CKGSB KNOWLEDGE

CHEUNG KONG GRADUATE SCHOOL OF BUSINESS

Volume No. 37
SPRING 2020 $12.00

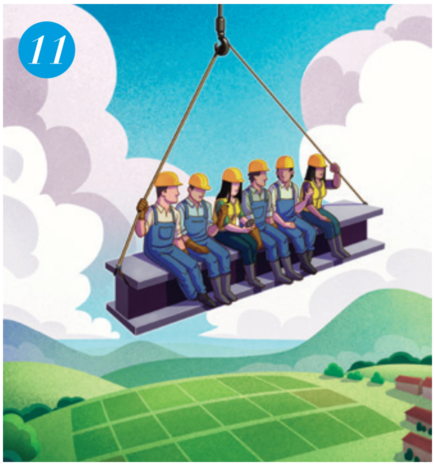
ONE WORLD DESPITE IT ALL

The forces of decoupling are strong, making re-globalization essential

- CKGSB Research: The economic effects of COVID-19
- China's new lower-middle class
- What is next for US businesses in China?

Table of Contents

Economy and Policy



Issue: Spring 2020
Vol. No. 37

Editor-in-Chief
Zhou Li

Senior Editors
Greg Langley and Marcus Ryder

Managing Editor
Mable-Ann Chang

Executive Editor
Chen Manting

Design
Jason Wong

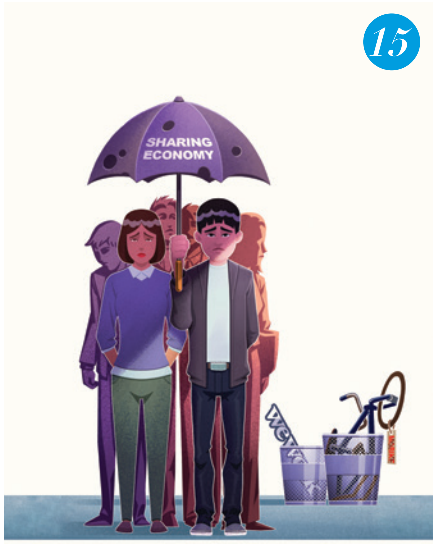
Cover
Raciel Avila Silva

Produced By
SinoMedia

ISSN 2312-9905

Publisher
CKGSB GLOBAL LIMITED
Suite 3203, 32/F, Champion Tower,
3 Garden Road,
Central, Hong Kong

For Letters to the Editor or reprint requests, please contact:
ckgsb.knowledge@ckgsb.edu.cn



Business Trends

Company

Business Barometer

Downtime

Towards a Re-globalized World

Over the past few months the world has been rocked by COVID-19 and its economic fallout, with the full impact of the crisis possibly yet to be felt. This issue of *CKGSB Knowledge* addresses several economic and business trends that have only been exacerbated by the virus crisis as we look towards the future and what it may bring.

In considering the immediate effects of COVID-19, "**A Financial Crisis and an Economic Recession**" (page **55**) by CKGSB Professor Xu Chenggang, addresses the overarching economic trends that have surfaced as a result of the virus. One is an unexpected boom in the online education market, with "**Virtual Education**" (page **31**), exploring how COVID-19 forced teachers and students to move all education online.

As usual, we look at key developments in the Chinese economy. Our cover story, "**One World Despite it All**" (page **6**), is a commentary on how even though the forces of decoupling have become even stronger, globalization is here to stay.

The steep economic slowdown in China is exacerbating problems in the sharing economy, with "**What Happened to the Sharing Economy?**" (page **15**), exploring the problems that once-golden startups are facing. A slowing economy and trade tariffs are also reflected in two other articles in this issue. "**Moving Out**" (page **27**), delves into how likely Southeast Asian countries are to benefit from the trend of manufacturers diversifying their supply chains, while "**China Pull**" (page **45**), examines how China has promised a more equal treatment towards foreign companies, in the hopes of attracting another wave of foreign investment.

COVID-19 is not the only virus to have been a concern for Beijing in the past few months, with African swine flu and Bird Flu have also rearing their heads in the country. "**Meat Market**" (page **40**), looks at the devastating impact that these diseases have had on China's pig and chicken populations. With science playing such a big role in discussions lately, "**A Science Great Leap Forward**" (page **19**) looks at what the future holds for scientific research in China, especially as it now ranks second globally only to the United States.

This year is the year that Beijing set as a goal to defeat poverty in the country. "**A Whole New Class**" (page **11**), explores how Beijing's "war on poverty" has yielded spectacular results, resulting in a new class of consumers in China. "**The Future of Shopping**" (page **49**), looks at the development of Alibaba's Freshippo supermarkets and how they are shaking up the Chinese supermarket world.

We have some great interviews in this issue, including a conversation with Kevin Nolan, the President and CEO of GE Appliances, who talks about the integration of the US's GE Appliances with China's Haier (page **8**). Craig Allen, President of the US-China Business Council, looks at the impact on businesses of deteriorating relations between the world's two largest economies (page **23**), while Dexter Roberts, author of *The Myth of Chinese Capitalism* explains how capitalism in China differs from anywhere else in the world (page **36**). And Pei Ling Tin, Singapore's youngest Member of Parliament, explores the role of youth in the future of China-ASEAN relations.

To wind down, sit back, pour yourself a glass of wine and enjoy "**The Grape Wall**" (page **62**), which looks at how China is already a big force in the world market for wine and what that means for domestic wineries.

Our Snapshot surveys the landscape of mobile apps being used in China and the US and explores which apps are the most popular, what revenues of these apps look like, and how Tencent's WeChat dominates the social media experience in China.

We at CKGSB, are committed to providing the best sense of the economic consequences of the pandemic and keeping both our readers and alumni aware of views and analyses on this epoch defining event. As always, if you have any comments or opinions to contribute, we would love to hear from you (lzhou@ckgsb.edu.cn or ckgsb.knowledge@ckgsb.edu.cn).

Yours Sincerely,

Zhou Li
Assistant Dean, CKGSB
Editor-in-Chief, *CKGSB Knowledge*

For more insights on the Chinese economy and business, please visit the CKGSB Knowledge *site: http://knowledge.ckgsb.edu.cn/*

One World Despite it All

The forces of decoupling are strong, making re-globalization essential

By Zhou Li

Whatever problems globalization is facing, we are still one world—now more than ever, as the pandemic reminds us. The public health and economic impact of the coronavirus has been a perfect example of the high level of interconnectedness of the world today and the crucial need for cooperation and joint action by all countries and territories around the world to address it. It is just one of a range of problems and issues which both point out the inevitability of interdependence, and also reveal a widespread crisis of trust in leadership. These issues include climate change, energy, food security, disease and new technologies, with the fake news and security issues that they create.

Globalization, characterized by the division of labor between different parts of the world and by generations of people seeking their fortunes in other countries, has overall raised prosperity levels around the world and created far more winners than losers, with the biggest winner of all unquestionably being the vast majority of China's population. The huge numbers of Chinese people who have been pulled out of poverty during this era, a topic addressed in this issue of the magazine, is evidence of that. Meanwhile, the developed economies, especially the US, have as a result of globalization in recent decades enjoyed a huge benefit in the form of low cost products from China. One of the questions emerging from the new globalization debate is whether or not consumers would be willing to pay more for products that are produced at home. Many people believe that in the end, self-interest means that, quality being equal, people will still go for the lowest price, regardless of where products come from. But it is true that globalization has led to the disappearance of many jobs in advanced economies, and thus bigger gaps between rich and poor, a speedup of environmental degradation and also in some cases the abuse of labor. It has created global dependencies that may need rethinking, and a reduction of the economic diversity in individual countries that is not necessarily to their advantage.

> Business people, including those in the US, are vital in helping to "re-globalize" the world

These globalization issues have been among the factors leading over the past few years to a rise in nationalism and protectionism. Brexit and the rise of Trump are often used as examples of this trend, but there are many others.

Governments, despite the local interests of their constituencies, have a crucial role to play in resolving these wider issues. Globalization still has much to offer the world and private enterprise also clearly has a role to play, especially in the context of constant confrontation at the government level.

How things are going to look at the end of the coronavirus period, no one can say at this point. But a move towards a world that is fundamentally divided in two would be a scenario with no positive consequences for anyone. Globalization is now a fixed and permanent part of how the world works and unraveling all of the connections is simply unthinkable.

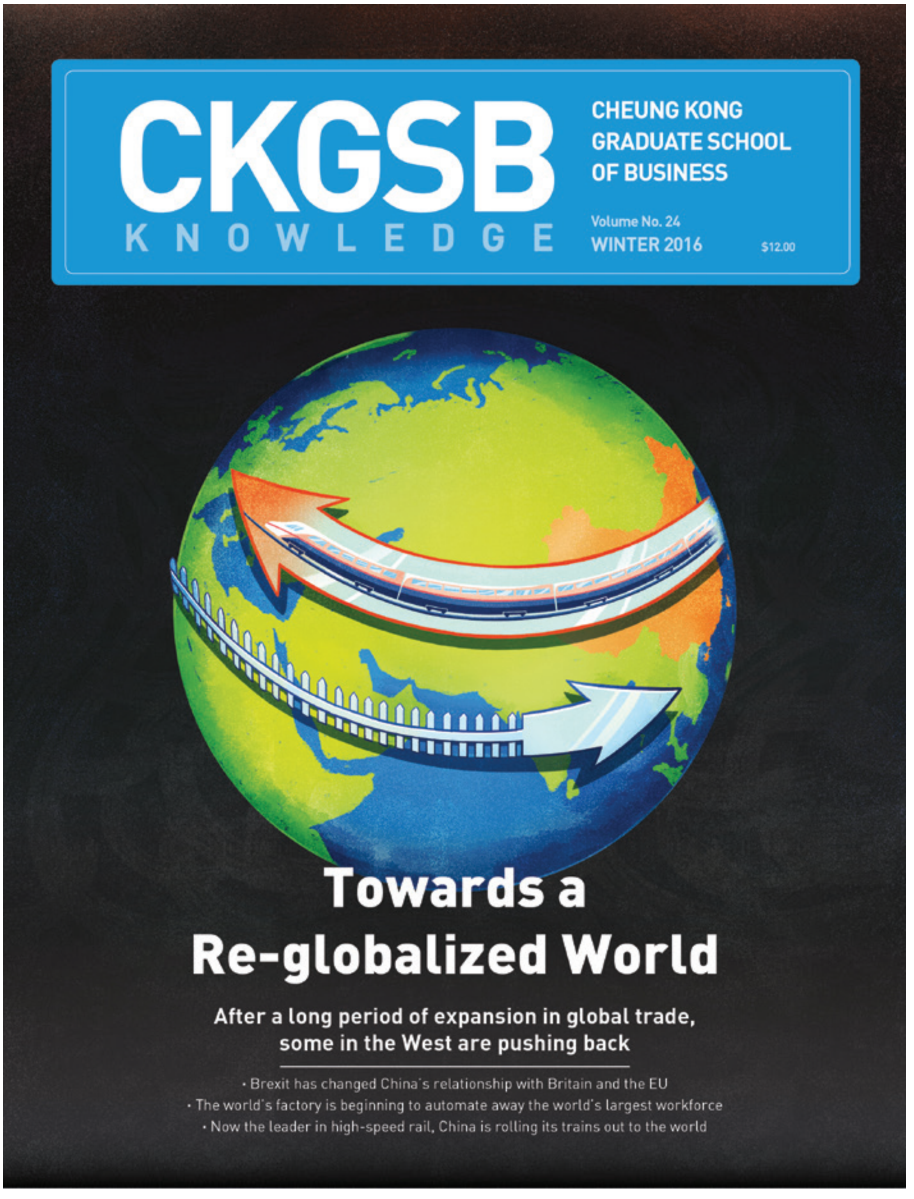
Instead of making globalization a scapegoat for the root causes of domestic income disparities, tweaking the trend to be more inclusive to achieve a brighter future for all of humankind is a more viable option. Supply chains have shifted, and then shifted again, throughout history, and the supply chain networks currently in place, created primarily to feed the US market, were always going to be reconfigured to serve the China and other Asian markets, as well as other changes to the global economy.

Fixing the flaws of globalization will require cooperation and detailed discussion in the spirit of goodwill and of mutual benefit, not of one side trying to beat out the other in both words and deeds. It will require compromise and the relinquishment of some strong positions and advantages in order to create a better world order which has stable sustainability. It will require a more globally-aware approach to trade and production to ensure that everyone wins, not just some. There also needs to be clear reciprocity, a unified way of handling the many points at issue by all countries. As the two largest economies in the world, the onus will to a large extent rest on the United States and China to sort all this out.

The divergence in positions between the US and China over the past few years is reflective of the urgency of addressing the issues currently undermining globalization. But calls from the US and others for China to open its markets further, just as the world opened up to China after its accession to the WTO are already being addressed to a large extent by the Chinese government, with significant changes taking place on foreign investment, particularly in the financial sector. Providing a clearer level of reciprocity would help reduce the degree of friction with other major players in the global economy. But what is certain is that there would be no winners in a real and determined decoupling between China and the US.

On the other hand, the world also needs to recognize and accept that China, which 200 years ago had been the world's largest economy for more than 1,000 years, has its own way of operating, as does anywhere else. There needs to be a flexibility with regard to what China is. A key part of the Chinese economic structure is private enterprise, and China's private companies and entrepreneurs do business all over the world, both to the benefit of China and to the countries in which they are operating. There is much more that they can do to encourage positive cooperation and interactions at this level.

Today, business people, including those in the US, are vital in helping to "reglobalize" the world to benefit more people, as we said in the Winter 2016 Issue of our magazine just before Trump was elected. The changes to the US government's role on the global stage does not mean the end of globalization. This is a process which started even in ancient times, driven by people's desire for the exchange of products and ideas, and it is something which on many levels cannot be stopped.



The cover of our winter 2016 issue

When East Meets West

Kevin Nolan is President & Chief Executive Officer of GE Appliances, a subsidiary of Haier, the world's largest appliance manufacturer. Here he discusses the integration of GE Appliances into Haier and the opportunities it creates

Haier bought America's GE Appliances in 2016 to build a stronger presence in the US household appliance market. Haier, based in Qingdao, China, is the world's leading appliance manufacturer, but at the time the company only held 1.1% of the US market. As a traditional American company, GE Appliances, headquartered in Louisville, Kentucky, was able to help with that.

Kevin Nolan is CEO of GE Appliances with overall responsibility for setting the short- and long-term strategies, as well as overseeing product innovation, product line performances and technology to maximise financial and business results. In his 28-year GE career, Nolan has progressed through various cross-functional operating roles in a variety of GE businesses.

In this interview, Nolan looks at the future of household appliances, the importance of brand image in global markets and valuable lessons learned in cross-border M&A integration.

Q. Haier and GE Appliances, for many people, would not have seemed an obvious combination. How has it worked out and what are some lessons in terms of cross-border M&A integration that would be relevant to other companies?

A. If you look at the industry, it's actually a good combination because the two companies have distinct strengths and the combination brings those strengths together so that they can be built upon. You have Haier, a strong Chinese appliance company and then you had GE Appliances, a strong American company, but neither were truly global. So by bringing these two together, you suddenly have a globalized company. It has the potential of being a beautiful combination.

Bringing together these two cultures comes with challenges. Looking at the history of Haier and what it's done in China, as well as the 100-year-old history of GE in the US, we had a lot of pride. So the biggest lesson to come out of this is respect. It's important to be able to respect both cultures and learn how to take the best from both worlds to create something new, without one trying to dominate the other from a cultural standpoint.

Haier has also let us learn from them: understand their philosophy, what they're doing, their drive as a business and their ideas. We're now working on translating those ideas into our markets. What Haier understands well, and what global companies need to understand, is that markets are different and consumers are different.

Business ideas might not be as universal as you think, because they're not translated well. Haier has a universal idea, but it has to be translated to work in the market. It's important to get to know each other, look through surface cultural differences and understand underlying ideas and beliefs. Working on adapting those ideas and using them in your local market is critical.

Q. GE Appliances still exists as a brand. To what extent is the name Haier used in GE Appliance's marketing and promotion?

A. If you look at one of the strategies of Haier and that we've adopted is the House of Brands strategy. Our company name is now "GE Appliances, a Haier company," so we have both GE Appliances and Haier in our name. What's more important ultimately, however, are our brands.

GE is a brand that we go to market with and that has a very targeted customer, while Haier is a brand that had been in America before. We've also offered products under other brands, such as Café, Hotpoint, Monogram and Profile. Some used to be sub-brands of GE but have since grown to become their own independent brands, so we have in some ways removed GE from being a parent-brand.

Then with Haier rebuilding its brand in the market, we want to make sure that we have the right products to represent its image as a company. The image that we're focusing on is aimed at urban living, because more and more people want to move into cities in the US. It is a trend that's future-oriented and caters toward millennials with technology and new smart devices. GE is a more traditional brand, so Haier will be the one that has an edgy image and focuses on the future. All of this was important for us when we were planning out how to grow the company as a whole.

Q. To what extent do consumers today see GE Appliances as a Chinese company?

A. I don't believe that customers really see the company any differently than before. If you're an American consumer and you're used to seeing GE, we still appear as GE. The business community might be more clued in to what has happened, but the average consumer mainly just sees the brand and Haier is not a very well-known name or brand in the US.

Q. How closely is GE Appliances integrated into the overall Haier strategy and business development?

A. GE Appliances is key to the strategy of Haier. When Haier bought GE Appliances, it was a strategic investment and part of Haier's globalizing as a company. We're key and core to that strategy that Haier has implemented.

Q. What opportunities for growth do you see? And what areas of GE Appliances' traditional business will fall away over the coming years?

A. We see big opportunities for growth. Our company is now the fastest-growing appliance company in the US. We feel that under Haier we were liberated in a way as we've been able to grow at a faster pace than ever before. Overall, we feel good about our prospects.

It's more about what we're gaining than what we're losing. We started developing new microenterprises to get into new markets, but I wouldn't say we're getting rid of anything. We've enacted the strategy of microenterprises, they're very organic. As opportunities arise, we're taking advantage of them. One example of that is how we've entered the market of producing air conditioners for the recreational vehicle (RV) market, which is big in the US. It is not something that we had ever done before, but that got started around mid-2019 and is doing very well. That's just a small example of something that we probably wouldn't have done before that we're doing now.

It's important to respect both cultures and learn how to take the best from both worlds

Q. To what extent is the element of foreignness an advantage in China? How is that changing for Chinese consumers?

A. GE Appliances used to be in China years ago, but we've stopped doing business there. Haier is keen on growing the GE brand in China, as they feel that there's a segment of customers that it would resonate with. Again, it's part of this House of Brands strategy where there's a targeted consumer base that might appreciate that brand and what that brand stands for. We overlook the brand governance, but how we go to market and how Haier wants to grow the business in China is their call.

Q. How quickly is IoT (Internet of Things) going to impact your industry and in what products will we be seeing these changes in?

A. I'd say it's already been impacted. Most of our appliances are already IOT-enabled as IOT has been a part of our strategy. It's core to what we're doing and where we see the future going, but in reality that future is already here. It's already rooted in appliances, it's something that's going to become more and more important as we continue to go forward.

Q. Will IoT level the business playing field in a way? What kind of companies and what kind of strategies are going to be successful in the new era?

A. I don't think IOT necessarily levels the playing field. In many ways, as you drive more technology into products and services, it becomes much more sophisticated, but do you really have a platform and an ecosystem for your products to work well on top of?

IOT is going to be different in different markets, but it's going to be one where partnership between various devices becomes important. In a consumer's home, they may have different kinds of devices that need to work together in the home ecosystem.

> I can't see a world where you're going to have [a] true decoupling between China and the US

Therefore we're very much into developing partnerships.

If a consumer buys a GE appliance, they can be well-assured that our product is going to work well within their home system. From a data security standpoint we're a trusted brand, so people can rely on us from a connectivity standpoint as well.

Q. Your IoT-infused products are going to produce massive amounts of data. What should be the attitude of consumers and of companies to that data?

A. As individual consumers, you have to be aware and concerned with where your data is going and what it's going to be used for. And as a company you must be responsible about who you are serving. Are you truly serving your users and consumers and how are you utilizing that data? We're sensitive on that as we want to make sure we're utilizing that data to know our consumers better and make sure our products are providing the services and the benefits that consumers want. So we have a very consumer user-centric approach to what we're doing with IOT.

Q. Technology is changing so quickly and GE Appliances are used in such a personal capacity. Could you paint a picture of what society will look like 10-20 years from now? How will it differ from today?

A. To look 10-20 years into the future, you've got to ground yourself in how things looked 10-20 years ago and observe the changes that have occurred. Twenty years ago, we didn't have smartphones. Our lives have dramatically changed the way we get news, the way we send information, as well as the way we communicate with our friends and our family. Everything has changed over the past 20 years.

When looking back 10 years, however, the changes are more subtle. In the past 10 years, devices became more advanced and better at what they do. But we're starting to see a maturity in this age of mobility. And I think in 20 years from now, there's going to be something new from a mobility standpoint. In the future are we really going to be carrying around these phones and these devices or will the technology just be more present among us?

When we look at appliances, the way that people shop and how they interface with brands has all changed over the past 20 years, there are still fundamental things in life that we hold dear to ourselves. An example would be a family meal. I don't think that is going to get replaced.

The way you get your groceries and how a refrigerator looks will likely change drastically, but at the end of the day, food needs to be chilled, clothes need to be washed and dishes need to be clean. So there are core things that we're still going to be doing 20 years from now. The tasks will be simpler and more automated, but they will still take place. Will we be talking on cell phones in 20 years? I hope not. But will I sit down to a home cooked meal in 20 years? I sincerely hope so.

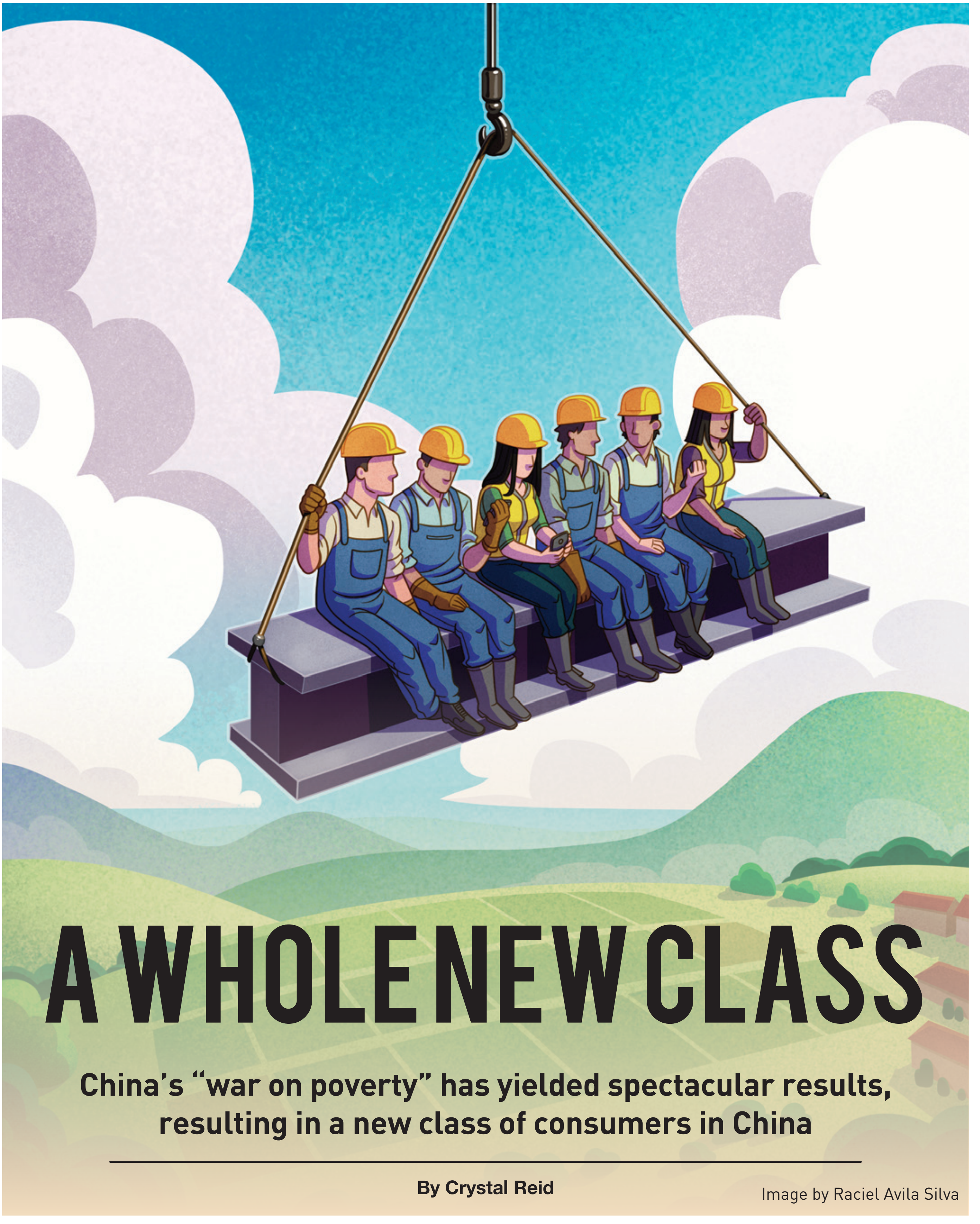
Q. How is the robotization of production changing the nature, location and costings of GE Appliances' and Haier's production?

A. As a company, we believe in zero distance. We want to be next to our customers and we want to know them better than anybody else. If you're in a market, you ideally want to produce in that market, which is a philosophy of Haier that is going to serve it well into the future. Manufacturing is a big part of what we do and it's actually been strengthened under Haier, but part of being able to produce where your consumers are, is making sure that you're cost effective, that you can get the labor force that you need and making sure that you can produce quality goods.

Automation is playing a key role in that now and will continue to do so in the future. Jobs will still exist, but with improved efficiency and quality of products, jobs will also become better with automation. A big part of the Haier strategy is to produce what an individual wants, when they want it.

Q. People talk about a fundamental decoupling between China and the US and it appears to be happening, particularly in areas that are tech heavy, which yours is. How is decoupling going to play out? What are the implications of decoupling for businesses around the world?

A. It's hard to predict, but as business people all we can so is simply make sure that we remain competitive. In the end it is a global economy and while many are talking about decoupling, I can't see a world where you're going to have true decoupling between China and the US. These two economies are just too important for each other. I believe that this trend of manufacturing locally is more driven by serving your consumers then a political drive. Companies are still going to want a global supply base and that's going to be there—I can't see that going away. There might be different political agendas from time to time, but in the future, I think that there will inevitably be a strong relationship between these two countries.



A WHOLE NEW CLASS

China's "war on poverty" has yielded spectacular results, resulting in a new class of consumers in China

By Crystal Reid

Image by Raciel Avila Silva

With the growth of China's economy came a host of new jobs, raising millions of people out of poverty. How are businesses cashing in on the now massive lower-middle income demographic?

China's war on poverty has been a success with 850 million people lifted out of poverty, resulting in a whole new class of lower-middle income consumers. Above the poverty line but not yet among the ranks of the prosperous middle class, this segment presents a huge opportunity for foreign brands and businesses.

Progress and inequality

China's economy, growing at an average rate of around 10% a year since the late 1970s until recently, has propelled it into position as the world's second-biggest economy and brought poverty levels down from more than 80% in 1981 to just 1.7% by the end of 2018. This makes China the first country to realize the United Nations Millennium Development Goal for poverty reduction.

Amongst the many results of this has been the creation of an urban middle class of some 400 million people who have developed an appetite for a wide range of upscale products, from luxury handbags to foreign toothpaste brands. But beyond the urban middle class, the rise in prosperity has also pushed up living standards and disposable income for hundreds of millions of people who not long ago were peasant farmers.

"China's lower-middle class is an important sector," says Sarah Wong, Head of Digital for McCann Health China. "And not just because of their number, but because they're everywhere."

Of those who have made it into the middle class, which according to data from the Pew Research Center, now accounts for 39% of China's 1.4 billion people, the majority (75%) sit in the lower-middle income bracket. This group, with a daily spending power of between $10 and $20 (as calculated by Pew), account for just over 29% of the total population.

China's middle-class has started to behave similarly to counterparts around the world, with one important difference: whether in the lower or upper segment of the demographic, the first priority for families when they reach a certain level of prosperity is the education and prospects of their children, because they know that upward mobility depends on knowledge and academic qualifications.

"Poverty is not just about income but low opportunity," says Jianye Wang, a professor of economics at NYU Shanghai. "China has been and still is a dual economy between urban and rural areas."

Roads and inroads

Beijing has invested heavily in infrastructure in the last few decades to help lift the rural population further out of poverty. According to government figures, 99.5% of villages are now linked to the outside world with paved roads, and 96.5% have at least one bus service. The luckiest rural residents find themselves close to a high-speed railway station, which means being able to get quickly to anywhere else in the country and also benefit from the growing lure of domestic tourism, says Mark Wang, a professor in Chinese social sciences at the University of Melbourne. "Chinese people want to go to beautiful places where everything is cheap. The local farmers in these areas build accommodation for tourists and find a new market for their products."

The government has also accelerated development of online infrastructure in rural regions as part of an "Internet Plus" strategy to tackle poverty. A manifestation of this are the "Taobao Villages," which encourage, and largely depend upon, the production of foodstuffs and other specialties for sale through China's biggest online marketplace. According to AliResearch, as of August 2019, there were 4,310 Taobao Villages scattered across the nation.

Yang Xue, a former apple farmer in Luochuang county, Shaanxi province, has benefited greatly from this northwestern region's increased connectivity. While the government and private industry have helped introduce sustainable farming techniques and worked to promote the apples grown by the area's 161,000 farmers, she has learned the ropes of e-commerce and can now make upward of RMB 50,000 ($7,000) a month selling her family's produce online.

