to be friends with both: to nurture security and economic ties with the US, as they grow their business links with China.

In a new Cold War, there can be no clear division between friend and foe. Nor is it possible to create Nato or Warsaw Pact equivalents with a hard line drawn through Asia, or drawn down the middle of the Pacific Ocean.

On the other hand, if there is indeed a conflict between the US and China, where will it end?

The Cold War ended with the total collapse of the sclerotic planned economies of the Soviet Union and the Eastern European countries, under the pressure of enormous defence spending. Even then, it took 40 years.

It is highly improbable that the vigorous Chinese economy will collapse in the same way.

China cannot take down the US either. The US is still by far the strongest country in the world. Its economy remains the most innovative and powerful, and its military capabilities and spending far exceed China's.

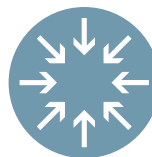
Americans worry about China catching up with the US, but although China may be abreast or even ahead in some fields, it will be many years before China can equal the US.

And contrary to what some people in China think, the US is not a declining power, nor is it withdrawing from the world. In fact, the US has made clear its intention to compete robustly, though in a different mode than before.

Even short of outright conflict, a prolonged period of tension and uncertainty would be extremely damaging. Many serious international problems like the Korean situation, nuclear non-proliferation and climate change cannot be tackled without the full participation of the US and China, together with other countries. In economic terms, the loss will not be just a percentage point or two of world GDP, but the huge benefits of globalised markets and production chains and the sharing of knowledge and breakthroughs that enable all countries to progress faster together.

We should therefore do our utmost to avoid going down the path of conflict, and causing enmity on both sides that will last for generations.

Of course, it is the duty of security and defence establishments to think the unthinkable, and plan for worst-case scenarios. But it is the responsibility of political leaders to find solutions to head off these extreme outcomes.



### DOMESTIC PRESSURES AND ZERO-SUM DYNAMICS

This is hard, because leaders on both sides are facing powerful domestic pressures. In the US, the political mood is deeply divided and disgruntled. Large segments

of American society have lost confidence in globalisation and multilateralism.

According to a Pew survey last year, nearly half of all Americans have an unfavourable opinion of China. As the presidential elections approach, these attitudes will surely deepen, because neither the Republicans nor the Democrats will want to risk being accused of being "soft" on China.

Regardless whether President (Donald) Trump is re-elected, or another Republican or Democrat wins, these sentiments will not go away.

China may not have US-style presidential elections, but their leaders face strong internal pressures too. In fact, the orientation of the Chinese leadership is primarily domestic. They know they have major issues to deal with at home. These include unevenly distributed growth, significant rural poverty, an ageing population and rising expectations for a better quality of life.

Both sides are sensitive about being perceived as weak.

Out of political necessity, the US wants to show that it has come out ahead in any deal. On the other side, because of China's long history with the West, its leaders cannot afford to appear to succumb to Western pressure to accept an "unequal" treaty.

Just a few weeks ago, China commemorated the centennial of the May Fourth movement. Not all of you may be familiar with it but it is an important date in Chinese history. In 1919, at the Versailles Peace Conference, a feeble China was forced to accept the decisions of the big powers. This caused Peking University students to demonstrate in protest, launching a nationalist movement to modernise and revive the country. This was a seminal moment in modern Chinese history.





This zero-sum dynamic makes it very hard to construct an agreement that is politically acceptable to both parties. But ultimately, it is in the interests of both the US and China to reach such an accommodation, and to persuade their domestic publics to accept it.

They both need to keep their relationship steady, so that both can focus on their respective pressing domestic priorities, and not be distracted by troubled relations with the other.



### **BENEFITS OF MULTILATERALISM**

What can other countries do collectively, to stem the growing hostility and instability? Small states like Singapore can do little to influence the big powers, but we are not entirely without agency.

There are many opportunities for smaller countries to work together to deepen economic cooperation, strengthen regional integration and build up multilateral institutions. This way, we can strengthen our influence as a group, and advance a collective position on issues that matter to us, be it trade, security or technology.

Our multilateral institutions today are far from perfect. The WTO is one of the major institutions in the post-war global order, but now it is almost paralysed, and urgently needs reform. Multilateral global deals like the Uruguay Round are no longer practical, when agreement requires a full consensus among 164 member countries of hugely diverse interests and philosophies.

Furthermore, the WTO was designed for an agricultural and manufacturing-based world economy, but the world has moved on to services and now increasingly digital and intellectual property, which need much more complicated rules.

The US has lost faith in the WTO. It often acts unilaterally, imposing tariffs and trade sanctions outside WTO rules. It prefers negotiating bilateral deals one on one against smaller countries in tests of

strength. It gives more weight to the US' direct benefits in the disputes at hand, than to its broader interests in upholding the multilateral system. This has caused concern to many of the US' friends and allies.

Singapore cannot afford to adopt the same point of view. Being small, we are naturally disadvantaged in bilateral negotiations. We need to reform and strengthen multilateral institutions, not cripple or block them. More fundamentally, confining ourselves to a bilateral approach means forgoing win-win opportunities which come from countries working together with more partners. We need to build a broader regional if not global architecture of cooperation.



### **SHARED PROSPERITY AND COLLECTIVE SECURITY**

When groups of countries deepen their economic cooperation, they will enhance not just their shared prosperity but also their collective security.

With more stake in one another's success, they will have greater incentive to uphold a conducive and peaceful international order. This will benefit many countries big and small.

Thus, short of universal trade agreements, we should at least strive for regional or pluri-lateral arrangements. This may be a second best solution, but it is a practical way to incrementally build support for lower trade barriers and higher standards, which can then be adopted by other countries.

This was the rationale behind the Trans-Pacific Partnership (TPP). The US originally came on board the TPP because it saw the strategic benefits, although it ultimately withdrew. Fortunately, the remaining 11 members were able to preserve nearly all that had been negotiated, and so the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP) is now in force.

I am glad that more countries have expressed interest to join the CPTPP, including South Korea, Thailand and the UK. China is also watching the CPTPP carefully. They are not ready to join now, but I hope that they will seriously consider doing so sometime in the future.

Similarly, I hope one day it will become politically possible for a US administration to rethink the US' position, and recognise that it stands to gain, economically and strategically, from becoming a member of the partnership that it played a leading role in designing.

Meanwhile, countries in the Asia Pacific are working on the Regional Comprehensive Economic Partnership (RCEP). The RCEP has a different footprint from the CPTPP. It covers all the key countries on the western side of the Pacific, including North-east and South-east Asia, and also importantly India, Australia and New Zealand. This inclusive configuration minimises the risk of the RCEP being misperceived as a bloc that excludes the US and its friends.

With such a wide range of participants, RCEP standards are naturally less ambitious than the

**To expect every country to adopt the same cultural values and political system is neither reasonable nor realistic. In fact, humankind's diversity is its strength. There is much we can learn from one another, from the differences in our values, perspectives, systems and policies.**

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CPTPP's, and the deal is also much harder to negotiate. Nonetheless, I hope the participants can take the final step to complete the RCEP by this year, or if not, as soon as the domestic politics of the key players allow.

Of course, regional cooperation goes beyond trade. In South-east Asia, Asean has provided 10 very different countries an effective platform for dialogue and cooperation. Asean has deepened ties and kept the peace among its members. It has become an effective regional partner of other countries, and enabled its members to project a stronger external presence as a group. Asean works on the basis of consensus. It makes more progress in some areas than others, because Asean members are not immune to the strategic forces that pull us in different directions. This is the hard reality of cooperation in a region exposed to multiple external influences.

Despite its limitations, Asean has contributed much to the well-being of its members and the security of the region, and Asean's partners recognise the value of Asean centrality.

Amid the geopolitical shifts, new concepts and platforms for regional cooperation have emerged, notably China's Belt and Road Initiative (BRI).

Singapore supports the BRI. We see it as a constructive mechanism for China to be positively engaged with the region and beyond. That is why we are active participants. For example, we work with the World Bank to promote financial and infrastructure connectivity, and we provide supporting professional and legal services to BRI countries. We are also partnering China to develop the New International Land-Sea Trade Corridor, which connects Western China to South-east Asia under the China-Singapore (Chongqing) Connectivity Initiative.

Of course, the substance of the BRI and the way in which the BRI is implemented are very important. The specific projects must be economically sound and commercially viable, and must bring long-term benefits to its partners. This has not always been the case; some BRI projects have run into significant problems.

Overall, the BRI must be open and inclusive, and must not turn the region into a closed bloc centred on a single major economy. As Asian countries deepen their links with China, they also need to grow their ties with the US, Europe, Japan and others. In other words, the BRI should help China to integrate with the world.

The end result should be to strengthen globalisation, and not to divide the world into rival spheres of influence.

I believe China appreciates this. At the recent Belt and Road Forum in Beijing, Chinese leaders stated clearly that the BRI would be “open, green and clean.” China's Finance Minister set out debt sustainability requirements for Belt and Road projects, which the IMF has welcomed. In the nature of such reassurances, the test will be how these statements of intent are implemented in practice, but these are steps in the right direction.

Meanwhile, other initiatives have been proposed

for regional cooperation. For example, several countries have proposed various concepts of “Indo-Pacific cooperation.”

These ideas are less fully elaborated or implemented than the BRI, but Singapore's attitude towards them is consistent. We support regional cooperation initiatives which are open and inclusive platforms for countries to cooperate constructively and deepen regional integration. These initiatives should strengthen existing cooperation arrangements centred on Asean. They should not undermine them, create rival blocs, deepen fault lines or force countries to take sides. They should help bring countries together, rather than split them apart.



### COMPETITION NEED NOT LEAD TO CONFLICT

US-China relations will define the tenor of international relations for years to come. It is natural that the two powers will vie for power and influence, but competition should not inevitably lead to conflict. We hope the US and China find a constructive way forward, competing certainly, but at the same time cooperating on major issues of mutual interest.

Some people argue that compromise is not possible or perhaps even desirable, because the US and China hold such different values.

Indeed, one US official recently defined the clash with China as “a fight with a really different civilisation and a different ideology.” Others observe that the US is a young country that wants everyone to be like them, while China is an old country that believes no one else can be like them.

To expect every country to adopt the same cultural values and political system is neither reasonable nor realistic. In fact, humankind's diversity is its strength. There is much we can learn from one another, from the differences in our values, perspectives, systems and policies. The story of humankind's progress has been one of exchange of ideas, and continuous learning and adaptation.

Henry Kissinger said last year that “we are in a very, very grave period for the world.” No one can predict which way events will develop.

At different times in the last two centuries, South-east Asia has seen rivalry between great powers. It has experienced destruction and suffering from war and occupation. It has been divided into opposing camps.

It has seen how isolation from the world economy led to stagnation and sometimes conflict. At other times, it has benefited from international cooperation that created an open, stable environment where countries could prosper in peace.

On a long view, we cannot rule out any of these eventualities. But in our own generation, we must work together to maximise the chances that countries will have the wisdom and courage to make the right choices, opt for openness and integration, peace and cooperation, and so preserve and expand the progress which we have made together. Thank you very much. **SI**



# The choice for South-east Asia isn't between the US and China

AT THE 18TH SHANGRI-LA DIALOGUE, THE premier annual defence and security meeting in the Asia-Pacific, concern about growing US-China rivalry was palpable. Senior officials from around the world delivered speeches expressing varying degrees of worry about the negative consequences of spiralling great power competition. This message was especially clearly conveyed by officials from South-east Asia.

Singapore Prime Minister Lee Hsien Loong, in his opening keynote address, asserted: "How the two work out their tensions and frictions will define the international environment for decades to come." Philippine Secretary of National Defence Delfin Lorenzana highlighted the "seismic geopolitical shift that is changing the very fabric of international relations in the 21st century" and producing "upheaval and tensions." Vietnamese Minister of National Defence Ngo Xuan Lich maintained that the "strategic-interest contest" in the Asia-Pacific is becoming "more and more intense" and "competition is now developing with complexity" due in part to "swift changes in the dynamic and balance of power."

While it is reasonable to be concerned about US-China strategic competition and its potential negative impact, it is wrong to draw a false equivalence between US and Chinese behaviour, particularly in the Indo-Pacific region.

In the South China Sea, for example, while Chinese law enforcement ships and maritime militia have blocked access to lagoons, interfered with energy exploration, rammed and harassed foreign vessels, and restricted the legitimate rights of fishermen from around the region, the United States has provided maritime domain awareness assistance to help increase the capacity of maritime South-east Asian countries to identify and respond to threats within their exclusive economic zones.

In contrast to routine warnings by Chinese military personnel stationed on artificial features in the South China Sea that foreign aircraft and vessels "leave immediately or pay the possible consequences", the US Navy conducts freedom of navigation operations to preserve unrestricted access to airspace and waterways for all seafaring nations as governed by international law.

US Navy ships sail in the South China Sea in accordance with international law, avoiding unprofessional and dangerous manoeuvres. Chinese navy vessels have made aggressive manoeuvres, including sailing on a near-collision course with US warships.

Despite Chinese President Xi Jinping's statement

that the Pacific Ocean is "vast enough" to accommodate both the US and China, Beijing is attempting to prevent South-east Asian countries from conducting military exercises with the US.

In the Asean-China single-draft Code of Conduct for the South China Sea that is still under negotiation, China proposed that "the parties shall not hold joint military exercises with countries from outside the region, unless the parties concerned are notified beforehand and express no objection."

The US no longer invites the Chinese navy to participate in the Rim of the Pacific multilateral naval exercises as a penalty for its militarisation of outposts in the South China Sea, but it does not seek to impede military cooperation between regional states and China.

