

China Icebergs: Forces That Could Reshape the World

Chinese businesses are not just changing China, they are changing the world. This bespoke study dives into the dynamics that have led to the rise of new corporate giants, while at the same time uncovering trends, firms and drivers that may be growing but are not yet fully on the surface.



Research conducted by:





Foreword

That China will define the 21st century is almost a foregone conclusion. Therefore, it behooves investors to seek a better understanding of China. Yet even those who have keenly tracked its market reforms through the 1980s and 1990s, and its growing global influence over the past two decades, acknowledge the difficulty of grasping the full breadth and depth of the Chinese opportunity as well as the obstacles.

PineBridge partnered with The Economist Intelligence Unit to bring you a multi-dimensional picture of China from the inside out to help uncover the opportunities that lie beneath the surface. Using hard data, local insights and expert interviews, this report draws out emergent trends, probes assumptions against actualities, and outlines a forward-looking framework for investors.

At PineBridge, we view contradictions and change as a wellspring of alpha, and the ever-evolving nature of the Chinese market is germane to our high-conviction, active approach. For 15 years now, we have harnessed the strength of our onshore joint venture Huatai-PineBridge, one of the largest quantitative investment managers in China by assets under management, to turn ground-level signals into exceptional alpha opportunities for our global clients.

The arc of the Chinese growth story will be long and wide. Coincidentally, this year marks 100 years since our legacy firm, AIG, laid its roots in Shanghai – a lifetime in calendar years but a mere dot in this extended timeline. We are grateful to the China experts who generously shared their perspectives on how this story unfolds, and we hope this publication adds valuable context for the long-term China investor.

A handwritten signature in black ink, appearing to read 'Greg Ehret', written in a cursive style.

Greg Ehret
Chief Executive Officer
PineBridge Investments

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About the research

China Icebergs: Forces That Could Reshape the World is an Economist Intelligence Unit report, sponsored by PineBridge Investments, that examines hidden strengths in the Chinese economy—“icebergs”—that existing and potential investors into the world’s second-largest economy should be watching.

Calum MacLeod is the report author and Jason Wincuinias is the editor. In addition to desk research and historical reference, the report’s analysis includes in-depth interviews with subject matter experts who have on-the-ground views and experience of the Chinese economy, coupled with wider industry knowledge.

Our thanks are due to the following individuals for their time and insights:

- **Yuwan Hu**, chief operations officer and research director, Daxue Consulting, Beijing
- **Yukon Huang**, senior fellow, Asia Program, Carnegie Endowment for International Peace; former country director for China, World Bank; author, *Cracking the China Conundrum: Why Conventional Economic Wisdom Is Wrong*
- **Winston Wenyan Ma**, CFA, tech investor and adjunct professor, New York University School of Law; former managing director and head of North America, China Investment Corporation (CIC); author, *China’s Data Economy (forthcoming 2019)*, *The Digital Silk Road*, *Digital Economy 2.0*, *China’s Mobile Economy*, and *Investing in China*
- **Tom van Dillen**, managing partner, Greenkern, Beijing
- **Weichuan Xu**, senior investment officer, China country anchor for financial institutions group, International Finance Corporation, Beijing

Executive summary

The US may have held its position as the world's largest economy since 1871, but in the 1820s the world's economic powerhouse was China,¹ at almost 20 times the size of US GDP. China's decline began in the 19th century and lasted until the country's economic reforms that began in 1979. Since then, China has rapidly re-emerged as a major economy.

China's boom has helped fuel global growth, but it has also raised the country's debt levels and prompted questions about economic endurance and global impact. Trends may be visible on the surface, but, like an iceberg, bigger implications lie underneath. To get a better understanding, this report aims to go below headline numbers and explore the nation's commercial strengths and potential weaknesses. Key takeaways include:

The economy is shifting, and consumers are the driving force.

Liberalisation of the private sector is shifting China from a state-backed to a consumption-led economy, which could fully transition by 2030. This has implications ranging from slower overall economic growth to greater expansion in certain business sectors. Think services and luxury goods, but also tourism and premiumisation in everyday purchases. The knock-on effects have turned domestic Chinese brands into some of the world's largest businesses on a revenue basis.

Chinese technological advances are compounding. From mobile internet to fintech to artificial intelligence and

flying cars, Chinese firms are innovating and advances are feeding into the local economy as well as going global. Chinese firms claim an increasing share of patent applications and R&D spending, though trade tensions, particularly related to technology, persist.

New growth centres are emerging—exponentially. China's lower-tier cities are growing fast and catching up to the mega-cities in terms of technology, commerce and infrastructure. However, in China even small cities are big, with nearly 300 of them hosting populations of 1m or more people. Disparities in income per capita and development still exist, but on the whole, poverty levels have dropped and the country's middle class has grown.

These dynamics show potential to push China into the top spot on the list of the world's largest economies. Risks to that outcome exist, such as continued trade and technology disputes with the US, and forecasts do range—calling for the move to happen either next year or as late as 2050. The Economist Intelligence Unit forecasts 2032 as the most likely year.²

What's ahead is, of course, debatable. And as financial professionals will attest, past performance is no guarantee of future returns. But forward-looking exercises are valuable for navigation in the business world. This report dives into data and opinion to explore the iceberg possibilities that can change China and the world.

¹ Development Centre of the Organisation for Economic Co-Operation and Development; Chinese economic performance in the long run, second edition

² The Economist Intelligence Unit, Country Forecast Main, China, April 2019

Introduction: landscape of change

Shanghai—China’s largest city on a GDP basis—felt old and forgotten in the 1980s. The Pudong district was a flat tract of paddy fields and industrial shanties. Today its skyline boasts some of the world’s tallest buildings, while magnetic levitation (maglev) trains travel to the airport at up to 430 km/hour. The city’s 25m residents transact without cash over mobile phones and sometimes pay via facial biometrics instead. And in 2020, Shanghai aims to be the first city in the world with full 5G coverage.

Shanghai has long been significant to China, but Shenzhen—once an insubstantial fishing village—is a newer development. Yet its rise tells a similar story. In 1980, before it became China’s first special economic zone, many Shenzhen roads were dirt and only a few buildings stood more than three stories tall. Bicycles traversed between aged-cement tenements against a backdrop of green fallow fields and scraggily treed hills. With only a handful of factories, there was little that was special or growth-focused about it.

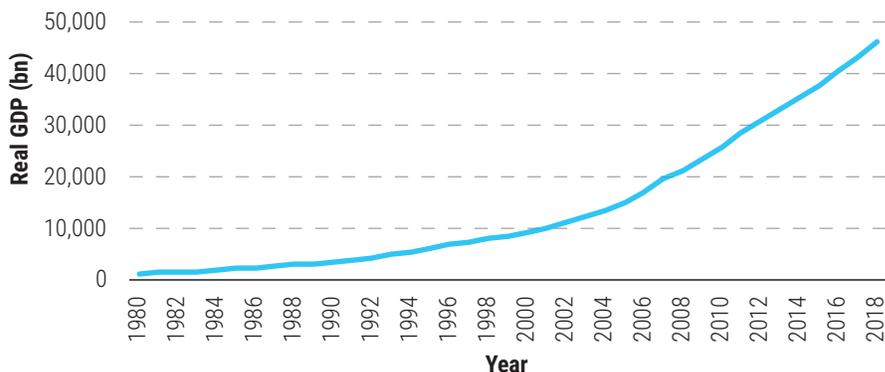
But in just 30 years, Shenzhen has swelled from 30,000 to 12m people, expanding so rapidly in the 1990s that the streets couldn’t keep up. Transformed into a glass and steel urbanscape, the former village now hosts more Fortune Global 500 companies than Singapore or Chicago, including some of China’s biggest names, such as Tencent and Ping An Insurance. Other innovators like electric car manufacturer BYD and revolutionary drone maker DJI also call the city home.