"My parents never had much money when I was a child, but now I can make a lot as long as the market is good," she says. "It is very good for my family and this region."

"Infrastructure is really expanding the market, reducing transportation costs and bringing those rural, mountainous, remote populations, and more importantly their labor force, into the market," says Jianye Wang. "They start to produce, sell and earn on the market."

The number of internet users grew to 854 million in the first half of 2019, giving the country an internet penetration rate of 61.2%, 98.6% of which comes from mobile devices. Rural internet connectivity and the penetration of e-commerce down to the smallest and remote villages continues to grow, although still has a way to go. China's e-commerce giants are keen to reach this sector.

"Many brands are striving to get into lower-tier cities now, but most residents far out in the rural countryside have yet to experience online shopping and deliveries take much longer to arrive," said Wong.

China's biggest e-commerce sites are working hard to address the problem, with JD.com employing more delivery personnel and testing drone delivery, and Alibaba's Rural Taobao initiative hoping to expand coverage to 150,000 villages by 2021.

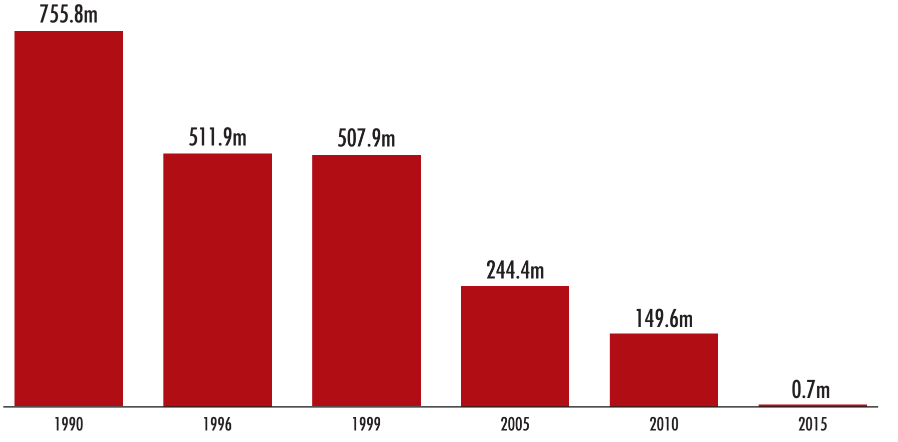
A population on the move

Chen Jingjing is one of the many millions who moved from rural areas to the city between 2000 and 2020. She grew up on a farm in Wuxue, in the central province of Hubei, where her parents got by growing their own food and selling the surplus at the local market. Chen and her four siblings rarely ate meat and never had new clothes. But thanks to government subsidies, Chen's parents were able to send her and her youngest brother to university. Chen now lives in Shanghai where she makes a living as a Mandarin teacher. Since all the children have moved out of the family home, Chen's father has also found employment as a construction worker in a nearby city.

"Overall, life is a lot better now," she says. "Now my parents have more money,

LESS POOR | The results of China's poverty alleviation efforts

People living below the international poverty line



Sources: World Bank, Statista

they are building a house and can buy medical insurance. But they don't have much to spare as they still want to buy apartments for my brothers for when they marry. They take this responsibility very seriously."

In terms of foreign brands, Chen says she gave her daughter Nestlé-owned Wyeth Nutrition milk formula when she was small and now shops at Korean lifestyle store Miniso for makeup, cheap gadgets and fun household gear, and she goes to the Japanese-owned store Uniqlo for basic clothing.

"Whether rich or poor, Chinese people's first priority for spending is their kids," says Mark Wang. "For education, food and everything related to the child, they will try 120% to get the best stuff."

The secrets to success

According to McKinsey, multinational brands entering China have a choice of whether to target the country's upper-middle class (termed "mainstream consumers" by the consultancy firm and estimated to consist of a relatively modest 14 million households) or the lower-middle class (termed "value consumers" and estimated to consist of 184 million households). Those deciding on the former can more or less follow the same business model as they do in other parts of the world, while those opting for the latter need to re-engineer both their products and strategy.

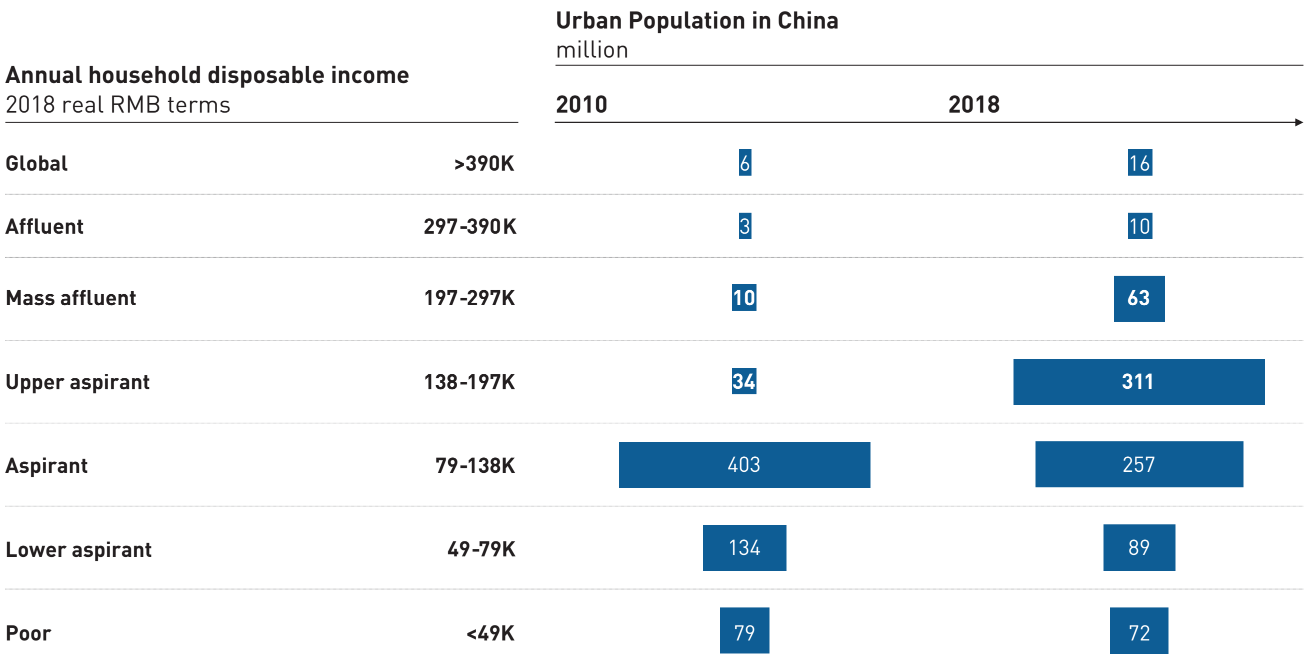
The race for the lower-middle class dollar has seen many established international brands introducing entirely new products, whether it be squid on a stick at KFC or lobster-cheese flavored Lay's chips.

One of the most famous mass market success stories is Oreo, which reinvented the classic American cookie after a disappointing start in China. As well as creating a wafer-style biscuit that was a more familiar shape and consistency for Chinese consumers, smaller, cheaper packets were introduced alongside Asia-friendly flavors like green tea. The result has seen Oreo take 46% of China's sandwich biscuit market and 30% of its wafer biscuit market, giving Oreo its biggest combined market share anywhere in the world.

Wong says many of the foreign brands they work with also launch specific products for lower income consumers. One example is SLEK, a haircare brand from Beiersdorf, which is touting its natural credentials to grab the attention of lower-middle class consumers who are increasingly wary of chemicals in their products.

Dividing their targets by city tiers (usually a good indicator of wealth), McCann's own research also found that consumers' willingness to spend on imported milk formula hardly differed across tiers, with 87.5% spending on

A CHANGING LANDSCAPE | China's middle classes are growing



Source: McKinsey Global Institute

foreign milk powder in affluent first-tier cities compared to 83.5% in second, 71.9% in third and 71.1% in fourth. "Our clients don't discriminate against lower tiers or incomes," says Wong, adding that they target low-income consumers through the same channels as middle-income consumers, such as JD.com, Kaola, Little Red Book, Taobao and WeChat.

Chen Jingjing uses the same online shopping channels herself. In addition, she uses Kuaishou, a video-streaming platform with more than 200 million daily active users that uses an actively inclusive algorithm to give rural people, a window into the world. "I buy a lot of natural products from Kuaishou because you can see the people who are growing them and the conditions," says Chen.

While foreign brands may find it hard to compete in areas where Chinese companies excel, such as high-tech (the top four smartphone brands are all domestic), sectors that require a high level of trust, such as food and wellness, are still dominated by foreign brands.

"Sure, you can get a lot of these products in China now," says Shanghai-based food blogger Rachel Gouk, "but you need a lot of certification to back it up and convince people it's safe, it's healthy, versus the mindset that it's better for you and can be trusted just because it's imported. They trust that things from abroad will have a higher standard of quality."

The bottom line

Chinese people are indeed getting richer, but at the same time the cost of living and the pressures upon them are mounting and the increase in disposable income is slowing. According to Li Shi, an economics professor at Beijing Normal University, rising household debt—much of it driven by an undeveloped welfare system that makes saving for medical expenses and old age essential—is impinging on the willingness of the middle class to spend.

Beijing is, however, keen to increase the country's spending power through tax reforms, and in the wake of the COVID-19 pandemic, there's little doubt that all efforts to ease economic pressures on both citizens and businesses will be made. Research by McKinsey predicts that many "value consumers" of the last decade will become "mainstream consumers" this year.

It's unlikely that China's rural poor will completely disappear any time soon. Those who are able to move to the city will do so, leaving the least economically mobile behind. "Once lifted above the poverty line, around two-thirds are actively engaged in online shopping, providing tourism facilities or selling their local products," says Mark Wang. "But another third is officially lifted above the poverty line but it's not permanent," he adds, explaining that this group is most commonly made up of the old, the sick and the disabled. "The fundamental issue is how can you increase the economic ability of these households?"

Opportunities abound within this increasingly widespread and diverse sector, but brands looking to cash in must tailor their products, services and messages to the places and people they seek to reach.

"Everybody has a phone these days but not everyone has a TV, so digital platforms are essential for reaching lower-income groups," says Wong.

WHAT HAPPENED TO THE SHARING ECONOMY?

The sharing concept has been hit by a wave of setbacks over the past year. What can we expect to see next?

By Matthew Fulco

Image by Raciel Avila Silva

A steep economic slowdown is exacerbating the problems for once-golden startups in the sharing economy, from those offering shared office space to shared umbrellas

In China's sharing economy, it is no longer possible to just share and share alike. The concepts encompassed by the phrase "sharing economy" inspired a huge injection of investment funds into a wide variety of products and business models, but the glow was already off the idea well before China's economic slowdown or the coronavirus hit. Startups have run out of cash and steam, and many unicorns, those worth $1 billion or more, have turned out to be paper tigers.

According to the World Economic Forum, the sharing economy is an economic model that focuses on peer-to-peer (P2P) sharing, the provision or acquisition of goods and services often facilitated by a community-based online platform. The list of ailing "sharing economy" firms in China includes former high flyers such as bike-sharing startups Ofo and Mobike, ride-sharing juggernaut Didi, and a number of local copycat versions of office-sharing giant WeWork, which was forced to jettison its planned IPO amid financial travails. The US office-sharing startup, a symbol of the sharing economy's irrational exuberance, saw its valuation plummet last October from $47 billion to just $7 billion.

At its height, the sharing economy concept was one that everyone wanted in on and the venture capitalists (VCs), including Chinese government investment funds, were lining up to push cash into the hands of entrepreneurs touting the word "sharing."

Crunching numbers

Almost all of the sharing economy companies in one way or another have been tagged as being part of the tech economy, in which startups overall have been facing difficult times. A total of 336 tech startups in China that had collectively raised RMB 17.4 billion ($2.5 billion) from investors shut down in 2019, according to IT Juzi, a business information services provider and startups database.

"Startups face regulatory risks in China, where the government has an outsize role in the private sector," says Jessica Liu, a partner at Taipei-based AppWorks, one of Asia's largest accelerators. "For companies in the sharing economy trying out new business models, it can be tough going."

The coronavirus crisis has exacerbated these trends and has had a huge impact on business plans and investments in all areas of the sharing economy. "Given the debacle of WeWork and the slumping global economy, [a] credit crunch has become the reality," says Daniel Tu, founder of Hong Kong-based Active Creation Capital and former chief innovation officer of the Ping An Group.

For now, only agile, well-capitalized and resilient firms will be able to survive—and ultimately prosper when the economy returns to a degree of normalcy.

One sector, two systems

The idea of the sharing economy was not born in China, but it grew quickly here on the back of the smartphone boom. Once Chinese consumers began using their smartphones as digital wallets in 2014, demand for apps of every stripe surged. But even though a wide range of activities are generally included in the definition of sharing economy, they actually divide up into two very different business models.

One is capital intensive and the other is asset light. Examples of the former include bike-sharing startups that own the bikes they rent to users, as well as WeWork, which purchases office space or leases it at a long-term rate and then rents it to tenants. These firms make money from fees that they charge for the use of their assets.

The asset-light model operates more as a third-party platform connecting the supply and demand sides. Examples include Airbnb, the home-sharing operator that connects hosts to guests through its listings platform. The car-sharing platform Didi and its US counterpart Uber are asset-light as well. They do not own the vehicles in their respective fleets, the drivers do. Airbnb, Didi and Uber all make money by taking commissions from sales on the use of the assets that they list.

Capital intensive

The capital-intensive model, which includes shared office spaces and shared bicycles, has not been successful. This is largely because of the degree to which market valuations were based on hype rather than actual economic factors, low barriers to entry by other players and overly ambitious expansion with crazy amounts of money being spent without revenues to cover it.

That's exactly how Ofo, the original bike-sharing unicorn, got into trouble. The company had global ambitions and rolled out a fleet of millions of bikes in 20 different countries, on the hope that its business plan predictions would be supported by the market. With supply far outstripping demand, its yellow bikes sat idle everywhere from Beijing and Singapore to London and New York, and then disappeared.

Tu from Active Creation Capital is not sanguine even about what remains of the bike sharing market. One of the major players, Mobike, was acquired by e-commerce giant Meituan but the purchase has not panned out. "Meituan itself continues to lose money and further losses from Mobike will not sit well with investors and the market," he says. Mobike was "an ill-timed acquisition that could be ultimately jettisoned."

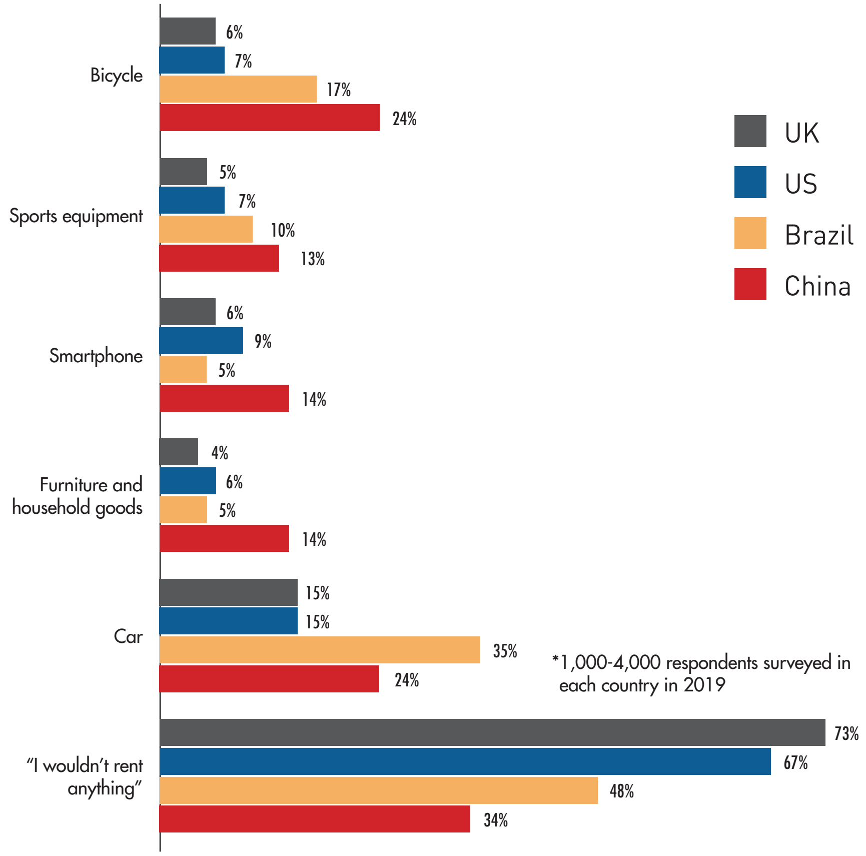
The business model of bike-sharing companies has been shown to be difficult to manage and involves huge upfront investments that are difficult to recover. Liu says: "There is heavy capital expenditure involved in the purchase of the bikes and their deployment across different cities."

The same is true of the office sharing economy, which was one that everyone was initially most optimistic about. Basically all of the shared office space firms are now bleeding money. It is a business concept that will likely survive, but the big question mark over the valuations of the companies has left a dark shadow on their growth potential.

WeWork targeted the China market and invested heavily in expanding here. Before the fallout from its abortive IPO, the US firm made strong headway, but as of October 2019, China accounted for 15% of WeWork's locations, according to *Nikkei Asian Review*.

UNWILLING TO SHARE | The Chinese are on top of the sharing economy

Share of respondents who said they would rent certain items instead of buying them



Source: Statista Global Consumer Survey

"WeWork spent big in China, one of the markets it hoped would fuel its growth," says a real-estate industry analyst in the region, who spoke to *CKGSB Knowledge* on condition of anonymity. "This capital expenditure has had a draining effect on WeWork's finances."

But the Greater China region took in only around $99.5 million in revenue for WeWork in 2018, *Nikkei* noted, and local rivals are edging WeWork out of the market.

The competitors, including Zhuhai-based Bee+, offer comparable products to WeWork at much lower prices. Others like Beijing-based Kr Space have watched WeWork hemorrhage cash and adjusted their business strategies. In November 2019, Kr Space announced it had raised $145 million to fund a transformation from a co-working space operator into a "full life-cycle enterprise office service provider."

Asset light

The asset-light business model has similarly proven to be difficult, certainly at the market valuations that the companies received when they were launched.

Profitability can be elusive when the prevailing industry ethos involves spending money to quickly accrue a large user base. Even if the firm's fixed costs are limited—compared to the capital intensive form of the sharing industry—the company often has to subsidize both the supply and demand sides.

For example, in the ride-sharing market, pioneer Uber at first tried to dominate China and spent billions in subsidies to both drivers and passengers, but ultimately had no choice but to cede the market to Didi, selling its rival its China

An oversupply of shared bicycles in Shanghai

operations in 2016 and taking an 18% stake in the Chinese firm. "We like to go after the thing that seems impossible," then Uber chief executive Travis Kalanick told *FT Weekend* at the time.

But even after Uber's disappearance from the market in the first half of 2018, Didi spent $1.6 billion on subsidies for drivers and passengers, according to data compiled by Bloomberg.

Meanwhile in the home-sharing market, Airbnb has had difficulty achieving economies of scale, despite the size of its network, says AppWorks' Liu. "Because every property and host are unique, the experience cannot be standardized and scaled-up like a hotel brand."

Home field advantage

While China's sharing economy overall is cooling, some startups are faring better than others. One trend is evident: Like in many segments of China's tech sector, local firms have an edge over foreign competitors. That's not to say the foreign firms have inferior business models—they just are not as well equipped to compete as local companies, which know the terrain better, have more local resources and are often more agile.

Airbnb, which is the accommodation-sharing leader in almost all markets around the world, has just 7% of the market here, dwarfed by domestic leaders Tujia and Xiaozhu, two companies which account for nearly half of the market. But Airbnb is an outlier as the only major foreign sharing-economy firm still growing in China. The company has defied the odds, especially after rejecting an overture in 2017 from Tujia to merge its China operations.

With its strong international reach, Airbnb can capture business from outbound Chinese travelers, says Chen Ming-ming, founder of Taipei-based travel activity booking platform kkday. "Airbnb's hosts have properties in many destinations favored by Chinese tourists. It just needs to get them acquainted with its brand," he says.

Survival of the fittest

China is an attractive market for new tech ideas such as those in the sharing economy area because of its smartphone penetration, abundant venture capital funding, tech-savvy consumers and the world's largest consumer market.

But both sharing-economy models as they currently exist are doing poorly. Didi remains in the red as it battles local competitors. One of them, Dida Chuxing, said in September 2019 that it had reached profitability thanks to brisk sales in other units, which include advertising, car maintenance and auto insurance.

Didi has also looked at diversification, and in early 2019 announced the creation of a fintech arm, borrowing an idea from Southeast Asian ride-hailing giants Grab and Gojek, which are both rejigging themselves as digital banks. Because, well, ride hailing just doesn't pay the bills.

"It's not impossible for Didi to succeed in banking, but they will have to capture a very specific customer niche that attracts users away from Alipay and WeChat Pay," says Richard Turrin, a Shanghai-based fintech consultant.

Airbnb, meanwhile, has a key strength that may help the company weather the economic downturn and allow it to stay in the market for the long run—it is well-capitalized. As of mid-March, Airbnb had $3 billion in cash and $1 billion in credit, according to CNBC. In early April, Airbnb raised an additional $1 billion from investors.

But overall, in the near term, sharing companies and other tech startups are facing the toughest business environment in recent memory. A report by IT Juzi published in late March found that investments in China's "new economy" fell more than 31% to RMB 119.1 billion ($16.8 billion) in the first quarter, from RMB 173.5 billion a year earlier. Deals dropped almost 45% to 634 from 1,143.

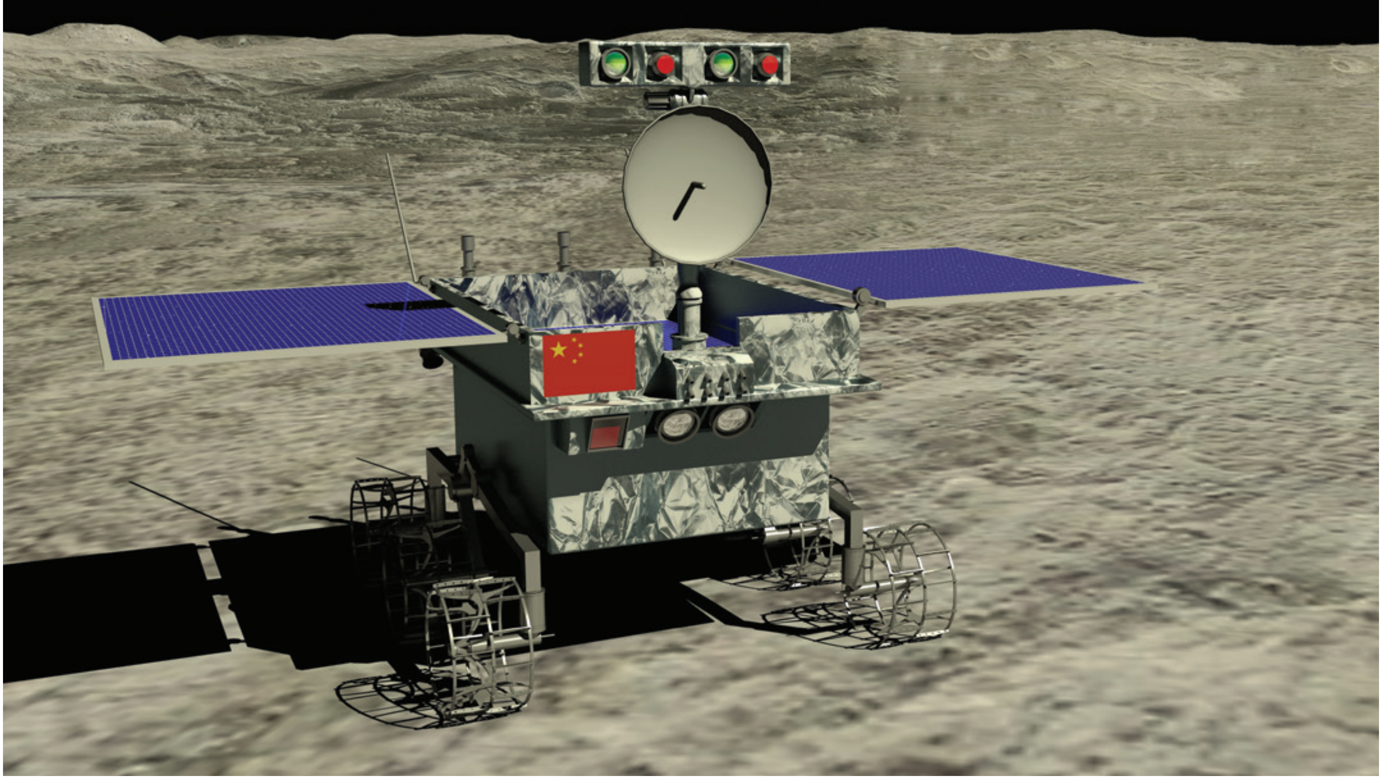
"For now, I expect the VC industry to pause and review their portfolio companies and assess their realistic runways in the coming year or two," says Active Creation Capital's Tu. "Many startups will fold while others pivot and strive for survival. Likewise, I see certain VCs closing shop as raising new funds will become increasingly difficult in the next year or two."

"While both models [capital intensive and asset light] have had varying levels of success in scaling, neither one has proved to be profitable," says Tu of Active Capital Management. "Neither model is more viable than the other, whether in China or beyond."

A SCIENCE GREAT LEAP FORWARD

In China, which now ranks second only to the United States, scientific research is booming

By Shi Wei Jun



China has for the first time taken the top position in the Nature Index as the biggest producer of high-quality research in chemistry. What will the future of China science look like?

Quantum physics may be science on an impossibly small scale but it is one field where China is staking a massive leadership role. In February, researchers in Hefei forged a quantum connection between clusters of atoms 50km apart through an optical fiber, meaning that any changes in one group's quantum state instantly affected the other. This 50km "entanglement"—the longest distance achieved anywhere—could eventually lead to a quantum internet that would be near-instantaneous and impervious to eavesdropping.

Quantum communications is just one area where Chinese scientists are taking a leading role—others include artificial intelligence (AI), biotechnology and materials genome engineering. Together they are allowing China to "reassert" its position as a scientific powerhouse, centuries after the Middle Kingdom wowed the world with the "four great inventions" of the compass, paper, printing and gunpowder.

China's modern-day scientific prowess is backed by unprecedented state spending on R&D. Expressed in Purchasing Power Parity (PPP), China's investment in R&D was $370.6 billion in 2017, second only to the United States which spent $476.5 billion. And China likely overtook the US in research funding in 2019 for the first time, based on projections by the US National Science Board (although the figures are yet to be compiled at the time of writing) . In terms of global scientific R&D spending, China has contributed 32% of all growth since 2000, compared with 20% for the US and 17% for the European Union.

The Chinese government's "open checkbook" has bought the country a lot of impressive big-science hardware—the country now boasts the world's most powerful supercomputer, the biggest radio telescope and, by some measures, the largest gene-sequencing center. But Beijing's willingness to spend belies its poor standing in a crucial indicator of science leadership—the number of Nobel Laureates. Only one Chinese national has ever won a Nobel Prize in a scientific discipline—Tu Youyou, recognized in 2015 for her role in the development of an antimalarial drug.

By contrast, the US has produced 302 Nobel Laureates in chemistry, medicine and physics since the year 1900—nearly one-third of which have been awarded since 2000. Japanese scientists have also fared well, with 24 Nobel Prize winners since 1949.

"Money is not the issue so much," says Denis Simon, who has studied Chinese science for 40 years and is the executive vice chancellor of Duke Kunshan University. "It's how you use the money. Money doesn't buy innovation. What buys innovation is inspired thought and willingness to take risks."

Countries that place more emphasis on independent free thinking seem to have done better in the Nobel Prize rankings, but China's ever-greater science proficiency is testing the hypothesis that it cannot be achieved by a highly centralized and hierarchal system as well.

Rising up the ranks

Nobel prizes aside, there are many indicators that show that China is closing in on the US as a science superpower. The country's scientists filed 49% of all related patents worldwide in 2018, although it is important to highlight that in the view of some experts, these numbers are skewed by various factors, such as the refiling of patents already filed elsewhere. In addition, China is steadily increasing its percentage of research articles published in authoritative publications, from just 5% in 2000 to 21% in 2018. The US remains dominant in its proportion of highly cited articles, followed by the EU, but China's numbers are growing.

China's recent scientific advancements in the past two decades are especially notable given the country's fraught history. Its scientific community was devastated during the 1966-1976 Cultural Revolution, when many academics were denounced as "counterrevolutionary" and universities were closed, halting almost all research and scientific training.

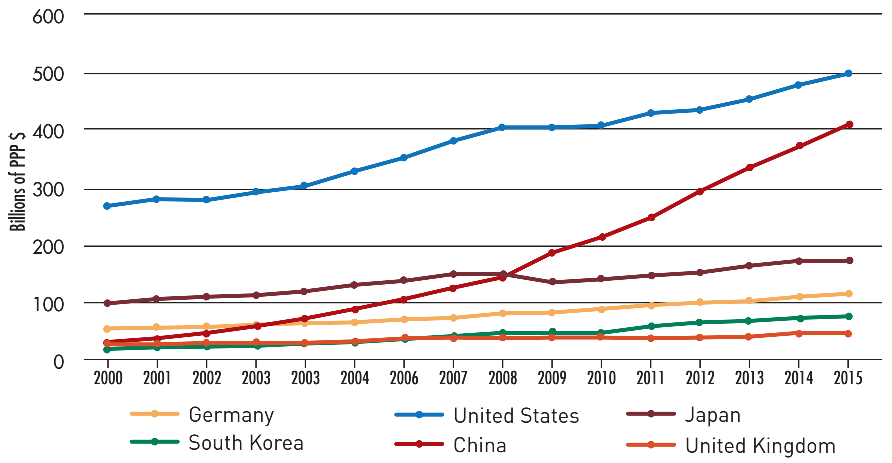
Only after China adopted its famous policy of "Reform and Opening Up" in

1978 did the research community begin to regrow around its stumps. In the four decades since, economic development and international contacts have been instrumental in enabling science to flourish in China, according to Cong Cao, who studies Chinese science policy at the University of Nottingham in Ningbo, a major port and industrial hub in east China.