PM Lee made an impassioned plea at the Shangri-La Dialogue for countries to accommodate China's growth and adjust to China's rise, implying that US policy is aimed at weakening the Chinese economy and blocking China's achievement of great power status. Using more direct language, he warned against the use of trade rules by either the US or China "to keep the other down."

Such characterisations uncritically accept Beijing's frequent but incorrect accusation that the US is seeking to contain China. In fact, as US Ambassador to China Terry Branstad has stated: "The Trump administration is putting America and Americans first by calling on China to live up to its pledge when it joined the World Trade Organisation in 2001 to provide greater economic openness and to compete on a level playing field."

It is understandable that South-east Asian countries object to some US policies in the Indo-Pacific region. There are certainly elements of the Trump administration's approach to the Asia-Pacific that deserve criticism, including US withdrawal from the Trans-Pacific Partnership, President Donald Trump's lack of appreciation for the importance of US alliances in defending American interests, and his emphasis on narrowing bilateral trade deficits.

But countries should not draw a false equivalence between US and Chinese actions and behaviour in the region.

The choice that South-east Asia must make is not between the US and China, as some would suggest.

Rather, it is a choice between a future in which there are shared rules and norms within a rules-based order that everyone upholds, and a future in which power prevails, the strong bully the weak and rules are disregarded in favour of a "might makes right" approach. [S](#)

**BONNIE S. GLASER**

For The Straits Times



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# No sweet spot for Singapore in US-China tensions

**BILAHARI  
KAUSIKAN**

For The Straits Times



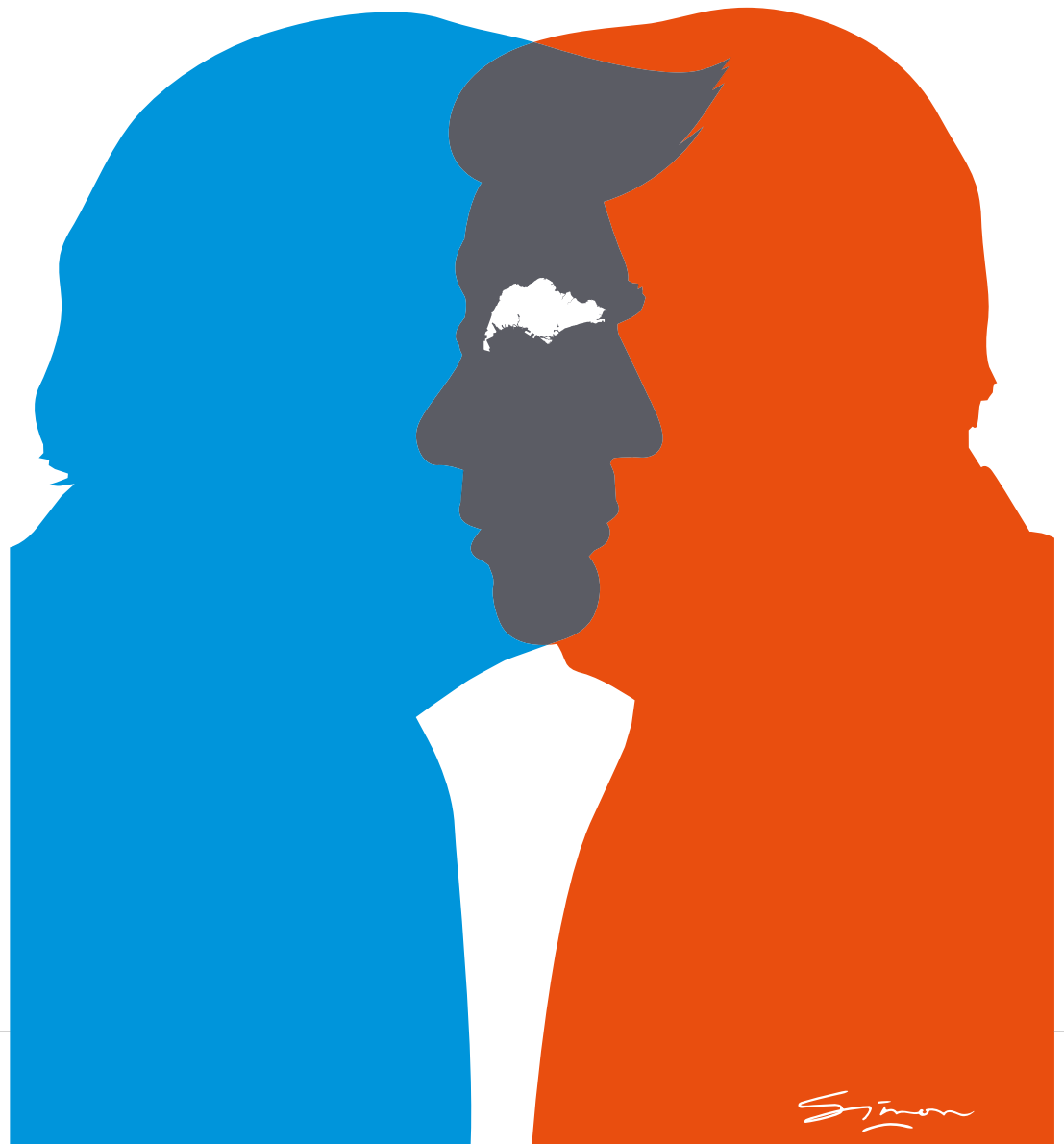
The United States and China are settling into a protracted struggle over trade, technology and geopolitics. Singapore will come under special scrutiny, as an ethnic Chinese majority society with strong ties to both.

ON MAY 20, CHINA'S PRESIDENT XI JINPING, during a tour of Jiangxi province, said: "We are now embarking on a new Long March, and we must start all over again."

Jiangxi was the start point of the best known of several retreats by the Red Army that came to be collectively known as the Long March.

Mr Xi did not explicitly mention US-China relations. But 10 days earlier, what was supposed to be the final round of trade talks ended without agreement and the Trump administration raised tariffs on Chinese exports from 10 per cent to 25 per

Caught in the eye of the storm?



ST ILLUSTRATION:  
**SIMON ANG**



cent. It was clear enough what Mr Xi was referring to.

A week before, an editorial in the People's Daily had described United States-China tensions as a "People's War".

This is highly charged political rhetoric, infused with deep symbolism that drew on the founding myths of the Chinese Communist Party (CCP).

Not all the symbolism may, however, have been as Mr Xi intended.

In October 1934, mistakes by its inexperienced Military Commission led the CCP's First Army to the brink of encirclement and annihilation by Kuomintang (KMT) forces. It narrowly escaped by embarking on a desperate strategic retreat. A year later, only about a tenth of the Red Army that left Jiangxi reached sanctuary in Yan'an in Shaanxi province.

### CHINA'S MISREADING OF THE US

Today, Beijing has clearly misread the direction of US-China relations. It underestimated the Donald Trump administration's determination to confront China, despite the 2017 National Security Strategy and the 2018 National Defence Strategy having labelled China a "strategic competitor".

After the 2009 global financial crisis, China seems to have begun to believe its own propaganda about the US' inevitable decline. After the 2012 Scarborough Shoal incident, Beijing may have mistaken the Barack Obama administration's reluctance to stand up to China as a new norm of American foreign policy. China may also have been misled by the contempt for President Trump that its usual interlocutors in the American foreign policy establishment did not bother to hide.

Towards the end of the Hu Jintao administration, and far more insistently under Mr Xi, China began to pursue its economic and strategic interests with increasing assertiveness. Chinese foreign policy took on a triumphalist tone. By the time of the 19th Party Congress in 2017, Deng Xiaoping's approach of "hiding light and biding time" had clearly been abandoned.

Hubris is not an American monopoly, and these were serious mistakes. Since the trade war started, Mr Xi has been subjected to muted but nevertheless pointed criticism within China.

Among the clearest criticisms was one by Mr Deng Pufang, Deng Xiaoping's son. In a September 2018 closed-door speech that was reported by Mr Jack Ma's South China Morning Post, he said: "We must seek truth from fact, keep a sober mind and know our own place." And that: "We should neither be overbearing nor belittle ourselves... The most important thing at the moment is to properly address China's own issues."

Mr Deng Pufang's criticism was all the more powerfully poignant because he was speaking at a meeting of China's Disabled Persons Federation. He himself had been crippled during the Cultural Revolution.

It was to prevent the reoccurrence of such excesses that his father had introduced the two-term limit that Mr Xi discarded.

Xi Jinping is not Mao Zedong. But the concentration of power on Mr Xi's watch, and the severe penalties for perceived disloyalty, may have reintroduced something akin to a neo-Maoist single point of failure into the Chinese system. There is good reason to wonder what is being reported upwards and how accurately.

In March 2017, I met an American friend who heads a major US corporation in New York. He is a senior member of the US-China Business Council that had just met Vice-Premier Liu He, who was on a visit to try and head off a trade war.

"What did you tell him?" I asked. The friend replied: "We told him it is all of us and not just Trump."

I was surprised. The disenchantment of American businesses with China had been building up since the George W. Bush administration. Surely, he already knew, I said. He didn't seem to, my friend replied.

China's growth was already slowing when Mr Trump raised tariffs. By the time of the annual lianghui or the "two sessions" of the National People's Congress and National Committee of the Chinese People's Political Consultative Conference in March this year, the serious pressures and uncertainties confronting China could not be concealed.

Premier Li Keqiang's report to this year's lianghui was a sober assessment of the dangers China was facing. Earlier, in January this year, Mr Xi outlined seven "major risks": politics, ideology, economy, science and technology, society, the external environment and party-building.

None of this is intended to suggest that China is going to fail. The CCP is an extremely resilient and adaptable organisation and I do not think that China will fail. Corrections have already been announced, for example to Mr Xi's signature Belt and Road Initiative. It remains to be seen how the adjustments to policy will be implemented.

But a period of serious difficulties certainly lies ahead for China.

### PROLONGED STRUGGLE AHEAD

Evoking the Long March is intended to prepare the Chinese people for a prolonged struggle with the US. It was, in effect, a tacit admission of the CCP's mistakes with the consequent need for a retreat, while holding out the promise of ultimate victory.

As this issue of Asia Report goes to print, Mr Trump and Mr Xi are scheduled to meet at the G-20 Summit in Osaka. Neither side wants a complete break from trade talks at this point. But it will not be easy.

Attitudes on both sides have hardened. The domestic political considerations on both sides are against compromise unless on their own terms. Neither side wants to appear weak. Both may believe that time is on their side.

Mr Xi, already under criticism, cannot accept any result that can be portrayed as China having buckled under foreign pressure. He may decide to

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**The Chinese have long memories. Despite our constant denials, they still consider Singapore a “Chinese country” and may feel entitled to our support and will not quickly forget if we are regarded as insufficiently helpful in their time of need.**



outwait Mr Trump. China's system is better able to pursue long-term goals. But if this is indeed Mr Xi's intention, it would be another mistake.

There is a strong bipartisan consensus in the US for a tough approach towards China. The 2020 presidential election is Mr Trump's to lose. He will not want to be accused of having turned soft. With the American economy doing relatively well, he can afford to subsidise those hurt by tariffs and has announced a US\$16 billion (\$22.2 billion) package for farmers.

Even if talks resume and some sort of deal is reached, it will probably be limited in scope and temporary in duration.

## **TRADE AND TECHNOLOGY**

The legislative and administrative restrictions on transfer of technology set out a new paradigm for US-China relations that will remain in place even if tariffs on goods are eventually removed or reduced, and will remain in place long after the Trump era.

International attention has focused on Huawei. But the actions against the Chinese tech firm are only the first shots in an approach that will extend beyond just one Chinese company. Mr Trump's May 15 executive order restricting transfers of information and communications technology on national security grounds was very broadly phrased, banning all transactions “posing an unacceptable risk”.

China is clearly ahead in some crucial areas of software, notably artificial intelligence.

But it is as clearly behind and dependent on foreign sources for equally crucial areas of hardware, particularly in the design and manufacture of high-end semiconductor chips. Without the hardware, the software cannot be put to practical use.

Last year, China consumed about US\$155 billion worth of semiconductors, around 40 per cent of global consumption. But only 5 per cent to 6 per cent was produced in China. It is likely that a large percentage of what was made locally was by foreign manufacturers located in China but vulnerable to US restrictions.

Globally, high-end chip design and manufacture is dominated by just three companies: Taiwan Semiconductor, Samsung and Intel. The last is an American company. The other two are from territories highly dependent on the US for their security.

Huawei, and China generally, has signalled the intention to become more self-sufficient in chip design and manufacture. I do not underestimate Chinese inventiveness, but this is easier said than done.

It is basically impossible to design chips without Electronic Design Automation (EDA) tools. The EDA market is dominated by just three firms: Cadence and Synopsys, both US companies, and Siemens, a German company.

The first two firms have already announced that they will stop supplying Huawei. Germany is

hesitant. But the Germans – and Europe generally – cannot deal with a resurgent Russia without American support and will sooner or later fall into line. Post-Brexit Britain will probably be more dependent on the Chinese market and has also been ambivalent about restricting Huawei. But ARM Holdings, a British chip designer owned by Japan's Softbank, has announced it will stop licensing its technology to Huawei.

China is such a big consumer of chips, so restricting exports to the country will hurt suppliers as well. It is not without other means to retaliate. But they are limited.

Since China runs a trade surplus with the US, there is limited scope to impose tariffs on American exports. Some have suggested that Beijing may dump its holdings of US Treasury bonds. But it cannot do so without tanking the value of its own reserves. And what can replace US Treasuries as an international store of value?