Shenzhen’s runaway development may be unique on the world stage, but in China it’s more commonplace. These futuristic cities reflect the country’s dash from having a near-zero share of the global GDP pie in 1980 to being the world’s second-largest economy today (or first in purchasing-power-parity terms). That growth is not without costs or risks; any period of accelerated economic expansion can also mask or introduce economic distortions.

These futuristic cities reflect the country’s dash from having a near-zero share of the global GDP pie in 1980 to being the world’s second-largest economy today (or first in PPP terms).

The Hockey-Stick Effect

GDP at constant (1995) market prices



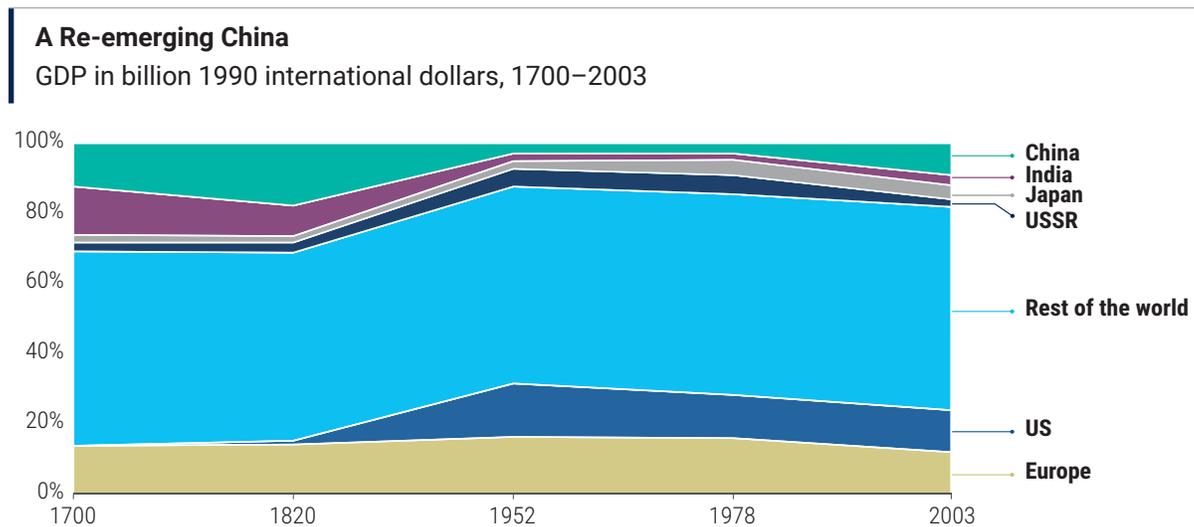
Source: EIU calculation, based on National Bureau of Statistics figures; 2018. For illustrative purposes only. We are not soliciting or recommending any action based on this material.

But a profound shift can be observed in the business world. Greater China, including Taiwan, now claims more of the world’s largest corporations by revenue than any other market, according to the 2019 Fortune Global 500 list. Out of the top five firms,

three are Chinese energy names—all are bigger than Exxon Mobil, which topped the US list and sat at number two globally only ten years ago.³The Industrial and Commercial Bank of China is the list’s top commercial bank, overtaking JP Morgan Chase and Bank of America in 2013. And while IBM still sits atop the IT-services category, this too could change in the years ahead. In 2017, China Resources surpassed Johnson & Johnson in the pharmaceuticals category. Which sectors might be next?

Understanding starts with history

Beginning in the 19th century, new technology and economies of scale boosted US GDP growth, while imperial resistance to modernisation, colonialism and internal revolts combined to drag China down. As a result, the US’s GDP swelled while China’s contracted.



Source: Development Centre of the Organisation for Economic Co-Operation and Development; *Chinese economic performance in the long run, second edition*. For illustrative purposes only. We are not soliciting or recommending any action based on this material.

“China had about 33% of world GDP [in 1820], but its share had fallen to 3% by 1980,” explains Yukon Huang, senior fellow at the Carnegie Endowment for International Peace and author of *Cracking the China Conundrum*. He calls the country “the first returning great power.” And, explaining further, he says it’s “a different great power, in terms of its features. What makes China different? Because its rise is so fast, neither the institutions in the West nor in China have had time to adjust. In the olden days, we’d had a generation, or decades, to reshape the global order.”

Since the end of the second world war, when the US emerged as the only intact industrial nation, the country’s innovations, such as supermarkets, credit cards and the internet, shaped the modern world. Business advances and economies of scale are the most prominent growth factors that are today rhymed, if not repeated, in China as it re-emerges.

China’s mobile internet economy has led to an increasingly digitalised and innovative data economy, contends Winston Wenyan Ma, former managing director of China Investment Corporation, a sovereign wealth fund. “In many different areas, you’ll see China is leaping forward to change businesses and industries into more data-driven, AI [artificial intelligence]-driven, or call it ‘smart-driven’ new models.” Such rapid technological growth is not without challenges. Privacy concerns are often raised, and how AI-enhanced surveillance capabilities will affect the future in every country, for example, is still an open question.

³ Fortune Global 500; <https://fortune.com/global500/2009>

Getting under the surface

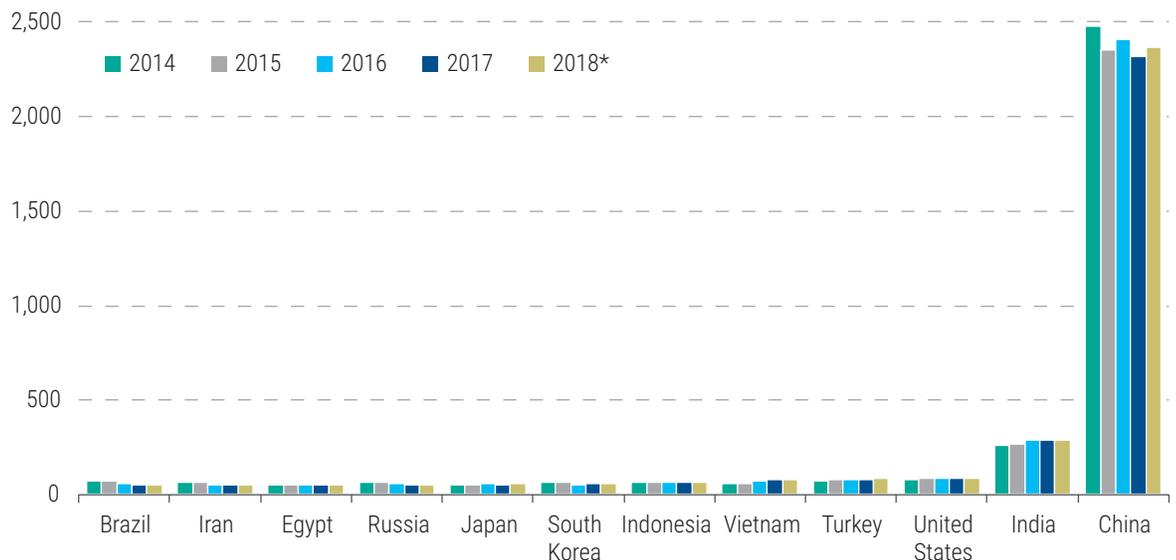
The new models and advances Mr Ma mentions are core to the unseen part of the proverbial iceberg that is the focus of this report. And while difficult to measure definitively, there are ways to estimate the order of magnitude.