"We really want to see this kind of stable environment continue," says Cao. "For the past 40 years, China has basically been a follower in scientific research. Now, in certain areas, the Chinese side is approaching the frontier of science," he says.

"Some parts of China's scientific system have been functional for decades," says Caroline Wagner, a professor at Ohio State University who has studied the scientific impact of foreign-trained Chinese researchers after they return to China. "Food science, agricultural science, soil, and engineering are fields where China's had strong research capabilities. It just hasn't participated in the world system of publication and validation," says Wagner.

FUNDING THE FUTURE | China's gross domestic expenditure on R&D has surged



PPP= purchasing power parity.

Sources: National Science Foundation, World Economic Forum

Science excellence

China has broadened its scientific gaze, beyond the areas mentioned by Wagner, to cover some of the most exciting topics and challenges in science today. China leads the world in 33 out of 137 research fronts, particularly in the areas of computer science, chemistry, engineering, material sciences and mathematics,, according to a report published in November 2019 by the Chinese Academy of Sciences (CAS) and Clarivate Analytics, a US data and analytics company.

The progress has been particularly visible in the field of chemistry, where for the first time last year, China dethroned the US as the biggest producer of high-quality research papers. China's research output in 2019 was almost double the combined share of India, Japan and South Korea, which all ranked in the top 10.

The COVID-19 outbreak, first detected in Wuhan, provides a challenge for China's scientists and an opportunity in terms of the development of a first vaccine. If they can do it, it would be a gamechanger. The deadly outbreak has also highlighted China's capabilities in AI and computer science, which has seen sweeping national investments in recent years.

The ability of domestic research institutions and companies to harness big data to feed their AI tools gives China a leg-up in the next round of scientific research and innovation, according to academics. "I think big data is an area China does have advantages in parts because they have a few dominant apps like WeChat that everybody uses," says Yu Zhou, a professor in the Department of Earth Science and Geography at Vassar College in the US. "You don't have that in the US."

Shortcomings

China still has shortcomings to overcome before it can be considered a global leader in science. Despite lavish spending, the global business consultancy McKinsey noted in a 2015 report that inefficient government funding, among other factors, was stifling China's endeavors to promote science-based innovations. Five years on, this remains a problem, according to Zhou, who says an immature system of evaluating science innovations has led to "state administrators from outside who don't know what they're doing and are just bureaucratic bean counting."

The country still lacks well-established links between businesses and universities, which significantly limits knowledge transfers. Although this relationship is difficult to quantify, Times Higher Education examined how universities work on research with industry, and noted that in 2016 more than "6% of US publications [were] joint efforts between the academy and industry, compared with just 2.7% in China."

While China ranked second in the CAS-Clarivate report identifying the best and emerging specialty areas in scientific research, it was dwarfed by the US, which claimed the top spot on 80 research fronts.

This may be partly because China has been selective in its approach, opting to channel resources into science that will not only help Beijing project its power but also respond to its people's particular problems.

"The state has the overview about the areas where China needs to invest more," says Zhou. She points to China's massive investments in renewable energy and electric vehicles as an example. "The state has this function of telling people where you should put more money. Some areas, like environmental science, make a lot of sense."

This methodical approach reflects China's attitude to science. In the last 40 years, China's leaders tackled the country's

> The US remains ahead, but if you're looking at where we will be five, 10 years from now, the trend lines are all extremely positive for China
>
> Denis Simon
> Executive Vice Chancellor
> Duke Kunshan University

lagging status with a top-down approach and long-term strategic planning. When it comes to the long-held view that this approach stifles innovation, Wagner, in a soon-to-be published study, disagrees.

"What we found is that at the disciplinary level, China's publications in physical sciences were highly creative when compared to the field as a whole, much more creative than other parts of China's work," she says. "The physical sciences stood out as highly creative. Measures of technology research was found to be moderately creative, but biology did not appear to be creative."

"We were surprised with the results of the work, finding that China's publications already display a world-class level of creativity," says Wagner.

China's approach

Authorities are orchestrating the development of a scientific establishment—one pillar of which is a core group of elite universities known as the C9 that includes Tsinghua and Peking in Beijing, and Fudan in Shanghai. Another key plank has been the Thousand Talents Program (TTP), a successful scheme aimed at luring top researchers to China with lab space, lavish salaries, research funding and other incentives.

"Around the late 1990s, the Chinese decided to double or triple the levels of enrollment in university, but what they couldn't do was hire more good faculty. They just couldn't get that many," says Simon at Duke University. But the TTP has helped reduce the deficit in training younger generations of Chinese researchers.

Simon believes the success of the TPP at the recruitment of top scientific talent has only become more important because China could face a potential talent shortage due to the notorious one-child policy. China has struggled to engineer a baby boom after scrapping the policy in 2015, which could result in shrinkage of the future scientific workforce.

Increasingly strict controls on internet access are also a potential long-term hindrance toward scientific excellence in China. A common gripe among the country's academics is that internet accessibility problems are a major obstacle to their research. Wagner from Ohio State University says free flow of knowledge and information is critical to innovation.

Many researchers routinely bypass internet controls, but ever-tightening restrictions on the flow of information risk making international collaboration more difficult and threaten China's place in science and technology globally.

"Studies demonstrate the benefits of openness," says Wagner. "You can't get around the need to share findings, data, and insights. If that gets closed off, China will drop behind and the world will be deprived of China's input. There are no winners in that scenario"

The China-US relationship has also grown increasingly toxic since President Trump took office three years ago, ramping up the prospect of the world's top-two economies "decoupling." Researchers are in no doubt that this would be a disaster for the scientific communities of both countries.

"It's not good for science globally," said Cong from Ningbo. "There's no doubt about that because each country is constrained by resources. No country in the world can pursue every line of research, so that's really where you need to be collaborative. If decoupling between China and the US really happens, it's not going to be good for China and for other countries."

There is also the argument that Chinese and American scientific communities are already too intertwined for any decoupling to have a serious impact, according to Simon.

"The government-to-government cooperation is important, but is not the defining dimension of the science and technology cooperation between China and the US," says Simon. "It would be very hard, at least from my perspective, for the US government to disengage and simply shut down all of that collaboration. There's just so much going on, I don't know if anyone would know where to go to stop it or to shut the spigot off."

Just how much a potential delinking would really hurt China is up for debate. February's successful quantum entanglement experiment in Hefei underscores how Chinese scientists are operating at the cutting edge in many ways on their own.

"The US remains ahead, but if you're looking at where we will be five, 10 years from now, the trend lines are all extremely positive for China," says Simon. "The Chinese have corrected a lot of the problems that were inherent in their system. They're all the time trying to get higher-yield performance from their scientific community. And I think they're starting to succeed."

Hopes, Fears and Decoupling

Craig Allen, President of the US-China Business Council, looks at the impact on businesses of deteriorating relations between the world's two largest economies

With the coronavirus disrupting trade international trade, what will become of the China-US "Phase One" trade deal, the first set of negotiations in the two countries' protracted trade war, and when will "Phase Two" begin? Craig Allen highlights how problems related to state-owned enterprises, subsidies and technology policies are still issues for foreign companies operating in China.

In 2018, Craig Allen began his tenure in Washington DC, as the sixth President of the United States-China Business Council (USCBC), a private non-profit organization representing over 200 American companies doing business with China.

Before joining USCBC, Allen had a long, distinguished career in US public service. He was US ambassador to Brunei and served as the Deputy Assistant Secretary for Asia at the US Department of Commerce's International Trade Administration and as Minister Counsellor at the US Embassy in Beijing.

In this interview, Allen looks at the role state-owned enterprises (SOEs) play in China, the "Phase One" trade deal and just how far China and the US can "decouple" from one another.

Q. The last two years has seen a gradual process that many people call "decoupling." How would you view the China-US trade relationship in this context?

A. The China-US relationship is characterized by increasing competition and decreasing cooperation across many fields.

On one hand, you have tariffs and then counter tariffs, which have led to quite a dramatic reduction in trade. Even though both economies have been growing in a healthy way, China's exports to the US in 2019 were down 20% as were US exports to China. So that would be the first form of decoupling.

The second manifestation of decoupling would lie in technology. In both countries, there is an increasing concern of overdependence on the technology of the other side. Both governments are engaged in restrictions that will lead to greater self-reliance in technology.

I wouldn't take the context of decoupling too far, however, as the two economies are very much intertwined, interdependent, synergistic and compatible, so I believe that decoupling in the form of tariffs is temporary. The decoupling found in the field of technology is more worrying, with the effects of that likely being longer term.

Both are a concern, as both limit economic prosperity on both sides and they create tension that is perhaps unnecessary.

Q. What technologies are at risk of decoupling and to what degree do you believe decoupling will come to pass?

A. When turning to technology, problems are deeper, more difficult and longer term. I believe that a complete decoupling is not

> We have real problems in the Chinese market, as we do not believe that the Chinese side has fully implemented its WTO obligations

possible, but as an example, China's internet is already decoupled from the rest of the world and the US telecommunications system is decoupling from one particular Chinese company.

We read that on the Chinese side that the government would like to remove all foreign computers and software from government institutions in the next two to three years. On the US side, we see new controls on emerging technologies and foundational technologies. We need to be honest and say that we don't know where this will lead. I hope that we can keep the decoupling as narrow as possible to allow the free exchange of knowledge, products, intellectual property, software and business models.

We want both governments to protect national security, but we believe that that means tall walls around a narrow garden, not around all new technology and research. So, let's protect things that need to be protected and open up things that are not real national security concerns. Both governments should be careful not to use a national security excuse to engage in protectionism, and I think that both governments are currently guilty of doing that.

Q. What role is there for organizations such as yours, chambers of commerce and other representatives of US businesses, during these changes?

A. We are actively speaking to both governments and encouraging negotiations, because we want solutions and not sanctions. We have real problems in the Chinese market, as we do not believe that the Chinese side has fully implemented its WTO obligations. So, we're hopeful that both sides will talk about that.

When you look at the results of the Phase One trade deal, I would argue that all those improvements on intellectual property rights, agriculture and financial services, are merely China meeting its WTO obligations. China should have done those things earlier in any case, as they were obligated to do. We encourage market-oriented reforms that benefit our own country, but also benefit our trading partners.

Trade is not a zero-sum game where I win, and you lose. Trade is a positive-sum game, where I can win and you can win too, which is how it has been for 4,000 years. So, let's have freer trade, welcome each other's companies into each other's markets and treat each other with respect and dignity.

Q. Some people have said that the response of US businesses to the deteriorating relationship between China and the US has been remarkably muted. Why is that?

A. Firstly, American companies in general agree with President Trump on his diagnosis of the problems at hand and agree that the Chinese government had not adequately implemented its WTO obligations. What we don't agree with, however, is the use of tariffs to force negotiations, as they harm both American and Chinese companies and consumers. Ultimately, we agree with the diagnosis, but we don't agree with the method of treatment.

That's why criticism has been muted. I believe that the voice of business has been consistent, we have supported resolution of the dispute on market-oriented, pro-trade and pro-investment terms. We want to support both governments, but we also want to support the WTO and the international obligations written in international law that we all survive by.

Q. How do you see the US-China Business Council's role developing in light of the changing relationship between China and the US? Are there any opportunities that you see coming out of this?

A. We very much want to support and assist both governments to implement the Phase One agreement. The Phase One agreement is complex and there are two major elements of it, but let us be honest and say that it is companies and workers that must implement this agreement and not governments directly.

Secondly, there's a Phase Two of the agreement that will need to address problems related to state-owned enterprises, subsidies and technology policies. We can make incremental progress on all those issues. We may not be able to go from A to Z immediately, but we can go from A to B, then on to C and then D. We want to keep up the momentum gathered from Phase One so that we have continued market opening and reform in China and adherence to WTO obligations by both countries. So, we will be working very intimately with both governments to support them in ensuring a successful Phase One and then move on to a fruitful Phase Two as quickly as possible.

Q. How do you view the status of China's economy now and how does it impact on the prospects of US companies operating in China?

A. I have such respect for the Chinese economic leadership, from Premier Li Keqiang to the Central Bank Governor and the Minister of Commerce, as well as all the economists and economic experts involved in China's economic decision-making. They are an absolute dream team.

The Chinese economy today is growing smartly and on a much bigger base, and the quality of growth is good. What I mean is that the labor share of the economy—the percentage of the economy going to the worker in terms of wages—is growing faster probably than in any other country in the world, so domestic private consumption is growing rapidly. We want that to continue and for China's middle-class consumers to feel secure in using their new credit cards. I'm confident about the Chinese economy, notwithstanding some challenges, but I am bullish and expect continued growth.

Because of the healthy Chinese economy, American companies are interested in expanding their exports into China. All the companies in my trade association want to invest more in China and expand in China, because China's producing approximately 30% of global economic growth today. That's more growth than in Europe, Japan and the US combined, so naturally businesses want to have a growing presence in China.

Q. What do you foresee as the biggest potential problems within the Chinese economy going forward?

A. The overall debt of China is very high, and that will lead to defaults, particularly in second, third and fourth-tier cities that have become over indebted. Along with the debt, there are problems with overcapacity in various industries. To wind that down will be extremely painful and difficult, but it must be done—there is no other way forward.

Local government finance has also been a mess for a long time, with debt and local government finance existing together and some cities are having more problems with that than others.

In the longer term, China's aging society is going to become a big subject. The demographic challenges that China faces are severe and there is no way to avoid them, one can only manage them. The demographics of China and the US are quite different. Ten years from now, China will be in a difficult spot, and in 20 years from now, China's demographic situation will become even worse. Whereas the US will likely be much healthier in this regard because we are an immigrant society.

Q. There has been a lot of talk about loosening regulations on foreign investments in China. What kind of an impact will this have on the levels of interest among US companies looking to invest in China?

A. We look at the foreign investment law and the Phase One trade deal, both of which we are very happy with. The adjustments made in Chinese law are good, but at the same time the Chinese government needs to issue licenses. If they just change the law without issuing any licenses, then that's a problem.

The other major problem, which is a difficult issue for the Chinese government, is the role of state-owned enterprises (SOEs). Will foreign companies be allowed to compete fairly against SOEs? Will Chinese private sector companies be allowed to compete more fairly with SOEs? Part of the answers to these questions revolves around what will happen with SOE reform. Will there be real reform? Right now, SOEs in China control around 30% of the Chinese economy, but they get 80% of bank loans. There's clearly a strong preference for SOEs and you cannot support SOEs and private enterprises at the same time. That remains a fundamental problem that the Chinese government is grappling with.

General Motors says trade tariffs cost the company over $1 billion in 2018

Foreign-invested enterprises will invest big time in China if they can compete fairly against SOEs, but right now we're not so certain about that.

Q. What impact has the shift in the China-US relationship had on countries in Southeast Asia? And what is the position of the Business Council on this?

A. There have been some beneficiaries and there have been some people who have lost out. I see increased investment by American and Chinese companies in Malaysia, Thailand and Vietnam. South Korea is perhaps both winning and losing.

Hong Kong, however, is an interesting case. I feel that the deteriorating China-US relationship has made it even more difficult to resolve already existing problems. Part of the economic stress in Hong Kong is a result of the tariffs, and the slowdown in trade between China and the US has had a disproportionate impact on Hong Kong.

The Business Council wants stability and right now we

> American companies in general agree with President Trump on his diagnosis of the problems at hand

have anything but stability. An example is seen in the auto industry regarding tariffs. Are they on or are they off? How can you do business when you ship a product by sea, and you don't know what the tariff will be when it arrives? But I'm afraid that that is where we are. Automotive tariffs over the last year have made my head spin. We are happy to follow Chinese law in China and American law in the US, but we need to know what the laws are.

From a philosophical perspective, I think it's appropriate and fair to say that the role of government is to bring stability and rule of law to the marketplace, so that business people can make investment decisions and run a business in a stable and predictable environment. But in an environment where it's so unstable, there are business people who are suffering. The trade distortion that has been created by this instability in trade is regrettable and detracts value from the global economy.

Q. With the Business Council located in Washington DC, we imagine that you have a better sense of what is felt on the ground. The policies of the Trump administration on China are clearly hugely different to the administrations that came before it. Why have policies on China changed now and what is your view on this change?

A. The election of Donald Trump in 2016 was a populist reaction against globalization, international institutions and the international elite. When looking at it from that angle, it becomes more understandable as to why policies toward China changed so dramatically.

If I were to put this in a positive context, President Trump is trying to support American factories, workers and farmers. He believes that because China has not fully implemented its WTO obligations, American companies and workers have been victims. He wants to bring manufacturing back to the US to the benefit of Americans. If you look at it from his perspective, he is doing everything that he can to support American working men and women, and that's why they support him.

Whether he is achieving his desired results is a different issue entirely. But politically, he is trying to recreate an American manufacturing base and his simple slogan "Make America Great Again," describes his approach accurately. Many people don't agree with that and even for many of our friends, allies and partners around the world, this is an uncomfortable thing.

From his supporters' viewpoint, the international elite have not been good for America's economy, the lives of ordinary Americans and America's place in the world, so he is reacting to that. I'm not suggesting that that's the whole story, but I think it's important that our Chinese friends and your readers understand it from his point of view. You don't have to agree, but you should understand why he is doing what he is doing.

If you look at this empirically, the data would be mixed on whether he has achieved anything in the direction of his goal. On the one hand, the manufacturing industry in the US has had about one year of decline since these policies came in place. The policies are supposed to have helped the manufacturing industry but that hasn't happened. Agricultural exports have declined. But President Trump has told his supporters that he believes that their time of waiting is over and that there will be a large increase in exports, manufacturing and investment, so we'll see.

Q. Quality of life in the China of today is clearly much better than before, which suggests that there is something right to the formula that the state is using. To what extent is the much-debated state-owned enterprise system beneficial? Should the US perhaps consider it as well?

A. Our economies and societies are quite different. If you go back in history, China has had SOEs for a very long time. In addition to that, public ownership is enshrined in China's constitution. We don't have that at all in the US. We do have public enterprises, but as a percentage of our gross domestic product, they're negligible. So, I don't think that it's useful to consider the Chinese SOE system as a model for the US. I think that the economics of this are pretty clear: SOEs are a drag on economic growth and reduce competition in markets where they dominate. They are also not innovative and global.

Virtually all of China's growth and new employment is coming from the private sector. So, I'm not a fan of China's SOE system and I think that they carry negative economic consequences. Overall, it depends on a country's stage of economic development. To build infrastructure and provide common goods for example, I believe that SOEs are excellent. But once you reach a level of economic development, then market competition is much better. China has surpassed the stage of economic development where it needs to build more infrastructure and in the age of innovation, SOEs are a drag on the economy.

MOVING OUT

With factories moving manufacturing out of China, how likely are Southeast Asian countries to benefit from these shifting supply chains?

By Kevin Livingston

Trade tariffs, rising labor costs, COVID-19 and other factors have caused manufacturers in China to consider diversifying their supply chains. To what extent will Southeast Asia benefit from this shift?

Over the past three decades, China has carved out a dominant position in producing the world's goods at a low cost, with high output and efficiency. But businesses around the world are increasingly concerned about diversifying supply chains to offset being too reliant on any one producer for their products. The top beneficiary of the diversification now taking place appears to be South-East Asia.

The irony is that before China's massive rise from the 1990s onwards to become the manufacturing juggernaut it is today, it was these very same countries in South-East Asia that provided the bulk of offshored manufacturing for the developed world. Malaysia, the Philippines, Thailand and Singapore were all major players in international supply chains.

"Many manufacturing companies have planned to relocate, or have already relocated at least part of their production, from China to other Asian countries as labor costs have been rising in recent years and environmental regulations have become more stringent," says Tommy Wu, the leading economist at Oxford Economics in Hong Kong. "The China-US tensions over trade and technology, and more recently, the COVID-19 outbreak, are pushing companies to be more decisive."

The split

More than 50 multinational companies, from Apple to Nintendo, shifted production out of China in 2019 to avoid the 25% trade tariffs that have been placed on over $200 billion worth of Chinese goods by the United States since 2017, according to the *Nikkei Asian Review*.

The *Review* said that Apple called on major suppliers to consider moving 15 to 30% of iPhone production out of China, and trial production of its popular AirPods has already started in Vietnam. American PC makers HP and Dell are also thinking of moving up to 30% of their notebook production in China to South-East Asia and elsewhere, and Amazon, Google, Microsoft, Nintendo and Sony all have plans to move some of their productions out of China. In the results of a survey released by the American Chamber of Commerce in May 2019, around 40% of the 250 surveyed firms said they were "considering or have relocated manufacturing facilities outside of China."

But it is not just foreign companies that are reconsidering their manufacturing bases—Chinese manufacturers are also part of this trend. Chinese electronics company TCL is moving its TV production to Vietnam, while tire manufacturer Sailun Tires is transitioning its production line to Thailand.

The effects of this trend as well as of the China-US trade war are already visible. In the first five months of 2019, exports to the US fell 12% on the year in value terms, while those from India, Taiwan and Vietnam logged double-digit gains. India, Malaysia and Vietnam have all recorded big increases in exports to the US as new supply chains are built. Vietnam's trade surplus with the US jumped 29% last year.

Many companies, alarmed at the prospect of a prolonged dispute between China and the US, have opted for the "China plus one" strategy, keeping factories operating in China for the domestic market and opening others elsewhere to service the international market.

"The coronavirus and trade war shocks have exposed the riskiness of this over-dependence [on China]; as a result, we could see China's de-facto monopoly in these areas start to erode, as multinationals try and set up alternative production bases in other parts of Asia," says Nick Marro, Global Trade Lead at The Economist Intelligence Unit.

Why not China?

Companies are looking to shift production for a number of reasons, including rising labor costs, US tariffs and what is widely viewed as a restrictive business environment. The COVID-19 crisis revealed the dangers of overdependence on a single manufacturing base.

Marro says that growing labor costs are the main reason. Chinese factory workers are now getting paid more than ever, reported CNBC with average wages now being five times those of India, putting China on a similar labor cost level as Portugal and South Africa.

"With the trade tension between the US and China, most economies in the region could grab huge opportunities to boost their economic development," says Marro. "This looks to have been concentrated primarily in areas of lower-end manufacturing, such as consumer electronics and in ready-made garments."

Fraser Howie, co-author of *Red Capitalism: The Fragile Financial Foundations of China's Extraordinary Rise*, highlights how an overdependence on China is now seen as a risk for businesses.

"There is a clear trend, only exacerbated by the virus outbreak, that dependency on China can become a liability," says Howie. "The trade war and US decoupling is part of that, but China as a sole or dominant source in a range of strategic industries is now understood to be a security concern."

For businesses looking to diversify their supply chains, there are several options available, including moving production to Mexico and Eastern Europe or even onshoring back to the home market. But with South-East Asia right next door, offering cheaper labor, less interference in commerce, and with similar cultures, it appears to be the most popular choice so far.

The winners

While South-East Asia overall will benefit from this shift, Vietnam is in the lead and is becoming home to many manufacturers of electrical and electronic equipment. It offers logistic advantages because it shares a land border with China, 64% lower manufacturing labor costs and the expertise to produce similar products to China.

Malaysia and Thailand are also likely contenders for production relocation. Thailand exports similar products, wages are 25% lower than in China and the country has investor-friendly policies, according to research by Rabobank, a financial services provider based in the Netherlands. Thailand's main caveat though is political stability, even after recent elections.

Malaysia, on the other hand, has a relatively stable legal and policy structure, which is attractive to foreign investors.

"By contrast, places like Indonesia and India—where regulations are fragmented, domestic interests are entrenched, and levels of red tape are high—have seen their potential relatively constrained," Marro says.

Analysts say that it is a long-term story and that these countries will ride the wave to varying degrees and South-East Asia itself is a mixed bag.

The have nots

Foreign investors have been encountering difficulties in particularly Cambodia and Indonesia. In recent years, Cambodia's worker protests and labor strikes have become prevalent, with productivity only reaching about 60% of China's, according to industrial analysts. Labor costs in Cambodia have also been on the rise, with minimum wages now higher than Bangladesh, India, Laos or Myanmar.

Indonesia—with the largest economy in South-East Asia—is also problematic. Its restrictive foreign investment policies, high taxation levels and geographic spread across a vast archipelago have not counted in its favor.

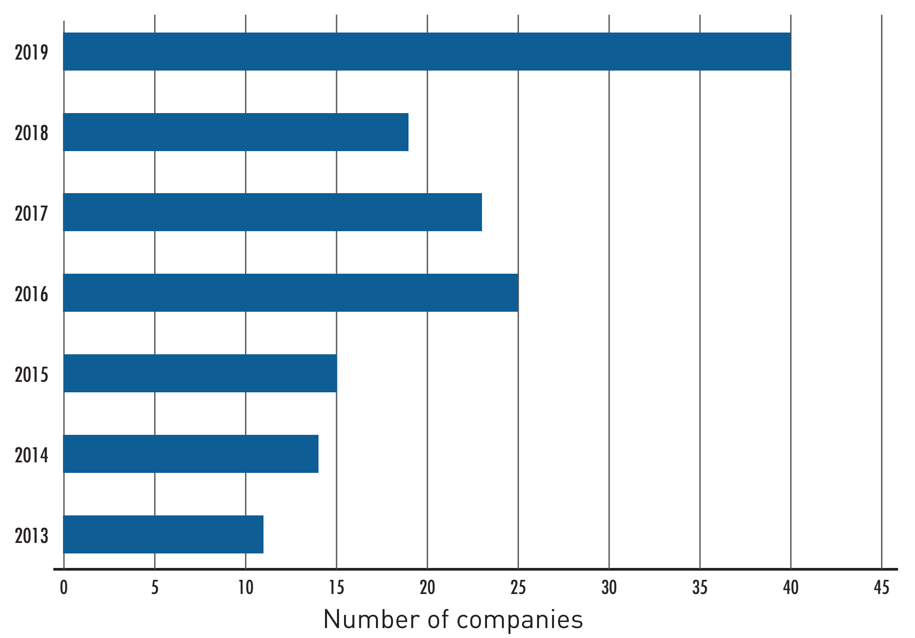
Overall, Marro speaks about the positives of supply chain diversification for South-East Asia, with the capital and technology transfers that inevitably come with foreign investment. But he also emphasizes possible problems.

"This has not always come without risks, however; in addition to concerns around a growing competition between foreign and local companies, we've seen some diplomatic developments in certain cases, too," he says. "The US, for example, is now paying a lot more attention to its trade relationship with Vietnam, based on the fact that many shipments from China have likely been illegally re-routed through Vietnam to avoid US tariffs. That's brought an unwanted degree of scrutiny to the US-Vietnam trade relationship."

No utopia

Not only does South-East Asia have its own challenges but China has strengths

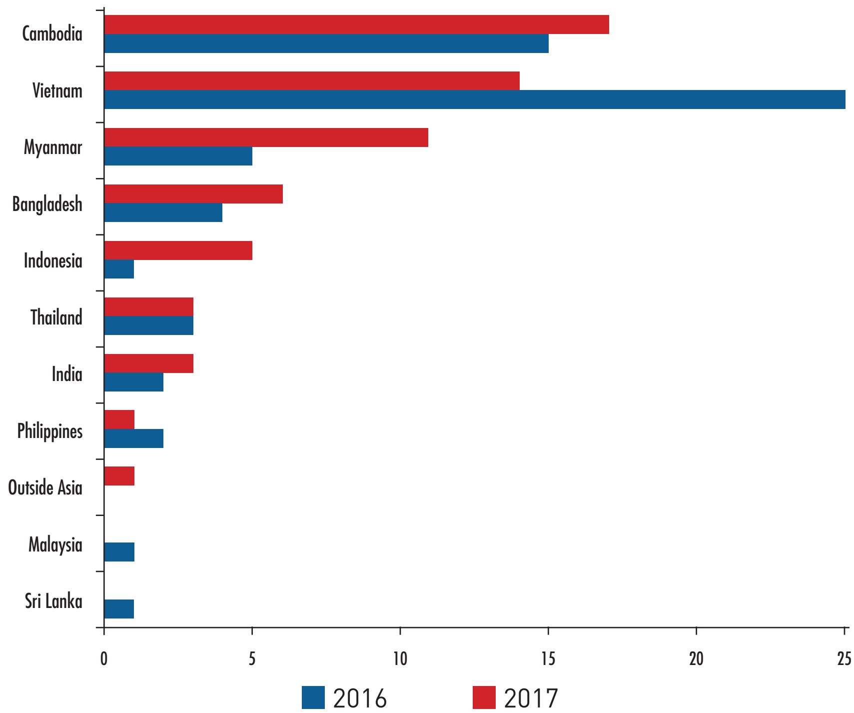
TIME TO GO | American Chamber of Commerce members that have moved or are planning to move some operations out of China



Sources: Center for Strategic and International Studies, American Chamber of Commerce in China

BUT WHERE TO? | Most manufacturers would appear to prefer Vietnam if they were to move

A survey of 200 China, Hong Kong and Taiwan-based manufacturers



Source: Standard Chartered Research

that are irreplaceable, at least for now. With its highly developed logistics network, superior supply chain ecosystem, skilled workforce and high efficiency, China has definitely earned its position as the "Factory of the World."

Wu from Oxford Economics says that many South-East Asian countries simply lack the infrastructure and bandwidth to compete with an established China that is already rebounding from problems presented by the COVID-19 outbreak.

"China has the size of labor, the number of process engineers, the infrastructure, as well as sophisticated and complete domestic supply chains unmatched by other countries in emerging markets," says Wu.