During his Jiangxi tour, Mr Xi, with Mr Liu by his side, pointedly visited a rare earth factory. China dominates rare earth production and about 80 per cent of US supplies come from China. But cutting off the US will only pose a temporary problem. Rare earths are actually not all that rare, only highly polluting to extract, which is why so much global production is in China. By some estimates, alternative sources could be up and producing in little more than a year.

## **BROADER GEOPOLITICAL CONTEST**

Trade and technology restrictions are only the instruments of a broader geopolitical contest. The time frames and cost-benefit calculations of a geopolitical competition are fundamentally different from the time frames and cost-benefit calculations of a purely economic or commercial competition.

A Trump administration that has a narrower and more transactional notion of relationships will not give much weight to the cost to friends and allies in its geopolitical calculations.

Since the technology restrictions will hurt China, at least through the intermediate term, there is little incentive for the Trump administration to relent on technology unless China entirely capitulates on trade or undertakes structural reforms that will fundamentally change its communist system. That is not going to happen.

If the US goal is to “decouple” China from itself and its friends and allies, it is not likely to succeed, at least not in entirety. China is as vital a node in the world economy as the US, and the Chinese and American economies are entangled and interdependent in a way that is historically unprecedented between rival major powers.

If China aspires to create an alternative system of hardware and software centred around itself, it too is unlikely to succeed in entirety. Technology does not respect political boundaries. Attempting to create a separate system will make both systems



sub-optimal, with implications for future growth in both.

But neither will give up easily. War by design is improbable. Both sides have too much to lose. But the geopolitical tensions and complications are likely to be prolonged, without a clear denouement.

## IMPACT ON SINGAPORE

What does this mean for Singapore?

Slower growth in China and eventually the US, and disruptions to global supply chains, will obviously create more uncertainties for the world economy. Singaporeans are understandably concerned about what this means for their jobs and future. Those with business links to China will be particularly concerned.

On the upside, some investments that might have otherwise gone to China, and some investments that would have remained there, may come to Singapore and other Asean countries, creating opportunities. But this will also bring more intense American scrutiny to ensure that “back doors” for Chinese exports do not open up and demands for strict safeguards to ensure that technology from foreign direct investment, arms purchases and from our own research and development efforts, do not leak to China.

All countries will face similar issues. But there are some challenges that may be uniquely acute for Singapore.

The Chinese have long memories. Despite our constant denials, they still consider Singapore a “Chinese country” and may feel entitled to our support and will not quickly forget if we are regarded as insufficiently helpful in their time of need.

Some in the Trump administration also seem inclined to view the issue in racial terms. As the only ethnic Chinese-origin majority sovereign state outside greater China, we may be subject to special scrutiny.

Our universities and other research institutions seem to be staffed by many People’s Republic of China (PRC) citizens or new immigrants from China. Technology is the future; we need these people. But if the geopolitical contest begins to boil over, the Americans may present an ultimatum: “You want F-35s? Then follow me.” We cannot do without advanced American defence technology either.

What Singaporeans need to understand better is that, under present circumstances, there may be no sweet spot we can occupy that will keep both the Chinese and the Americans simultaneously happy. There is no silver bullet, and it is a fool’s errand to look for one.

Neither can we just lie low and hope for the best. You may not look for trouble but trouble may come looking for you. And trouble is all the more likely to seek you out if either side thinks you are, or can be, intimidated.

We must have the courage to pursue our own national interests. Sometimes our national interests



may lead us to tilt one way, sometimes the other. But it must always be our national interest that guides us and nothing else.


Both the Chinese and Americans may not be too happy with us for pursuing our own interests. But Singapore does not exist to give joy to American or Chinese hearts. So long as neither side is so unhappy that it dismisses us as unredeemable, we can live with their unhappiness and manage it.

Every Singapore Government I have served has had to stand up to the US, or stand up to China, and occasionally to stand up to both at the same time. Under present circumstances, what was once an occasional challenge may become the norm.

Our more complex domestic politics is a complication. I see still faint but distinct signs that some section of our population – how large, I do not know – either for transactional economic reasons, or unthinking ethnic sympathies, or sheer chauvinism, is beginning to look at the current US-China tensions through a racial lens.

As US-China competition heats up, this tendency may be accentuated. This is the greatest danger to Singapore in this new phase of US-China competition. It is still at a nascent stage and must be checked, if necessary by the prophylactic exercise of the coercive powers that are the legitimate monopoly of the state, before external and internal forces act and react with each other in a vicious spiral downwards.

If we hold together, we can manage the external complications. If we do not, and the social compact which is the foundation on which modern Singapore was built is strained or broken, these internal stresses may make the external complications unmanageable.

Since this period of US-China tensions will be prolonged, this is not a challenge that lends itself to definitive solutions. Managing it requires continual vigilance and periodic decisive action. It is our own Long March. 

*Bilahari Kausikan, a retired diplomat, is a former permanent secretary of the Ministry of Foreign Affairs.*

Mr Xu Xuebing, founder of China firm Sam Wood, showing where in the United States his company imports wood from. While China is ahead in some crucial areas, such as artificial intelligence, it is behind and dependent on foreign sources – especially the US – for equally crucial products. PHOTO: AGENCE FRANCE-PRESSE

PEOPLE POWER IN HONG KONG

# Carrie Lam likely to lead a weakened govt just when Hong Kong needs a strong hand

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IT IS LIKELY THAT HONG KONG CHIEF EXECUTIVE Carrie Lam will serve out her full term of office despite her poor handling of an extradition Bill that brought some two million Hong Kongers out onto the streets in protest.

This is because her stepping down, in the eyes of Beijing, would lead to the collapse of the pro-establishment camp and chaos in Hong Kong.

To prevent this, Beijing would want her to stay on, analysts said.

"She will complete her term because otherwise, the whole government set-up will be thrown into disarray," said veteran journalist and current affairs commentator Ching Cheong.

If Mrs Lam were to leave, then members of government involved with the Bill would have to go too, including Secretary for Justice Teresa Cheng and Secretary for Security John Lee, as well as police chief Stephen Lo, he added.

Besides, said Dr Willy Lam from the Chinese University of Hong Kong, Mrs Lam has been toeing the Beijing government's line closely and it would be "extraordinary" to remove her.

Some protesters are also no longer asking for her resignation.

The Hong Kong Federation of Students said at a press conference on June 19 that Mrs Lam's resignation was no longer its priority. Instead, it wants the government to withdraw the Bill, investigate police action during clashes with protesters, stop classifying the clashes as a riot and release protesters arrested – demands similar to those by other protest groups.

Mrs Lam has been seen as politically insensitive and arrogant in her handling of the Bill to amend the city's fugitive offenders law that will allow Hong Kong to send criminal suspects to the mainland.

Hong Kongers are opposed to this as they do not trust the opaque legal system in China and worry the amended law will be used to curtail their civil and political freedoms and erode their city's autonomy under the "one country, two systems" framework.



The Hong Kong government has responded to concerns by amending the Bill twice to put in safeguards, such as increasing the threshold for extradition from crimes carrying three-year jail terms to those with seven-year jail terms.

But it refused to withdraw the Bill or delay it for further consultations, leading to more than a million people, or nearly one in seven in the city of 7.4 million, marching against it on June 9.

In the face of such massive opposition, Mrs Lam showed her political insensitivity by putting out a statement that night that the Bill would not be delayed. This led to protesters surrounding the Legislative Council complex on June 12 to prevent the second reading of the Bill.

Some protesters attempted to enter the building by charging the police cordon, leading to violent clashes between them and the police, who used tear gas, rubber bullets and bean bag rounds to push them back.

The Bill was suspended on June 15, a Saturday, but it was not enough for the people, two million of whom again took to the streets the next day, leading the Chief Executive to apologise that evening in a statement.

But she has refused to formally withdraw the Bill – although at her press conference on Tuesday June 18, she made it clear to Hong Kongers that it will not be resurrected and will die a natural death when the current Legislative Council ends next year.

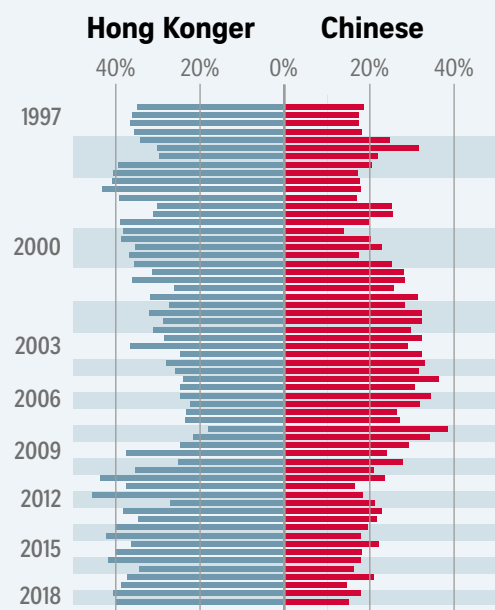




Protesters marching on the road outside Victoria Park on June 16, 2019.  
ST PHOTO: LIM YAOHUI

## Hong Kong ID

People in Hong Kong who identify themselves as ...



Survey by HKU Public Opinion Program

Source: AFP STRAITS TIMES GRAPHICS

While the Bill is effectively dead in the water, Mrs Lam cannot withdraw it, said Mr Ching, because if she does so, she will be seen as bowing to opposition pressure.

"If she changes the wording from suspension to withdrawal, then it will be the opposition deciding the agenda and not the establishment," he said.

This would be anathema to Beijing.

But not doing so sets up the government and the people for more confrontation, as those opposed to the Bill want it to be formally withdrawn so there would be little chance of it being tabled once protesters leave the streets.

While organisers would not be calling for large-scale mass rallies, there will be small-scale persistent protests, said Mr Ching.

The Civil Human Rights Front which organised the mass protests against the extradition Bill, however, were asking Hong Kongers to turn out in force at the annual pro-democracy march on July 1, which marks the 22nd anniversary of the city's handover to China.

The worry is that if protesters overreach, they might cause Beijing to take harder action.

Mrs Lam's top adviser, Mr Bernard Chan, has intimated in a television interview that the central government might intervene, saying that Hong Kongers would not want outside forces to come into Hong Kong to keep law and order.

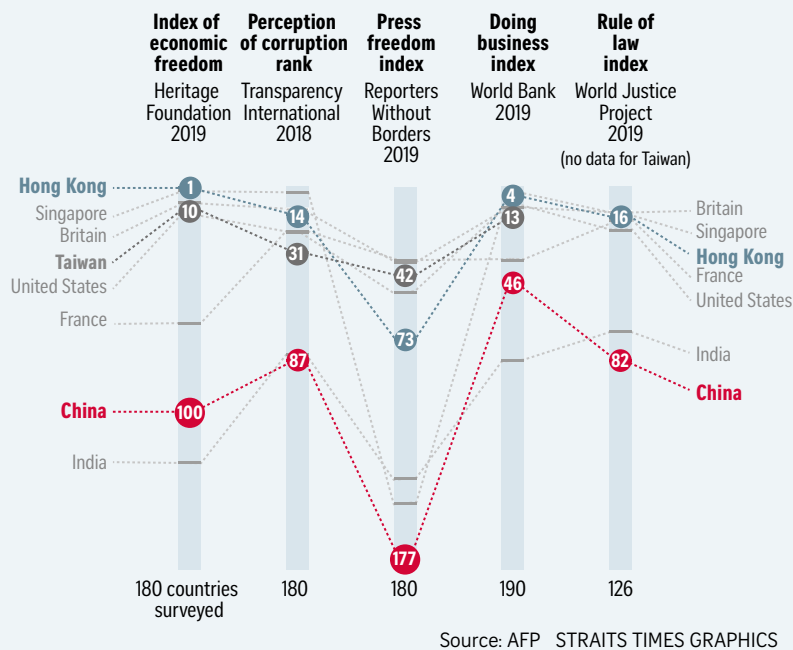
Mr Ching believes the Hong Kong government

**The Civil Human Rights Front which organised the mass protests against the extradition Bill, however, were asking Hong Kongers to turn out in force at the annual pro-democracy march on July 1, which marks the 22nd anniversary of the city's handover to China.**

”

## How the world sees Hong Kong and China

Major international rankings on economic freedom, corruption, press freedom, doing business and rule of law



should at least give in to one of the demands of the protesters, which is to set up an independent commission to investigate police action during clashes with protesters.

"This is the best way to pacify the protesters at this moment," he said.

It would allow society to gradually calm down and allow the two sides to enter into dialogue.

A good start has been made, he noted, with the police releasing some of the protesters who were arrested for their involvement in the clashes with the police.

Even so, Mrs Lam's authority is damaged by the whole episode and her government, which has another three years to go, will be a lame-duck one, noted Dr Lam.

This does not augur well for Hong Kong, he said, as it needs a strong hand now to steer its economy, which is facing headwinds, including China's slowing economy and the trade war between China and the United States.

Another worry, he added, is that the liaison office of the central government might be tempted to step into the power vacuum created by the lame-duck Hong Kong government.

This would mean the liaison office having a greater say than before in the running of Hong Kong, something Hong Kongers will not want to see. [ST](#)

## Why Hong Kong's extradition Bill is so controversial



A banking source in Hong Kong said the super rich have begun to shift their assets to Singapore, which analysts said is looking increasingly enticing to foreign businesses as the location for their headquarters and key staff.

ST PHOTO: LIM YAOHUI

### WHAT IS THE LAW ABOUT?

The Hong Kong government is pushing a Bill through the legislature that would allow extradition to any jurisdiction with which it does not already have a treaty, including mainland China.

It says this is needed to plug existing loopholes and prevent Hong Kong from becoming a haven for fugitives.

Chief Executive Carrie Lam says safeguards are in place to protect free speech and ensure political cases will not be affected by the extradition law.

She adds that it meets international standards for human rights and that only serious crimes which carry sentences above seven years will be considered.