Choose a metric: Shopping? Evolving from mainly state-run stores in the 1980s, China has set online retail records. Sales on Alibaba's Singles' Day reached US\$30.8bn in 2018,⁴ far outpacing Cyber Monday, the largest online sales day in the US, which grossed US\$7.9bn in 2018.⁵

Something less glamorous but more fundamental is cement. Production in the US ranged from about 70m to 86m tonnes through the 1990s⁶ and remains at similar levels today. But China's production over that same decade caught up to and passed the US, and then kept growing.

Solid Lead

Major countries in worldwide cement production from 2014 to 2018 (in million tonnes)



Source: Statista; US Geological Survey. *2018 estimate. For illustrative purposes only. We are not soliciting or recommending any action based on this material.

China's 2018 cement production figures were an estimated 2,370m⁷ tonnes, more than 25 times that of the US. Taken as a proxy for infrastructure (roads, bridges, subways, skyscrapers, etc.), the data illustrate the scale of development and investment in China. Of the country's yearly cement capacity, only near 1%⁸ is exported; China consumes the rest. There's little doubt that within the rush to build, excesses have resulted in a seesaw of pent-up demand and oversupply; the much-covered "ghost cities" being the most famous example.

⁴ Alibaba Group; <https://www.alibabagroup.com/en/news/article?news=p181112>

⁵ Adobe Analytics; <https://news.adobe.com/press-release/experience-cloud/adobe-analytics-data-shows-cyber-monday-broke-online-sales-record-79>

⁶ US Geological Survey (USGS) statistics.

⁷ USGS; Mineral Commodity Summaries 2019, page 43

⁸ CEIC; <https://www.ceicdata.com/en/china/cement-trade/cn-cement-export-ytd-portland-cement>

Even Shanghai's Pudong skyline was once labelled with the ghost moniker, but today its vacancy rate is in line with New York City's. According to Colliers, a commercial real-estate services firm, commercial vacancy rates in Pudong have fluctuated from a high of about 20% in 2009 to less than 5% in 2014 (currently sitting near 10% with a forecast to decline over the next five years).⁹ Downtown Manhattan, a similar central business district to Pudong, has a similar vacancy rate: 10.7%,¹⁰ according to Cushman & Wakefield, another commercial real-estate services company.

What's more pertinent here, and below the surface, are less tangible developments—entrepreneurship, knowledge work, productivity—that transpire in the office towers and city centres that all of China's cement built.

High-speed rail (HSR) is another metric. "China managed to become not just competitive, but a global leader in that area," says Mr Huang. China's stated aim is to connect at least 80% of its cities with HSR, and the nation went from zero capacity in 2007 to boasting the world's largest network in 2011. An early goal was to build 30,000 km by the end of 2020, but that may be surpassed before the end of 2019. By contrast, the US (where railways were a major lever of economic growth from the 1820s) still has zero kilometres of HSR.

More than mere transportation, the fast trains represent productivity gains that pay compound interest. A 2014 World Bank study estimates that the HSR in Guangdong resulted in a "10% rise in average productivity per employee."¹¹ Ultimately, those gains feed into business outcomes, as demonstrated in China's share of the Global Fortune 500.

How it grows

"In economics, when we think of an economy, we begin with a model centred around the enterprise," says Mr Huang. "It has labour, gets capital, produces—we talk about how policy affects it, what allows it to flourish."

"This model doesn't fit China," the economist and author explains, "because its local government units are economic entities. They produce; they invest; they compete with objectives that can be commercial or state-driven. When their objectives are in line with the rest of the economy, China is a very powerful economic machine."

This state-led model harks back to the days of the Soviet Union and communist Eastern Europe. "We wrote, decades ago, that state-managed entities don't succeed, they collapse." But things have changed, according to Mr Huang. "They've turned around what we considered a disadvantage and not viable into what we see today as an advantage, and now China needs to be reined in, or regulated, because this advantage is very powerful."

"We wrote, decades ago, that state-managed entities don't succeed, they collapse. They've turned around what we considered a disadvantage and not viable into what we see today as an advantage."

⁹ Colliers International, Pudong's Skyscraper Economy; <https://www.colliers.com/-/media/files/marketresearch/apac/china/eastchina-research/colliers-pudong-en.pdf>

¹⁰ Manhattan Office Marketbeat February 2019; <http://blog.cushwake.com/new-york-city/manhattan-office-marketbeat-reports-february-2019.html>

¹¹ "After controlling for broad differences in labor skills, capital endowment, industry composition and the number of hours worked, halving the economic distance within the coastal region of Guangdong can lead to a 10% rise in average productivity per employee." World Bank, *Regional Economic Impact Analysis of High Speed Rail in China*, 25 June 2014

Case study: Medical artificial intelligence

Cancer-detecting technology that provides results in 4 seconds and other AI-driven technology in the health care space are disrupting the industry.

Ping An is a well-known giant in China's insurance sector, and the publicly traded company is using that clout to push itself into other fields, such as AI. By cross-referencing millions of anonymous patient records via AI, the company helps doctors diagnose about 1,500 diseases.

China's huge data sets and AI capability also represent an export opportunity. In Singapore, which has the second-highest proportion of diabetics among developed nations, Ping An's technology is helping diagnose the disease.

Tencent, the internet giant behind WeChat and many of China's online games, launched an AI-supported diagnostic system in 2017 for conducting digital colposcopy and detecting cervical cancer. The system, called Miying, takes images and simultaneously sends them to Tencent's data centre, where AI processes them and now gives results in four seconds. The company and its medical partners claim that the AI's accuracy for early diagnoses of some cancers reaches 90%.

Other Chinese start-ups in the AI-healthcare space include Deepwise, an AI-enhanced clinical imaging provider; Shukun Technology, which develops AI diagnostics for chronic diseases; and YITU, a machine vision, listening and comprehension firm that focuses on healthcare, finance and security applications.



China's private sector now accounts for two-thirds of its GDP and 80% of urban employment,¹² which is foundational to the country's next transformation. As the private sector expands, consumer consumption grows with it. Forecasts from The Economist Intelligence Unit show China switching from a state-backed to a consumption-led economy by 2030.

State Stake Shrinking

China nominal GDP statistics (Rmb bn)

	2015	2016	2017	2018	2019	2030
Nominal GDP	69,911	74,563	81,526	88,443	95,679	201,235
Private Consumption	26,598	29,344	31,796	34,821	37,955	83,921
% of Nominal GDP	38.04	39.35	39.00	39.37	39.66	41.70
Investment	30,150	31,808	34,937	38,077	41,740	78,210
% of Nominal GDP	43.12	42.65	42.85	43.05	43.62	38.86

Sources: National Bureau of Statistics; The Economist Intelligence Unit as at 9 August 2019. Any opinions, forecasts and forward-looking statements are valid as of the date indicated and are subject to change. For illustrative purposes only. We are not soliciting or recommending any action based on this material.