A rebalancing

Beijing was under pressure to keep the economic growth rate up even before the virus hit, and in the past year has offered special benefits and preferential policies to foreign enterprises in the hopes that the new advantages outweigh the reasons for wanting to leave. China announced in June 2019 that it would ease restrictions on foreign investment, with direct investment into China increasing 3.5% year-on-year to about $70.7 billion for the January-June half as a result, according to the Commerce Ministry.

Rabobank has also reported that there is concern that the movement of production capacity from China will increase unemployment and lower the capacity for domestic consumption. Ironically, if China wants to move up the value chain and produce more high-tech goods, it needs foreign investment and more open trade.

But even though the disadvantages for China of a production shift are clear, experts say that the impact will not be too severe as many companies will still produce in China for the domestic market.

"Foreign direct investment (FDI) interest will persist in the market," says Marro. "The bigger risk is whether reforms to China's own FDI policy framework stall and discourage this investment from continuing."

He adds China will still remain the economic heavyweight in the region. Menghour Lim, deputy director of the Mekong Centre for Strategic Studies at the Asian Vision Institute, agrees with Marro in that a manufacturing shift will not have a significant impact on China.

"Even though companies are planning to move, it does not affect most of the economy due to the interconnection of world economics today," he says. At the same time, China and other ASEAN states are promoting their bilateral economic cooperation, for example, through Free Trade agreements, in order to boost their trade and investment."

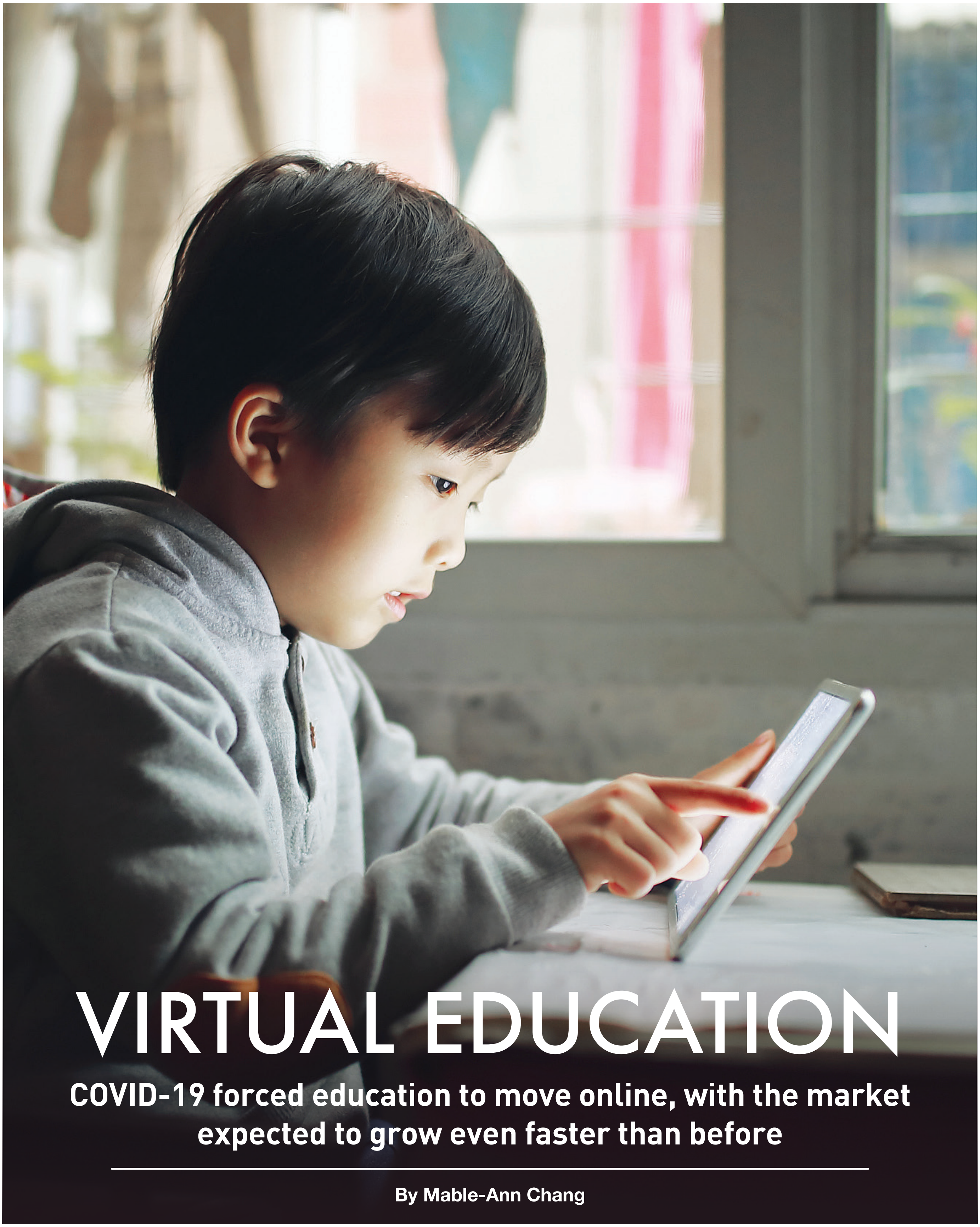
The longer-term supply-chain relationship between ASEAN and China is likely to be a symbiotic one, both Lim and Howie say.

"China and South-East Asian countries will be relying on each other to boost their economic development," says Lim. "China, the biggest economy in the region, will lead the supply chain to South-East Asia. The evidence suggests that while there is an outbreak of COVID-19, the supply chain from China to South-East Asia has been affected and slowed down, but that won't last forever."

"The supply chain relationship between China and South-East Asia is probably going to become more balanced," says Howie. "China will remain a large and import economy, but manufacturing will move from China. Manufacturing in China will become more for the local market."

The issues involved in shifting manufacturing are huge in terms of financing, logistics and construction, and cannot happen overnight.

"We may see the relocation of less sophisticated products or production processes in the near future, but it will take much longer for the sophisticated ones to happen," says Wu. "Also, we may see production in China gear toward domestic sales, whereas production elsewhere towards the international market."



VIRTUAL EDUCATION

COVID-19 forced education to move online, with the market expected to grow even faster than before

By Mable-Ann Chang

The COVID-19 crisis turned taking online classes from being a mere option to becoming an absolute necessity. What does this mean for businesses working in the education technology sector?

The coronavirus outbreak hit China first and hit it hard, forcing businesses to shutter and schools to close, but the stringent measures put in place to contain the spread of the virus has had a huge benefit for at least one industry: online learning.

With students still in need of an education, online classes have gone from being a mere option for students and parents to becoming an absolute necessity. Hundreds of millions of students and teachers suddenly started using online platforms to conduct school classes, and it is already clear that it is not a temporary phenomenon.

"All of our students are now taking lessons online," says Wang Yi, a teacher at a private bilingual school in Jiangsu, a coastal province north of Shanghai. "We originally started out teaching math, Chinese and English online, but we have since added other subjects to our students' schedules as time went by."

For the growing number of companies that provide online tutoring services, this trend represents a massive business opportunity.

"On January 23, we were told that all of the schools will be closing, and from one day to the next, everything changed," says Jesper Knutell, executive vice president and general manager of Education First, an international education company headquartered in Switzerland that focuses on the China market. "In the three weeks following Lunar New Year, we managed to migrate up to 150,000 students online, from young children through to adults. After that, a further 10,000 students were added to our online education structure every day."

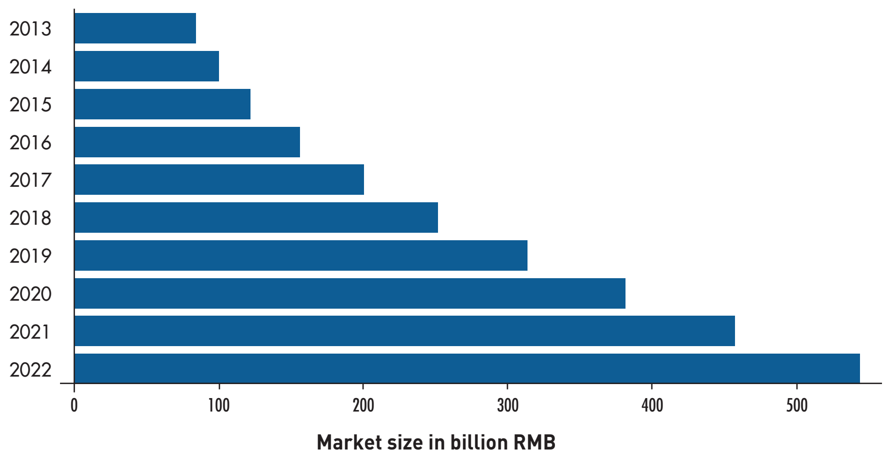
Doing the math

With regular schooling, from primary to university levels, all being conducted in virtual classrooms during the virus outbreak, interest in extra tutoring online in subjects such as English, mathematics, science and music also surged. But the shift in interest toward online tuition had already started well before the virus.

According to the China Internet Network Center, a government agency, the domestic online education market already numbered 200 million users in 2018, seeing year-on-year growth of 25.7% to reach revenues of RMB 251.7 billion ($35.9 billion). The sector was expected to grow 12.3% to RMB 435.8 billion ($61.5 billion) in 2020 according to the marketing group iiMedia Research, but in the wake of COVID-19, it should be much bigger.

When it comes to spending on their children's education, Chinese parents have always outdone their Western counterparts to a significant extent, and just about every child in China's major cities takes extra classes in the evenings or on weekends. HSBC Group reported in 2017 that 93% of Chinese parents pay for private tuition or

ONLINE ON THE UP | China's online education market is expected to top RMB 500 billion ($70.6 billion) by 2022



Sources: iResearch, *Financial Times*

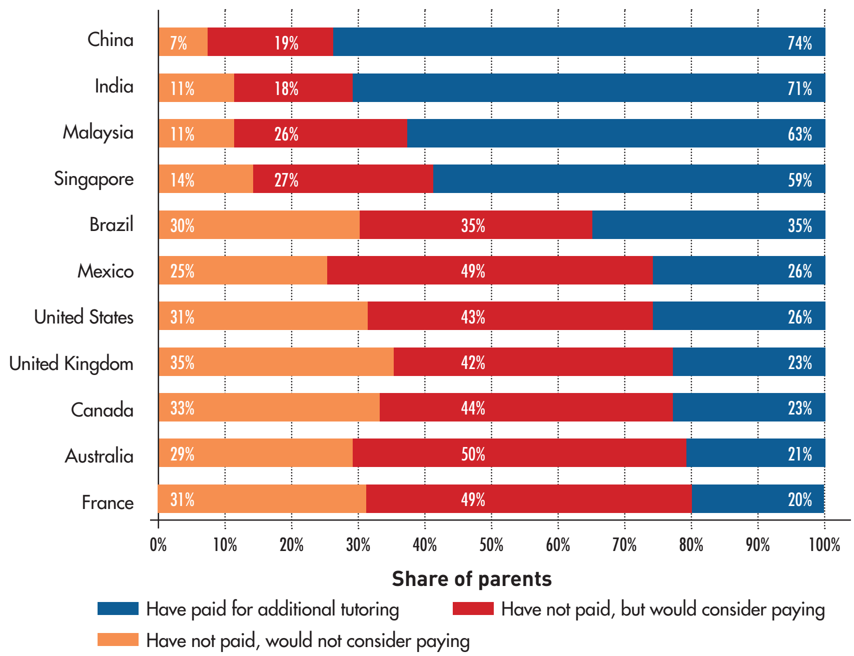
have done so in the past, compared to the United Kingdom's 23% and Australia's 30%. That translates to Chinese families forking out an average of $42,892 on each child's education, far surpassing the amounts Canadian ($22,602) and French ($16,708) moms and dads shell out.

"Nobody really taught us to place such an emphasis on education, it's just in our blood," says Wang. "Chinese culture developed under a Confucian background and lessons from our ancestors. Even though fees for classes are becoming higher and higher, parents are willing to make great sacrifices to pay for their children's mounting education-related fees."

The higher spending levels on education are driven not only by culture, but also by the highly competitive nature of the education system and the country's huge number of people.

"The sheer size of China's population means that there is a great deal of competition to get into the best schools, the best universities and secure the best jobs," says Natasha Galasyuk, a teacher at EIC Scholar Tree, an English language training center in Shanghai. "Extra classes are seen as a way to make sure that your child is not left behind."

PAYING UP | Share of parents who have paid or would pay for tutoring for their child in selected countries in 2015



Sources: HSBC, Statista

Best of both worlds

This trend towards online education has compelled parents, teachers, students and online education providers alike to re-evaluate the whole future and nature of the teaching process.

"With the virus forcing everyone to stay at home, China became a massive global experiment in how we deliver online education," says David Mansfield, executive headmaster of the YK Pao School, a bilingual school located in Shanghai. "It's something that people were beginning to experiment with, but it has now been forced to the forefront out of necessity."

The benefits of taking classes online are clear. Students avoid lengthy commutes, study from anywhere with a stable internet connection, connect to teachers all over the world, play recorded videos on repeat to ensure optimum understanding and progress at their own pace.

"Online classes are more convenient," says Shimeng Hu, a 13-year-old student in the city of Wuxi in Jiangsu province. "My mom also quite likes that she doesn't have to sit in traffic every morning to drop me off at school."

"Online learning fits into busy lifestyles," says Knutell from Education First. "If you have a quick 20-minute gap in the day while you're on the bus, you can pick up your phone and learn something, whereas that level of flexibility is impossible when it comes to in-person classes. With virtual learning, we are also able to match the best teacher in the world with the student, no matter where they are located."

In addition, some subjects seem more suited to being taught online than others.

"Subjects such as math and science are better taken online," says Knutell. "When a student doesn't understand how to do a sum, for example, they can watch the teacher explain it on repeat until they do, instead of stopping a whole class full of kids. Language learning tends to be more interactive, however, and so the value of offline classes is still there."

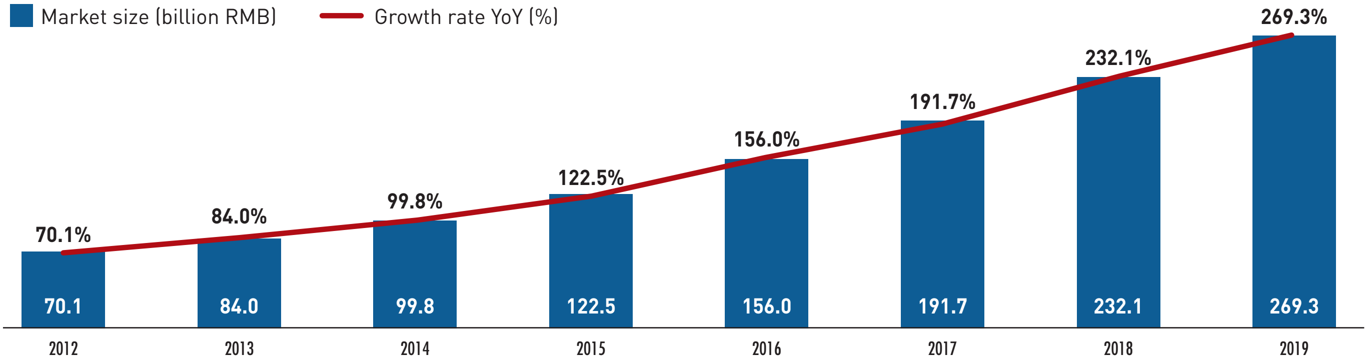
While the convenience of online classes is undisputed, teachers and students still see the importance in having face-to-face classes, particularly for younger students.

"I know that some of my students are totally fed up and itching to get back to class," says Elizabeth Thomas, a grade school teacher at Veritas Academy, a foreign-managed high school in the city of Rui'an, about 500 km south of Shanghai. "The worst thing is not being able to communicate with my students on a personal level, observe them properly and identify those who need my help."

"For younger children, it becomes really important for their parents to sit beside them in each lesson to make sure that they're following and using the software correctly," says Galasyuk. "For those whose parents are working or unable to sit with them for the duration of each lesson, they are actually falling behind."

Many students—although not all—also miss the social interaction of the traditional classroom environment. "I prefer going to school because I get to talk to my teacher and play with my friends when I'm there," says Huangyun Ji, a 12-year-old middle-

EXCEEDING EXPECTATIONS | **China's online education market has been expanding at a spectacular pace**



Sources: iResearch, China Internet Watch

schooler in Jiangsu Province.

Teachers and businesses alike feel that while online education may be growing in popularity and has huge prospects, it isn't something that can replace offline teaching altogether.

"Online teaching will never be able to replace traditional teaching, but the two modes may be able to complement one another," says Galasyuk. "They need to be used in parallel for the best outcome."

"The impact of this is going to be that consumers and students in general have opened up their eyes to online education," says Knutell. "Most may have thought that digital learning would be quite boring and one-dimensional. That's something which has changed. Students and parents are seeing that there can still be a bond between the student and the teacher, even with online learning."

"What I think is going to happen is that part of education will move online, while part of it will stay offline," he adds. "I don't think all of it will move online, but the balance is sure to change."

With online learning, students can be connected to teachers anywhere in the world

The backing of tech

China's centrally controlled system allows for a coordinated and efficient response to exactly the kind of problems created by the coronavirus outbreak. When it hit, the Ministry of Education quickly issued an order to all schools to use internet platforms to teach students, and launched a national cloud learning platform.

The Ministry of Industry and Information Technology roped in the three major telecommunications operators—China Mobile, China Telecom and China Unicom, all state-owned—and tech companies including Alibaba, Baidu and Huawei to back up the e-learning platform with 7,000 servers and 90 terabytes of bandwidth, which ensured that the platform can run smoothly with up to 50 million students using it at the same time, said state-run CCTV. With the country's internet penetration reaching 854 million people as of June 2019 and an internet availability rate of 61.2%, according to Xinhua News Agency, it created a quickly assembled viable alternative to school education.

Overall, technology has assisted hugely around the world. There are now a multitude of apps and platforms, with Skype and Zoom being used by teachers everywhere. "We use Zoom and I've found it to be a well-developed platform," says Galasyuk. "I can control both my screen and the screens and audio of my students."

Other companies, such as English First, have spent years developing their own online teaching platforms. "We have a team of 200 developers constantly improving our platform," says Knutell. "Integrating consumers' feedback is important."

> **Companies that are able to capitalize on both [online and offline education] will be the survivors in this competitive industry**
>
> Jesper Knutell
> Executive Vice President and General Manager
> Education First

The champions

But online education companies in China are in a league of their own, with the COVID-19 virus providing an extra boost. It's not easy for a company to reach "unicorn" status, with a value of over $1 billion, but China now has several in the education field. Some of the biggest names are DadaABC, Knowbox, New Oriental, Tal Education Group, TutorABC, VIPABC, VIPKID, Yuanfudao and Zhangmen 1 to 1.

According to education market intelligence provider HolonIQ, the top three unicorns in the online education industry based on valuation are Yuanfudao which provides tutoring in subjects including math and English, VIPKID which offers English courses, and Knowbox, a homework managing app. All three target children and are valued at $7.8 billion, $4.5 billion and around $1 billion, respectively.

As the trend toward online education continues to gain momentum, new companies and mobile applications are being created at a breakneck pace, all in the hopes of benefiting from the gold rush.

"Education is rapidly becoming much tougher and more competitive and they're all competing for market share," says Mansfield. "Not all will survive and there will be a lot of M&A in the market in the next few years, but the market will still grow. It's going to be the investors with lots of money, who are willing to wait maybe five to 10 years to get a return on their schools that will begin to see a profit. And once they have cash in the bank, they will be able to buy up other schools. The market is a strong one, it's just a difficult one to make a lot of money quickly."

"You can look at education businesses in two tracts," says Knutell. "Those that have online options have been seeing demand increase. Those who didn't, have been scrambling to move everything online. Online learning and offline learning are the same in the sense that it's ultimately all about the experience. So, if you're not able to deliver the same high quality online that you do offline, your brand will be impacted."

Anytime, anywhere

The coronavirus crisis and the underlying education trends in society have translated into a massive opportunity for Chinese companies offering online education, but they also create opportunities for teachers around the world to offer services into the China market.

Almost all the teachers teaching on online learning platforms are working remotely, meaning that they can be located nearly anywhere in the world. When looking at English teaching, for example, market research and management consulting firm Daxue Consulting, estimates that 100,000 English teachers are still needed in China. Supply simply does not meet the demand. But when considering online education, suddenly the problem is solved.

"I teach English to Chinese students online for around $18 an hour," says an American based in Indonesia, teaching through VIPKID. "It's a location independent job, so I'm literally able to teach from anywhere in the world as long as I have a stable internet connection."

The changes also present an opportunity for companies looking to develop new software. The most popular software programs in use in China include Alibaba's Dingtalk, ByteDance's Lark, Tencent's WeChat Work and Zoom. App rankings compiled by data compiler Sensor Tower show that Dingtalk experienced 1,446% year-over-year growth in downloads, Lark experienced 6,085% and WeChat Work 572%.

New-found familiarity

Being left with no alternative but to start taking lessons online during the virus crisis has made both children and parents become more familiar with virtual classes and led to the realization that an online education is in fact viable. This new-found familiarity is likely to push the market to grow at an even faster pace than it was already doing.

"The growth trend and investment [in online education] will continue, because as China continues to look outwards, the need for an international education continues to grow," says Mansfield. "As second, third and fourth tier cities join the market it will only become even bigger. The problem then is whether you can generate genuinely effective products with good quality teaching at a price that's affordable to the local market. We'll wait to see how that balances out over time."

"In the next 10 years, the online training market will have a much bigger market share that it has today," says Knutell. "Will it replace an offline education? No. But companies that are able to capitalize on both will be the survivors in this competitive industry."

China: Capitalism, But Not As We Know It

Dexter Roberts, author of *The Myth of Chinese Capitalism: The Worker, the Factory, and the Future of the World* looks at China's economy and how its capitalism differs from anywhere else in the world

With China and the United States seeing their relative levels of power on the world stage converge and their political differences grow, tensions between the world's two largest economies have surged. The trade war, the risk of decoupling and the coronavirus have all contributed toward this growing rift, and it is now more important than ever to understand the two countries' systems and how they differ.

Dexter Roberts, a regular commentator on the China-US trade and political relationship, is the former China bureau chief and Asia News Editor at Bloomberg Businessweek and was based in Beijing for more than two decades. He has reported from all of China's provinces, covering the rise of companies and entrepreneurs, the changing roles of its manufacturing sector and migrant workers as well as exploring its demography and civil society. He has also reported from Cambodia, Mongolia and North Korea, while focusing on China's growing economic and political influence.

Roberts' first book, *The Myth of Chinese Capitalism*, looks at how legacy policies from China's past, including its household registration system (the *hukou*) are leading to growing inequality and social tensions and are holding back the country's development. In this interview, Roberts highlights what sets China's economic and political system apart from those typical in Western countries.

Q. What myths does your book,* The Myth of Chinese Capitalism*, refer to?

A. In broad terms, the myth I'm referring to is how the economic reforms that we've seen coming out of China in previous years are going to continue at a similar pace going forward. The dramatic growth in GDP (gross domestic product) that the Chinese government has seen in previous years, and the opportunities that both corporations and countries have benefited from, will not be duplicated.

Another myth that I focus on is the idea that the middle class will just keep endlessly growing in leaps and bounds. The course that the country is set upon right now, with the legacy policies that are still in place that I write about in my book, are restricting the future growth of the middle class.

Q. How does Chinese capitalism differ from capitalism in other countries?

A. The most obvious difference is in how the role of the state is more important in China. We've actually seen it become even more important in recent years, within Chinese capitalism. There's this sense amongst top officials that corporations should be answering more to the government and that there should be a strong role for the state in key strategic industries. Ultimately there is the expectation that companies, both state-owned and private, should at key moments have a role in ensuring social stability and doing things the government sees as good for society. They shouldn't just focus on making money.

The situation that we are now in with the coronavirus provides a good example. The expectation in China is that companies should help, for example, by making machines that produce masks. In the US there is a much more laissez-faire idea. The government, while it does exert control over companies, of course, typically does not expect companies to contribute to society to the same degree as what we see in China.

Q. What are the prospects of a transformation of Chinese capitalism into a more traditional form of capitalism?

A. I don't see China moving toward a Western or American style capitalism, very much to the contrary. The leadership in China sees their system as an alternate model and would like to see others move more toward the Chinese model. I don't see the two countries becoming more similar. I don't see China moving toward the US or vice versa.

We saw a real rethinking of the value of the Western model of capitalism within China first during the 2008 global financial crisis. I think there was a realization then that unfettered financial markets can ultimately be very damaging for an economy. I was in China then and it was the first time that I really felt this wave of people, including businessmen and officials, thinking 'maybe we just don't adopt the Western model. Maybe we can try and do something different.'

Q. Does the framework of capitalism, with shareholders and stock markets, not contain with it the seeds of an inevitable shift toward the approach of the internationally standard form of capitalism?

A. China may use stock markets to raise capital, but they're not going to blindly follow the model of the West. So for example, there has been a move to strengthen the role of the Party in big Chinese companies in particular. Clearly President Xi Jinping thinks that's important.

Another example would be the way that the so-called "national team" operates in the stock market. Large Chinese companies make concerted efforts when the Chinese economy looks weak, at the behest of the government, to step in and support the market. I would argue that this is relatively unique to China, or at least something we don't see in the United States.

Q. Many people refer to the meritocratic nature of China's system. How would you compare the Chinese system with the Western system in terms of its ability to place capable individuals in leadership roles in society? To what extent is that changing in both the West and China?

A. First of all, one could easily point out that our system in the US has recently produced some leaders who are not very effective. Elections don't always produce the most capable people, a big issue that we're dealing with right now in the US.

> **I don't see China moving toward a Western or American style capitalism, very much to the contrary**

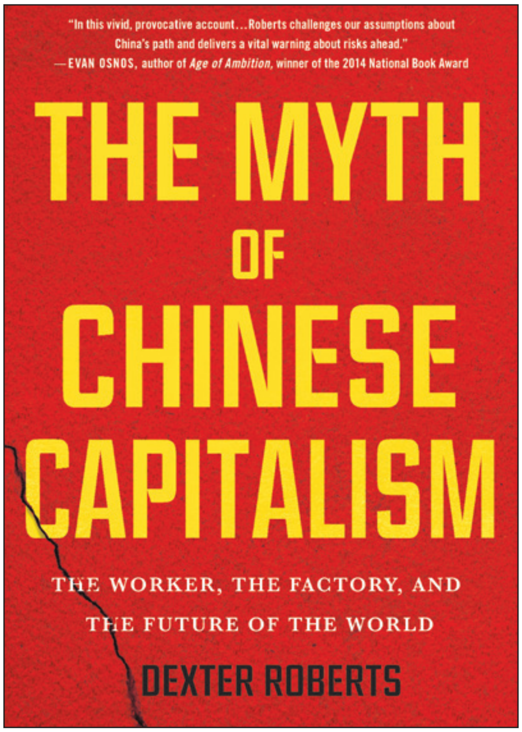
Officials rise in politics in China through the Communist Party of course. There is this ideal that officials move through leadership roles in the provinces and in the countryside, before finally getting positions in key cities like Shanghai or Beijing. It's assumed that after rotation through a variety of different posts, they will be ready to do a good job if they finally get promoted into the central government.

The reality doesn't necessarily turn out that way, however. If you look at the early response to the coronavirus, that hardly highlighted meritocracy. Instead of immediately clamping down on the spread of Covid-19, a decision was made to go ahead and have this huge Communist Party meeting in Wuhan. In a one-party system, a disastrous mistake like that can happen; you don't have another party saying, wait a second, there is a mysterious disease we are hearing about. We can't have a political meeting now.

Q. China says that it should be given the right make its own decisions on how it chooses to run its economy. What would be your view on that?

A. I think that that is entirely reasonable. China is now the world's second largest economy, with a lot of people thinking that it's on the path to becoming the world's largest economy. China is playing catch-up in terms of the size of its role in international organizations and it too has created some multilateral organizations itself, like the AIIB. As a country that is becoming more and more economically important, it is natural they play a larger role in setting the terms of international trade and investment.

To the extent possible, one would hope that their economic decisions reflect the interests of all the people in the country, which is a challenge that all countries face and not just China.



Q. How important are private enterprises and foreign investment to the overall stability of the Chinese system?

A. They are very important. The most obvious statistic that jumps out is the huge proportion of people employed by private enterprises in China, something like 80% of urban workers. So, if private companies find themselves in a situation where they are doing badly, then it becomes a difficult situation for most working people in China.

Foreign companies are important as well, but less than they used to be. When I arrived in China in 1995, it was a different world. There weren't a lot of internationally-minded Chinese companies and they could learn a lot from foreign companies. Now China has many globally competitive companies and the need for the investment and managerial know-how they got from foreign investors, that once was so crucial, is not as important anymore. I'm not saying that foreign companies are of no use to China of course, but I do think that they are undeniably less important than in the past.

Q. How do you see the China-US relationship developing over the next two years?

A. I'm actually quite worried about the relationship. I think already over the last couple of years with the trade war, we did see real evidence of decoupling. Multinationals including from the US are recognizing the need to diversify their supply chains for economic and business reasons, but also because of the deterioration in the political relationship between the two countries. There is a fear that they will find themselves exposed to the vagaries of the deteriorating political relationship.

On the other hand, it's very obvious with the coronavirus, that it is now ever more important for the largest and second-largest economies in the world to be working closely together. Other global challenges including arms proliferation, climate change and tensions on the Korean peninsula all show how important it is for China and the US to work more closely together. So I'm concerned about the deterioration in the relationship we're seeing right now.

Q. Youth unemployment is becoming a significant problem in China and it is one that you refer to in your book. Under the Chinese system, what is the role of the government to a problem such as youth unemployment?

A. An obvious one is in providing skills training for youth so that they are well-prepared for the job market and to help them find jobs. For a long time there has been a complaint amongst companies that universities are not preparing students for the job market. The government obviously plays the key role in setting the curriculum in the education system and should ensure to some degree that it matches that needs of the society.