### WHY DO PEOPLE OBJECT?

Fears centre on getting tangled up in China's opaque and politicised courts – whether it be the city's 7.3 million inhabitants or those just passing through the airport.

A broad cross-section of society has opposed the legislation, including lawyers and influential legal bodies, business figures and chambers of commerce, journalists, activists and Western envoys.

But the extradition furore is just the latest chapter in what many see as a battle for the soul of Hong Kong. For the last decade, it has been convulsed by political turbulence between the pro-Beijing authorities and opponents who fear a resurgent China is stamping on the city's unique freedoms and culture.

### DOESN'T CHINA RUN HONG KONG ANYWAY?

Yes. But under the 1997 handover agreement with Britain, China has agreed to a 50-year "one country, two systems" deal, where Hong Kong is able to retain key liberties such as freedom of speech and an independent judiciary.

The city's courts and rule of law, built around the British legal system, are key to its economic success. But there are accusations Beijing is reneging on that deal, moving to reduce liberties before the deadline expires in 2047.



This latest crisis may have quietened down for now but it will, sooner or later, rear its ugly head again. Companies want certainty and want to be in a jurisdiction that makes its own decisions.

”

– Mr Sean King, a University of Notre Dame Liu Institute for Asia and Asian Studies Affiliated Scholar.



PHOTO: AGENCE FRANCE-PRESSE

## *Uncertainty may lead to outflow of funds from city*

GROWING UNCERTAINTY BECAUSE OF TRADE tensions between the United States and China as well as the recent unrest over a divisive extradition Bill have apparently given pause for thought for the wealthy in Hong Kong as well as foreign businesses.

A banking source in the territory said the super rich have begun to shift their assets elsewhere including to Singapore which, analysts said, is looking increasingly enticing to foreign businesses as the location for their headquarters and key staff.

But the sources said “the wealthy decision-makers are still in Hong Kong and China” and they still pay taxes in these two places.

The source also noted that “the final destination of the funds may not be Singapore” since it can be invested elsewhere.

Mr Brock Silvers, managing director of Shanghai-based Kaiyuan Capital, said it was “too soon” to gauge the depth of financial outflows from Hong Kong but agreed that Singapore should be a beneficiary if unrest continued to grip Hong Kong.

“Singapore’s economy is free, the rule of law is strong, and it enjoys a high degree of social cohesion. Given its common cultural background, Singapore has a natural attraction for disaffected Hong Kong investors,” he said.

Mr Sean King, a University of Notre Dame Liu Institute for Asia and Asian Studies Affiliated Scholar, said that Singapore would also gain in terms of attracting multinationals and the like.

“This latest crisis may have quietened down for now but it will, sooner or later, rear its ugly head

again. Companies want certainty and want to be in a jurisdiction that makes its own decisions... Singapore thus makes sense,” he told The Straits Times.

Echoing this, Mr Silvers said attention has been drawn to fears about China’s legal system that many Hong Kongers describe as opaque and controlled by the Communist Party. Despite government assurances to the contrary, critics said the extradition law could be used for political persecution.

The suspension of the extradition Bill “won’t completely eliminate this concern”, Mr Silvers said.

“For companies that are now making growth, investment and location decisions, Carrie Lam has inadvertently but irrevocably placed her thumb on the scale in favour of Singapore,” he added.

Meanwhile, former chief executive C.Y. Leung broke his silence over the divisive legislation and urged business chambers to send delegates overseas to explain the issue.

Posting on social media, he said that the incident has seriously damaged the city’s international reputation and that it was not enough for Hong Kong to rely on Chinese embassies, trade offices based overseas or even international media to do “explanatory work.”

Mr Leung, who is the vice-chairman of China’s top political advisory body, wrote that many business chambers had accepted the Hong Kong’s government’s revised proposal on the Bill and were in the best position to comment on the issue. **ST**

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ST PHOTO: LIM YAOHUI

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Indonesian President Joko Widodo should win presidential elections: He holds a big lead in the match with challenger Prabowo Subianto and -in advantages of incumbency.

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Asian Insider brings you insights into a fast-changing region from our network of correspondents.



Good day!

Today's Asian Insider, trade talks could be nearing the endgame, MBS wraps up his Asian tour and Asia's three tsunamis.

Ravi Varma  
Associate Editor

## WASHINGTON CONSENSUS



## 2 | ELECTION CHECK-IN: THAILAND AND INDONESIA



Here's a quick update from our bureaus on the upcoming elections in Thailand and Indonesia.

Let's start with Thailand, where elections will take place in a little over a month. Anybody just checking in today would detect nothing out of the ordinary in this round of polls.

That's because, a week after what was one of the most dramatic weekend in Thai election history, the short-lived tenure of Princess Ubolratana Rajakanya (above) as a prime ministerial hopeful seems to have dropped off the radar. Most now expect the party that nominated her to be dissolved while she appears to have quickly returned to her pre-politics persona. There may be some reaction yet from the public, but for now, everything seems to have returned to

## 3 | INDONESIANS SEE RED



Before the fall of President Suharto in 1998, the Chinese in Indonesia, the world's largest nation of Muslims, were banned from celebrating their festivals, while speaking Chinese dialects in public was also prohibited. More than 20 years after the strongman's New Order regime ended, Imlek - or what Chinese New Year is known as here - is now gazetted as a national holiday. However, says Indonesia Bureau Chief Francis Chan, prejudice against Chinese Indonesians continues today amid rising intolerance in the country.

## 4 | ASIAN MARKETS DROP



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Anwar Ibrahim meeting Prime Minister Mahathir Mohamad in Putrajaya. PHOTO: FACEBOOK/ANWAR IBRAHIM

## Country Report

# Anwar-Azmin feud over Malaysia gay sex videos seen cooling after Mahathir's exit promise

**SHANNON TEOH**  
Malaysia Bureau Chief



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The power transition is longer than the two years that the PKR leader had tried to assert previously

THE HEATED DISPUTE BETWEEN MALAYSIA'S would-be future leaders over gay sex videos has been doused after Prime Minister Mahathir Mohamad repeatedly reaffirmed his commitment to hand over power to his former protege Anwar Ibrahim, even promising, for the first time, a three-year time frame.

Tun Dr Mahathir, who turns 94 on July 10, and Datuk Seri Anwar, president of Parti Keadilan Rakyat (PKR), had struck a conciliatory tone in the past week.

An indirect rebuke by the Prime Minister's media adviser – that leaders embroiled in sex scandals should resign – will also give pause to embattled PKR No. 2 Azmin Ali, who is convinced the release of the videos was an inside job. Datuk Seri Azmin denies being one of the two men in the clips, and his supporters have strongly implied that Mr Anwar's allies are responsible.

Dr Mahathir told CNBC in an interview published on June 24: "As far as I'm concerned, I have made a promise that I will step down and that Anwar will succeed me."

"I will not go beyond three years," he added in the interview held on the sidelines of the June 22



Malaysian Economic Affairs Minister Azmin Ali has strongly denied he was one of the men featured in a sex video with Mr Haziq Aziz, a PKR member who issued a self-confession video June 12. PHOTO: MALAY MAIL

Asean summit in Bangkok.

Separately, Dr Mahathir also said that "I made a promise and I'll keep to my promise", referring to the deal struck within the Pakatan Harapan (PH) coalition prior to its shock win in the May 2018 election.

In recent the preceding days, Mr Anwar, who was sacked as Dr Mahathir's deputy in 1998 after being accused of sodomy, had been supportive of his former mentor. After their meeting on June 19, he said there was no need for Cabinet changes, despite reports that he wanted to return to the deputy premiership.

"In my weekly private exchanges with the Prime Minister... I do not have any doubt that the transition

will take place. As far as I am concerned, and he is concerned, it is a done deal," he said on June 22.

The power transition is longer than the two years Mr Anwar tried to assert previously. But with his supporters lobbying for a concrete time frame, the three-year period given by Dr Mahathir will be read as a victory by them.

And they would note the setback for Mr Azmin after the PM's media adviser Kadir Jasin blogged on June 23: "The question that every PH leader must ask is, do I use my party and my government position to shield me from my wrongdoing or I shield my party and my government from shame by doing the right thing?"

His post was titled "The Litmus Test of the Sandakan Video", a reference to the clips allegedly filmed in a hotel in the Sabah town. Datuk Kadir listed several foreign politicians who had resigned over sexual misconduct.

But Dr Mahathir has repeatedly insisted that Mr Azmin is innocent.

Political risk consultancy Bower Group Asia's director Adib Zalkapli told The Straits Times: "Kadir is just showing that the government is still bound to conservative views and that the administration is paramount. Not that Azmin must resign but should

he become a liability, it will not be up to Mahathir or the government to rescue him."

Meanwhile, Mr Azmin met party officials at a closed-door meeting on June 24, in an apparent appeal for the same support he gave Mr Anwar "when he was slandered in 1998." Mr Azmin told reporters: "This understanding is important as our loyalty to the party and its leadership is not based on camps or factions, but facts and principles."

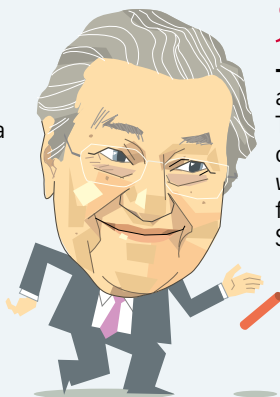
The PKR deputy president's rise over the past five years has led to a rift within the party; there is talk that Dr Mahathir is grooming him, having said that his replacement must command the support of the majority. Dr Mahathir created the economic affairs portfolio for Mr Azmin, conferring on him control over major agencies, especially those tasked with empowering the Malay majority.

Government officials and PH insiders said Mr Azmin still has the Premier's backing, but present circumstances mean he must curb his ambitions for now. One official told The Straits Times: "As much as Anwar's political future depends on Mahathir, Mahathir's legacy hinges on the transition and whether he leaves a strong government or one still riddled with problems and infighting." **ST**

**I am not in a hurry. Mahathir should have the full mandate to govern effectively without thinking about when Anwar is coming. As long as he is committed to the reform agenda I am happy. I want Mahathir to be an effective PM to affect the necessary changes and reform.**



– Mr Anwar, in an interview with The Straits Times on May 18 last year, two days after he was granted a royal pardon for a sodomy conviction



## The succession plan

In January last year, the four member parties of Malaysia's Pakatan Harapan coalition agreed that if they won the election in May that year, Tun Dr Mahathir Mohamad would become prime minister and Datuk Seri Wan Azizah Wan Ismail would be deputy prime minister.

They also agreed to immediately secure a royal pardon for Datuk Seri Anwar Ibrahim so that he

could participate in government and, after that, be nominated as the country's eighth prime minister.

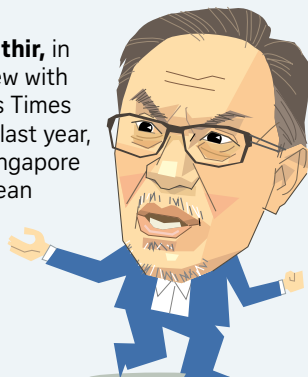
It was understood that Dr Mahathir would step down after two years, as he had said that was how long he would stay in office to solve the country's problems.

This is what both men have said about the succession plan since then:

**But supposing the people want to express their own views, I mean as a democratic nation, we have to listen to the people. If you install a prime minister who's not well accepted by the people, then we are going to have a problem.**



– Dr Mahathir, in an interview with The Straits Times on Nov 13 last year, while in Singapore for the Asean Summit



**Of course it's not five years because he's made it very clear they would not exceed two years. But it's important to allow him to govern effectively because we are in very difficult and trying times.**



– Mr Anwar, in an interview with Bloomberg Television on Feb 13 this year in New York

**As far as I'm concerned, I have made a promise that I will step down and that Anwar will succeed me. No, I will not go beyond three years.**



– Dr Mahathir, in an interview with CNBC on June 22, while in Bangkok for the Asean Summit





Iranian President Hassan Rouhani welcoming Japanese Prime Minister Shinzo Abe to Teheran. Mr Abe is the first Japanese leader to visit Iran since the 1979 Islamic Revolution.  
PHOTO: EPA-EFE

## Country Report

# Abe negotiates minefield of bias as he plays peacemaker

Japan PM's bid to broker peace between US and Iran marred by hit on oil tankers in Gulf

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JAPANESE PRIME MINISTER SHINZO ABE travelled to Teheran in a high-stakes bid to broker an uneasy peace between Iran and the United States, but ended up being caught in an awkward position after two oil tankers were attacked.

He had been upbeat at first, after a rare meeting with Iran's Supreme Leader Ali Khamenei, saying that "major progress has been made towards

securing peace and stability in this region."

But any illusion of reduced tensions was quickly shattered later when news broke that two oil tankers were attacked near the vital Strait of Hormuz.

That the two vessels, one owned by a Japanese company, were struck just when Mr Abe sat down with Mr Khamenei was a fact not lost on many observers, who believe it was an attempt to scuttle



the ongoing diplomacy.

"It's hard to believe that this came at the direction of the Iranian leadership," Institute of Energy Economics senior research fellow Shuji Hosaka told the Nikkei daily. "It may have come from forces (like the Islamic State) that want to stop Iran-US relations from improving."

Both sides immediately pinned the blame on each other.

US Secretary of State Mike Pompeo cited the sophistication of the attack, while Iranian Foreign Minister Mohammad Javad Zarif accused the US and its Middle East allies of "sabotage diplomacy".

This exemplifies how Mr Abe will have his job cut out for him as he walks the diplomatic tightrope between a friend (Iran) and an ally (the US), an act that will mean navigating potential minefields of biased perception on both sides, while urging them to make concessions despite their enmity.