It's also a transition from a manufacturing-based to a services-based economy. As Mr Huang points out, services-based economies are typically slower growing, and this is likely to be the case for China. Yet, the consumption-led story over the next ten years holds promise for particular sectors. Yuwan Hu, chief operations officer and research director at Daxue Consulting, a Chinese market research and management consulting firm, believes that a major category of companies that will see benefits are healthcare related. This "includes insurance—still [at] a low penetration rate—vaccinations, cancer treatment." But she sees this theme extending into linked industries, such as "organic foods and other organic products, and consumer items for environmental protection."

Much of that opportunity derives from an ageing population and underdeveloped business sectors, but Ms Hu also sees consumption potential in leisure themes—fashion, cosmetics, personal care—with younger consumers.

¹² The Economist, 8 December 2018; <https://www.economist.com/business/2018/12/08/chinas-private-sector-faces-an-advance-by-the-state>

Tier-ing down barriers

The Economist Intelligence Unit projects that 480m Chinese consumers (more than the whole of the US population) should reach upper-middle and high-income status by 2030.¹³ Amid continued urbanisation, China's lower tiers (smaller and less developed cities) are likely to be growth dynamos as investment and capital fan out from tier-1 cities such as Shanghai, Beijing and Guangzhou.

Bright Lights, Big Cities

Cities in China with populations over a million



Source: Economist Intelligence Unit 2018 estimates. For illustrative purposes only. We are not soliciting or recommending any action based on this material.

Growth in up-and-coming cities, also called low-tier, is like another China-size iceberg of spending power coming online over the next 15 years. Across the country, the ten largest cities only account for about 165m people.¹⁴ If top-tier consumption has been driving the growth seen thus far, what happens as the remaining billion or so people catch up?

Overall development started in large eastern-seaboard cities and progress has generally moved west and inward ever since. Taking a road trip from Shenzhen, on the border with Hong Kong, to western cities such as Zhanjiang or Qinzhou, closer to the Vietnamese border, is almost like travelling back in time. Urban development decreases and associated advances in business and technology noticeably diminish (although mobile phone/internet service is typically undeterred even in rural areas). Underdevelopment can be seen as representing deficiency or it can be viewed as pent up demand. Given growth rates for China generally, the latter is a more likely scenario.

An Economist Intelligence Unit forecast from January 2019 predicts central China will be the fastest-growing region in the country over the next three years, drawing support from transportation and logistics infrastructure development and government policies aimed at industrial relocation; at the same time, the research note says, eastern provinces have the resilience to withstand national slowdowns associated with shifting economic patterns.¹⁵ Eastern regions are dominant in the services sector, translating to less exposure to industrial disruption. There are, of course, global economic risks, such as slowing migrant flows, an overall slowing economy as China transitions to consumption reliance and trade issues dampening exports or manufacturing. Still, the lower-tier development trend has a momentum that is likely to withstand temporary shocks.

¹³ EIU definition of consumer segments: Low income - less than Rmb13,000/year; Lower-middle income - Rmb13,000-67,000/year; upper-middle income - Rmb67,000-200,000/year; high income - over Rmb200,000/year

¹⁴ Economist Intelligence Unit, 2018 estimates

¹⁵ Economist Intelligence Unit, China's emerging cities, 2018

Improved living standards and growing wealth generally drive demand for products with higher quality or safety standards, and China is no different. “Western brands are still quite representative in terms of high-end and good quality,” says Ms Hu. “But they face challenges from local brands.” Findings from Kantar, a research and brand consultancy, show that Chinese firms are making a mark globally. Kantar’s 2019 edition of its consumer study found that Xiaomi and OnePlus, both Chinese electronics makers that have made strong inroads with lower-tier consumers, are gaining recognition outside the country, as have home appliance makers Hisense and Haier.¹⁶ The report also names Japan, France and Spain as markets where Chinese brands are rising fastest in consumer esteem.

Within China, this dynamic materialises as a trend of premiumisation. From electronics to fast-moving consumer goods, premiumisation is behind sales in many sectors. Bain & Company, a business consultancy, claims the trend drove 10.3% value growth in personal-care sales in 2018.¹⁷ The auto industry is also a case in point.

“Consumers prefer a sturdy pencil case for 30 yuan from Muji [a Japanese brand] to a 2-yuan one found on [shopping site] Taobao,” explains Tom van Dillen, managing partner for Greenkern, a consultancy that works with auto brands and AI firms. “And that’s totally magnified with a car purchase.” He says Chinese consumers are becoming more sophisticated and foreign car brands are “figuring out that just localising a marketing plan is not enough.” Price sensitivity still exists but “consumers themselves are putting up a lot of new demands.”

To get the higher-end products they want, China’s consumers largely go online. Experts interviewed for this report almost all referenced Pinduoduo, an online group-buying site, not just as a service but almost as a metaphor. It’s so prominent that it has become definitive of consumer segments. Mr van Dillen, for example, uses the app as a way to define markets. “We can compare it with the Pinduoduo app crowd,” he says, referencing how car brands approach different markets in China. “People in tier-3 or lower cities are so price sensitive that the kind of sales they want to achieve there needs to be done in a very different, tactical way.” Mr Ma says “Pinduoduo tells you that for a large group of users, consumption upgrade still means buying stuff cheap in a mobile, fun way,” and adds that without shoppers outside major cities, the app wouldn’t have had so much success. “There is still more to come from the rural areas.”

¹⁶ BrandZ™ Top 50 Chinese Brand Builders 2019

¹⁷ Bain & Company; China Shopper Report 2019, Vol. 1

¹⁸ Chinese tourists: Dispelling the myths; an in-depth look at China’s outbound tourist market; McKinsey & Company 2018

¹⁹ The Future of Luxury: A Look into Tomorrow to Understand Today; <https://www.bain.com/insights/luxury-goods-worldwide-market-study-fall-winter-2018>

²⁰ CB Insights; <https://www.cbinsights.com/research/unicorn-startup-market-map>

²¹ World Bank Global Findex Database, 2017

Reach beyond the tiers

As rising incomes lead to lifestyle upgrades, tourism has become an export valve for China’s growing bulge of higher-income consumers. In 2018 there were 149m outbound trips, and a report from the China Tourism Academy pegged related spending at US\$130bn.

While those numbers are large, a 2018 report from McKinsey & Company estimates they could be even bigger, forecasting 2020 to see 160m outbound trips and driving US\$315bn in related spending.¹⁸ Chinese tourism is not new and its cashflow is most often felt in the luxury sector. Estimates from Bain show that Chinese consumers accounted for 33% of worldwide luxury consumption in 2017, with about only a quarter of sales happening domestically.¹⁹

Tourism may also be the leverage China’s digital giants need to export their platforms and prowess. To court travellers who are more accustomed to paying digitally, some overseas businesses are already embracing Chinese payment platforms, such as Alipay or WeChat. “Payment systems have developed very, very quickly in China and today we don’t actually use cash anymore,” says Ms Hu. “From high-end shopping malls down to the little business on the street, every single one is using apps [to collect payments].”