Another important priority—one which I talk about in my book—should be improving education in the countryside. There's a serious gulf between the quality of education and the funding for schools in China's cities and what is provided in the interior of China. An average student in a poorer province like Guizhou receives far worse education than compared to that received by students in Shanghai. The government should ensure a more equitable allocation of resources in public education.

Q. To what extent are you expecting to see a shift away from China in terms of global supply chains and where do you see them going?

A. It's already begun. It accelerated during the two-year trade war and supply chains are now struggling through COVID-19. There is a risk in having all of your eggs in one basket, and a lot of companies have really focused on China for their supply chains. It served them quite well in the past, but it's becoming increasingly problematic. A lot of businesses, too, have become increasingly uncompetitive because of rising labor costs. Other places are now able to offer lower labor costs than China, such as Malaysia or Mexico.

I don't think it will be easy for other countries to absorb the diversifying supply chains, however. And as factories move to other countries, such as those in Southeast Asia, they will start to drive up labor costs there as well.

Having a good infrastructure is very important. One of the great strengths of supply chains located in China is their access to tremendous infrastructure, something they might not find when they move. Another complicating factor is how supply chains often are made up of a whole ecosystem of different companies making all the components that go into a finished product. If Apple decides they want to have the iPhone manufactured in another country, it's not just Foxconn that has to move. There are dozens if not hundreds of sub-suppliers that also might have to move.

Q. China has maintained a policy of household registration for population control for decades. How important is the reform of the household registration system in your view?

A. I think the reform of the hukou is crucial. It's the heart of the argument in my book: Unless China fully reforms the *hukou* policy, they cannot continue to grow the middle class. The hukou makes it difficult for migrant workers to settle down permanently where they work. That creates a whole host of complicating issues for them. They're usually restricted from enrolling their children in city schools. They can't bring their elderly relatives to live with them because they often can't get affordable medical care in clinics or hospitals in the cities as well.

This also means that the Chinese migrants don't spend as much money. They engage in what economists call precautionary saving, because they need to be prepared for possible high education or health care costs. It means they cannot become part of the consuming middle class.

The Chinese government knows they are going through one of the biggest economic transitions in decades. They know they must move from being the "factory of the world" to a much more consumption-driven, service-driven economy. My argument is that you can't have a more consumption-driven economy if a large proportion of the population is being treated as second-class. And that's what I think the *hukou* does to them.

Q. China has had significant success in reducing poverty levels. From a property market perspective, how do you see the overall balance of China's population shifting in the year ahead?

A. When I look at the property issue in China, I focus in on the dual-land system. While urban people can buy and sell their property and do so at market rates, that is not true of people from the countryside.

The land in rural China is officially owned by the collective and farmers or migrants who typically have a plot of land in the countryside are usually unable to sell or lease it at market rates. Meanwhile people in the cities have gotten rich from buying and selling apartments. That's one key reason China is increasingly an inegalitarian country and has seen an explosion in wealth inequality. I see the dual land system as being a real obstacle, like the *hukou*, to the growth of the middle class.

Q. China is now relaxing some of its rules on foreign investment. What is the level of interest among foreign companies investing in China now compared to the past?

A. If you look at surveys by both the European Chamber of Commerce and the American Chamber of Commerce over the last couple of years, growing numbers of foreign companies are saying they are consider diversifying their business to other countries. That may seem odd while at the same time some business sectors, such as the financial market, are being opened more to foreign companies. But companies are increasingly facing higher costs in China and in many cases may not be seeing the same growth levels as before, as urban markets become more saturated and it's not always easy to expand business into lower tier cities and rural China.

> **Companies should be focusing a lot more on third and fourth-tier China, as well as the interior**

Q. What advice would you give to someone wanting to do business in China over the next 10 years?

A. Broadly speaking, most businesses endeavors in China can be divided into two kinds. While there is undoubtedly a huge overlap, there are those that focus primarily on selling into the domestic market in China and those that are looking at China as an export platform where they can produce goods at an affordable cost. Obviously the trend has been a mingling of these two: a lot of companies that once only used China as an export platform are also trying to sell into the Chinese market now. But depending on what your main focus is, the advice I would give varies.

Many companies that have been producing lower cost goods in China for export now need to look at diversifying elsewhere. Obviously, it's already happening, with many textile makers, for example, moving production to Southeast Asia, where they can find cheaper labor. For others moving isn't so easy. China still provides an unparalleled supply base, developed infrastructure and a good workforce. So if you're not producing really low-cost items, the decision whether to stay or go isn't so easy.

On the other hand, for a business that focuses on China primarily as a market, they may have to look beyond the well-developed coastal regions and try to sell their products in the interior of China and to the people who hail from there. Those are the people that I talk about in my book a lot, namely the farmers, the migrant workers and people from smaller tier cities across China. The reason why they need to do that is that although we've seen impressive growth in urban markets, particularly along the coast in China, to a degree there is now a market saturation. There's a lot of competition from Chinese brands and fewer numbers of newly minted middle class people to sell to.

Those companies should be focusing a lot more on third and fourth-tier China, as well as the interior. It's not going to be easy, but if they're aiming to see growth in sales, that's where they need to be looking.

MEAT MARKET

In light of the devastating impact of diseases on China's pig and chicken population, how precarious are the country's food supplies?

By Colin Peebles Christensen

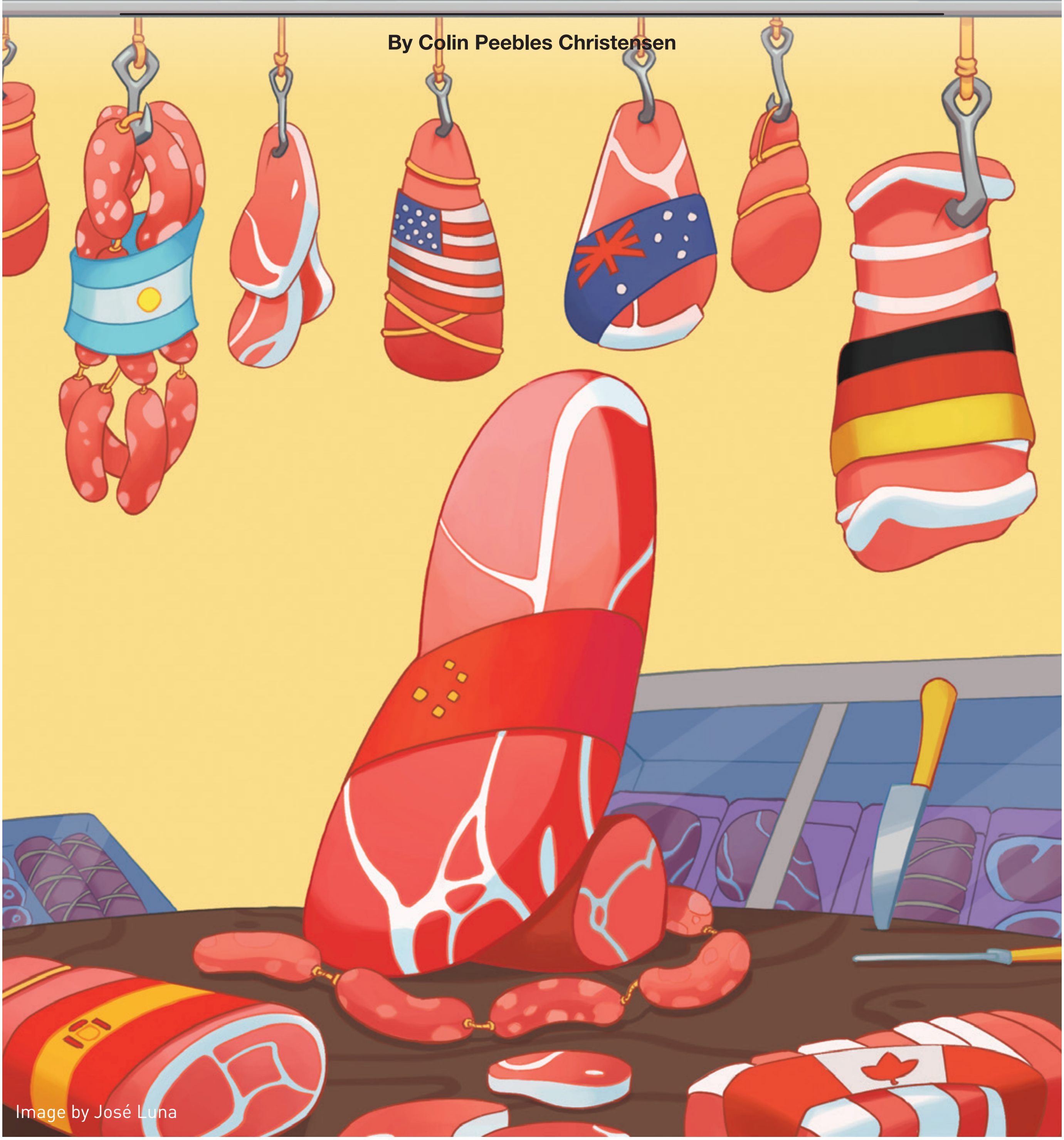


Image by José Luna

China is the world's top consumer of pork. What has the impact of African swine flu been on the meat industry and food security in the country?

China's meat industry has been hit in the past couple of years by two devastating viruses: Bird flu and African swine fever. The renewed bird flu outbreak led to mass culling of chickens, but even more serious is the fact that close to half of China's 442 million swine stocks were killed last year either by African Swine Fever or by the preemptive killing of pigs to stop its spread.

African Swine Fever first struck China in August 2018 and has decimated the world's largest pig population, creating economic disaster for farmers, as well as sharply pushing up meat prices and overall inflation. China has a large and still growing appetite for meat, but the first signs are emerging that these diseases are leading to a shift away from traditional pork consumption habits, which have big implications for farming, the environment and international trade.

"Since the beginning of 2019, deaths and panic slaughters have caused steep declines in the pig population," says Dan Wang, China analyst at the Economist Intelligence Unit (EIU), "with many smaller farms having exited the market."

China is far and away the world's top consumer and producer of pork, and the country's pig farms are home to about half the pigs on the planet. Every year, the country devours 55 million tons of the meat, which is a key staple of the national diet. But pork output last year plunged to a 16-year low, creating food shortages in some areas and causing pork prices to shoot up more than 100% by the end of the year. The agency that manages the government stockpile of frozen pork has been releasing large quantities since September 2019 in an effort to ensure market stability.

African swine fever has had "a huge impact on the supply of pork," says Miranda Zhou, senior analyst at Euromonitor International, a research provider. Rising prices and damage to consumer trust in the safety of eating pork has encouraged some people to shift to other protein sources such as poultry and eggs. And with overall rising incomes, some middle-class Chinese are also opting for pricier, higher-quality meats such as beef.

New trends in meat

China produced 86 million tons of meat in 2018. The country's meat industry was valued at $157.5 billion in 2019, with pork at $110 billion, close to 70% of the total, according to Euromonitor. There are approximately 26 million pig farmers in China, of which 30% are small-scale "backyard" operations.

Chinese people ate just short of 30kg of meat per capita in 2018, of which 22.8kg was pork, 2kg beef and 1.8kg mutton. Poultry and seafood, categorized separately, averaged 9kg and 11.4kg per

Consumption of meat in China is on the rise

> **Historically, China is very much a pork consumption country**
>
> Adam Xu
> Partner
> OC&C Strategy Consultants

person respectively.

"Historically, China is very much a pork consumption country," says Adam Xu, partner at OC&C Strategy Consultants. "And the price of pork is much lower than beef and mutton."

Pork is sure to remain number one in overall share, says Hongzhou Zhang, a research fellow at Nanyang Technological University in Singapore and author of *Securing the "Rice Bowl": China and Global Food Security*. "But given the recent prices of pork, people have had to cut back on their consumption because the price has become insanely high for poor or ordinary people."

However people may be slow to change their consumption habits. "I would call myself a meat-oholic," says Zixuan Wang, a 26-year old Beijing resident who spoke to *CKGSB Knowledge*. And despite the rising price of her favorite meat, Wang says she isn't planning to change, as beef and lamb remain expensive, too. "A higher price is not a big issue yet. I usually spend a lot on food."

Animal farm

In terms of total domestic consumption, meat imports are small, accounting for just 3% of domestic consumption volumes, according to EIU's Wang. "Imported pork makes up a bit more than 2% of total pork consumption, and imported beef—fresh and frozen—about 14% of beef consumption," she says.

The main beef exporters to China by volume are Argentina, Australia, New Zealand and Uruguay, while Canada, Germany, Spain and the United States provide most of the foreign pork. Pig liver and other types of offal, often discarded by western European and North American consumers but enjoyed in China, make up a significant portion of the imports.

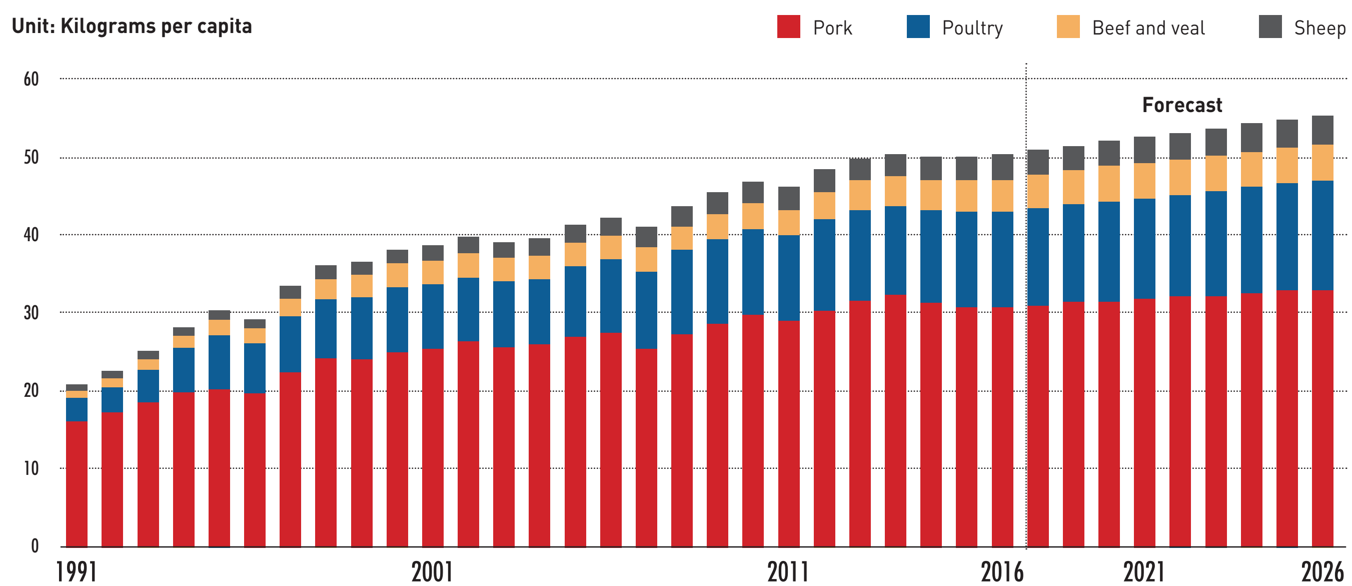
Food security is always one of the top issues, says Chenjun Pan, a senior analyst of animal protein at Rabobank. "China can be self-sufficient in poultry—imports only account for 3% of total supply—but the reliance on [imported] beef is rising," she says. "This year, imports may increase the share further."

In a win for pork security, WH Group, China's largest meat processing company, expanded its market dominance when it purchased the US-based Smithfield Foods in 2013—the largest pork processor and hog producer in the world.

Disruptors

For a number of reasons, China is

A MEATIER MIDDLE KINGDOM | The trend of growing meat consumption is expected to continue



Sources: OECD, FAO of the UN

especially prone to the spread of animal diseases, known as zoonotic epidemics. Peter Li, associate professor of East Asian politics at the University of Houston-Downtown, specializing in Chinese politics, environmental governance and animal welfare, cites industrialized farming operations, drug resistance, overcrowded caging conditions and enforcement shortfalls among the factors.

The current meat disease situation, he says, is in some ways a rerun of 2006 for China, when it was Porcine Reproductive and Respiratory Syndrome, more popularly known as Blue Ear Disease, that devastated pig farms. "That's why public health is a tremendous issue," Li says.

Health and environmental beliefs are challenging the food and agriculture industries globally—with unease over the impact of red meat on heart disease and carbon emissions. Still, in China, food safety remains the number one concern, says Li. "Global warming is a hot issue in Europe and the United States, [but] it's not a major concern among the Chinese public, [not] even among the highly educated 5% of people."

In 2016, the government revised its Dietary Guidelines for Chinese Residents to encourage the nation to opt for more fish or poultry over fatty, smoked and cured meats. But the concept of healthy is open to interpretation, too. "People think meat is good for kids and young people, but not so good for elders," says Zixuan Wang. "My parents, 55 years old, and their friends eat less meat to keep healthy now, but it's not for the environment."

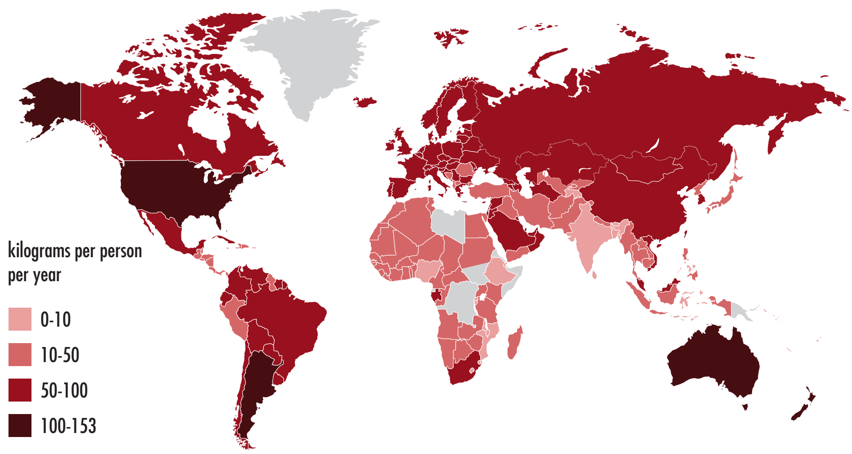
"I think consumers in general believe that meat is not bad for them," says Xu. "Everything is about consuming an appropriate volume. We have not yet reached the stage where we over-consume protein while reflecting on the impact on the environment and on our health."

The pork cycle

Following the African Swine Flu outbreak, many smaller farms, lacking government subsidies and dealing with skewed insurance schemes, have been forced to shut down.

WHO EATS THE MEAT?

Chinese people are quickly catching up as major meat-eaters



Source: UN Food and Agriculture Organization, BBC

"This is causing tightness in supply," says Dan Wang. "Large pork-producing provinces such as Heilongjiang, Henan, Jilin and Liaoning have seen a decline of more than 50% in production capacity."

Small-scale farmers, under pressure to pay back loans, tend to bend the law for profit, with excessive veterinary drug use and widespread violations in every step of farming operations, according to Li. Local officials turn a blind eye, scared that shutting businesses could trigger local unemployment and social unrest.

Retailers are selling a larger share of frozen meat stocks and pork prices have more than doubled from a year ago, having spillover effects.

"The pork cycle is the most important component in inflation," says Dan Wang. As the single largest item in China's Consumer Price Index (a measure of the weighted average of prices of a basket of consumer goods and services), pork accounts for 2.4%. "A 10% increase in the price of pork will add 0.24 percentage points to the rate of headline consumer price inflation. Pork has experienced two price cycles since 2009, each lasting around four years. We are currently on the rising wave of the third cycle," she says.

Pork prices rose a staggering 135.2% in February compared to the year before, and up 9.3% since January. Overall livestock meat prices grew by 87.6% year-on-year, adding nearly 3.85 percentage points to the CPI in February. Pork boosted inflation by as much as 3.19 percentage points that month. Wang estimates that even without swine fever, the pork price was on a rising cycle and would have increased 50% last year. But instead prices are up three times as much, without yet peaking.

This is boosting consumption of substitute protein, such as beef, poultry and seafood. As a result, beef prices registered a 20% increase in February compared with a year earlier. Mutton was 11% more expensive.

Feed prices are affected too. China has committed to import massive amounts of soybean from the US while the domestic pork industry is shrinking. "Feed prices are likely to drop as a result, which will benefit pig producers," according to Wang.

Social stability

Food security has political stability and legitimacy implications. But the government understands that "inflation is the number one cause for social instability, and even political crises," says Zhang, which is why pork was added to the national meat reserves after Blue Ear Disease ravaged the market in 2006.

China's frozen pork reserves are designed to calm markets in times of

Pork being brought to a meat market in the northern Chinese city of Datong

temporary shortages and runaway food prices. But Wang says the pork reserves play a limited role in stabilizing meat prices. "It is more a symbolic move to calm market sentiment since pork price is a sensitive social issue. In sensitive times, like before Chinese New Year and during the coronavirus outbreak, pork reserves are auctioned out to stabilize prices for certain regions."

Wang estimates that the reserves make up less than 1% of annual output and can only be used to stabilize prices in a few large cities for from three to six months. The exact size of the reserves is a state secret. Zhang suspects that a lot of imports go directly to the reserves instead of to markets.

New protein

Thanks to diseases and other factors, protein sources are changing, and some of the urban middle class are shifting away from pork. Zhou reckons pork will remain the mainstream protein source, but meats with lower fat and cholesterol, such as poultry, fish and shrimp, and higher nutrition, like beef and lamb, will become more popular as people shift to healthier options.

Similar motivations explain the rise of vegetarian and alternative protein diets globally. Faux meat producers Impossible Foods and Beyond Meat are both planning a China launch, and homegrown startups are catching on, too—with Whole Perfect Food and Starfield in Shenzhen, Zhen Rou in Beijing and Green Monday in Hong Kong.

Vegetarianism is not a new concept for China and meat substitutes date back at least to the Song dynasty, when "mock meat" made from wheat gluten, soybeans and mushrooms formed the core of Buddhist-friendly cuisine. Still, "veganism and fake meat are niche," says Zhou. "Although there have been some attempts on fake meat products, they don't receive very positive feedback."

Overall, meat consumption is not decreasing and rural consumers, who eat as little as 1kg of beef per year on average, still provide big room for growth of meat sales. Rural migrants, especially, will change to meatier diets as they continue to move to the cities, says Zhang.

Zhang predicts consumption to become more diversified in the years ahead. "The overall share of pork of animal protein will decrease, and then you will have more consumption of chicken, fish, and, of course, beef," he says. "I think China will import more of all sorts of meat products from the global market. Self-sufficiency is simply not possible. Total meat consumption will still go up. And then a rising amount of the food consumption, or the gap, will be met through imports rather than domestic production."

But is all of this enough to wean people off meat?

"For Chinese people meat is very important," says Shen Wei, a 36-year old who lives in Ningbo. Even if people eventually eat less of it, he says. "It would be impossible to eat no meat at all."

> **It would be impossible to eat no meat at all**
>
> Shen Wei
> Consumer
> Ningbo

CHINA PULL

China is promising more equal treatment towards foreign companies

By Jens Kastner

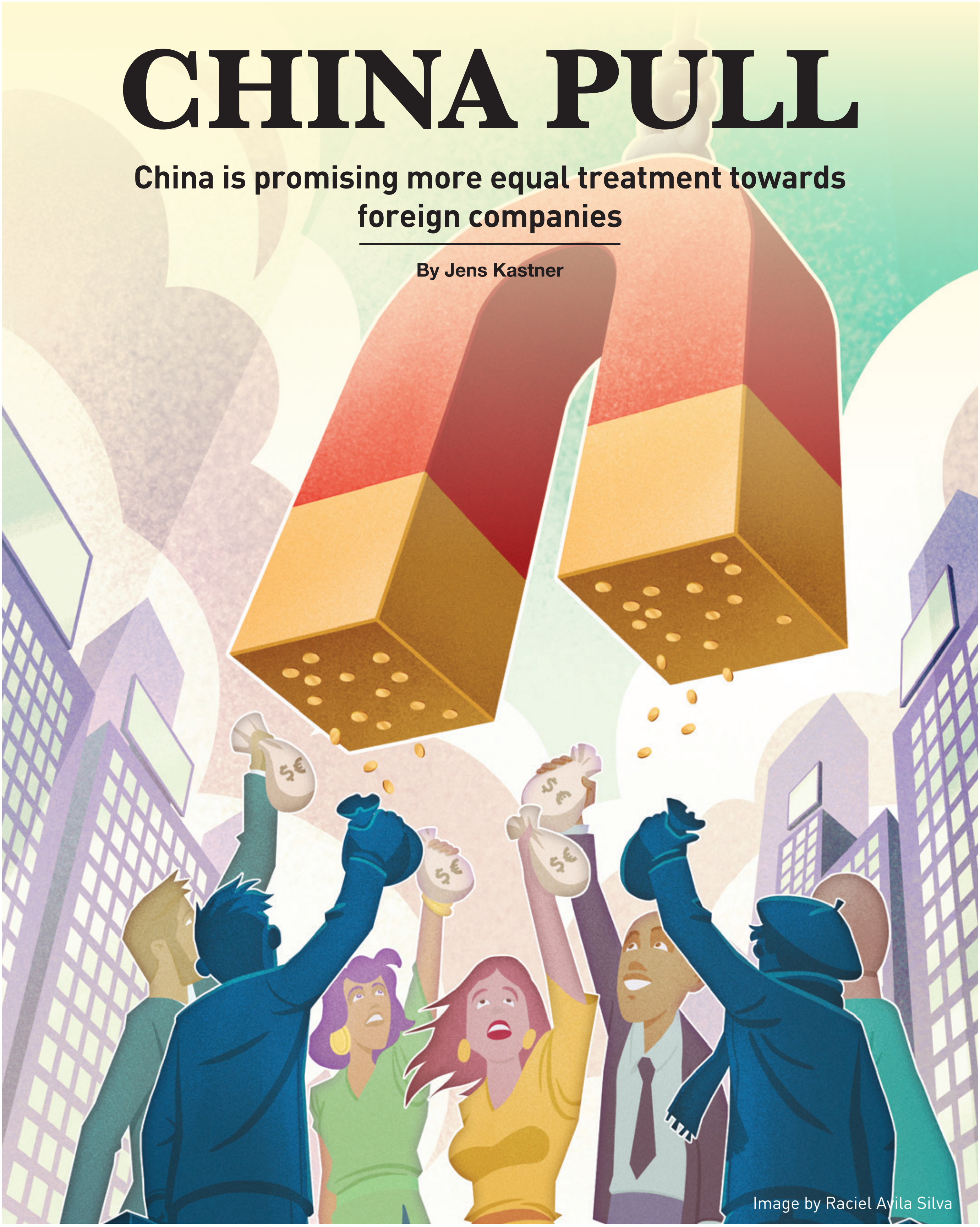


Image by Raciel Avila Silva

Against the backdrop of the trade dispute with the United States and a slowing economy, China is opening up key sectors to foreign companies in the hopes of raising the possibility of further foreign investment

In late 2018, German carmaker BMW became the first foreign auto manufacturer to take control of its main joint venture in China after Beijing loosened corporate ownership rules. It was a milestone, given that foreign ownership of such ventures has been with few exceptions, capped at 50% ever since China started welcoming foreign investors in the early 1980s.

Similarly, in late 2019 German insurer Allianz received Chinese regulatory approval to commence operation of China's first fully foreign-owned insurance holding company. And after decades of trying, in March 2020, two of the world's biggest investment banks—Goldman Sachs and Morgan Stanley—were finally granted permission to take majority control of their local securities' joint ventures. Morgan Stanley had held a 49% stake in Morgan Stanley Huaxin Securities and Goldman 33% of Goldman Sachs Gao Hua Securities, with both moving up to take 51% control.

The relaxation in ownership controls opens up wide new operational vistas for foreign companies operating in China and, as the government clearly hopes, raises the possibility of another influx of foreign investment funds into the huge and, in many ways, still attractive Chinese market.

"We are seeing a slow opening in key sectors, for example, in financial services and other advanced manufacturing like automotive, where foreign companies now have much more open access in terms of what services or products they can offer to the market and in terms of what a foreign company can wholly own," says Ben Cavender, managing director of the Shanghai-based China Market Research Group (CMR).

China has been a huge magnet for foreign investment for the last four decades. The investment funds from overseas in manufacturing and more recently in services and other sectors has been fundamental in the growth of the Chinese economy to become what it is today, the second-largest in the world. But there have also been massive areas of disagreement and no-go zones, which have on the whole made China a very different place for foreign companies to do business compared to Chinese companies doing business in other territories, and most notably OECD countries.

Over the decades and in spite of the restrictions, foreign capital has flooded into China because of cheap labor costs, production efficiency and a huge local market. But for many reasons, including a slowing economy and rising labor costs, China has become less attractive in recent times. In the past couple of years the Chinese government has started to address the problem of slowing foreign investment by easing the restrictions placed on foreign companies.

A shifting scene?

A much-anticipated Foreign Investment Law (FIL) went into effect at the start of 2020, broadening market access and better protecting the rights and interests of foreign investors.

The FIL replaced three previous laws governing foreign businesses and foreign investments in China, and provides for greater protection as well as enhanced regulatory transparency. It also identifies more key industries, such as agriculture, manufacturing and technology, in

> **China is in need of liberalizing further to get to the next stage of development**
>
> Sara Hsu
> CEO
> China Rising Capital Forecast

which China further encourages foreign investment with preferential policies.

The new law was introduced at the height of the China-US trade war, in which the US side aggressively sought to discourage Foreign direct investment (FDI) into China. The FIL's implementation also coincided with the start of the COVID-19 pandemic, which has cast a cloud over the world's economic prospects in at least the short to medium term.