He spoke by phone with President Donald Trump on June 14.

The ongoing crisis is rooted in Mr Trump's decision last year to pull out from the 2015 nuclear pact, saying it failed to curb Iran's role as a malign actor in the Middle East.

In doing so, he reinstated tough sanctions and, more recently, threatened punitive tariffs on


countries including Japan if they were to continue buying oil from Iran. Tokyo has stopped doing so.

Japanese envoys deny any intent to engage in "shuttle diplomacy", but Mr Abe is in a unique position to play a role as an international statesman who can ease Middle East tensions – one which Japanese media agreed on June 14 that he should continue playing.

On his trip, the first to Iran by a Japanese premier since 1978, Mr Abe scored a significant commitment from Mr Khamenei that Iran has "no intention to make, possess or use nuclear weapons."

Japan broke with the US to back the nuclear deal known as the Joint Comprehensive Plan of Action (JCPOA), whose importance Mr Abe and Iranian President Hassan Rouhani affirmed on June 12.

"Overall, we could see that Iran is still committed to the JCPOA," said Dr Yasuyuki Matsunaga of the Tokyo University of Foreign Studies, who noted there was no similar commitment by Iran to ensure safe passage of vessels through the Strait of Hormuz, and that Japan would have been able to help Iran's position had there been a commitment.

The Japan Times said: "It is easy to call his effort a failure, but if he has established a connection that can facilitate conversations in the event of a crisis, then the trip should be considered a success." 

**Japanese envoys deny any intent to engage in "shuttle diplomacy", but Mr Abe is in a unique position to play a role as an international statesman who can ease Middle East tensions – one which Japanese media agreed on June 14 that he should continue playing.**



## Country Report

# India plays cricket to gain edge in geopolitics

It is using soft power in sport to score over other nations in strategic playing field

WHEN INDIAN PRIME MINISTER NARENDRA Modi visited the Maldives in June, geopolitical issues – such as maritime security, infrastructure development, climate change and defence collaboration – dominated discussions. But what also made the cut was an unlikely soft power element: cricket.

Deploying its status as a global cricketing power, India made an offer to promote the sport across the Indian Ocean archipelago through professional coaching, exposure for Maldivian players in Indian tournaments and the development of cricketing infrastructure, including a stadium, on the islands.

A team from the Board of Control for Cricket in India (BCCI), the apex body for the sport in

the country, visited the Maldives in May to train cricketers, organise coaching programmes and supply kits.

Behind the generosity, though, lies a cold calculation of realpolitik. This is because cricket brings a direct and emotive people-to-people connect to India's outreach, helping it steal an edge over China as well as Pakistan in what is a strategic geopolitical playing field.

Pakistan, India's arch-rival in cricket, has also been using it to generate goodwill in the Maldives.

"Cricket is like a lodestar for the Indians. Countries like the Maldives are beginning to realise that you strike a chord with India when you talk cricket," said Mr Ayaz Memon, a senior

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Indian Prime Minister Narendra Modi (left) presenting a cricket bat autographed by the Indian cricket team to Maldivian President Ibrahim Mohamed Solih, during his visit to the Maldives. PHOTO: NARENDRA MODI/TWITTER

sports journalist and editor. “India is beginning to recognise it can use cricket as a soft power tool not only to promote the sport but also to exploit it diplomatically.”

This sporting diplomacy follows the success India has had in promoting cricket in Afghanistan, something motivated by geopolitics as well, as New Delhi tries to wean the country away from Pakistani influence. Afghan players have built a team that has transcended ethnic divisions in their country and emerged as a popular success story for a people keen to leave behind a difficult past.

Afghanistan is today a full-fledged member of the International Cricket Council (ICC), which governs

## CRICKET AS SOFT POWER

**Cricket is like a lodestar for the Indians. Countries like the Maldives are beginning to realise that you strike a chord with India when you talk cricket. India is beginning to recognise it can use cricket as a soft power tool not only to promote the sport but also to exploit it diplomatically.**



**MR AYAZ MEMON**, a senior sports journalist and editor, on using cricket to reach out to other nations and generate goodwill.

the sport globally. Its team is playing in the ongoing ICC Cricket World Cup in England. The Maldives, an associate member of ICC, is not participating in the tournament.

India has assisted the rise of Afghan cricket in recent years through several initiatives, including offering two of its stadiums to the Afghan team to train and play matches with international teams. Its veteran players have coached the Afghans and India has donated cricketing kits and developed pitches in Afghanistan. It has also supported the construction of a stadium in Kandahar, Afghanistan’s second largest city.

While welcoming India’s move to promote the sport in the Maldives and Afghanistan, cricket analysts said India, given its pre-eminent status as a cricketing nation, should be at the forefront of espousing the game’s greater good.

There have been attempts to popularise the game in the United States, Japan and China, but these efforts have made little headway. If spreading the gospel of cricket is an intent, India, or rather the BCCI, will have to think long-term and loosen its stranglehold on the sport. It may also require the board to take on the Indian government when the sport falls victim to politics.

“There was a time in 2004 when the BCCI pushed the Indian government to let India’s tour of Pakistan go ahead,” said Mr Pradeep Magazine, a senior cricket writer. The March-April tour that year went ahead, despite political opposition.

“Today, there is no line dividing the BCCI and the government. Their interests seem to merge or maybe they are scared. They are just toeing the government line,” he added. The BCCI wrote to the ICC after the attack in Pulwama in February this year, urging “the cricketing community to sever ties with countries from which terrorism emanates”

More than 70 per cent of the ICC's revenue is estimated to come from the Indian market. It is this financial muscle that has given BCCI a throttle-hold on the game internationally, something it has been reluctant to let go of, impeding the spread of cricket in the process.

One way it has done so is to oppose its inclusion in the Olympics. "The BCCI wants to protect its hegemony and not let another body have a say in how the sport is governed," said Mr Memon. "This is understandable because it is not an NGO but a profit-making body. But you cannot have a situation where the sport does not grow because, at some stage, it will catch up and the BCCI will not remain

as powerful," he added.

Experts said BCCI needs to let go of its monopoly on the T20 format of the game, which remains the best bet to popularise the game, given its short duration of play and similarities with baseball.

While cricketers from other countries play in the Indian Premier League (IPL), India prevents its players from participating in T20 leagues elsewhere.

"India fears that if it allows its cricketers to play, for instance, in an Australian league, it could become as big as the IPL," said Mr Magazine. "India wants to preserve the IPL as the main T20 tournament. In doing so, it prevents the spread of T20 leagues and hampers the growth of the game," he added. [SI](#)

## *Modi shifts focus to little-known regional bloc in second innings*

Move to woo Bay of Bengal states comes as Pakistan issues linger

WHEN MR NARENDRA MODI WAS SWORN IN for his second term as India's prime minister on May 30, he chose to share the limelight in the courtyard of the regal presidential palace in New Delhi with leaders from a little-known multilateral grouping bearing an unwieldy name – the Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation (Bimstec).

India's decision to grant high-profile focus to this bloc at the start of Mr Modi's second innings has prompted critical stocktaking of Bimstec, with many urging India to take the lead to transform the grouping from its under-developed and under-exploited status.

The forum brings together Bay of Bengal littoral states – Bangladesh, India, Myanmar, Sri Lanka and Thailand – and two landlocked ones in the wider region – Nepal and Bhutan.

The forum was created with the intent of delivering progress on a range of issues, including a free trade agreement, tourism, cultural cooperation, the environment, agriculture, poverty alleviation, counter-terrorism and disaster management. But the understaffed and poorly funded body has yielded little.

A trade deal remains elusive despite a framework agreement that was signed as early as 2004 in a region that is poorly connected.

Bimstec holds significant potential as a strategic platform that allows India to bring together its



Indian Prime Minister Narendra Modi (right) and Bhutan Prime Minister Lotay Tshering heading for a Bimstec meeting in New Delhi on May 31.

PHOTO: EPA-EFE

Neighbourhood First and Act East policies, offering an alternative to countries in the region seeking to balance China's growing presence.

India will also have to display unwavering commitment to the bloc and avoid turning to Bimstec simply to spite Pakistan internationally. .

The decision to invite Bimstec leaders to the swearing-in ceremony in May came in the wake of the Pulwama attack in February this year, also traced back to Pakistan-based terrorists.

In 2014, however, Mr Modi was sworn in among Saarc leaders, including then Pakistani Prime Minister Nawaz Sharif. [SI](#)

– Debarshi Dasgupta, India Correspondent In New Delhi





A blue-footed booby sitting on lava rock formations in Los Tuneles – translated as The Tunnels – on the outskirts of Isabela on the Galapagos Islands. The islands are home to all sorts of weird and wonderful creatures.  
ST PHOTO: MARK CHEONG

## Sustainability

# Galapagos: El Nino rocks the cradle of biodiversity

The Galapagos Islands are famous as the birthplace of Darwin's Theory of Evolution. The Straits Times visits Ecuador to find out how El Nino has affected the islands' wildlife and seas.

### AUDREY TAN

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IT WAS RAINING WHEN WE ARRIVED ON THE Galapagos Islands, 1,000km off the coast of Ecuador, South America. The rain and humidity clinging to our skin was not unusual for April, when the archipelago experiences its typical warm and wet season.

But when too much rain falls, as it does during some El Nino years, it can pose a severe problem for these volcanic isles of Darwinian fame.

The Straits Times' photojournalist Mark Cheong and I had arrived on the shores of the Galapagos after spending the past month tracing the footsteps of El Nino – a natural climate phenomenon with a

footprint spanning the Pacific Ocean.

This year is an El Nino year, according to the United States' National Oceanic and Atmospheric Administration (NOAA).

Our first stop was another archipelago in the west of the Pacific: Indonesia, where El Nino usually leaves its mark with fire.

When El Nino blitzes through South-east Asia, it tends to bring hotter and drier weather to the region, worsening the forest fires typical of Indonesia's agro-forestry landscape.

But on the Galapagos Islands, El Nino leaves a wet signature. As waters in the eastern Pacific Ocean

warm, they fuel the formation of rain clouds.

The islands enjoy two distinct seasons – the wet and warm season in the first half of the year, and a cooler, drier season when precipitation comes mainly in the form of “garua” – a fine mist that hugs the highlands.

But when an El Nino signal occurs, it interferes with these distinct seasons, according to Mr Stuart Banks, science marine manager for the eastern tropical Pacific seascape at environmental group Conservation International (CI).

“It can make the weather wetter or drier than usual, and this represents extremes for species that live on the islands,” he says. “A very strong El Nino event can completely and dramatically change the nature of the ecosystems.”

Thankfully, the El Nino that NOAA has detected this year is a weak one. It is also centred mainly in the central Pacific, leaving the eastern end of the oceanic basin largely unscathed.

## DRAMATIC CHANGES

The Galapagos Islands are well-known for being the birthplace of Charles Darwin’s Theory of Evolution. Today, the wildlife that served as Darwin’s muse continue to inspire scientists, tourists and journalists, too.

From tropical penguins to giant tortoises and birds with blue feet, the islands are home to all sorts of weird and wonderful creatures.

We had our first glimpse of one of these creatures just minutes after our arrival.

A blue-footed booby sat preening on the rocks by the pier on San Cristobal, the bright blue of its feet apparent even through the veil of rain.

As we stood transfixed at the sight of the bird, our guide Carmen Guzman, a biologist who has been living on the islands for more than 20 years, recalled how the 1997 El Nino – one of the most destructive for the Galapagos – affected this creature.

“They nest on the ground. But that year, because of the El Nino event, it rained a lot and there was water all over the place, so the boobies couldn’t nest, and many adults abandoned their chicks,” she said.

It was not the only creature to be affected that year, she added, pointing to the Galapagos sea lion on the pier as another species affected by that event.

El Nino is a natural event that animals had to deal with long before human activity started changing the climate.

But scientists now fear that global warming could further threaten Darwin’s cradle of biodiversity, home to many creatures found only on the Galapagos.

Dr Guzman says: “Climate change is not natural. Human activities are releasing gases into the air, polluting the land and the oceans, and all of these are interfering with natural processes.”

The impact of El Nino is relatively short-lived, changeable and not the same as long-term, permanent climate change. But there are still

lessons that can be learnt.

As a 2011 report by the World Wildlife Fund and CI stated: “Because the effects of El Nino are much the same as the effects projected under climate change, it’s helpful to look to the impact of El Nino for clues to how species might react to longer-term climatic changes.”

Another unknown is how the nature of El Nino would be altered in this era of climate change.

Dr Carlos Mena, co-director of the Galapagos Science Centre, says: “Personally, I think the most problematic issue for the Galapagos would be the increase in intensity and frequency of El Nino events.”

If that happens, animal populations will not have enough time to recover, he says.

The 1982 El Nino event, which ended in 1983, was among the most destructive for the Galapagos Islands and Ecuador. Rain flooded communities and washed away homes, and the warming ocean devastated wildlife communities on the Galapagos. This practically led to the collapse of fisheries in Ecuador, Chile and Peru.

Today, the memory is still deeply etched into the minds of people in the region.

Mr Rodney Martinez, an oceanographer born in Guayaquil, Ecuador, is the international director for the International Research Centre on El Nino, which makes El Nino forecasts for Latin America so that policymakers can take action.

Talking to The Straits Times from his office in Guayaquil, he says: “El Nino is very well-known in Latin America – so popular that we have to be extremely careful in mentioning El Nino, because many things happen. Markets, investments, trade – all these are affected at the slightest hint of El Nino, because we have reminders of what happened in 1982 and 1997.”

The 1997 El Nino, for example, racked up losses of US\$2.8 billion (\$3.83 billion) in Ecuador alone, says Mr Martinez.