Other service platforms that recently joined China’s unicorn club are Tuandaiwang and cgtz.com. Both have attracted investments from international venture funds and have valuations exceeding US\$1bn.²⁰

These fintech companies, both in terms of technology and business models, are key to integrating lower-tier consumers into the bigger China picture. About 225m Chinese remain unbanked or under-banked, according to the World Bank,²¹ while Weichuan Xu, senior investment officer at the International Finance Corporation in Beijing, estimates the count could be closer to 300m.

“Many people in China believe the banks are not serving the individual or the common people well enough,” Mr Xu says. “Now with the availability and convenience of services on your mobile phone, you don’t need to rely on traditional banks as the only financing channels. You can go to online lenders and get first-rate services with a few taps on your screen. This truly changes people’s mentality and is a very fundamental and psychological driver.”

PineBridge view



Anik Sen
Global Head of Equities
PineBridge Investments



Hanqing Tian
Chief Investment Officer
Huatai-PineBridge

China's onshore equity market—the world's second largest in terms of market capitalization*—has never been more accessible to international investors. Yet navigating a market whose drivers are decidedly different from those of most other markets in the world can be a challenge.

Technological innovation, a rising affluent middle class, and economic rebalancing are fast reshaping China and driving secular growth. Readers will find in this report plenty of examples of how this is giving rise to new winners and losers, and a reordering of industries and sectors, with implications for investors.

We believe local knowledge and discipline will be key in capturing the equity opportunities emerging from this shift. In addition to PineBridge's experienced on-the-ground investment team of analysts, researchers and portfolio managers in the Greater China region, we take pride in the partnership with our onshore joint venture Huatai-PineBridge, which allows us to combine on-the-ground insights and global industry expertise to generate non-consensus views. We are firm believers that a rigorous stock selection process can overcome market cycles, and for that matter, news cycles. While the airwaves are saturated with news about trade, we focus on company fundamentals and that gap between perception and reality that yields alpha.

The progressive inclusion of domestic A-shares in global indexes is expected to drive substantial flows and increasing allocations towards China. As this report illustrates, investors have before them a timely entry point into the world's second-largest economy at its likely inflection point. With active management, investors should be well placed to take advantage of this significant opportunity with the selectivity and conviction that this market calls for.

* World Federation of Exchanges, as of 30 June 2019.

Consumption-bred tech or tech-led consumption?

If China's growing middle class is the engine of the shift into consumption, then technological innovation may be its most powerful fuel.

"The concept of consumption upgrade is not one-dimensional and is something unique about the Chinese market," explains Mr Ma. "On the one side, you have developed markets in Beijing, Shanghai and Shenzhen. But at the same time, you have millions of people who don't even have internet yet, so there's lots of room to discover: what will be the service that the new users are mostly seeking?"

Social commerce—the convergence of e-commerce and social media—has turned becoming key opinion leaders (KOLs), who review and recommend products to millions of followers, into a major business model. Mogu.com used live streaming of fashion influencers to build its US\$2bn in sales. The trend has spread to established Chinese names like Alibaba's Taobao, which claims that more than US\$14bn worth of its 2018 gross merchandise volume was attributable to live-streaming; the shopping site plans to extend the practice into more rural areas in what the company says is an effort to uplift poorer regions in China,²² but it's just as likely to be a strategy for laying groundwork to capture more up-and-coming consumers.

"Social commerce," says Ms Hu, "is a fast-growing sector. People are socialising, but also buying while socialising." Xiaohongshu, or "Little Red Book," is a company she highlights. "It started as a media platform; they accumulated a large number of recommendations. And then they became very impactful and influential." Combining the community aspect of Pinterest with the shopping features of an e-commerce site, the app connected influencers with

corporate accounts to create an entire ecosystem of search, review and supply. The company has drawn investment from GGV Capital in the US as well as GSR Ventures from Singapore, and Alibaba and Tencent in China. It has also attracted attention from regulators. In August 2019, Xiaohongshu was pulled from the app stores of domestic Android-based mobile providers (it was still on the Apple store), reportedly due to availability of fake or restricted items (tobacco, e-cigarettes).²³ While the firm has hit a roadblock, many of the tactics it helped pioneer—social selling, influencer selling—are becoming standard for online retail in China.

Pinduoduo is again an example in the social-commerce space, growing from founding to IPO in about three years. Another is Vancl.com, a national Chinese clothing brand that built a following from letting customers pose as models in a social-media style feed. The phenomenon is a convergence of fintech, consumption and internet technology that blurs whether tech or consumers are leading the way, while feeding into a bigger picture of China's digital economy.

According to a China Academy of Information and Communications Technology (CAICT) report, China's digital economy reached a value of nearly US\$4.5trn, with a nominal growth rate of 20.9% in 2018. The organisation says the scale of China's digital industrialisation represents just over a third of GDP and 191m jobs, accounting for 24.6% of total employment in the country with year-on-year growth for 2018 of 11.5%, significantly higher than the national total employment growth rate.²⁴ Information technology consulting firm IDC announced at its FutureScape event in Beijing in December 2018 that it expects digital technology to drive 65% of China's GDP by 2022.²⁵



²² Taobao helping farmers reap gains in livestream boom; <https://www.alizila.com/taobao-helping-farmers-reap-gains-in-livestream-boom>

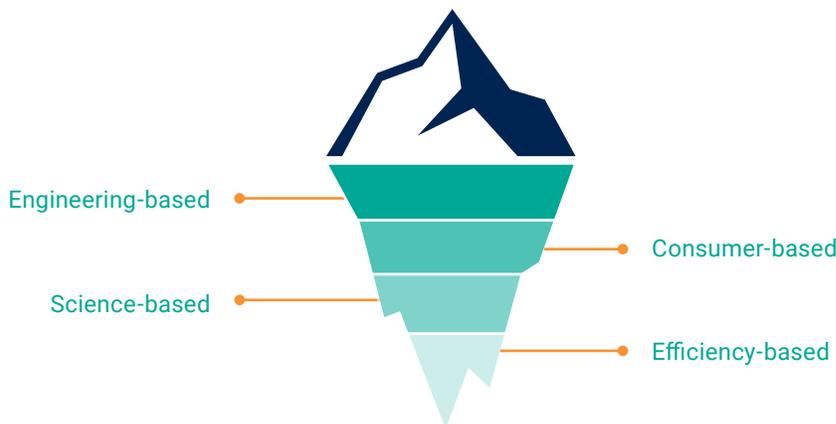
²³ Why was Xiaohongshu Pulled from China's App Stores? <https://www.azoyagroup.com/blog/view/why-was-xiaohongshu-pulled-from-chinas-app-stores>

²⁴ Includes electronic information equipment manufacturing, electronic information equipment sales and leasing, transmission services, computer services, software and the integration of other digital technologies as well as cloud computing, the Internet of Things and big data. CAICT -中国数字经济发展与就业 白皮书 (2019 年); <http://www.caict.ac.cn/kxyj/qwfb/bps/201904/P020190417344468720243.pdf>

²⁵ China's growth to be driven by digital; China Daily 20 December 2018; <http://www.chinadaily.com.cn/a/201812/20/WS5c1b3de2a3107d4c3a001eab.html>

Where are the icebergs of innovation?