"The Foreign Investment Law promotes the legitimate rights and interests of foreign investors, especially the protection of intellectual property rights, and solves the pain points that have long plagued foreign-funded enterprises with regulations," said Zong Changqing, director of the Foreign Investment Department at Ministry of Commerce (MOFCOM), to Chinese TV network CGTN. "It will greatly enhance companies' sense of gains."

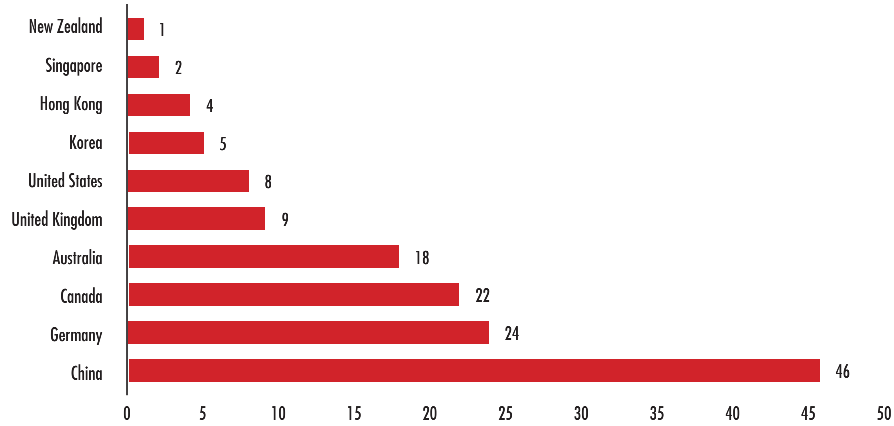
To strengthen China's attractiveness as an FDI destination, the negative list of industries barred to foreign participation has also been shrinking in recent years, and foreign ownership restrictions in the financial services area in particular, have been reduced for asset management companies, banks, fund and futures companies and personal insurance and securities companies.

FDI into China in 2019 was up 5.8% year-on-year reaching RMB 941.5 billion ($137 billion), which was quite an achievement considering that global FDI flows recorded negative growth of 1% in the same period. Comparable figures for 2020 are not yet available, although a sharp drop is expected due to the virus.

FDI started edging its way into China in 1979, and by 2002 China had surpassed the US to become the world's top FDI host. FDI has played a crucial role in China's economic development and export success, with the Ministry of Commerce in 2010 reporting that foreign invested enterprises accounted for over half of China's exports and imports, provided for 30% of Chinese industrial output, and generated 22% of industrial profits while employing only 10% of labor.

NOT SO SIMPLE

In the Ease of Doing Business Index, China ranked 46th in the world



Sources: World Bank, Asia Briefing Ltd.

"China has become a very attractive market for foreign investors in the consumer-facing sectors, such as auto and financial services," says Nick Marro, the Economist Intelligence Unit's Hong Kong-based lead analyst on trade. "This has led to the current situation that no one can really afford not to be in China."

Points for China

The original motivation behind the strict controls on foreign investment, implemented from the early days of China opening up, was for the government to maintain control of all key sectors of the economy. At the same time, the country would gain the benefits to be accrued from foreign companies operating in China without providing them with the same levels of ownership and freedom of action that are common in most OECD countries.

Fast forward 40 years after China officially opened up and many major sectors of the economy are still dominated by state-owned enterprises (SOEs). This is in spite of assurances provided at the time of China's entry into the WTO in 2001

"China kept sectors dominated by SOEs closed, as in the early days were unable to compete against multinationals that had better access to resources and technology," says Marro. "The main argument of opponents of economic liberalization—not only in China but anywhere in the world—is that if you liberalize, you destroy local jobs."

"Nevertheless, there is still a lot of protection for SOEs in place as well as a big push toward China supporting the growth of Chinese businesses in key industries," he adds.

A pressure pot

In many ways, the new legislation can be viewed less as Beijing wanting to loosen control over key sectors and more a reaction to economic frailties of the last 10 years. Between 2013 and 2017, FDI inflows into China fell steadily. In 2017 total FDI inflows stood at $168 billion, below 2008's $172 billion. More importantly, China's FDI inflows relative to its gross domestic product (GDP) have also been on a downward trend, from 6.2% in 1993 to 1.4% in 2017, the lowest level since 1991. This coincided with GDP growth slowing to 6.1% in 2019, the lowest rate China has booked since 1990.

"The costs for not liberalizing are rising for China, epitomized by the distortions of the demographic legacy of Beijing's one-child policy, which has resulted in relatively few young people burdened with supporting a very large population of the elderly," said Harry G. Broadman, Chair of the Emerging Markets Practice at Berkeley Research Group LLC and a former US Assistant Trade Representative.

"For an economy as large as China to ride the bicycle fast enough to not fall off requires freeing up the sectors that continue to be dominated by SOEs to provide room

> As COVID-19 shaves economic growth, the government is under pressure to get as much economic activity as possible
>
> Renaud Anjoran
> Partner
> China Manufacturing Consultants

for private competitors, including foreign companies," he added.

Similarly, Sara Hsu, CEO at China Rising Capital Forecast, warned that failing to liberalize further will ensure that China remains tied to a course of domestic-led development.

"With high levels of debt and few sources of new growth, China is in need of liberalizing further to get to the next stage of development," Hsu says. "This will require higher incomes and greater employment in advanced service sector and manufacturing jobs," she adds.

More recently, pressure on China to open its doors wider to FDI has built up as it has become clear that the China-US trade war has made Chinese goods exported to the US more expensive than goods from rival exporting countries, such as Vietnam, due to higher import tariffs.

The Bulletin of the Chinese Academy of Sciences in February 2020 flagged cases of the outward transfer of parts of the industrial chain, such as auto parts maker F-Tech switching production of brake pedals from its Wuhan plant to its plants in the Philippines.

The Bulletin warned that industries such as clothing and textiles that depend heavily on low-cost labor could accelerate their reallocation to low-income countries, while electrical and electronics equipment, transport equipment and other industries with low labor intensity and high technology density may easily return to developed economies.

"As COVID-19 shaves economic growth, the government is under pressure to get as much economic activity as possible, which means it will be easy on private sector business, be it foreign-owned or locally-owned," predicts Renaud Anjoran, Partner of Shenzhen-based China Manufacturing Consultants.

"To get the export-engine running again, the government will be tempted to let the RMB depreciate, and it may double down on its policy to give more subsidies for R&D by companies in strategic sectors, be it foreign-owned or locally-owned," he adds.

More work ahead

With all of the regulatory changes to foreign investment that have taken place, the European Chamber of Commerce's Business Confidence Survey of 2019, said that a quarter of respondents felt more welcome at the time of survey than when they first entered the China market.

However, the same survey also pointed to foreign companies feeling an "us" and "them" attitude when it comes to how they are treated in comparison to Chinese companies. This is evident in how 15% of European Chamber of Commerce members also report that they continue to face direct market access barriers and 30% indicating that they face indirect market access barriers, such as complex administrative approval processes and difficulties accessing operating licenses.

"We see some positive aspects in the implementation regulations of the Foreign Investment Law, such as a stronger protection of Intellectual Property Rights and more restrictions on forced technology transfer, but we think that fundamentally, there should be no legal distinction between foreign and local companies except for legitimate reasons such as specific national security concerns," says Carlo D'Andrea, Vice President and Shanghai Chapter Chairman of the European Chamber of Commerce.

"And while the 2019 Negative List revision brought openings in sectors like energy and oil and gas exploration and extraction, there appears to be little room for foreign investors in this already saturated market. As long as SOEs maintain a vertical monopoly on upstream, midstream and downstream industry, there is little room for outsiders to secure any more than a tiny fraction of the market share," he adds.

A delayed win

China offers many advantages for foreign investment thanks to its huge market and the superb efficiency of its manufacturing ecosystem, but some people believe the era of mass investment into China is ending.

The COVID-19 pandemic is expected to accelerate the diversification of multinational companies out of China to other regions, and with the many core economic building blocks already in place in China, there is less opportunity for new foreign investment in many areas of the market.

"It is probably too late for a lot of foreign businesses to take a leadership position in China as the market is too competitive. An example is the technology space where Alibaba and Tencent are probably too strong for American tech firms to compete with," says CMR's Cavender.

But the European Chamber of Commerce's D'Andrea, thinks it is never too late for further liberalization.

He predicts that European companies will remain dedicated to China and understand the potential that has been hindered by various restrictions. "These enterprises will welcome liberalization with open arms and open check books."

Young ASEAN Leaders

Pei Ling Tin, a Singaporean Member of Parliament and an active contributor to Singapore-China relations, explores the future of the China-ASEAN relationship

More than half of the population of South-East Asia is under 30. With many economists saying that the Asian century is upon us, the future is largely in their hands. These young people inherit a tech-driven, innovative and globalized world that also faces issues such as climate change and increasingly protectionist sentiments.

Pei Ling Tin is the youngest Member of Parliament in Singapore and chief executive of Business China. A non-profit organization conceived by Singapore's Founding Prime Minister Lee Kuan Yew, he launched it together with the former Premier of the People's Republic of China Wen Jiabao in 2007. She is also Vice-Chairperson of the People's Action Party Youth Wing and Deputy Chairperson of the Communications and Information (including Smart Nation) Government Parliamentary Committee (GPC).

Q. As China's economy continues to expand and integrate with those of ASEAN, how do you think the countries can cooperate and help each other economically?

A. If we look at trends, ASEAN is the second largest trading partner of China, and China is the largest trading partner of ASEAN. There is a great deal of trade and interaction between the two and it is growing at a tremendous rate compared to the rest of the world.

The recent development of RCEP (the Regional Comprehensive Economic Partnership, a free trade agreement in the Asia-Pacific region) is another step in enlarging the overall market and enhancing market access for everyone involved. In the years to come, the intensity of trade as well as people-to-people interaction can only increase.

ASEAN is developing rapidly and is on the trajectory to become the fourth largest regional economy in the world. There are many factors that ASEAN has going for it. It is home to a young population, has natural resources and a growing middle-class, which means that consumption is also on the rise. In this, there is a level of collaboration and complementarity between the entrepreneurs of China and ASEAN.

Overall, China and ASEAN have a long history of interacting with each other. In recent times, we have seen the benefits of multilateralism. Therefore, given what's happening around the world, it has become even more important for us to engage with one another openly and fairly, so that we can all prosper together.

Q. What do you see as being the most promising areas of trade between China and ASEAN?

A. We are all moving toward a broader new digital economy. In terms of digital, with things like AI, blockchain and fintech, there would be space for us to explore and work together.

Important is how we can enable interoperability in terms of data flow, standards, policies and culture. Once we've set the right conditions, then the potential of the new digital economy can be fully unleashed. There are some ground rules that need to be put in place, and in ASEAN we are working on this, with Singapore championing interoperability in our region. There is also interest from the China market to go into ASEAN and develop further, and if managed well, this can be a boon for ASEAN markets.

Q. As the youngest MP in parliament, what are the difficulties that you feel Southeast Asian youth face in the employment market and in their careers?

A. I won't say that I speak for all youth in ASEAN as we all have different circumstances, but in ASEAN we embrace diversity. Different economies are at different stages of development and we all have different circumstances.

There are some things that are important to young people. First and foremost is access to high-quality education. Some parts of the region still have room to grow in this regard. With good education and an encouraging environment through helpful policies, I hope that young people will feel empowered and free to choose the

> We want to cultivate Singapore-China-savvy talents sensitive to the latest political and economic developments

path that they desire. Whether climbing the corporate ladder or becoming entrepreneurs, they should receive the right support.

Young people are also interested in sustainability. Questions they often ask include how we can ensure the sustainable use of resources and protect the environment. They're often concerned about how we can ensure that future generations will continue to have a thriving environment for them to also pursue their own aspirations and achieve their dreams.

Post-COVID-19, economies around the world have taken a beating and youth unemployment may be a key concern. The pandemic may also imply a new normal for governments, corporates and individuals, compelling a reimagining of the future that drives new reforms. For one, the pace of digitalization will be accelerated. Interestingly, the creativity, energy and entrepreneurial spirit of a demographically young ASEAN may help the region overcome the uncertainties and challenges our economies face.

Q. Singapore has previously been touted as an ideal model for China. Would you agree?

A. Our relationship has evolved over time. Singapore opened a little earlier, so at the beginning there were more opportunities for Singapore to help China in its reforms. After the state visits between Lee Kuan Yew and Deng Xiaoping almost four decades ago, the direction from China was to send officials to Singapore to observe and to learn. As interactions intensified, the proposal of a joint project in China to facilitate learning was made. Consequently, the Suzhou Industrial Park was born. That marked the beginning of investments in China and knowledge transfer (软件移) by Singapore. Singapore actively played the role as a catalyst and connector between China and the world. We still do. Business China, too, aims to do so as articulated in our mission.

Fast forward, China has developed rapidly and is a different country altogether, but still Singapore has areas that we feel we can still add value to, particularly in terms of people and system management. But the direction is no longer bilateral, it's now about walking toward the future together and entering third party markets together. Competing with each other is not beneficial, but we can definitely complement one another.

Q. As the CEO of the non-profit organization Business China, how do you see the organization strengthening economic ties between Singapore and China?

A. The crux is in connecting people. Irrespective of collaborations or economic cooperation, the most important thing is to learn about one another and develop trust. Then we can talk about fostering long-lasting relationships. Business China has a long mission statement, but the essence is to cultivate bilingual and bicultural talents able to preserve our multicultural heritage and also to reinforce Singapore as a cultural and economic bridge in helping China connect to the world.

It's about making sure Singaporeans understand China and continue to engage with China. In the past, we were more focused on ensuring that Singaporeans continued to be bilingual and bicultural, but now it's more than that. We want to cultivate Singapore-China-savvy talents sensitive to the latest political and economic developments, as well as the whole business environment in China. It's about taking additional steps to ensure relevancy and moving forward as a whole.

Q. With your experience in the philanthropic sector, how do you see the balance between government and non-government philanthropy in terms of the maintenance of a stable society?

A. Philosophically, I don't think that responsibility of caring for people and society should land entirely on the shoulders of the government. Civil society should play a role. There are two parts to this: the ideological part and the pragmatic part. For ideology, we talk about being inclusive and caring in society.

To be a caring society, everyone must live up to their values and not just outsource to one entity to get things done. Everyone needs to get involved. Because of that, it's important for us, as citizens, to organize ourselves and contribute on our own, whether by volunteering at a civil society organization or finding another way to complement the positives in society.

I believe society is made up of different pieces. The government is naturally responsible for the bigger ones, but it's up to us as individuals to make sure that the smaller pieces fit into the puzzle as well. Then if we look at the pragmatic part, no matter how big and efficient a government is, it is simply impossible for them to do everything. They can't always be there for everyone, and therefore society needs to rely on a network, so that you can cover that last mile. The government will organize the bigger pieces of society, provide the framework and the resources, but that last mile needs to be done by volunteers.

THE FUTURE OF SHOPPING

How Alibaba's Freshippo is shaking up the Chinese supermarket world

By Mark Andrews

Alibaba is rapidly expanding its new offline retail food store chain, Freshippo or Hema in Chinese, with stores operating on cutting-edge innovations

Imagine a top-flight supermarket, bathed in glowing white light and filled with the best food products the world can provide. The store doubles as a distribution center, so conveyor belts whiz overhead carrying a steady stream of blue shopping bags to motorbikes that deliver fresh produce to customers at home within 30 minutes of them having placed their orders online. This is not a flight of fancy but describes Freshippo in China. For many people, it represents the future of food retail.

At first glance, the Freshippo stores look like any other upscale supermarket, but tech integration is taken to another level with digital price tags, self-checkout, mechanized and robot transport of products from store to delivery drivers, and to instore food courts. Shoppers scan barcodes to get personalized recipe suggestions and information of everything is available through the store's mobile app, with the ubiquitous Alipay used for mobile payment.

It's a futuristic experience, and the store chain, known in Chinese as Hema, is growing rapidly. It is part of the tech giant Alibaba group and it is at the forefront of re-making the concept of how to combine online and offline retail of fresh foods, online ordering and grocery delivery services. Hema says it keeps prices down by directly sourcing products, including top quality foods from overseas. To appeal to single shoppers—a target group—package sizes are small, and all produce in the stores have a one-day turnover, ensuring freshness.

China has suffered several food safety scares in the past few years, and Hema's transparency, offering a clear traceability of products via its app, gives customers an extra level of confidence. The app also helps to build a community among shoppers, with users being able to see the most popular items of the day and view feedback from other shoppers on different products.

"I think Hema is great!" said Andrea Liu, a millennial living in Shanghai. "Deliveries often arrive in under 20 minutes and it's a relief to not have to carry all my shopping home myself. The times that I have gone into Hema stores have always been quick and convenient."

"Hema has a 'halo effect' for a few reasons," says Michael Norris strategy and research manager at AgencyChina, a market intelligence firm. "It's the first supermarket to be run by a technology giant, and it was also the first supermarket in China to fully integrate online and offline ordering." Such integration is vital in China, where consumers are increasingly using their phones for every conceivable purchase.

Hema epitomizes the concept Alibaba founder Jack Ma dubs "new retail," which sees the full integration of online and offline shopping using technology, data and customer engagement. While online shopping has been huge in China for several years, fresh food was not on the menu until recently.

"The online channel only accounted for about 4% of overall fresh food distribution in China, and the vast majority of fresh food sales still occurred offline," says Professor

> **Hema is a perfect blend of offline and online experience**
>
> Steffi Noel
> Project Leader
> Daxue Consulting

Bing Jing of CKGSB, referring to 2019 data. Furthermore, retail space turnover in China tends to be high. Shanghai shopper David Zhang notes that the space occupied by his local Freshippo/Hema supermarket has played host to at least two other stores in the last five years, including a Walmart.

Wading in

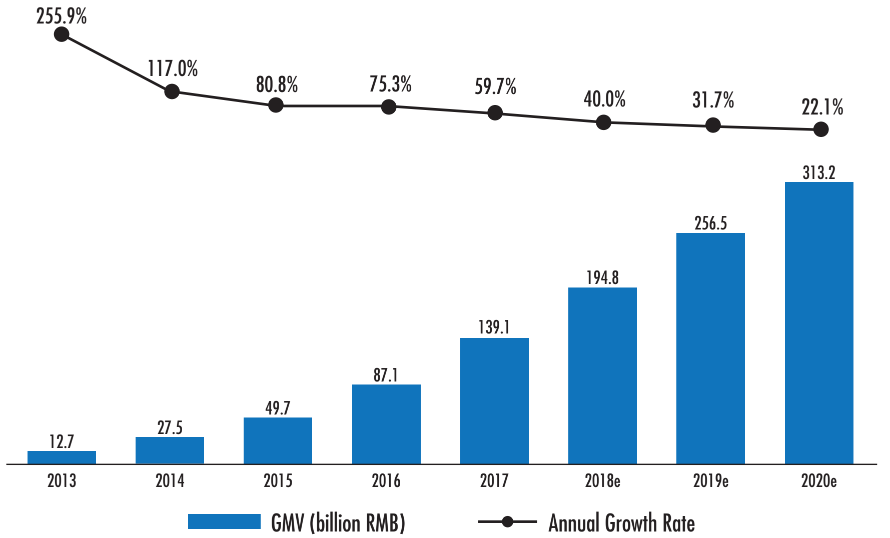
The first Hema store opened in Shanghai in 2016 and operates mainly in China's tier-one and -two mega cities. "Hema already has 228 regular stores," says Jing. "This size allows it to procure many products from the source rather than from a wholesaler. For example, it directly imports salmon, cherries and kiwis from Norway, Chile and New Zealand, respectively."

The main competition comes from China's other tech heavy hitters, Tencent and JD.com. "JD.com follows a retail strategy similar to Alibaba's New Retail: it is called Unbounded Retail," says Steffi Noel, project leader at Daxue Consulting. "It is based on the same pillars as Hema. JD.com has opened stores called 7Fresh which only sells food products, 75% of which is fresh." Tencent, meanwhile, is working with the Carrefour hypermarkets, which are now majority-owned by China's Sun Art supermarket chain.

But competition also comes from a myriad smaller shops and individuals selling fresh food locally, both online and offline. "There are some other online venders around my home that provide daily vegetables, like Carrefour, Dingdong Maicai and Yonghui," says Hema consumer Zhang. Jing notes that the more traditional competitors are often cheaper than Hema, but delivery can take longer.

Hema's profitability is difficult to judge as Alibaba treats the figures as classified and combines the company's accounts with other units. "Based on Alibaba's data, offering a combination of online and offline shopping options results in an increase in average monthly spending by customers," says Steven Gutteridge, Head of Technology for Greater China at AKQA, a digital marketing agency. "Consumers who shopped both online and offline at Hema spent an average of RMB 575 ($82) monthly, compared to under RMB 300 for purely online, or purely offline shoppers."

FRESH FOOD WOES | Gross merchandise value of China's fresh food e-commerce market, 2013-2020



Source: iResearch

This, though, is likely due to the target consumer base of Hema, which positions itself as a relatively upmarket brand and has a product mix emphasizing relatively expensive seafood and imported goods.

"On a revenue-per-square-meter basis, Hema reaches three to five times the revenue of its competitors," says Norris. But it takes around 18 months for a Hema store to achieve that level and it only applies to outlets in tier-one cities.

Hema has grown rapidly. From August 2019 to the end of the year, the number of stores in operation jumped from 171 to 197. Noel says Alibaba plans to have at least 2,000 Hema stores across China by 2022. Direct competitor 7Fresh, however, also aims to open 1,000 stores over the next three years.

Anatomy

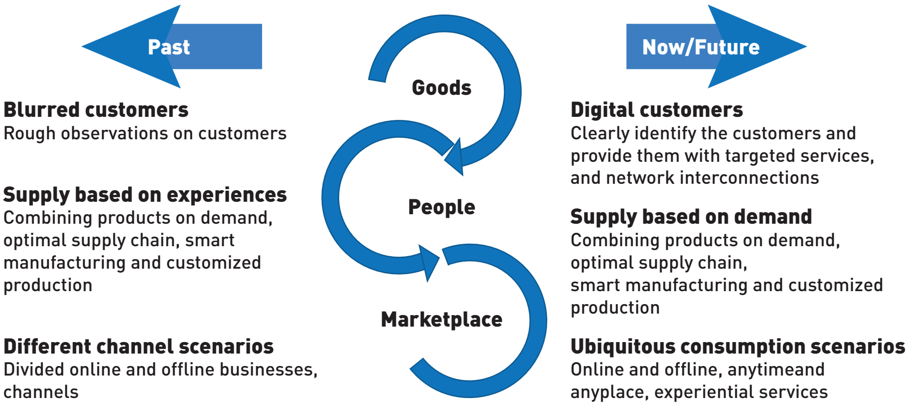
Key to the Hema experience is its mobile app, which is far more than just a way of ordering and paying for food online. "Hema is a perfect blend of offline and online experience," says Noel. "To get more information about a product, you can scan the QR code on the product and on your smartphone you have access to videos, infographics and info about the origin, the farmer, the history of the product and even ideas for cooking it."

Many traditional supermarkets in developed markets have tacked the online element onto their existing offering, but Hema integrated all channels right from the start. Visually, this is evidenced by how much a Hema store differs from a traditional supermarket. "Hema pioneered the 'store-as-a-warehouse' retail model in China," says Jing. "The distinguishing feature is that its stores are remodeled as warehouses to expedite fulfilment of online orders."

With deliveries promised in such a short time, orders are simultaneously filled in different parts of the store with the conveyor system taking the goods for collation and delivery. Online orders make up 60% of Hema's revenue. "Elsewhere, online is an accretive sales channel for supermarkets," says Norris. "But for Hema, online orders can be considered its core."

Operators in other countries are using automated warehouses and out-of-town superstores, but such models cannot meet Hema's commitment of delivery in 30 minutes within a three-kilometer radius. "Although numerous, their online orders carry much lower margins than in-store transactions because delivery is free of charge to consumers," says Jing. The model

NEW RETAIL | Hema aims to reshape the relationship between people, goods and the marketplace



Source: CKGSB Case Center

also encourages smaller orders and Norris says that the average order is only around RMB 90. Although the COVID-19 crisis increased the number of orders and attracted many new customers, the average value of orders was reported to have dropped to around RMB 40.

Addressing the issue, Hema has introduced a membership program with benefits such as a 14% discount for orders made on Tuesdays. "This program nudges shoppers toward a weekly grocery shop," says Norris. "Previously, most Chinese households would buy groceries multiple times throughout the week. Now, Hema's captured that weekly spend at the start of the week."

The right habitat

Underlying the emergence of the trend was the widespread adoption of smartphones around a decade ago. "It is the key to enable, drive and unlock the future of retail, or 'New Retail' as Jack Ma describes it," says Gutteridge. "The smartphone has almost become an extension of a user's anatomy." Crucial here, he believes, is the duopoly of the online payment systems, WeChat Pay and Alipay, along with their integration into social and commerce experiences.

If this was the enabler, the push for integration has come from rising digital advertising costs—an earlier proliferation of online-only sales was fed by cheap digital advertising. "Successful online-first brands in China, like Three Squirrels [an emerging food brand] and Perfect Diary [a makeup brand] recognized this shift and announced ambitious offline expansions," says Norris. "One thing that's interesting about these digital-native brands' embrace of offline retail is, they tend to view offline stores as a form of marketing."

Retailers are trying to create a seamless experience between the online and offline worlds. Hema, for instance, uses digital pricing, meaning that it can instantly change prices for both channels. It also feeds into the demands of today's consumer for instant gratification.

"Everything is so fast in China, with mobile payments and excellent customer service, so why should shopping take longer than anything else?" asks Noel. "The 'see now buy now' (SNBN) trend is therefore what drives demand the most." Helping China to be at the forefront in new retail is massive data collection. Noel says that less resistance to the idea of data collection from consumers in China compared to Europe has powered China ahead in technical innovation and artificial intelligence.

And it is AI that is likely to shape how retail will look in the future. "By integrating AI in new retail in China, retailers can find a better way to improve business efficiency, as well as provide a holistic shopping experience for customers," says Noel. Sensors can already monitor aspects such as the mood of a customer. "What we are seeing here is what was once simply a store that focused on sales is now an experiential center that gives consumers the opportunity to socialize, discover, eat, drink, learn, share and participate," says Gutteridge.

Sink or swim

Hema has an obvious first mover advantage in combining the online and offline shopping experience, but with many traditional supermarkets now also offering online ordering for fresh foods, it must work to stay ahead of the game. China's consumers are notoriously price-sensitive and brand loyalty is not deep.

"Consumption of Hema products in Xi'an is not high," says Xiao Jin who lives only 300 meters away from a Hema store in the northwest China city but does not use it as her main supermarket. "Compared to other supermarkets, Hema's prices are slightly higher."

Also the concept is heavily dependent on a cheap migrant workforce—the motorcycle brigade—who often work in poor conditions and under great pressure. The long-term sustainability of that logistics model is questionable, but in the short term, the availability of quality fresh foods delivered to the door within a half-hour strikes a chord with many customers.

"Hema has more kinds of vegetables and focuses on the concept of freshness and quality, other supermarkets only tend to sell goods instead of a new and healthy way of life," says shopper Miranda Liu. A reliance however on predominantly single customers and young couples without kids may prove a problem in the long term.

For the moment, the Hema/Freshippo concept appears to be working. The supermarket chain has created a model in China's biggest cities that can be rolled out across the country. It has a first-mover advantage and the backing of Alibaba. And Gutteridge highlights how Hema's strength lies in the choices it provides consumers.

"Hema is a true omnichannel retail provider," says Gutteridge. "Unlike established supermarket brands found elsewhere, they've created a proposition that focuses on delivering a seamless, non-linear experience rather than one that's delivered piecemeal."

CKGSB RESEARCH REPORT

COVID-19: A Financial Crisis and an Economic Recession

By Xu Chenggang, Professor of Economics at the Cheung Kong Graduate School of Business

The widespread effect of COVID-19 has resulted in a major jolt to both the Chinese and global economies. Its impact has been immense, far exceeding all expectations.

The key task for central banks at present is to ensure that there is adequate liquidity in the market. Should there be a sharp decline in the financial markets, it would lead to a major downsizing and a rapid reduction in liquidity. Monetary policy alone is insufficient to address this given the widespread nature of the crisis.

With the epidemic now taking hold of the global economy, focus should be placed on guarding against a financial crisis. Ensuring ample liquidity will not only save the stock market and stimulate the economy but is could help avoid a global financial crisis.

I proposed this as an abstract argument in February, when there was no serious sign of a financial crisis. Since then, the signs have become clear and prevention of a financial crisis must be a top priority.

If the financial situation worsens, the entire global economy will face devastating consequences. Immediate preventive measures would mitigate the impact of a financial downturn and benefit the economy, but the benefits of such monetary policies and financial measures for SMEs (small- or medium-sized enterprise) are limited.

The reason is simple: China's financial system is generally not geared to benefit SMEs. Therefore, if we aim to resolve the problems faced by SMEs, we must come up with solutions beyond monetary policies. The problems Chinese SMEs face cannot be resolved solely through ensuring the supply of money or by strengthening the financial system.

Understanding the current situation

The economy has been greatly impacted, but the source of the problem is not monetary or financial, but the fundamental system of the economy itself. At present, robust monetary policies are critical when it comes to preventing a financial crisis, but it is not enough to resolve the impact of the pandemic at its core. We need to understand what we are facing, as that is still the most crucial issue at hand.

The global pandemic originated in China and has now spread to the rest of the world. In terms of epidemiology, the public still has little knowledge about COVID-19. When a medical system becomes overwhelmed, an epidemic becomes far more than just an infectious disease. It could trigger paralysis of entire societies and economies.

Impact on supply chains relates to demand

Demand-side challenges have been quite serious during the pandemic. The entire hospitality industry was suspended in China at the time of the initial outbreak, with the follow-on economic impact directly hitting and affecting air and railway transportation. The impact has been a lot more serious than the impact of the global financial crisis of 2008-9.