## UNDER THE WARMING SEA

Off the coasts of Latin America, where some of the world’s richest fisheries can be found, the impact of El Nino is hardest felt in the ocean.

The marine turtle is an example of wildlife native to the Galapagos, which lie at the crossroads of three major currents in the Pacific Ocean.

ST PHOTO: MARK CHEONG







Sea lions on a beach on San Cristobal on the Galapagos. As El Nino causes the seas to warm, it affects the marine food chain. Animals such as the sea lion suffer as a result.  
ST PHOTO: MARK CHEONG

The Galapagos penguin – the only penguin species that lives so close to the Equator – is perhaps the poster child for this.

On average, their numbers range between 2,000 and 4,000, says Dr Gustavo Jimenez, principal researcher for marine birds at the Charles Darwin Research Station.

But in the aftermath of the 1982 El Nino, their numbers plunged 80 per cent, leaving just 300 penguins, he tells *The Straits Times*.

History repeated itself in 1997 when another strong El Nino hit the islands. That year, the penguin population fell 60 per cent, dwindling to 400, says Dr Jimenez.

The very reason for the penguins' high mortality during El Nino events is, ironically, also why this cool-adapted species can be found so near the Equator.

It all boils down to the way the currents swirl around the islands.

The Galapagos Islands lie at the crossroads of three major surface ocean currents in the Pacific Ocean: the cool South Equatorial and Humboldt currents that come from the east and the south-east respectively, and the warm Panama Current which streams down from the north-east.

The Galapagos also receives another subsurface current: The Cromwell undercurrent from the west helps the penguins thrive on the Isabela and Fernandina islands, located on the western end of the archipelago.

Said CI's Mr Banks: "The westerly Cromwell Current is a submarine current that sits between 50m and 100m below the surface.

"When it hits the western islands, it causes an upwelling, like a hose firing against the base of a platform."

The upwelling of cool, nutrient-rich water stimulates the oceanic food web, allowing phytoplankton – plants of the ocean – to bloom. This provides a buffet for fish that the penguins enjoy in turn.

It also provides a cool water refuge on the Equator.

El Nino and La Nina events, however, disrupt this status quo. La Nina is the sister to El Nino, bringing cool waters to the archipelago.

During these events, penguin numbers go up, says Dr Jimenez.

El Nino typically arrives on the Galapagos on a red "carpet" as warm water spreads across the Pacific Ocean. This is often depicted in maps as a swelling pool of red across the ocean basin.

As warm water journeys east, it pushes the cool water that usually upwells along the coasts of South America to deeper depths.

This means that the water which wells up is warm and nutrient-poor instead.

When this happens, the oceanic ecosystem starves from the bottom up, says Mr Banks.

Penguins are not the only casualties. After the 1982 El Nino, 95 per cent of coral on the islands bleached and died.

Bleaching occurs when water that is too warm causes coral to expel algae living in their tissues.

Marine iguanas – reptiles found only on the Galapagos – are also hit hard when higher water temperatures kill the algae that they scrape off the seafloor.

## SLOWING THE TIDE OF INVASION

El Nino, however, affects different sectors in different ways.

Cattle ranger Geovanni Saigu, 37, owns a 50ha farm on the highlands of San Cristobal and believes increased rainfall can help some farms. "Rain helps to fill the reservoirs, and also helps the grass grow better, providing more food for the cows."

But not all farmers benefit. Vegetable farmers could suffer crop losses when too much rain drowns the tomato and cucumber plants.

Higher rainfall also helps alien species, such as blackberries and guava plants, grow better. When birds peck at the fruit and spread the seeds, the plants spread further.

Biologists consider invasive species detrimental to the pristine ecosystems, as they can out-compete native species and spread diseases.

Blackberries, for example, are threatening the endemic *Scalesia* forests on the island of Santa Cruz, said a 2017 scientific report.

Alien species of animals are also affecting nature's balance. Goats brought to the islands by early settlers consume endemic plants and damage the nests of giant tortoises with their foraging, says Mr Eduardo Espinoza, director for ecosystem services at the Galapagos National Park.

Amid globalisation, eradicating invasive species is practically impossible and projects to remove them do not come cheap, says Mr Espinoza. An initiative to remove goats from Isabela island cost US\$8 million, he adds.

The Galapagos National Park is undertaking many efforts to slow the tide of invasion and reduce the impact of human activities.

All ports of entry to the islands have staff who inspect bags for agricultural products.

Tourism is also carefully managed – visitors must be accompanied by a guide in protected areas, and strict controls limit the number of tourists visiting certain areas.

These efforts are crucial for the islands, considering that the twin engines of the islands' economy – fisheries and eco-tourism – are heavily dependent on nature.

A 2016 report by the United Nations Educational, Scientific and Cultural Organisation, also known as Unesco, stated that tourism on the Galapagos generates US\$418 million annually, of which US\$61 million enters the local economy. This, said the report, accounts for 51 per cent of the islands' revenue.


However, climate change and global warming is not an issue that the Galapagos can combat on its

own, says Mr Espinoza.

What the national park can do is mitigate the impact of human activity, so that natural ecosystems are more resilient to climatic shocks.

He says: "You will always have natural threats, like El Nino, and climate change is global. But if you add on other threats from humans, like invasive species, pollution or destruction of their natural habitats, it is an extra weight for them."

He adds: "Many people think resources are materials and things, like money or laptops. But nature is also a resource – it gives us the air we breathe, the water we drink. And on the Galapagos, our nature is what the tourists come to see."

Dr Guzman agrees. "We have to learn how to share our planet with the other animals and plants... because with our bad actions, we are deciding the future of the planet." 

## Indonesia: The scars of El Nino

Added to climate change, it is a recipe for disaster but preventive measures are being rolled out

THE FIRE CRACKLED SOFTLY UNDERFOOT.

It sounded soothing – harmless, even – but the licks of fire that The Straits Times photojournalist Mark Cheong and I saw in Indonesia's Riau province in April this year belied the vastness of the problem.

We were walking through what were once plantations of acacia trees, grown for the production of pulp and paper.

But hectares of trees had been reduced to scorched earth, laid waste by the ravages of fire.

The licks of flame we saw were vestiges of the fire possibly still raging under the dried-out, flammable peatlands we stood on.

Later, we learnt from Mr Okto Yugo Setiyo, deputy coordinator for environmental group Riau Forest Rescue Network, or Jikalahari, that the fire had started a month before our arrival.

These fires are not uncommon in Indonesia's agro-forestry landscape. But, this year, their strength could have been influenced by El Nino – the natural climate phenomenon that brings hotter and drier weather to South-east Asia.

According to the United States National Oceanic and Atmospheric Administration, this year is an El Nino year. It is, however, no match for the one that hit four years ago.

Many Singaporeans may remember the "monster" El Nino event in 2015, however, as more of a big inconvenience. For two months in September and



October, the Republic was shrouded in thick haze that disrupted outdoor events and prompted many to seek shelter in air-conditioned malls.

But for Indonesian journalist Mukhlis Senin Wijaya, 40, the crisis had a much higher cost: his eldest son, Mohannum Anggriawati, died after days of breathing difficulties and nights where he simply could not fall asleep as a result.

He was just 12 when he died in September 2015.

The elementary school pupil was a precocious child close to his mother, and could speak three languages and one dialect – Bahasa Indonesia, Arabic, English and Hokkien, says Mr Mukhlis, whose family lives in Indonesia's Riau province – one of the areas hardest hit by the pollution.

A discarded life jacket lies among a burnt plantation in Bengkalis regency in Riau in the aftermath of a forest fire.

ST PHOTO: MARK CHEONG



Mr Okto Yugo Setiyo, deputy coordinator for environmental group Riau Forest Rescue Network, on burnt peat at Bengkalis regency in Riau. Fires are not uncommon in Indonesia's agro-forestry landscape but El Nino could worsen their impact.  
ST PHOTO: MARK CHEONG



## SEVERE IMPACT

**El Nino events are getting more frequent, causing a lot of losses in terms of the areas burnt, the impact on health and total economic loss.**



– DR ARIEF WIJAYA, senior manager for climate and forests at think-tank World Resources Institute Indonesia.

Back then, the haze was so thick the air turned yellow, and the air reeked, he tells The Straits Times through an interpreter.

“The haze incident is a bitter experience for my family,” he says.

“Because of the haze in 2015, my son is dead.”

### THE EL NINO EFFECT

The extreme haze episode that year was caused by a “monster” El Nino – one of the three strongest to have occurred in the past five decades.

El Nino occurs every three to four years on average. When it hits, it causes weather in South-east Asia to be hotter and drier than usual.

Without rain to help douse the fires usually started by humans to clear land for plantations, they spiral out of control.

The remote location of the fires can delay firefighters, hampering efforts to put them out quickly.

For an idea of the vastness of the landscape, picture this: It took us about 10 hours by car, ferry and motorcycle to get from Pekanbaru, the capital of Riau, to the site in Bengkalis regency where we saw the remnants of the fire.

The impact of El Nino usually lasts just a few months. But, with climate change, scientists in Indonesia say they are certain that its impact will be felt more keenly.

Dr Arief Wijaya, senior manager for climate and forests at think-tank World Resources Institute (WRI) Indonesia, says: “El Nino events are getting more frequent, causing a lot of losses in terms of the areas burnt, the impact on health and total economic loss.”

The World Bank estimated that the haze crisis in 2015 cost Indonesia more than US\$16 billion (\$22 billion) in economic damage.

Estimates by researchers from the Harvard and Columbia universities in the United States had put the number of early deaths caused by the haze that year at 100,000.

The number is staggering, yet statistics mask the pain of families coping with the loss of their loved ones, such as in the case of Mr Mukhlis.

Coconut farmer Muis – who, like many Indonesians, goes by one name – also recalls a brush with El Nino in 2015. The 55-year-old from Riau province says that coconuts dropped to the ground before they grew big enough to sell.

“Usually, I harvest about 700kg of coconuts twice a month. But when El Nino came in 2015, I could harvest only once in two months,” he says in Bahasa Indonesia.

Scientists are still studying how climate change would affect the frequency and intensity of El Nino.

As the Intergovernmental Panel on Climate Change noted in its fifth and most recent assessment report, “changes in (El Nino) intensity for the 21st century are uncertain”, due to varying conclusions by different climate models.

But, on the ground, El Nino is felt differently.

From Indonesia to the Galapagos Islands – archipelagos across the Pacific Ocean that are ground zero for the impact of El Nino – scientists, farmers and activists I interviewed all point to the growing burden of the phenomenon.

In Indonesia, Dr Arief says El Nino events are occurring at a quicker pace.

In the 1980s, the country endured just one strong El Nino event in 1982, he says. In the 1990s, there were two to three, including the globally significant one in 1997.

“Big forest fires used to happen once a decade. But from 2000 till 2015, there have been at least four big fire events in Indonesia, causing haze and

smoke in the region,” Dr Arief says, pointing to El Nino events in 2003, 2007, 2013 and 2015.

For Indonesia, the growing impact of El Nino could boil down to how land there is being managed. There, forests are being cleared for plantations, to feed the world’s increasing appetite for commodities such as palm oil.

Figures from the Centre for International Forestry Research show that plantations in Indonesia and Malaysia produce around 85 per cent of global palm oil supply.

As Mr Mukhlis acknowledges: “The haze may be worsened by natural events, but humans started it.”

## THE PEAT PROBLEM

In Indonesia, fire is often used by small-time farmers and larger agro-forestry companies as a tool to clear land for oil palm and pulp and paper plantations.

Fire is commonly used around the world to open land for agriculture, but, in Indonesia, this practice is problematic because of the scale at which it is carried out and the type of soil that most of these plantations sit on – peat.

Peat swamps are carbon-rich ecosystems that form when dead plants fall into water-logged soil.

But cash crops like oil palm and acacia do not do well in waterlogged soil. So, large agriculture companies drain the land by building canals.

As the peat gets exposed to air and dries, the organic matter in it becomes fodder for fire.

Says Jikalahari’s Mr Okto: “This makes the peatlands more flammable, and areas around the plantations are also at risk of fire.”

We had the chance to see burnt peat in Bengkalis regency during our reporting trip in April.

While there, Mr Okto grabbed a handful of the ground we stood on and held it out to us, saying: “Peat swamps are supposed to be water-logged. But when they are drained and burned, they look like this – like a dried-up sponge.”

With a solemn face befitting of the landscape we were in, he declares: “This is a peatland that has been destroyed.”

## CLIMATE PARADOX

As the world discusses avoiding the harshest impacts of climate change by investing in renewable energy and reducing reliance on fossil fuels, the Earth’s natural defences against global warming are sometimes underestimated.

Tropical rainforests and peatlands, for instance, help to absorb heat-trapping carbon from the atmosphere.

Peatlands, in particular, are highly efficient carbon sinks – they store up to 20 times more carbon than non-peat mineral soils, says think-tank WRI.

Yet, as the example of the peatlands in Indonesia has shown, these important ecosystems face many threats – from El Nino, climate change and human activity such as deforestation.

National University of Singapore botanist Lahiru Wijedasa says El Nino events and the drought-like conditions they bring to South-east Asia have been affecting forests for centuries. What has changed, however, is their ability to recover.

Deforestation and logging have broken up forests into smaller patches, causing the forest to dry out. This is known to scientists as the “edge effect”, says Mr Lahiru.

Poaching of animals also affects the forest’s ability to recover, he adds. When seed dispersers such as birds are poached for the pet trade, it is harder for seeds to be carried to barren areas where they could re-colonise.

Throw in the effects of El Nino, or changing rainfall patterns due to climate change, and you get a recipe for disaster, he says.