Mr Huang describes four categories where China's companies have seen most of their innovative success:



Apart from HSR, China's engineering- and science-based innovations have had a mixed record. Mr Huang points out that "China is still not able to make, on its own, a globally competitive car," for example, "despite the fact it had all these joint ventures and car deals." That could change in the electric category in the future (see section on NEVs).

In terms of innovation, concerns are often raised in the market about China's technology transfer demands and cyber or intellectual property (IP) security. These are likely to remain unresolved to any satisfaction in the near term. Tensions between the US and China have been evolving from a trade to an IP dispute. The US government has blacklisted Huawei, China's largest phone maker³⁰ and the world's largest telecoms equipment manufacturer,³¹ from key technology purchases such as semiconductors and operating systems from US companies—cited as a security concern but just as often mentioned in the press as related to trade tensions. Continuation of the US trade block and the fallout from it are still unclear, but Huawei revealed a new phone chip in September 2019,³² reportedly to replace those it has been barred from buying. If the company finds wide commercial success with its semiconductors, that could indicate a global shift in how the electronics industry operates going forward.

While that story is still unfolding, consumer- and efficiency-based innovations play to China's scale and strength, thanks to intense competition and a huge domestic market of consumers who, as Mr Huang highlights "are very open to experimentation." The social e-commerce names mentioned earlier are part of that and exhibit huge potential in China, more so than most markets. But an even bigger trend, which is related because of all the associated data, is AI. "They'll succeed because they'll be able to use data unencumbered, unlike the West," confirms Mr Huang. And what China may lack in diversity of data, when compared with a market like the US, it makes up for with depth. Chinese citizens are so deeply engaged with mobile technology

²⁶ World Bank data, accessed August 2019, current prices US\$

²⁷ Includes electronic information equipment manufacturing, electronic information equipment sales and leasing, transmission services, computer services, software and the integration of other digital technologies as well as cloud computing, the Internet of Things and big data. CAICT -中国数字经济发展与就业 白皮书 (2019年); <http://www.caict.ac.cn/kxyj/qwfb/bps/201904/P020190417344468720243.pdf>

²⁸ US Bureau of Labor Statistics, as at July 2019

²⁹ Alibaba Group; <https://www.alibabagroup.com/en/news/article?news=p181111>

³⁰ IDC, July 2019; <https://www.idc.com/getdoc.jsp?containerId=prUS45414919>

³¹ Dell'Oro Group, September 2019; <https://www.delloro.com/news/worldwide-telecom-equipment-market-grew-6-percent-in-past-twelve-months>

³² Huawei lets us glimpse Mate 30's power with 5G Kirin 990 chip; <https://www.cnet.com/news/huawei-lets-us-glimpse-mate-30s-power-with-new-5g-kirin-990-chip>

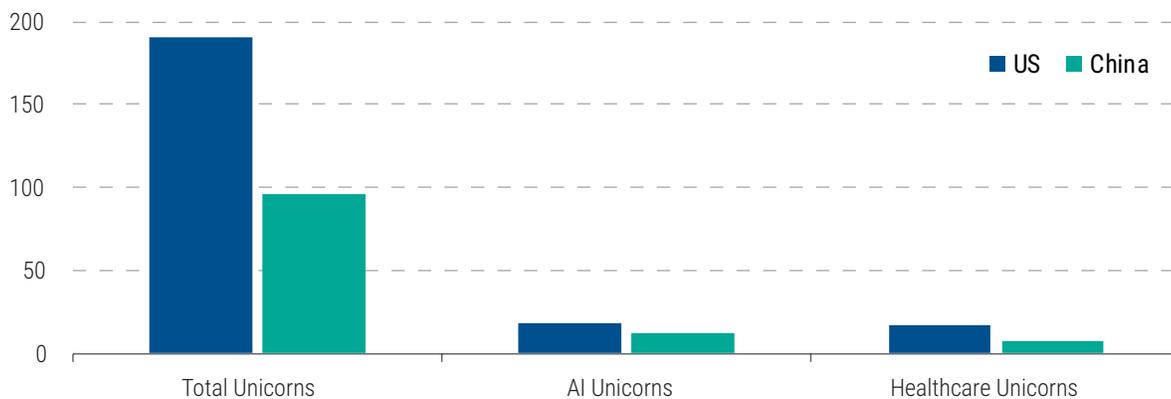
for shopping, socialising and simple daily tasks (unlocking doors, gaining access to public services), and all of that digital information readily feeds into AI systems. China’s companies are purposefully positioning themselves to profit off the dynamic. In the consumer space, understanding behaviour means understanding the market. Chinese companies have greater access to their market’s data than companies anywhere else in the world.

An example is ByteDance, parent of the globally popular TikTok app, which was founded in 2012 on the idea that mobile devices represent the future of how data would be created, collected and consumed. Valuations for the company now exceed US\$75bn, which the company is spinning into new AI-based ventures.

“In the start-up sector, you see more and more unicorns coming up—AI/machine learning, face recognition, and all those AI-enhanced entertainment platforms, or big data-based healthcare service companies, insurance companies, and new fintech companies,” says Mr Ma. “All are centred around this concept of data and AI.” These are the next generation of private companies that will serve and employ China’s consumers.

Billions and Billions Infused

Number of private startups with valuations over US\$1bn (unicorns), US and China



Source: CB Insights as at January 2019. For illustrative purposes only. We are not soliciting or recommending any action based on this material.

By 2030, China intends to be the world’s leading AI power³³ just as technology becomes increasingly seen as key to shaping the global order. “When travelling through the country, you see all the provinces, cities, setting up ambitious goals to invest into AI, encourage AI research, or welcome AI companies to incorporate and invest in their industrial parks,” says Mr Ma. Beijing, Shanghai, Shenzhen and Hangzhou are all home to corporate players in China’s AI scene, but significant government incentives are also being rolled out to build an AI ecosystem, lining up both public and venture capital with incubators, universities and start-ups.

³³ http://english.www.gov.cn/policies/latest_releases/2017/07/20/content_281475742458322.htm. For the full text in Chinese: http://www.gov.cn/zhengce/content/2017-07/20/content_5211996.htm; For an English translation: China’s ‘New Generation Artificial Intelligence Development Plan’ (2017); <https://www.newamerica.org/cybersecurity-initiative/digichina/blog/full-translation-chinas-new-generation-artificial-intelligence-development-plan-2017>

For a long time, China “was quite a free world of data in some sense, which definitely helped data collection for internet platforms,” adds Mr Ma. “Between data privacy and online convenience, for now, lots of users are choosing convenience.” But he believes change is coming. “Going forward, I think Chinese users will push back.” A recent Economist Intelligence Unit report, *The transparent business barometer: Preparing for the end of easy data*, also reaches this conclusion. “The discussion of privacy is quite slow but getting stronger. And Chinese users are also getting more familiar with the concept of data as a resource,” Mr Ma continues. Every day, in their newspapers, on TV or in WeChat, there’s talk about ‘data as an asset’, it’s the oil for the AI machine. Going forward, more users will demand a piece of the action, and will ask for at least some sharing of the property rights of their data.”