During that crisis, people remained at home because they did not have enough money. During this crisis, people stayed home because of the pandemic. Most

> China's financial system is generally not geared to benefit SMEs

flights were canceled and border crossings closed. From an economic perspective, the impact of the pandemic has been felt by all aspects of all economies around the world.

Let us take aircraft manufacturing as an example. When airlines stop flights, they are bound to stop ordering aircraft. Lufthansa announced it would permanently retire selected A380, A340 and B747 aircraft. Hong Kong's Cathay Pacific for a time ceased almost all passenger flights. Thus, it can be assumed that Lufthansa and Cathay Pacific will not be ordering new aircraft at least in the short run or perhaps for much longer. In turn, aircraft manufacturers will suspend or drastically cut production, with aircraft parts suppliers also having to cut down on their production. The impact on one company's supply chain will both affect its upstream and downstream suppliers and vendors.

Impact of the epidemic

At the beginning of the outbreak, some experts assumed that it would be like SARS in 2003, which was a short-term epidemic. We now know that COVID-19 has had a serious impact on the global financial markets, with people seeing its all-round impact.

The impact may last until a vaccine is successfully developed, put into mass production and provided universally. One year may be the shortest time frame for a vaccine to be successfully developed and produced in quantity, and another half a year before the vaccine is able to be applied universally. Therefore, it will take one-and-a-half years at a minimum to control the disease medically and scientifically.

Where a government has sufficient resources, then spending the money should be less of an issue, and individuals and SMEs should be safe. However, the resources of the Chinese government are, in reality, limited.

Today, the fiscal resources available to the Chinese government are far less, relatively speaking, than in 2008. Back then, the Chinese government and the entire economy were considered healthy in terms of debt. When sovereign and corporate debt are low, financial leveraging may be comprehensively adopted and used to support fiscal policy.

But China is now a country with one of the highest leverage levels in the world, for instance as measured by the debt-to-GDP ratio. With an overly high leverage ratio, drastic over-spending will put the country at risk of a financial crisis. Thus, China should not and cannot repeat what it did in 2009.

Where should China allocate its limited resources in the face of an epidemic? What is the greatest difficulty the economy is facing? We must answer these questions with great care.

Due to the epidemic, SMEs are suffering the most. Significant numbers of bankruptcies of SMEs would cause an extremely high unemployment rate, as most of the working population is employed by SMEs. Therefore, it is crucial to ensure that SMEs survive.

Secondly, neither the financial nor the usual fiscal policies directly benefit and alleviate the pain of SMEs. The government's large-scale macro policies mainly benefit big enterprises, especially state-owned enterprises. So, any large-scale fiscal stimulus usually strengthens state-owned enterprises further, rather than assisting struggling SMEs. Nor will large-scale fiscal stimulus help reduce large-scale unemployment.

The government must devise a meticulous plan that will benefit SMEs. An example would be to define how the government can reduce SMEs' costs, which could be viewed as fiscal stimulus. In addition, it could also raise the income tax threshold to ease the burden on low and middle-income groups. Such fiscal stimulus is easier to implement and is more targeted. By doing so, it would allow for the distribution of wealth among low-income groups and SMEs immediately.

Government spending on infrastructure is not an effective means of fiscal stimulus in dealing with the current crisis. Compared to the government just spending money, it would be better if SMEs and the general population spent money to ensure their own survival. By doing so, it would help prevent the Chinese economy from falling into an even bigger potential crisis or even collapse.

The government has also stressed the importance of supporting so-called "new infrastructure," which illustrates the importance of technology to the economy. The development of, and support of, high-tech industries and infrastructure has its own issues—it largely depends on the market—and a strong fiscal stimulus would disrupt the market. I believe that the market should govern the development of high-tech infrastructure and industries.

The development of high-tech solutions also depends on the development of SMEs. Here, we can classify SMEs into two groups: the first is labor-intensive SMEs in the service industry, and the second is high-tech SMEs.

High-tech SMEs also face cost-related issues in their development. Therefore, efforts to reduce their costs (such as tax exemptions and reductions, as well as fee exemptions) will help their development, which would be deemed a more effective solution. The government should not design plans to just spend money. We saw the waste of resources that occurred with the fiscal stimulus provided during the global financial crisis.

Back then, the Chinese economy was healthier compared to the current economy, so it could afford wastage. However, if the economy itself is unhealthy and has structural issues, it can no longer support such an approach. If we talk about fiscal stimulus and infrastructure construction, we should remember that this epidemic is a lot more serious than earlier crises.

If governments at all levels only focus on developing infrastructure, it could be dangerous, because such a move would divert the general public's attention from where it is really needed. Governments must prioritize controlling the pandemic first and allow for the resumption of work only when it is safe to do so.

Liquidity and human capital matter most

Every enterprise should place a high priority on finding a way to survive this unprecedented challenge. Since every environment is different, every enterprise should adopt different means of doing so.

However, we should recognize that in the face of such a serious pandemic, enterprises must prioritize and focus on liquidity. Here, liquidity refers to cash and any assets that may be turned into cash quickly.

Just as important is human capital. If an enterprise must give up resources for its survival, it should ensure that it does so while protecting its human capital. If there is human capital, the enterprise will recover when things get better. If not, it will go bankrupt.

From a long-term development perspective, an enterprise must ensure liquidity for survival. In addition, it must make efforts to retain human capital because things will get better someday.

A financial crisis differs from an economic recession

Globally, experts have been discussing the impact of the current pandemic on the global economy compared to the financial crisis during 2008-2009. They include the former US Treasury Secretary, Lawrence H. Summers (President Emeritus at Harvard University) and Jason Furman, former Chair of the Council of Economic Advisors under President Barack Obama, who was directly responsible for the policies put in place when the United States faced the global financial crisis. In interviews, they have said that the impact of this epidemic on the global economy is far more serious than the global financial crisis.

Small- and medium-sized enterprises are in the greatest need of state support after COVID-19

How should we view this problem? As I said previously, believing that the problems of the pandemic now only exist overseas and that the pandemic is completely under control in China is a mistake.

Compared to the 2008 global financial crisis, this time the financial crisis is attributed not to the inherent problems of financial institutions, but to extraordinary impacts from outside the financial sector. So far, the US Federal Reserve has taken prompt action, as has the Bank of England and the ECB. The International Monetary Fund and other international financial institutions are working to coordinate the policies of all countries. Such measures will help avoid a financial crisis. But that is quite different from dealing with an economic recession.

The last economic recession resulted from a financial crisis, but the current financial problems are triggered by the fundamentals rather than finance. Therefore, efforts to ensure financial stability do not necessarily provide solutions against an economic recession.

Currently, there is no treatment or preventive medical measure that can be taken against this pandemic. The only preventive measure is through quarantine, a medieval approach. However, quarantine measures are bound to have an impact on the economy. When can quarantine be completely lifted? That can only be done safely when a vaccine has been successfully developed. As long as a vaccine does not exist, we should not abandon quarantine measures completely.

Given how quarantine measures cannot be fully lifted until a vaccine is developed, the next question is what kind of an impact will this have? What will be the impact if the epidemic rebounds and there is no measure against it? For core and important enterprises, the potential loss of human capital will have a particularly strong impact on bankruptcy potential. Therefore, we must focus on this fundamental issue whilst discussing the economic recession.

The ultimate purpose of financial policies or fiscal countermeasures is to guard against the immediate financial crisis and the subsequent economic recession. If a recession takes place, we need to take preventive measures to assist future recovery. All these preventive measures, including policies designed by the government and self-protection measures taken by enterprises for their own survival, must be well thought out in advance.

This article was originally published on NetEase in Chinese.

CKGSB RESEARCH REPORT

Trouble at the Pumps

Fu Chengyu sheds light on the impact of the oil market shock on the global economy

Fu Chengyu, Professor of Management and director of the Research Center on Governance and Management of Large Corporations at the Cheung Kong Graduate School of Business, recently shared his insights on the "Impact of the Oil Market Shock on the Global Economy." His webinar attracted over 440,000 online viewers. Fu Chengyu has more than 40 years of experience in the oil and gas industry, including as chairman of Chinese oil and gas enterprise Sinopec and chairman and CEO of the China National Offshore Oil Corporation (CNOOC). During the webinar, Professor Fu discussed the long term impact of the COVID-19 crisis on oil prices and how the dramatic fall in price has been a big plus for the Chinese economy.

"I believe four forces have led to the plummet in oil prices: changes in the capacity of the international industry; the

relation between supply and demand on the international market; games between super powers and geopolitics, specifically the reasoning of Russia and Saudi Arabia in using oil for bargaining power; and the impact of COVID-19," said Fu.

The glut of oil was the new norm even before the COVID-19 crisis, largely due to growing production of shale oil in the United States. This changed the game in the global industry by shifting the center of production to the US and disrupting oil geopolitics and supply-and-demand in the global industry.

"Oversupply became a new norm mainly due to the US's growing production of shale oil. Reducing production in OPEC+ countries (a 24 member group consisting of the 14 OPEC nations and 10 non-OPEC nations) will not cause prices to rise when US shale oil is growing robustly. At the same time, the demand for oil has been weak since the financial crisis of 2008. The US's dominance over incremental oil supply and energy geopolitics fueled the new round of price war in the oil industry."

COVID-19 contributed to the falling prices by causing countries to lock their borders, which devastated international airlines and resulted in less demand for oil. Fu suggests that oil prices will not rise anytime soon, especially now that there is an oversupply of oil.

"From my observation and analysis, I predict that the price of West Texas Intermediate (WTI) crude may drop to below \$20 per barrel and then rise to \$20-23 and stay at that level for several months to half a year, although the specific timespan will depend on containment of COVID-19," he said.

"After the pandemic is under control, the price may go to \$25-30 per barrel as demand starts to grow when economies resume, although this scenario does not consider any new agreement made by OPEC+ to cut production. What we can see is that the WTI price will fluctuate between \$25-20 per barrel for less than six months and may increase to \$30-40 per barrel either when the COVID-19 pandemic is controlled, when 15-20 million barrels per day of production is cut by OPEC+ or shale oil production suffers a substantial reduction due to the collapse of shale oil companies in the US.

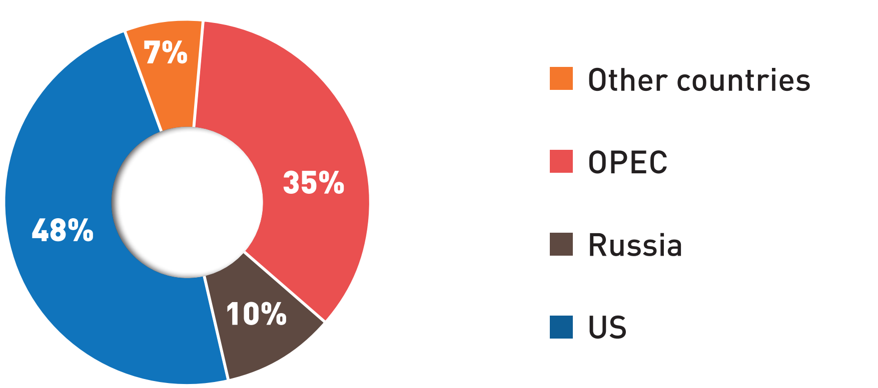
"When the global economy is fully recovered, the price might go to \$50-60 per barrel, which is a sustainable price for the industry. An oil price higher than \$60 per barrel may, on the contrary, restrain the development of the industry and stimulate the new energy and renewables industry." Professor Fu said low prices are good for oil importing countries as they help reduce economic costs, but added, "China is not able to buy more oil as it filled its oil storage capacity to more than 60% before prices plummeted. This supply will not be quickly consumed due to the lower levels of economic activity recorded during the Spring Festival and the COVID-19 pandemic. As China's economy gradually recovers, it can consume reserves, buy oil futures and rent more tankers to store the oil." The average full domestic cost of oil production in China is above \$50 per barrel. In Fu's view, China should produce less during this time and buy more oil futures at the price of \$30-40 to bring the average cost down while continuing to produce, so as to keep mines running. Fu also shared his thoughts on the impact that lower prices will have on private businesses and the wider economy. He believes that private companies in the oil industry may have a hard time with prices so low.

"Private upstream service companies need to focus on technological innovation to bring down costs for oil companies and promote their service efficiency. Downstream refineries must cut costs to survive. A low price is good for downstream oil companies, but weak demand on oil products and overcapacity downstream require companies to offer competitive prices. Low oil prices can restrain the healthy development of new or sustainable energies, but we need to look at this strategically in the long run," he said.

"As China grows stronger economically, energy security must be considered. The growth of the new energy sector can help China with its overall economic recovery, increase investment, employment and GDP (gross domestic product) and help the country gain energy independence."

Oversupply became a new norm mainly due to the US's growing production of shale oil

THE WORLD'S OIL | The incremental structure of world oil production



CKGSB BUSINESS CONDITIONS INDEX

Plight of the Private Sector

The need to protect employment and the productivity of private businesses

The BCI is directed by Li Wei, Professor of Economics at the Cheung Kong Graduate School of Business

China's private economy is still very much in the doldrums: while the immediate threat of the novel coronavirus has been curbed, the shadow of the epidemic on the economy has yet to recede.

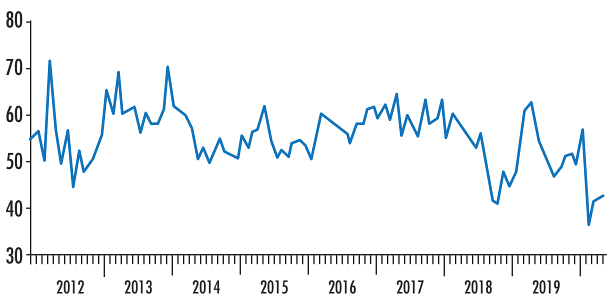
In April, the CKGSB Business Conditions Index (BCI) registered 42.2, up less than one percentage point from March (41.3). From this, we can see that the economy is still extremely weak. Without strong government policy intervention, economic growth is unlikely to be very positive going forward.

This month's BCI fully fits the description of a horizontal price movement, moving neither up nor down by much.

Introduction

Since June 2011, CKGSB has conducted a monthly survey of executives about the macro-economic environment in China called the Business Conditions Index (BCI). The BCI is skewed toward small- and medium-sized enterprises (SMEs) that are competitive in their industries, and so provides a reliable snapshot of business sentiment among successful private companies.

Business Conditions Index (BCI)



The BCI is a set of forward-looking diffusion indicators. The index takes 50 as its threshold, so a value above 50 means that the variable that the index measures is expected to increase, while an index value below 50 means that the variable is expected to fall. The BCI uses the same methodology as the PMI index.

Key Findings

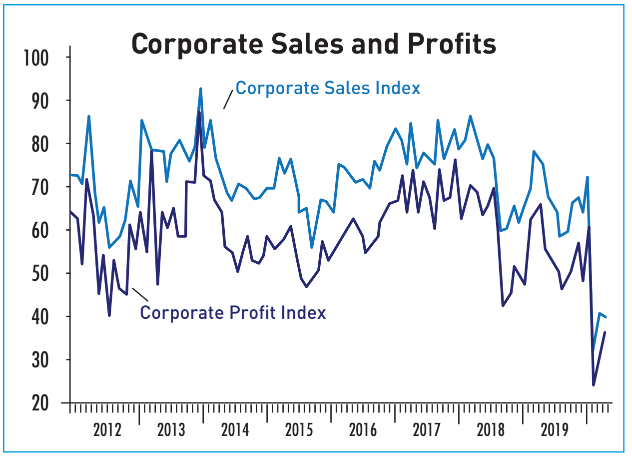
- In April, the CKGSB Business Conditions Index rebounded slightly on March's result, rising from 41.3 to 42.2.
- The investment and recruitment indices are both below the confidence threshold, showing weak sentiment.
- Foreign trade demand has fallen sharply, with total import and export growth being -8.5% year-on-year.

Analysis

The CKGSB BCI is comprised of four sub-indices: corporate sales, corporate profits, corporate financing environment and inventory levels. Three measure future prospects and one, the corporate financing index, measures the current climate.

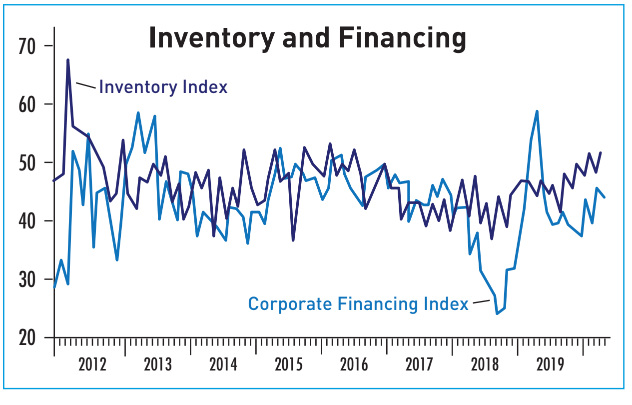
In April, two rose and two fell, but fluctuations were not large. The corporate sales index dropped slightly to 40.2 from 40.8, and the corporate profit index rose from 30.7 to 35.7.

April's corporate financing index deteriorated somewhat, falling from 45.5 to 43.9. It appears that government policies aimed at supporting small- and medium-sized companies through the crisis have not travelled the final mile to reach the accounts of the SMEs in need.



Inventory forecasts crossed back over the confidence threshold from 48.6 to 51.6.

Looking at prices, the consumer price forecast fell slightly from 40.4 to 38.4. As we appear to have escaped the clutches of inflation, we have moved swiftly closer to the jaws of deflation. The producer price index continued to fall this month, from 35.7 in March to 35.4 in April.

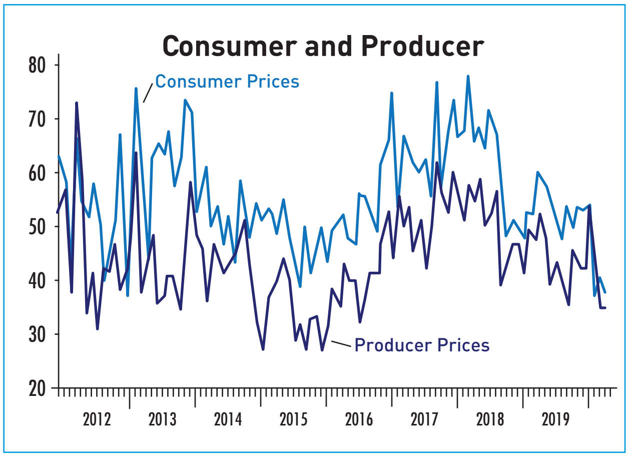


We now turn to investment and recruitment. These two indices have been consistently at the more confident end of the scale since the BCI began. In the past few months, however, both have weakened, especially the recruitment index. In April, both weakened, the investment index falling to 44.6 from 50.4, and the recruitment index falling to 45.0 from 49.1.

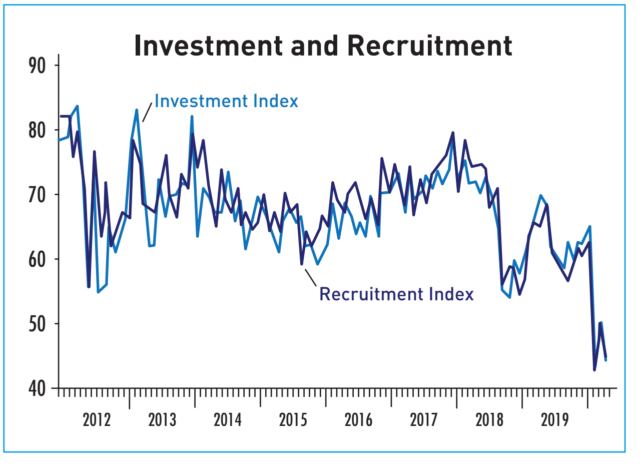
Conclusion

Our sample is comprised primarily of private SME owners, for whom the pandemic has hit hard. Private SMEs are responsible for creating the majority of jobs in China, and if this situation continues for much longer, employment rates will suffer. We will also be left facing a large-scale fall in the long-term potential growth rate of the Chinese economy.

Tied closely to such an economic downturn is deflation. Falling prices provide more evidence of the shrinking of Chinese macroeconomy, alongside rising bankruptcy and unemployment. Inflation is taboo the world over, but deflation is just as worrying.



Private companies' three biggest issues at the moment are resumption of work, sales issues and foreign trade. For many companies, resuming work remains a problem. The risk of a second outbreak of the coronavirus remains, as does the contradiction between managing the outbreak and rebooting the economy.



One policy particularly worth noting is infrastructure spending. In a system where resource allocation is dominated by the government, we expect beneficiaries of this to be mainly state-owned and large-scale private companies. Even if private small and medium-sized enterprises were able to benefit, they would have had to first survive the storm. A better way is targeted rescue methods to enable most private small and medium-sized enterprises to survive. This will protect the most vibrant part of the Chinese economy, that which is the closest to consumers and offers the most job opportunities.

THE GRAPE WALL

China is already a big force in the world market for wine. How does domestically produced wine fare in the trade?

By Mable-Ann Chang

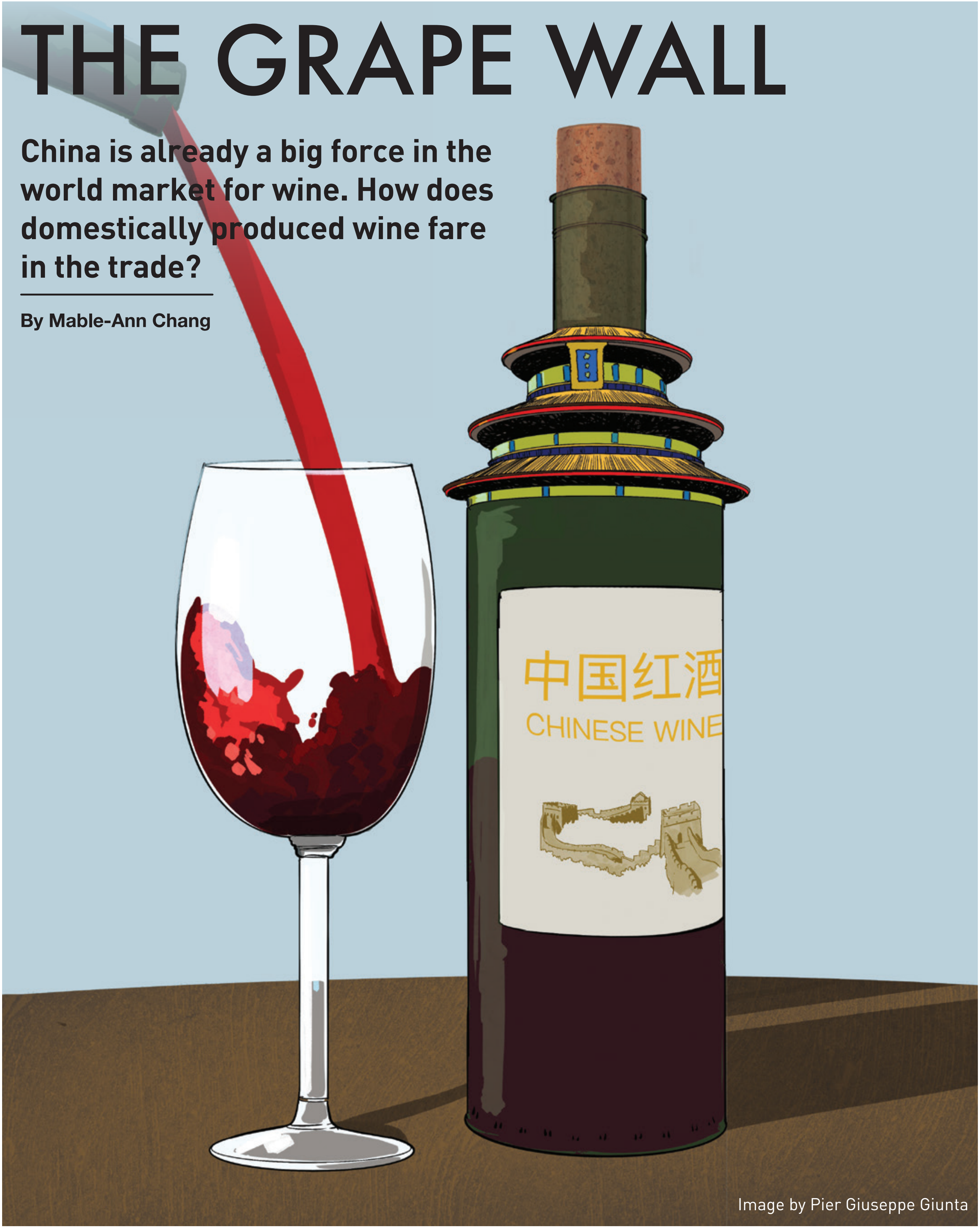


Image by Pier Giuseppe Giunta

The demand for wine among Chinese consumers is growing, creating an opportunity for wineries in the country as people look beyond imports

A stone chateau sits on a slope surrounded by sprawling vineyards complete with a wine factory and cellar, welcoming visitors for wine tastings while grapes are hand-picked and sorted under broad blue skies.

This may sound like a scene straight out of a famous wine-making region such as Tuscany, but Treaty Port Vineyards is in fact near the seaside town of Penglai on the eastern Shandong peninsula.

"I first started working in China in the 1980s and the local wines were terrible!" says Yorkshireman Chris Ruffle, owner of the winery. "This was one incentive in setting up Treaty Port Vineyards and planting our own vineyard in 2005."

A thirst for wine

China has been producing alcohol since the dawn of civilization and is well-known for its formidable clear grain alcohol known as baijiu, but it is only fairly recently—in the past two decades—that the country has become a contender in the global wine industry. The modern trend in drinking grape wines started in the 1990s with the consumption of imported red wines being a major status symbol. Red wine was later also enjoyed at special occasions and official banquets, with its popularity enhanced by its alleged health benefits. Drinking a glass or two of wine has now become, for an increasing number of Chinese people, an ordinary part of dining out.

Over recent years, the number of wine drinkers has soared, making the country the fifth largest grape wine market in the world by total consumption, and the biggest in the world by red wine consumption, according to a report released by financial data provider MarketWatch. With the country's growing thirst, the China Wine Competition, an annual international event held in Shanghai, estimates that consumption will rise over the next five years by over a third.

The amount of wine imported reached 729.68 million liters in 2018, an increase of around 80% when compared to 2013. France is the largest source of wine imports and leads the market with a 14% share, but French vineyards are seeing their share decline as other countries build their presence. The popularity of Australian wines is still growing, and they take a 9% market share—up from just 4% in 2016—driven by strong Australian brands such as Yellow Tail, Penfolds and Rawson's Retreat, says Beverage Daily, a news and analysis firm of the beverage industry. Chilean wine takes third place with a 6% market share. The value of wine imports from France in 2018 was about $1 billion, Australia $723 million and Chile $270 million.

"In the 1980s almost all wine was imported," says Ruffle. "But the potential [for domestic wine] is clearly massive given the scale of the market and the low penetration rate of wine in China."

Imported wines now account for only about 40% of the wine market, reported Beverage Daily, meaning that most of the wine that is consumed today is produced domestically.

The growth of the domestic wine industry has been impressive, with several wineries now producing internationally-recognized wines. China produced over 900 million liters of wine in 2018 and has the second-largest vineyard area globally. Some of the best-selling names in the industry include Changyu Pioneer Wine, Dynasty Wine, Great Wall Wine and Ningxia Silver Heights Winery.

"Many wines sold in China are still imported, but as the market and domestic production matures, Chinese wines will have the opportunity to become part of mainstream wine consumption," says Andy Xu, owner of Cellar Door Wines in Shanghai, an importer of Australian wines.

Suvania Naiker, owner of The Cellar, an importer of South African wines, highlights how there are now significantly cheaper options available to consumers, which also contributes to higher levels of consumption.

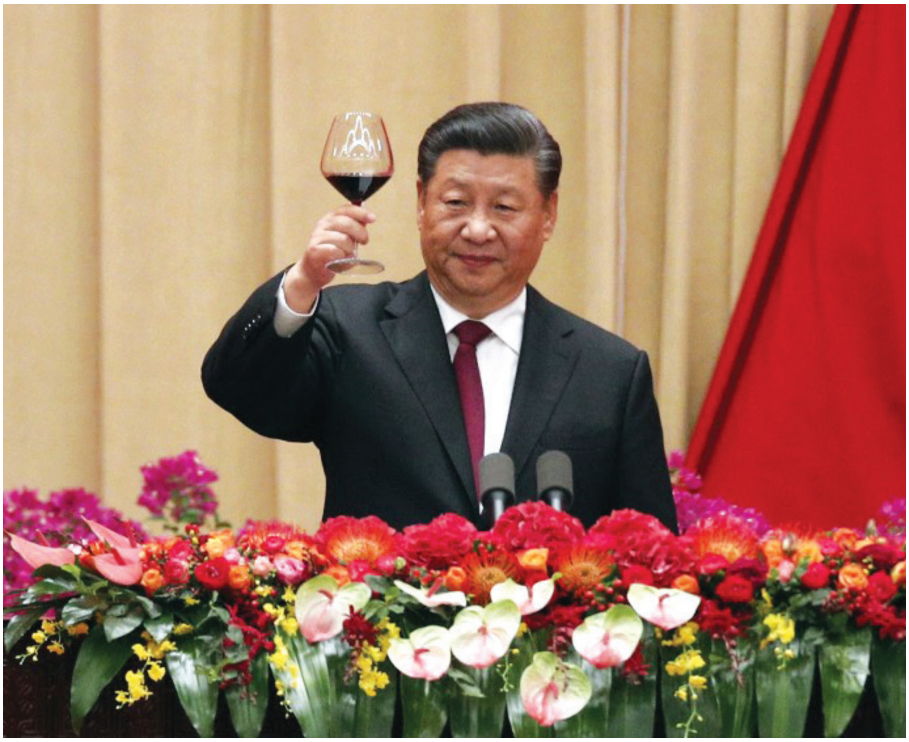
"Wine is priced very affordably in China, making it highly accessible," says Naiker. "The cheapest locally produced wine I've seen comes in at around RMB 20 ($2.80) per bottle. Imported wines are more expensive, typically from around RMB 50 and up."