Trees, says Mr Lahiru, are not too different from marathon runners: “They can get through a drought by using their internal energy, but if they have to do this repeatedly, they exhaust this store of energy.”

Some trees, especially those in regions where there are seasons, may be accustomed to drier spells and able to survive if these occur with ample recovery time in between.


But if the climate changes and dry spells happen more frequently, the worry is that they cannot.

He further explains: “If you run a marathon and you have enough time to recover, you can run again. Without that time, you cannot run as far as you did previously. Repeat this and a runner will just manage a kilometre before collapsing.”

The good news is that, in the aftermath of the 2015 haze, Indonesia has rolled out a slew of preventive measures.

They include efforts to reduce the occurrence of fires such as damming up canals to re-flood dry landscapes, or measures to suppress the blazes when they erupt.

In October last year, Indonesia also established the International Tropical Peatland Centre in Jakarta.

An initiative of Indonesia, Peru, the Democratic Republic of the Congo and the Republic of the Congo, the research centre aims to develop scientific projects that will inform the conservation and sustainable management of tropical peatlands, which can be found in all four countries. 

– Audrey Tan

A farmer transporting the fruits of palm oil plants grown on peatland in Bengkalis regency in Riau.  
ST PHOTO: MARK CHEONG





# Going underground – Singapore's new frontier

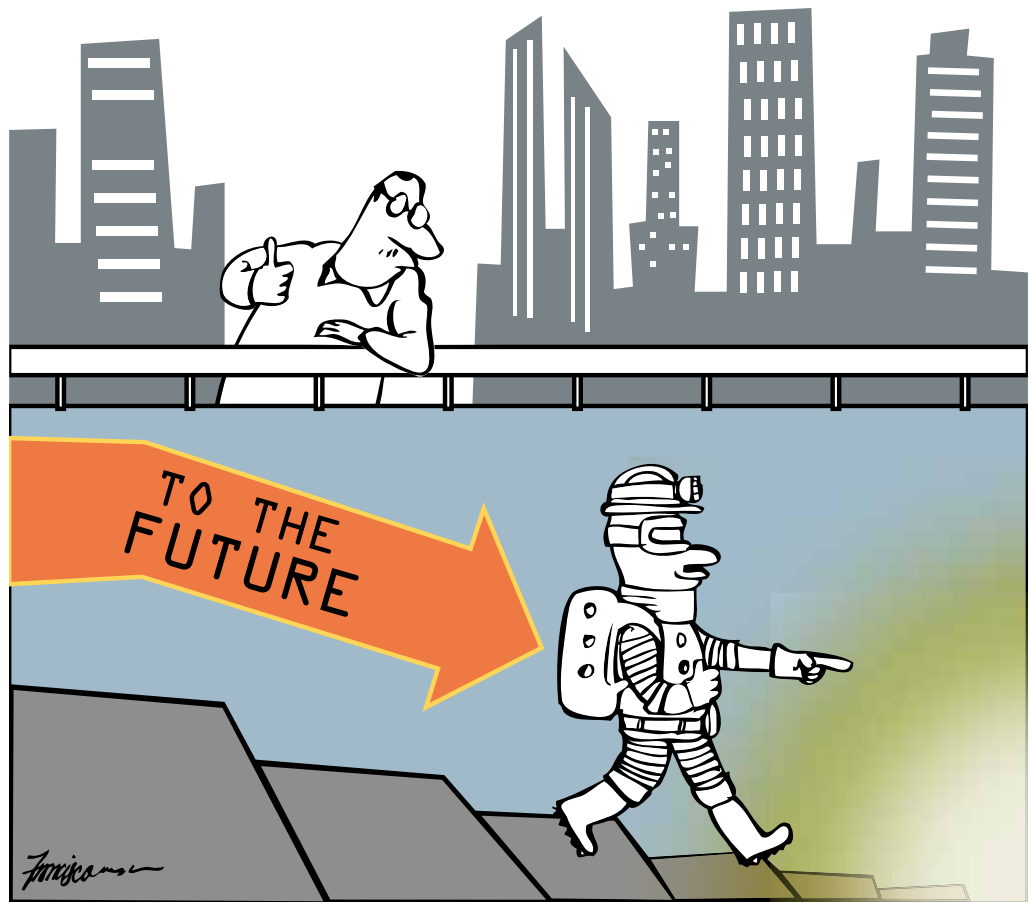
Shifting facilities such as reservoirs below ground offers more space and flexibility for city planners

**IRENE THAM**

Tech Editor



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ST ILLUSTRATION:  
MANNY FRANCISCO

EVER TALLER BUILDINGS USED TO BE THE WAY to go when urban planners ran out of land in growing cities.

No longer.

Increasingly, they are breaking new ground by digging deeper underground and finding new ways to free up the precious space above.

Overcrowding is eased and the cities become more liveable, not least through ease of travel and more room for open-air recreational facilities.

Singapore is the latest country to join such trailblazers as Japan, Canada, Norway, Germany,

France and the Netherlands in exploring the new frontier of smart subterranean cities.

As a first step, the Urban Redevelopment Authority (URA) has released this year a subterranean master plan, providing the first comprehensive three-dimensional (3D) look at what lies up to hundreds of metres underground.

Maps for Marina Bay, Jurong and Punggol were available first. More areas will be added over time.

Singapore laws limit land ownership to a maximum of 30m below the surface. Going way below that limit opens up vast new opportunities

as new developments no longer need to track what lies above and be held back by private property ownership rights.

It gives land-scarce Singapore greater latitude to build all kinds of infrastructure – from rail networks to reservoirs and storage facilities.

## FINDING SPACE FOR THE FUTURE

The idea to develop underground spaces was first raised in 2013 by then National Development Minister Khaw Boon Wan, who wrote in a blog post that Singapore could take a leaf from Canada and Japan's book, as their cities have extensive underground pedestrian passages, shopping malls and offices.

One of the "largest and most well-known" underground cities is Montreal's RESO, he wrote.

"It comprises 32km of tunnels covering about 12 sq km in downtown Montreal, linking a wide range of facilities such as offices, hotels, retail shops, cinemas, universities and train stations. It is easily accessible and half a million people use it every day."

Singapore, he suggested, could similarly maximise its land area by moving below ground transport hubs, pedestrian links, cycling lanes, utility plants, storage and research facilities, industrial buildings and shopping districts.

While many of these facilities remain on the wish list, Singapore already has extensive underpasses linking major shopping malls such as Ion Orchard, Tang Plaza, Wisma Atria and Ngee Ann City along Orchard Road.

In 2000, Singapore's first dedicated underground mall, Citylink Mall, opened. Spanning 60,000 sq ft (5.6 sq km), it allows people to shop while they walk from Raffles City to Suntec City Mall and Marina Square.

Why is Singapore looking underground? What other options does it have? In the past two centuries, the country has aggressively reclaimed swathes of land to meet the demands of its growing population.

While land reclamation has increased Singapore's land area from 58,150ha to 71,910ha, it can go only so far. The rising cost of imported sand, the deleterious impact on the ecosystem, shipping lanes as well as territorial limits impose restraints on the land-reclamation option.

Other ways to maximise land space include packing more people and floor space into new developments, and rezoning old industrial areas and golf courses for homes and offices. But a city's livability must be considered, thus limiting the number of tall buildings that can be squeezed onto a plot of land.

These constraints support the move to dig deeper.

In announcing the URA's upcoming subterranean master plan last year, its chief planner Hwang Yu-Ning said: "The underground plan is part of our strategy to create spaces for the future and create capacity for growth." The plans also serve to keep developers informed.

At April's Geospatial World Forum 2019 in Amsterdam, which The Straits Times attended, Singapore Land Authority's (SLA) chief executive



A tunnel-boring machine that will be used for tunnelling in the second phase of Singapore's Deep Tunnel Sewerage System. Singapore has ambitious plans to build storage and transport infrastructure deep underground.

PHOTO: LIANHE ZAOBAO

Tan Boon Khai noted that as the country is "almost fully built up on land, we have to plan and build underground."

Even so, there are no plans to build underground homes. "We want to dig deeper to build reservoirs, roads and storage facilities so that the ground above can actually be freed up for homes and parks," he said.

## LOCATING UNDERGROUND ASSETS

Whatever the grand vision, planners will need to deal first with a major challenge: find out what is hidden underground to avoid costly accidents, construction delays and disruptions to essential services and the broader economy.

Accidentally nicking buried water and sewerage pipes, power grids and telecommunications cables comes with varying costs. Research by Britain's University of Birmingham has estimated that it ranges from £300 (\$530) for damage done to a water or sewerage pipeline to £2,800 for fibre optic cables. Potential business losses arising from service disruptions are estimated to be 30 times that of each hit.

Singapore has suffered 26 cases of telecommunication cable cuts in the past three years that resulted in hours or days of Internet and telephony service outages. As connectivity becomes increasingly important to businesses and home users, the price incurred with each incident rises.

These cables are typically laid up to 3m below ground. The challenge lies in not just physically protecting them whenever the ground is dug up for new train lines, power cabling, water and sewerage works and the like but in locating and mapping them in the first place.

## FREEING UP SPACE ABOVE GROUND

**We want to dig deeper to build reservoirs, roads and storage facilities so that the ground above can actually be freed up for homes and parks.**

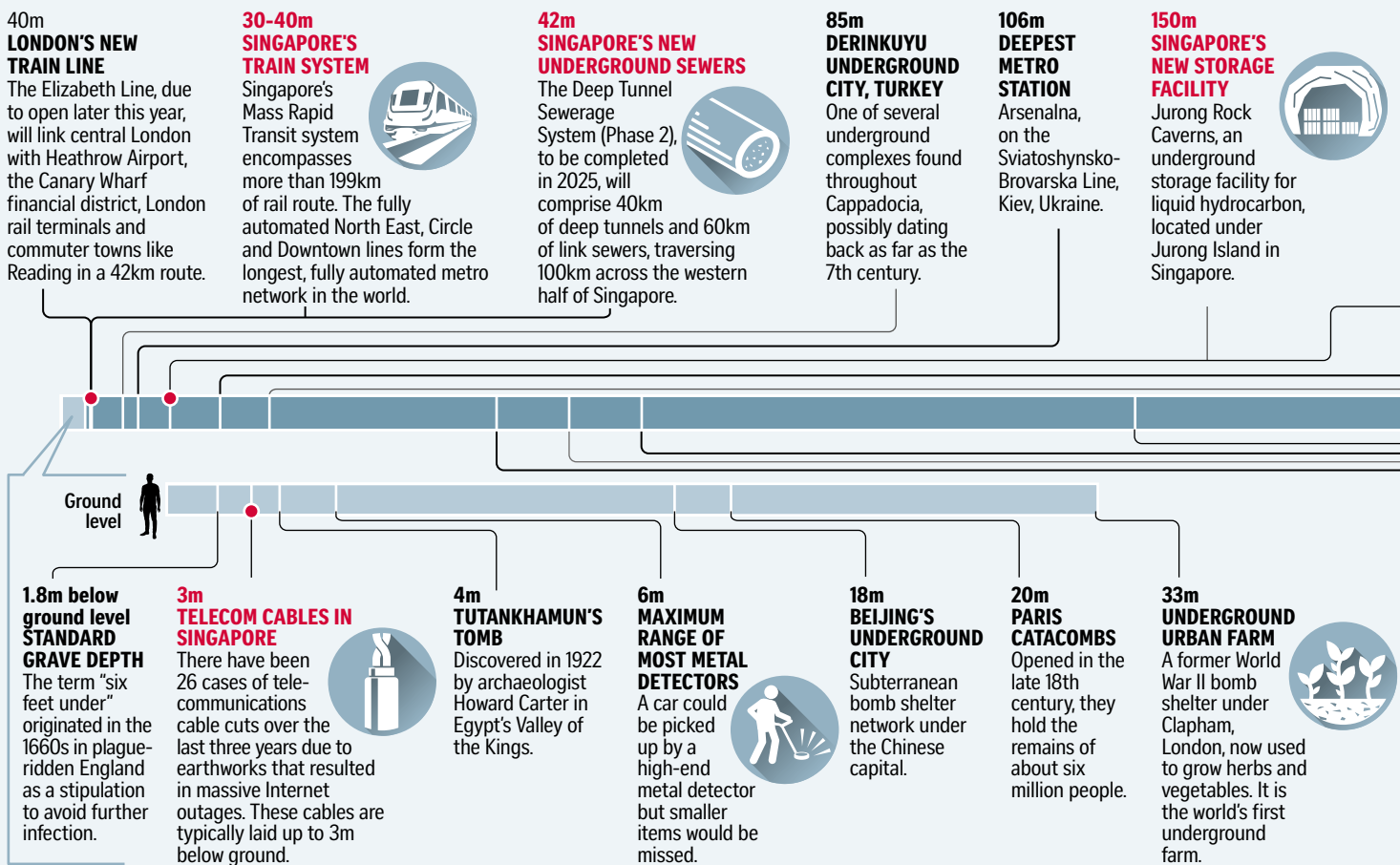


**MR TAN BOON KHAI**  
chief executive of the  
Singapore Land Authority



# What lies beneath

Singapore laws which limit land ownership to up to 30m below the surface will open up many opportunities for huge infrastructure projects from rail networks to reservoirs to storage facilities.



The process is complex and time-consuming because Internet service providers and telcos – Singtel, StarHub, M1, ViewQwest and MyRepublic – are unwilling to share the location of their assets, leading to a patchy knowledge of the island's buried critical infrastructure.

Outside the telco sector, the Energy Market Authority keeps track of where its power grids are laid, and national water agency PUB manages its own database of its water pipes.