AI represents a convergence of Mr Huang’s four forms of innovation. Marrying China’s ability to build (as with HSR) with acumen in leveraging data (as with mobile apps and businesses) implies potential for its AI firms to turn into giants not only on their own turf, but also globally. Megvii (formerly Face++) and SenseTime are two Chinese AI companies that are well known for facial recognition. Other up-and-coming names include: Cambricon, which is working on a “brain-inspired” microprocessor for machine learning; iCarbonX, which uses AI for healthcare treatment analysis with a goal of developing personalised medicines; and Unisound, which develops AI voice-recognition chips for smart speakers, as well as voice-command technologies for structural design or mass production. All of these companies now have valuations of US\$1bn or more.³⁴

A recent AI report from CAICT says that in the first quarter of 2019, global financing for AI projects reached US\$12.6bn, which is a stark decline from a peak in the fourth quarter of 2017, when global investment exceeded US\$25bn. For China, the respective numbers are US\$3bn and US\$15bn.³⁵ The decline could indicate a pullback based on market conditions, as trade and economic activity seem to be slowing overall. But it could also indicate a maturing in the field, with the next stage being less about deals and more about deployment.

Marrying China’s ability to build with acumen in leveraging data implies potential for its AI firms to turn into giants not only on their own turf, but also globally.

³⁴ CB Insights, <https://www.cbinsights.com/research/unicorn-startup-market-map>

³⁵ China Academy of Information and Communications Technology, Global Artificial Intelligence Industry Data Report, 全球人工智能产业数据报告; 中国信息通信研究院 数据研究中心 2019年4月

Driving the progress of electric vehicles

Another area where China is making large headway is electric cars, or new energy vehicles (NEVs). Through a combination of political will, financial backing and entrepreneurial drive, China is now the world's largest producer and purchaser of the cars. The government calls for cumulative production and sales volume to reach 5m units by 2020.³⁶

Self-driving electric taxis, buses and trucks are being tested throughout China and people appear eager to get on board. "In terms of experimentation, just about everywhere Chinese firms are very far ahead, and also very far ahead in people being open to trying it," says Mr van Dillen. Among the many firms chasing the next stage of autonomous vehicles [see MaaS case study] is Baidu, originally a search engine company. Its promised "robotaxis" debuted at the National Intelligent Connected Vehicle Testing Zone in August 2019.³⁷

Although government policies remain a work in progress, as subsidies are added and subtracted, there's little indication that things will slow—NEVs represent a growth industry that both government and consumers support. Like other gold rushes, opportunities are likely to emerge in peripheral industries, supplying the proverbial pickaxes and shovels through a variety of components from car parts to connectivity and AI systems.

New business models in the industry include electric charging services and facilities. China already boasts the world's largest charging network, and it's still growing; UK energy company BP is set to launch a charging hub joint venture with China's ride-sharing giant, Didi Chuxing.³⁸ "The moment there is a business opportunity in any way in the charging network, it will just explode," expects Mr van Dillen. "If anything, there might be an oversupply."

³⁶ Energy Conservation and New Energy Vehicle Industry Development Plan (2012-2020); <https://www.d1ev.com/carnews/daogou/72763>

³⁷ http://www.enghunan.gov.cn/News/Localnews/201908/t20190807_5411182.html

³⁸ BP, <https://www.bp.com/en/global/corporate/news-and-insights/press-releases/bp-and-didi-join-forces-to-build-electric-vehicle-charging-network-in-china.html>





Case study: MaaS-ive Iceberg

Paradoxically, the world's largest car market may become the first to abandon individual car ownership.

Mobility as a Service (MaaS) did not originate in China, but it may be where the theme finds its most profound expression. Pollution, vehicle costs and difficulty registering private cars in major cities are all market forces that give impetus to the concept where consumers buy transport on an as-needed basis rather than owning the means. "In China, on the consumer end, it's all about persuading a fraction of the people who have the affordability and the intention to buy a car to not buy it and stay with our services,"³⁹ Stephen Zhu, vice president of ride-hailing giant Didi Chuxing, has said. The company's target isn't just to fill a gap but to become the norm.

Autonomous vehicles are key to the story. Didi Chuxing spun off its autonomous driving unit in August 2019. Aside from vehicles, the new firm will develop high-definition mapping, perception, behavioural prediction, and cloud-based control platforms that could be adopted more widely in smart cities in China or globally, making it part of China's growth in the services sector.

China's cities are often traffic-snarled and smog-bound despite multiple restrictions on

car use and ownership. "Consumers here, specifically in urban areas, are really noticing the downsides of mobility that have crept up much faster than in markets outside China," said Mr Tom van Dillen, managing partner for Greenkern. The situation is a business-driver opportunity. "Everything happens in such a compressed timeline here. People who used to dream about a car have been, within one generation, hit by it becoming impractical, unaffordable or unattainable." Consumption at scale in the car industry could be changing the very pattern of consumption itself.

There's more going on in this space. Baiyun Taxi Group, the largest taxi company in south China, established a joint venture with SCI (Guangzhou) Group, a state-owned investment and IT firm, and WeRide, a smart mobility company.⁴⁰ The new company, WeRide RoboTaxi, aims to live up to its name with e-hailing services for autonomous cabs.

"The dream scenario that car companies are looking at now for the future would be eventually having different status levels of membership—like black, silver or premium membership. A car group like Volkswagen would be able to offer different brands so it becomes an experience decision. If you want to go premium, arrive in style in a Bentley autonomous driving car," said Mr van Dillen.

³⁹ Technode, 17 August 2019; <https://technode.com/2018/08/17/china-ride-hailing-mobility>

⁴⁰ WeRide Launched a Joint Venture to Build Robo-taxi Service; <https://www.weride.ai/robo-taxi>

PineBridge view



Arthur Lau

Head of Asia ex Japan Fixed Income
PineBridge Investments



Steven Oh

Global Head of Credit and Fixed Income
PineBridge Investments

The first inclusion of Chinese local currency bonds in a global bond benchmark in April 2019 marked an important milestone for the global fixed income markets. As the world's second-largest bond market,* China has long been underrepresented in global benchmarks relative to developed markets and to the underlying opportunity.

It is only a matter of time now before global fixed income flows pivot toward China. In a low-yield global environment, Chinese bonds offer attractive yields and low correlation to developed market bonds. As China undergoes a profound economic shift, so too should global bond portfolio allocations.

The emerging trends highlighted in these pages support our view that China's economic transformation, including its deleveraging efforts and reorientation to a consumption-led growth model, will lead to a high dispersion of value in the bond market. This opens up a rich field for active bond pickers like us. As long-time China bond investors, we uncover opportunities through an intimate knowledge of issuers and sectors, and a strong understanding of the credit fundamentals as well as policy and politics. Absent global rating agencies onshore, the onus is on the investor to conduct credit due diligence, and here, experience and expertise come to the fore.

China's bond market is young—in human years, a millennial—but it has come of age. Index inclusion should precipitate further developments in the financial ecosystem, including the renminbi's internationalization. A successful economic rebalancing, capital market reforms, and increasing integration with global bond markets should bode well for the market's long-term prospects and, ultimately, for investors' returns.

* Bloomberg, as of 4 September 2019.

Growing pains of going global

China's size and room for growth have satisfied most domestic tech firms to date, but they still look to expand overseas. However, this presents a more complicated landscape, with trade tensions morphing into tech disputes, with the US in particular, and regulatory tightening in the EU, Australia and Japan.