> It's the young working professionals that are driving this trend of wine consumption in China
>
> Suvania Naiker
> Owner
> The Cellar

The terroir

The most popular domestically produced wine regions tend to be in northern China, with the exception of Yunnan province, which is in the south. A report released by the International Bulk Wine and Spirits Show (IBWSS), an exhibition trade show in China, highlights Ningxia as having attracted the most attention from Chinese winemakers looking to expand. Located nearly 1,500 kilometers west of Beijing, it has a cool, dry, semi-desert climate and the report compares it to the sunnier Bordeaux region in France.

Yantai in Shandong province is also an admired wine-making location and is home to over 140 wineries, with 40% of all Chinese wine being made in the region. Decanter China, a leading wine media brand delivering China-related wine news, also identifies Xinjiang region as promising, as well as Yunnan province and the Loess Plateau in Shanxi province to the south of Ningxia.



President Xi Jinping enjoys a glass of locally-produced red wine during Lunar New Year celebrations

"There is no perfect place to make wine in China," says Ruffle. "My area, Shandong, often has problems with rain in August, so we develop strategies to cope with this and avoid thin-skinned grapes. In our main 'rival' Ningxia, the summer is hot, and there are few insect issues, but the vines need irrigation in summer and the winter is very cold, and all the vines need to be buried, which is labor-intensive."

Red, red rosé

When speaking about wine in China, it is important to highlight how red wine dominates the market, particularly cabernet sauvignon, which accounts for 76.5% of domestic production, and merlot, which accounts for 12%, according to the IBWSS.

In the early stages of the wine boom, Bordeaux's influence on the industry was huge, with many Bordeaux chateaux now having been bought by Chinese entrepreneurs. Varietal selection, winemaking techniques and even winery design have mirrored the famed French wine region, contributing toward the great interest amongst Chinese drinkers in cabernet.

Not surprisingly, local producers have also looked for ways to make use of this red wine trend. One interesting development has been the rise of marselan—a French cross of cabernet sauvignon and grenache vines—as the "signature grape" of China. Marselan appears to be on its way to become the most important Chinese grape, surpassing even cabernet sauvignon.

Apart from the status attached to it, as well as the rich flavors, red wine is also preferred by Chinese tipplers for health reasons.

"Wine is perceived as healthy, especially red wine," says Ruffle. "And of course, relative to drinking baijiu, it certainly is! The color red is also considered auspicious, particularly amongst older generations."

Aficionados also argue that red wine pairs better with Chinese cuisine, but while the dominance of red wine is undisputed, consumers' knowledge about wine and tastes are a changing.

"There used to be a great deal of misunderstanding when it comes to white wine," says Sun Zhiyong, a restaurant owner in Zhejiang province's Wenzhou city. "Brand promotion was not done well, and the taste of Chinese food is generally heavier, so red wine tends to complement the food better."

"More and more people are interested in trying white wines and even dessert wines," says Naiker. "With Chinese interest in the wine scene being relatively new, consumers' tastes need time to develop. In the north, there has actually been a large increase in sales of dessert wines, such as prosecco, moscato and rosé blends because of the way it is now marketed as a complement to food."

Vinification

In terms of demographics, wine consumers are mostly younger urban residents, particularly in the country's biggest cities— Beijing, Guangzhou, Shanghai— who view wine consumption as being international and fashionable.

"It's definitely the young working professionals driving this trend of wine consumption," says Naiker. "Previously it was an older demographic that enjoyed wine, but when more variants were imported and not just red, the younger generation started taking more of an interest. Chinese people have also been consuming more and more wine because it has made them feel like part of a global community."

"Drinking wine is trendy," says Xu. "Most young people will start with a sweeter variety, and as their palates develop, they become more adventurous and willing to try other kinds."

Domestically produced wines are increasingly dominating the market but there are several factors that stand in the industry's way, including high production costs, restrictive government policies and the limited scale of wineries.

"The wine industry still has a long way to go," says Xu. "In countries like Australia, it's not necessary for boutique wineries to have their own bottling facilities. They can rent bottling machinery by the day. Here, bottling equipment is a prerequisite before the government grants you a license to produce wine, which is a big challenge for the growth of Chinese wine."

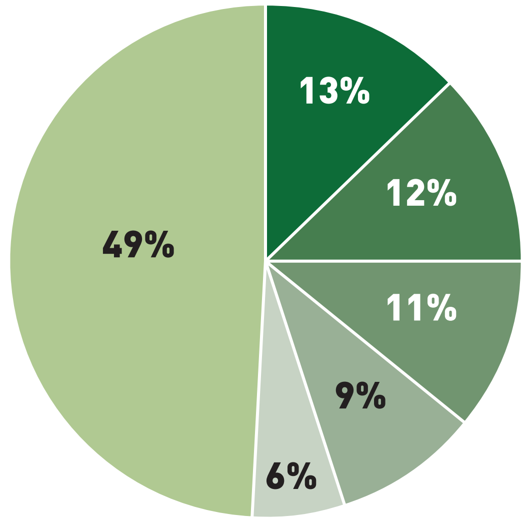
AREA UNDER VINES

Area under vines destined for the production of wine grapes, table grapes or dried grapes, in production or awaiting production

7.4 mha is the global area under vines in 2018

5 countries represent 50% of the world vieyard

- Rest of the world
- Spain
- China
- France
- Italy
- Turkey



Source: International Organisation of Vine and Wine

"Being able to produce wine therefore requires a huge level of investment," adds Xu. "It's changing, albeit very slowly, because it's not good for business. The government can't relax all of these regulations at once, because then it would be difficult to maintain standards."

Currently there is next to no export of Chinese wines, but Naiker believes that there is potential for it to become a global contender in the future.

"Once issues involving branding, mechanized production and scale are resolved, then Chinese wines have a vast potential for growth," says Naiker. "I predict that Chinese wine has around eight to 10 years to go before it becomes known on the world stage and there is a demand for it in other countries."

There is also the question of how the "Made in China" label would affect sales abroad.

"There is a big credibility issue: 'Wine from China?!' So, we need to price competitively to get consumers to try our wine," says Ruffle. "When they try it, the reaction is usually positive. My main aim is the break into the Chinese restaurant sector abroad, which at the moment largely misses out on the wine margin."

"Chinese wines have huge potential," says Naiker. "It needs to focus on its home base, as consumption here is massive. Interest abroad will take a longer time to grow, but it will surely follow."

Fermentation

With the improvement of living standards and changing lifestyle choices, the demand for wine is continuing to increase. When visiting a vineyard in Ningxia in mid-June, President Xi Jinping said that the wine industry has promising prospects as the living standards of Chinese people continue to rise.

"The potential is clearly massive given the scale of the market and the low penetration rate," says Ruffle. "However, there is also a big job of education to do when it comes to wine culture. More work needs to be done on food matching, given the variety of foods and tastes at a Chinese feast."

"There are definitely opportunities for investors, but profit is not quick to make," says Xu. "To produce good wine requires many years of trial and error. It needs to be viewed as a long-term investment."

The Landscape of Apps

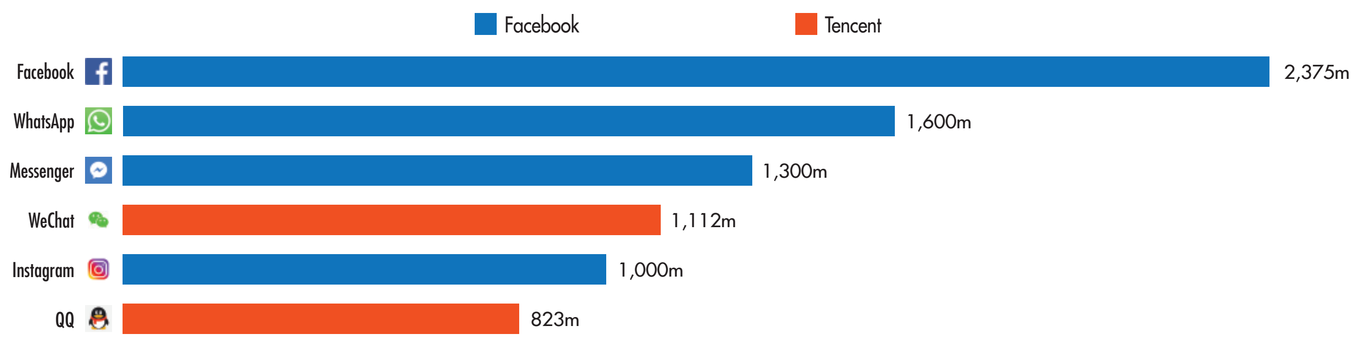
Chinese mobile phone users now spend six hours a day on their devices on average. With so much time being spent on screens, what mobile applications are being used in China compared to the West?

The Breakdown

Based on monthly active users in 2019, Facebook takes the lead globally, with the company owning four of the top-five most-popular apps.

With Facebook being blocked in China, tech company Tencent has filled the gap with WeChat, a super app that essentially integrates social media, messaging and mobile payment. Besides WeChat, there is also Twitter-competitor Weibo and instant messenger QQ.

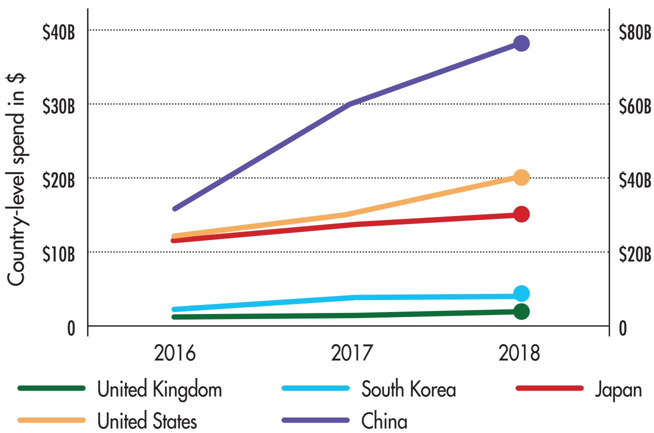
Most-popular apps globally



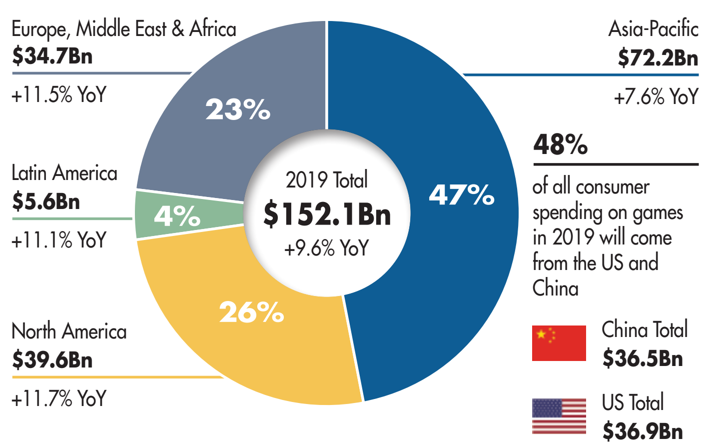
Revenues

When it comes to revenue from in-app purchases, the Chinese market is by far the biggest in the world. At close to $40 billion in app revenue in 2018, it reported nearly double the United States' figure of $20 billion. The majority of that revenue comes from gaming apps.

Top countries by consumer spend through apps



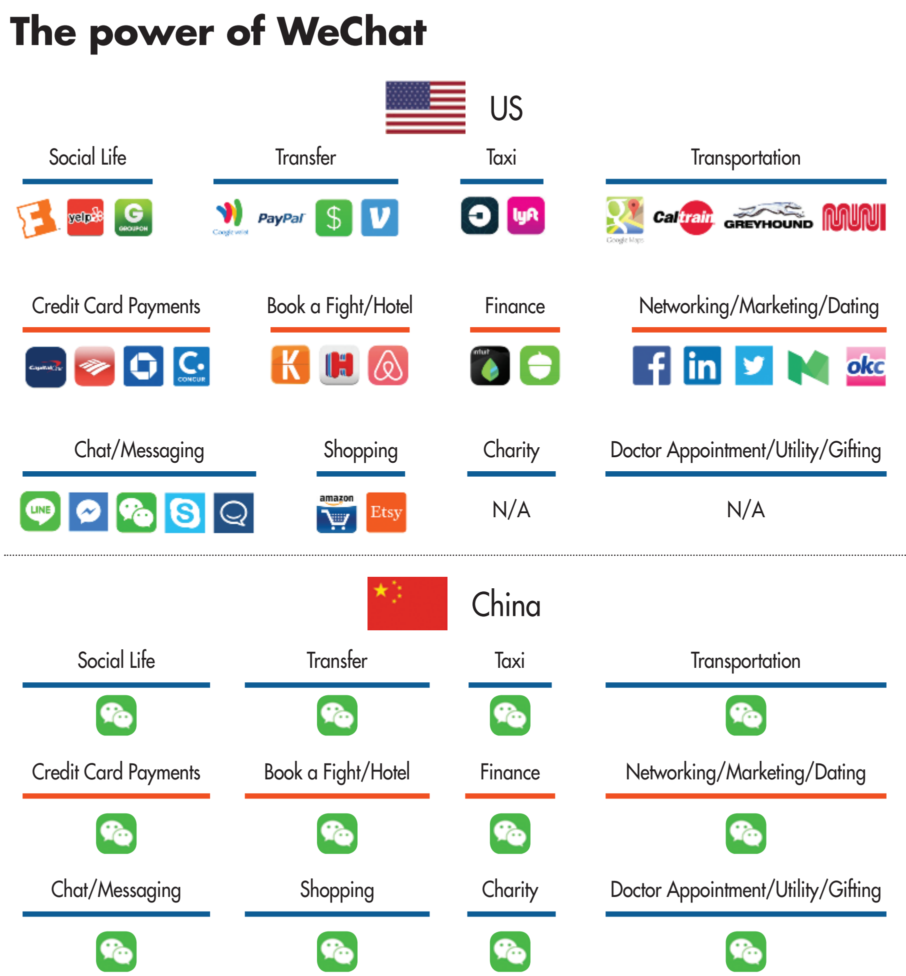
2019 Global Games Market

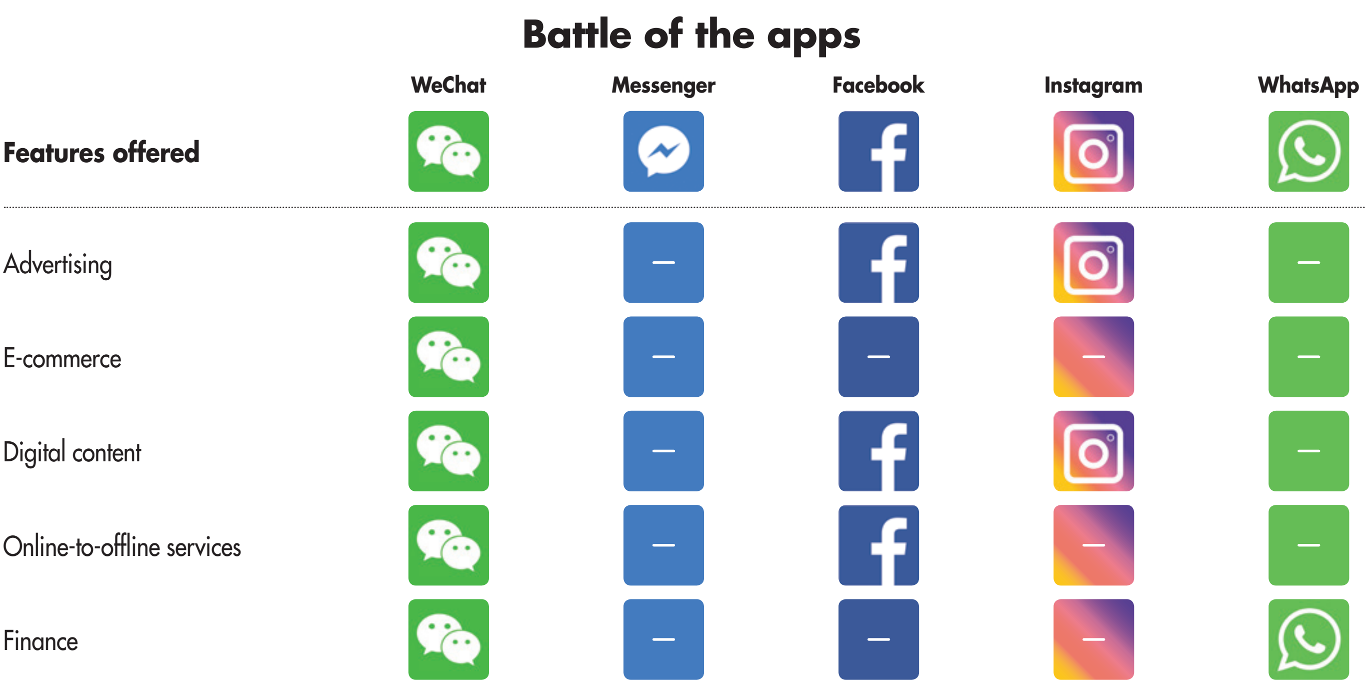


Sources: App Annie, DataReportal, Newzoo, Statistica

While Facebook is an app that nearly everyone uses in the West, WeChat is the app that dominates in China. Facebook was estimated to have taken 64% of the Western market in 2018, compared to WeChat's 98% of the Chinese market. Considered a "super app," which is an umbrella app that operates with many functions within it, WeChat has infiltrated into nearly every online aspect of consumers' lives.

WeChat users can use the app to call or message a friend, invest in financial products, shop online, transfer money to friends, hail a taxi, read the latest news, split the bill in a restaurant, book a flight, purchase a cinema ticket and meet new people nearby, amongst other things.





Sources: BDA, Tencent, *The Economist*, China Channel

The stats you need to know

Macro

All new lows

China's economic growth rate hit a **29-year-low** in 2019, with annual gross domestic product (GDP) growth measuring **6.1%**, revealing an economy under pressure from weak consumer spending, rising unemployment and problems in the banking system.

Source: *Financial Times*

Young and jobless

The nearly **9 million** tertiary-level students expected to graduate in 2020—China's biggest graduating class in roughly a decade—will enter one of the toughest job markets in recent history. China's official unemployment rate was at a record high of **6.2%** in February, above the official **5%** rate that it has held roughly constant over the past few decades.

Source: *Wall Street Journal*

The threat of bad debt

Beijing has called on banks to support companies amidst the COVID-19 crisis even though they are falling below the threshold to buffer against financial contagion itself. Non-performing loan ratios at banks are expected to rise to **3.5%** from **1.5%** in June 2019, which would push common equity tier 1 ratios at several banks to below the minimum regulatory requirement of **7.5%**.

Source: *Financial Times*

Business

Topping global listings

China edged out the US as the world's most popular venue for stock market listings in the first quarter of 2020. Initial public offerings and secondary listings in the Chinese financial centers of Shanghai and Shenzhen raised more than **$11 billion** in the first three months of the year, compared to the New York Stock Exchange and Nasdaq—which raised **$10.5 billion**.

Source: *Financial Times*

The power of patents

China became the world's top patent filer in 2019, pushing the United States—which had held the top spot for more than four decades—down to number two. A record **265,800** international patent applications were filed last year with a **5.2%** increase compared to 2018.

Source: *South China Morning Post*

Luxury and the virus

The hit to fashion and luxury sales in China from coronavirus is expected to be much harder than originally feared. Revenues are expected to plunge between **25%** and **35%** in 2020 as a direct result of store closures owing to lockdowns, with total sales projected to drop between **$450 billion** to **$650 billion**.

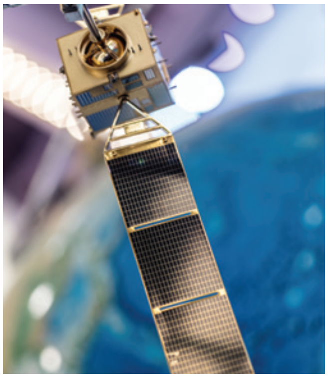
Source: *Financial Times*

Winning control

Regulators have given Goldman Sachs and Morgan Stanley permission to take majority control of their local securities joint ventures in China. Both Wall Street investment banks will be permitted to increase their holdings to **51%**, from Morgan Stanley's current **49%** and Goldman Sachs' **33%**.

Source: *Financial Times*

Technology



Satellite success

China's first satellite to conduct experiments on key technologies related to space-based gravitational wave detection, the **Taiji-1**, successfully completed its in-orbit tests in December. The satellite has amongst other things performed a breakthrough in the country's detection of gravitational waves.

Source: *Xinhua*

Energy for all

Chinese manufacturer, GCL System Integration Technology, is spending **RMB 18 billion ($2.54 billion)** to build the world's biggest solar-panel manufacturing plant in eastern Anhui province. The plant will have the capacity to meet half of global demand by producing **60 gigawatts** of solar panels a year.

Source: *Caixin*

Protecting IP

The search engine giant, Baidu, has been fined **RMB 1 million ($143,000)** for copyright violations by its cloud storage and software service. The decision by a court in Beijing represents the first such court-ordered fine against a third-party cloud operator for the illegal transmission of copyrighted material.

Source: *Caixin*

Autonomous autos

Volvo is now working with China Unicom to develop **5G**-based vehicle-to-everything **(V2X)** communication technology that can enable cars to better interact with their surroundings. With stronger data transmission capability, more-stable connectivity and shorter response times, the new technology is considered key to enabling autonomous driving.

Source: *Caixin*

Consumer

Falling birth rates

The number of newborn babies in China sunk to a near six-decade low last year. Chinese mothers gave birth to **14.65 million** babies in 2019, down from **15.23 million** in 2018. Although China's overall population continued to grow, rising to **1.4 billion**, the low birth rate raises concerns about future economic growth and support for the elderly.

Source: *South China Morning Post*

Going green

China's top economic planner has said the production and use of plastic in the country will be cut over the next five years. Non-degradable plastic bags in supermarkets, shopping malls and in food delivery services will be banned by the end of 2020.

Source: *South China Morning Post*

Wildlife ban

China's top legislature has banned the trade and consumption of wild animals. Illegal consumption is to be "severely punished," as well as hunting, trading or transporting wild animals for the purpose of consumption.

Source: *Reuters*

BOOKSHELF

A Historical Look into China

Paul French, author of *Midnight in Peking*, business adviser and analyst, recommends books that take readers back in time to understand the roots of modern Chinese society

First arriving in China in the 1990s, Paul French was co-founder of the Shanghai-based market research firm Access Asia, which was acquired by the United Kingdom's Mintel in 2012. Since then, French has worked full time as an author and written a constant flow of novels, scripts, articles and short stories all related to China, including the New York Times bestselling and Edgar Award-winning *Midnight in Peking: How the Murder of a Young Englishwoman Haunted the Last Days of Old China and City of Devils*, both now in development for TV adaptations.

French has also written a history on foreign correspondents in China and a biography of the legendary Shanghai adman, journalist and adventurer Carl Crow.

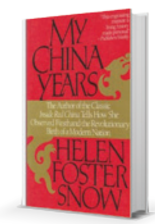
What would be your number one book recommendation for someone looking to learn more about China?

That's easy—the masterwork of my great spiritual mentor on China, Carl Crow. He arrived in Shanghai from Missouri, USA, in 1911 and over the next 25 years worked as a journalist and founded China's most successful Western-style advertising agency. His commercial memoirs, ***Four Hundred Million Customers***, is a 1937 guide to the pitfalls and delusions of doing business in China. It's amazing to see just how many people then, as now, overestimated the market, its capacity for buying anything you cared to sell, and were surprised when deals went south, fakes appeared and contracts were worthless.

What book on China have you re-read the most?

Emily Hahn's ***China To Me*** (1944) is a book I return to again and again. Hahn, the New Yorker correspondent in China in the 1930s, moves in so many worlds compared to the more ghettoized foreigners at the time (or now). She partied with Sir Victor Sassoon at the Cathay Hotel but she was also deeply involved with the poet Shao Xunmei—who was also her lover—in creating an avant-garde literary magazine. She crossed the divides and wrote about it all so well, whether on the failings of the Nationalist government or her own opium addiction.

What are you reading currently?

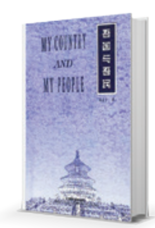


I just finished Helen Foster-Snow's autobiography ***My China Years***. I have long thought Foster-Snow the more talented, though grossly overlooked, of the couple—she was the wife, and often writing partner, of the better remembered Edgar Snow. Where Snow is declarative, self-assured and self-aggrandizing, Foster-Snow is far more subtle, engaging and deep. Just like Snow, she also went to the communist bases at Yenan, explored Shanghai and Beijing and covered the kidnapping of Chiang Kai-shek in Xi'an, but she also maintained their homes, walked the dog and organized legendary soirées.

What book totally changed your perspective on a certain topic?

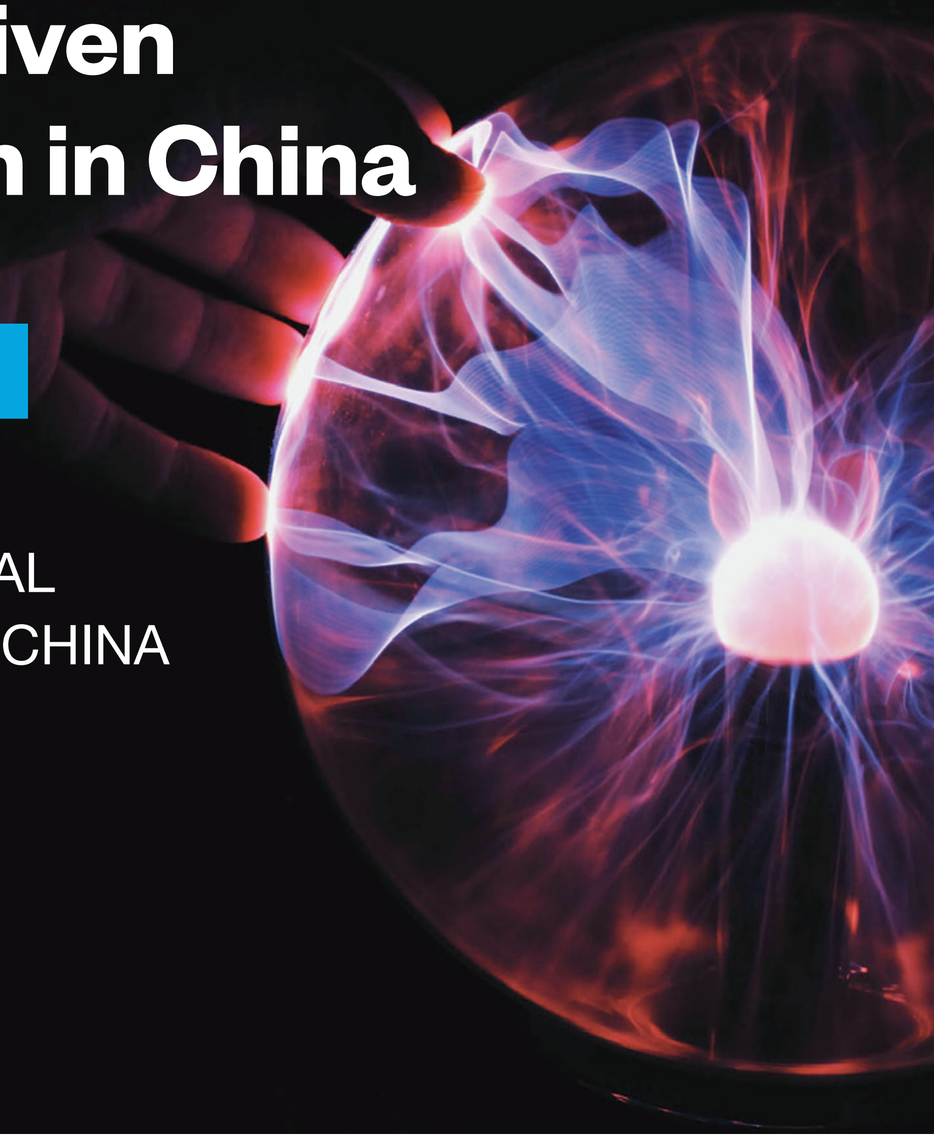
Frank Dikotter's ***The Age of Openness*** is the short book that I give everyone. It is the simple, precise and straightforward antidote to the invented narrative of the Republican period that is official history now in China and often simply accepted by outsiders. Dikotter describes the pluralistic intellectual environment, emerging educational opportunities, women's rights, thriving open markets and economic growth, as well as expanding personal liberties and rule of law under the Nationalists. It is an essential curative to much of the nonsense that today is taken as fact.

Which China book do you think is the most underappreciated?



My Country and My People by Lin Yutang was a bestseller when it was published in 1935, but is a book that I feel is underappreciated today. Think of any of the books written by foreign journalists today that try to describe China through its "types"—entrepreneur, cadre, dissident, millennial. Lin's book was in fact the first to do so. He looks at the forces that shaped China and which arguably still often have an impact now. If you want to understand why such bizarre interpretations of Confucius, social obedience, supposed collective values and beliefs have become so rampant in modern China, then this is a good place to start.

COVID19-Driven Digitalisation in China



Online LIVE Program

DIVE DEEP INTO DIGITAL INNOVATIONS LED BY CHINA

20 Jul - 13 Aug, 2020

CKGSB
长|江|商|学|院

WHO SHOULD ATTEND

- Decision-makers who are formulating global business strategy
- Marketers responsible for shaping digital strategies
- Entrepreneurs who are identifying new opportunities
- Tech-savvy professionals who want to develop business and strategic thinking
- Teams driving digital transformation in an organization

Enroll NOW

Ms. Mara YUAN
ytyuan@ckgsb.edu.cn
+86 (10) 8537 8140

CUTTING-EDGE CHINA INSIGHTS AT YOUR FINGERTIPS.