There is no central agency from which earthwork contractors could get a consolidated, accurate view of all the underground assets on the island. This has meant that contractors have to repeatedly dig "trial holes" to check for buried utilities in many places, and determine whether diversion works are needed. This process is extremely unproductive and costly.

"The unknowns underground and the risk of hitting buried infrastructure have contributed to delays and inflated construction costs by up to 30 per cent," said Mr Geoff Zeiss, principal of the US-based consultancy firm Between the Poles.

## ROLE MODEL IN THE NETHERLANDS

The unknowns include soil condition and the

presence of aquifers and gas fields, all of which affect construction.

Soil condition, for instance, will determine the amount of reinforcement required for tunnels: Some stretches along the Thomson-East Coast MRT line near Katong Park, for instance, had to be strengthened as the area is made up primarily of soft marine clay, which has the consistency of peanut butter.

Capturing such information in a shared database is a step towards smarter underground city planning.

The Netherlands, which created a law to mandate the sharing of data on soil and groundwater from 2018, offers some valuable lessons.

The Dutch government also introduced an open database – called the Basis Registratie Ondergrond (BRO), or Key Registry for the Subsurface – accessible to all citizens. Any company that excavates or drills underground will have to share data with the BRO registry. Any user who finds inaccurate information is required to report it.

All the information will go towards the creation of an authoritative and comprehensive 3D underground map, the foundation for future underground development as well as ground-level construction planning. Having a rich and constantly



### 150m and below SINGAPORE'S NEW RESERVOIRS

National water agency PUB is looking to store water in underground reservoirs deep below to free up to 3,700ha or 5 per cent of Singapore's total land space.

### 219m GREENBRIER NUCLEAR BUNKER

West Virginia, US. Kept secret for 30 years, it was designed for Congress to use in an emergency.

### 287m DEEPEST UNDERSEA ROAD TUNNEL

The Eiksund Tunnel, Norway.

### 2,500m DEEPEST LABORATORY

Jinping Underground Laboratory, China.

### 2,850m DEEPEST NUCLEAR EXPLOSION

Siberia, Russia, in 1985.

### 3,110m DEEPEST SINGLE- SHAFT LIFT

Moab Khotsong gold mine, South Africa.

### 600m GERMAN MINES

Germany is turning hard coal mines in the north-west of the country shut down last year into hydroelectric storage facilities.

### 700m CHILEAN MINERS

33 miners were trapped for 69 days in 2010 in the San Jose copper and gold mine in Chile.

### 800m DEEPEST PROPOSED PUBLIC RAILWAY STATION

Porta Alpina, in the Gotthard Base Tunnel in southern Switzerland. The project was shelved by the Swiss authorities in 2012.

### 1,480m HOMESTAKE GOLD MINE, UNITED STATES

Closed in 2002. But in 2007, it started to house the Sanford Underground Research Facility for sensitive physics experiments that needed to escape radiation from the sun.

### 2,190m DEEPEST KNOWN CAVE

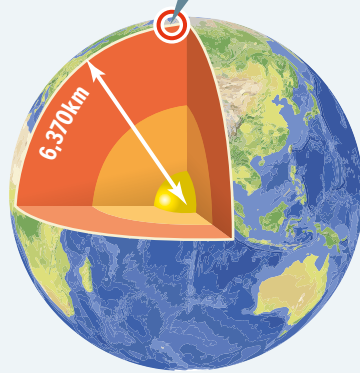
The deepest known point of Krubera Cave, also known as Voronya Cave, in the Arabika Massif, Georgia.



## HOW DEEP IS IT REALLY? The deepest point humankind has gone into the earth

### DEEPEST DESTINATION FOR HUMANS

At 3,900m (about the combined height of 12 Eiffel Towers), the TauTona gold mine in South Africa has to be cooled to 28 deg C. Rock-face temperatures currently reach 60 deg C. This distance is a mere 0.06 per cent of the average distance to the centre of the earth.



3,900m

TEXT: IRENE THAM STRAITS TIMES GRAPHICS

updated database will, for instance, help engineers determine how rivers have shifted their course and how soil conditions have changed over time, ahead of laying or reinforcing the foundations for bridges, buildings and dikes.

## SINGAPORE'S CHALLENGE

This kind of data-sharing looks like an uphill task in Singapore because of longstanding rivalry among companies and security concerns.

SLA's Mr Tan said: "One of the challenges is to get utilities companies and telcos to share data. They guard their data jealously."

But without knowing with certainty what is underground, it is hard for city planners to figure out whether there is scope to do more. As such, Singapore's progress has been limited.

One completed project is the Jurong Rock Caverns, a storage facility for liquid hydrocarbon 130m under Jurong Island. This has freed up more than 60ha, an area equal to 84 football fields, of development space on the island. The project is straightforward as Jurong Island consists mostly of reclaimed land, and it is managed by one agency - JTC Corporation.

More ambitious projects in the pipeline include

new sewers 42m below the surface and reservoirs more than 150m below ground. The PUB's Deep Tunnel Sewerage System (Phase 2), to be completed in 2025, will traverse 100km across the western half of Singapore. The agency is also looking to store water in underground reservoirs at 150m and below to free up to 3,700ha or 5 per cent of Singapore's total land space.

The new projects need data, and mapping is a key first step.

On the plus side, new technologies that let underground assets be mapped with greater precision, with a margin of error of below 40cm and in 3D, make the job of avoiding earthwork accidents easier.

However, more needs to be done to improve the sharing of underground information and maps, with the Dutch model offering lessons for Singapore.

The subterranean project is a challenging one. If above-ground airports and ports can take decades to plan and develop, what more underground cities and amenities. But the rewards of more space and a more liveable city for all are immense too.

Greater efficiency in underground city planning will go a long way to advance Singapore's march towards this new frontier. **ST**



# THE STRAITS TIMES *Asia* report

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# Robots at your service

Your face could be your room key and roving robots could bring amenities to your room, as hotels get tech savvy

Guests at Alibaba Group's FlyZoo Hotel can scan their faces to activate elevators, access the gym and restaurants, and unlock their room doors. Amenities are sent to the room by roving robots, while bespoke cocktails at the bar are mixed by a robotic arm.

PHOTO: STARHUB



NO ONE IS MANNING THE RECEPTION DESK at Hangzhou's sleek FlyZoo Hotel – and that is completely normal.

In fact, guests rarely interact with staff at all during their entire stay here. Amenities are sent to the room by roving robots, while bespoke cocktails at the bar are mixed by a robotic arm.

This is, after all, a hotel unlike others. Owned entirely by Chinese e-commerce giant Alibaba, it is, as its nickname Future Hotel indicates, one that taps heavily on new technologies in overhauling traditional hotel processes.

It is not the first high-tech hotel in the world, of course. Robots serving various functions have been deployed at other hotels in locations such as Japan and Singapore, with varying degrees of success.

But FlyZoo – derived from its Chinese name, which is a pun for “it is a must to stay here” – is

much more than that. It has digitally transformed almost every aspect of its operations – from check-in and check-out procedures to concierge services.

This reporter stayed at the 290-room establishment for three nights and, for the most part, was impressed by how efficient many of these high-tech innovations turned out to be.

Alibaba declined to reveal how much money was invested in building the place.

FlyZoo, which opened in December last year, is a test bed of sorts for Alibaba, whose headquarters is situated just down the road. If things go well, these new ideas could be marketed and sold to other hotels.

Already, Alibaba has partnered global hotel chain Marriott International to trial facial technology check-in procedures at two Marriott outlets in China (one in Hangzhou and the other in Sanya).

## YIP WAI YEE

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Get served by a robot at the hotel restaurant.  
PHOTOS: ALIBABA

When this reporter tried out the same type of check-in procedure at one of FlyZoo's self-service kiosks, a problem popped up.

As the system currently recognises only those holding Chinese national IDs, a member of the staff had to help with registering a foreign passport.

The hiccup aside, this reporter could still make full use of the hotel's facial-recognition technology for the rest of the stay.

As soon as the scan of your face is completed – a procedure done on the spot and which takes seconds – your face becomes the key to unlocking everything from the hotel room to the gym doors.

Even using the lift to access the room floors takes a quick scan of the face, as does signing in for breakfast every morning.

For someone who usually misplaces the hotel key card, the system, which worked smoothly each time, proved to be fantastic.

Guests who prefer the old key card can still choose that option. Having your face scanned everywhere you go is after all a matter of concern for those who are worried about giving up too much of their personal data.

In response to queries from The Straits Times, an Alibaba spokesman insisted that the hotel takes data security "seriously and has strict measures in place to protect our guests."

He added: "The purpose of using facial recognition is solely to provide our guests with a

M Social Singapore hotel guest Eugene Pang getting an omelette cooked by AUSCA, a robotic egg chef at the breakfast buffet.  
ST PHOTO: JEREMY KWAN



more convenient hotel experience.

"Any images of our guests are immediately erased from our system after their stay with us. We also provide guests with the option to opt out of the use of facial recognition."

Another convenient piece of innovation is the voice-assistant option in each hotel room, which controls everything from drawing the curtains to dimming the lights to switching off the air-conditioner.

## Other smart hotels

### SINGAPORE

**Copthorne King's Hotel, M Social, Yotel, Hotel Jen, Sofitel Singapore City Centre**



At least 10 hotels in Singapore have robot staff, such as M Social in Robertson Quay, Yotel in Orchard Road and the two Hotel Jen outlets – in Somerset and Cuscaden Road.

Hotel Jen's Jena and Jeno robots deliver guests' orders to their rooms, as do M Social's Aura robot, Yotel's twin robots and Sofitel Singapore City Centre's Sophie and Xavier robots.

M Social and Copthorne King's Ausca robots cook eggs at breakfast.

According to reports, hotels here turned to automation as it frees up manpower to deliver better and more personal service, such as recommending where to go in the neighbourhood.

Indeed, the lack of customisation is perhaps one of the problems with choosing to go robotic.

A Straits Times story published last year quoted an M Social guest, who said the eggs cooked by Ausca tasted similar to those done by a human chef, but he would have liked to customise his order by asking for less oil or more pepper.

### JAPAN

#### Henn-Na Hotel

The name translates to Strange Hotel and attracted a lot of hype for being one of the first robot-staffed hotels in the world, when it opened



The smart speaker – Alibaba's Tmall Genie – can answer general questions about Wi-Fi passwords and restaurant opening hours, as well as go through the movie catalogue on the television and whittle down films with a specific actor or director in seconds.

The voice assistant worked perfectly with each command, until you attempt to ask questions in English.

For now, the system is available in only Mandarin

**As soon as the scan of your face is completed... your face becomes the key to unlocking everything from the hotel room to the gym doors.**

”

– albeit a friendly female voice with a sense of humour to boot (“I thought I knew everything, how could I not know the answer to this?”) – but there are plans to upgrade it with other languages in the future.

Getting the roving robots to send fresh towels or bottled water to the room can also be problematic when demand is too high – these robots move slowly, cute as they are.

A housekeeper showed up at this reporter's room door out of breath with a requested bag of toiletries, explaining that she was worried that the wait for the robot would be too long.

Such teething problems are minor for now, but it does raise the question: Is being smarter always better?

Without giving specific details, the Alibaba spokesman said that through the automation of routine work, the hotel staff are then “able to focus more on our guests instead”

Perhaps, only time will tell. [ST](#)



its doors in Nagasaki in 2015.

Photos of the hotel reception area went viral on social media as the three receptionists manning the check-in counters were all robots – one designed to look like a woman, while the other two looked like dinosaurs.

Since then, the hotel has run into a series of technical problems and reportedly cut its 243 robot staff by more than half earlier this year. The cost of maintaining these robots was too high and the machines were prone to break-downs or mishaps. For example, the receptionist robots could not answer basic questions and in-room voice assistants mistook snoring as voice commands.



## **SOUTH KOREA**

**Vista Walkerhill,**

**Hotel Novotel Ambassador Dongdaemun**

High-tech South Korea has made use of smart technology in several of its hotels, including these two hotels in Seoul. Both employ state-of-the-art voice-assistant technology in their rooms, with Novotel's Giga Genie smart speaker understanding voice commands in Korean and English. When The Straits Times' South Korea correspondent Chang May Choon tested the system last year, the voice assistant understood her commands even when she spoke in Singlish.

Far left: In this hotel in Henn-na (or weird in Japanese) Hotel in Sasebo, Nagasaki, almost every member of the staff is a robot.

PHOTO: EUROPEAN PRESSPHOTO AGENCY

Left: At the Novotel Ambassador Dongdaemun Seoul Hotel, guests can call on Giga Genie, an AI voice assistant, to do their bidding, like turn on the television, adjust the room temperature, play K-pop music, draw the curtains and request amenities from housekeeping.

PHOTO: KT CORPORATION





A child swimming in a pool filled with plastic bottles during an awareness campaign to mark the World Oceans Day in Bangkok on June 8. PHOTO: AGENCE FRANCE-PRESSE

## Big Picture

# Swimming in a plastic ocean

THIS CHILD SWAM IN A POOL FILLED WITH plastic bottles during The Plastic Ocean Swimming Challenge to raise awareness of what the oceans could be like if no action was taken to stop pollution.

The event was part of a campaign to mark World Oceans Day in Bangkok on June 8.

In 2009, the United Nations General Assembly designated June 8 as World Oceans Day.

This month, the group launched Play It Out – a global campaign against plastic pollution. The

campaign included a music festival.

“Today, 13 million tonnes of plastic leak into the oceans every year, among other damage, killing 100,000 marine animals annually,” the UN said in a statement.

“From plastic straws to plastic bags, we all are at the front line of efforts to #BeatPlasticPollution.”

More than 1,000 related events are being held around the world this year, including film screenings and cleanup activities. **ST**



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