"Misinterpreting signs, soft power, communication issues, power struggles," lists Mr van Dillen, "the problems of foreign brands in China pale beside the problems of Chinese firms going overseas." Cultural differences are significant, agrees Mr Ma. "WeChat tried to be global. In overseas markets, it tried to use Lionel Messi [a professional footballer, for endorsement], which is smart—football is universal—but still, it didn't work out. A social network is very culturally intensive."

Challenges include the complexity of local markets. Chinese companies going abroad must find ways to localise, and use local talent, but some market segments may prove beyond their capabilities. Chinese smartphones are successful in India, says Mr Ma, but local brands thrive with cheaper handsets designed for local functions, such as dialects. "To offer that kind of grassroots service is not a strength of Chinese products," he says.

And it is tough to replicate China's domestic success. In fintech, says Mr Xu, companies need "so many different elements that would enable or support fintech" to succeed. WeChat is central to life in China, but, he points out, many of its functions, such as payments, don't yet cross international borders.

One notable international success is TikTok, the AI-enhanced entertainment platform from ByteDance, which supplies a feed of short videos. "People can use lots of special effects, so the cultural aspect became less central," and the content is "goofy and funny," says Mr Ma. "The concept of fun tends to be more universal. It's one of the few examples today of a Chinese mobile application that has gained substantial popularity outside China, and an example that Chinese apps/innovations are not necessarily copies of Silicon Valley." Moreover, the platform "is really efficient in terms of distribution of content to users based on their characteristics, and also using machine learning to really understand the content's creation; thus, the platform can identify and cultivate KOLs quickly, which makes the platform more dynamic."

Scrutiny of Chinese technology in the West may push Chinese companies towards more-welcoming developing nations, particularly within the Belt and Road sphere. The result could see Chinese capital and technology catalyse development there, just as US and European capital spurred economic development in China through the 1980s and 1990s.

US companies like Microsoft or IBM have dominated global markets on the strength of their products and services for decades. Today, more Chinese firms are reaching that level, as Fortune's Global 500 list illustrates. Given the speed with which China has become the second-largest economy, and is pursuing technologies of the future, it would be a mistake to underestimate the odds of its top companies also becoming global leaders.

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Conclusion

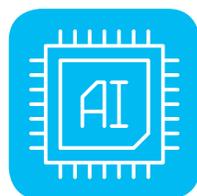
The data and history add up to three major factors, or icebergs, on the horizon that businesses, investors and strategists should put on their radar: **consumption at scale**, **compounding technological advances** and **new growth centres**.



Consumption at scale: the tip of the iceberg is the fact that China is transitioning to a consumption-based economy. And as

Mr Huang points out, such economies have slower growth in general; but that slowdown hides an expansion in volume. Scale is often overlooked. Rapid economic growth seen so far in China derives largely from top-tier cities, where residents have already upgraded their education, income and tastes. The next tier, and a far larger population, is only at the start. China's growing economy means more consumers who both buy more and buy higher quality. The Economist Intelligence Unit projects 480m Chinese consumers to reach upper-middle and high-income status by 2030.⁴¹ That implies logical trends, such as more meat on dinner tables, that have a knock-on effect in agriculture, retail and food delivery. But think a step past that. Current US meat consumption is about 99kg per capita;⁴² in China, it's roughly half that.⁴³ If Chinese consumption increases only 1kg per person over the next year, that's over a billion kilograms of meat that need processing through the entire food chain—from livestock feed to retail packaging. A kilogram is a step-change; a kilogram at scale is drastic. Consider if China's per capita meat consumption were to rise to current US levels, essentially doubling, the jump would be astronomical; capacity to meet that demand doesn't exist today.

What economists, business strategists and investors should consider is how consumption at scale alters the dynamics of consumption itself. It's an economic pressure that has to release somewhere. If resources don't exist, what are the alternatives? Rising prices globally? Lab-grown alternatives? A boom in farm tech? The same calculation holds true across consumables. China is already the world's biggest auto market, but if car ownership were to hit US levels, China's cities couldn't physically hold the volume. Consumption at scale can push markets to their breaking point, necessitating new tactics, at a far faster rate than in the past. It's a dynamic that changes the world, not just China.



Compounding technological advances: that China's engineers and entrepreneurs are making advances isn't hard to see;

that's above the surface. But how much and how quickly progress will build is the large, less visible part of the iceberg—innovation at scale may be as disruptive to world markets as consumption dynamics. Like compound interest, technological advantages tend to amplify and accelerate. Winning the space race may have decided who won the cold war; winning the AI race could have similar repercussions for whomever masters the technology. China already runs the fastest maglev train and most extensive HSR network. Will a country

with less experience be able to leapfrog? The state-owned China Railway Rolling Stock Corporation (CRRC) has already planned to put a new 600km/h-capable maglev train into production in 2021.⁴⁴ Waiting in the wings is a host of next-generation technologies, sometimes called deep tech—AI, renewable or green energies, robotics and molecular biopharmaceuticals. These take a long time to reach maturity, demand large capital outlays and have the potential to completely upend existing markets. There's no telling where the next breakthrough will emerge, but China's abundant and increasingly educated workforce can collapse timescales, and the government's willingness to endure sustained spending (such as with HSR) shouldn't be ignored. According to numbers compiled by The Economist, China is responsible for half of the total increase in global patent applications since 1990.⁴⁵ In addition, European think-tank Bruegel says the nation accounted for 20% of worldwide R&D spending in 2017.⁴⁶ Today, China lags the US in terms of semiconductor production and sophistication (only 16% of semiconductors used in Chinese manufactured products are made there),⁴⁷ but how likely is that condition to continue? And what does it mean for global businesses if this sector also becomes China's domain? Discounting the possibility of China becoming a formidable technology centre in the 21st century is an iceberg-size risk.

⁴¹ *The Chinese consumer in 2030*, The Economist Intelligence Unit Limited 2016 - Definition of consumer segments: Low income - less than Rmb13,000/year; Lower-middle income - Rmb13,000-67,000/year; upper-middle income - Rmb67,000-200,000/year; high income - over Rmb 200,000/year

⁴² Per Capita Consumption of Poultry and Livestock, 1960 to Forecast 2020, in Pounds, USDA; <https://www.nationalchickencouncil.org/about-the-industry/statistics/per-capita-consumption-of-poultry-and-livestock-1965-to-estimated-2012-in-pounds>

⁴³ Daily chart - China's Growing Meat Consumption; <https://www.caixinglobal.com/2018-10-12/charts-of-the-day-chinas-growing-meat-consumption-101334433.html>

⁴⁴ CRRC, <http://www.crrogc.cc/en/g7389/s14333/t279572.aspx>

⁴⁵ The Economist, The Chinese century is well under way, October 27th 2018

⁴⁶ Bruegel, China is the world's new science and technology powerhouse, 30 August 2017

⁴⁷ Center for Strategic & International Studies; <https://www.csis.org/analysis/chinas-pursuit-semiconductor-independence>



New growth centres unfolding China's next era. China's secondary or lower-tier cities are a still unfolding story. The tip of the iceberg

can be seen in skylines of top-tier cities like Shanghai, but progress is moving into central China as well as the western and northern frontiers. While the top-tier cities still represent only about a tenth of China's total population, the lower tier moving up in consumption power and consumer confidence is analogous to another China, with its scale and technological capability, coming into the global economy. There are hundreds of smaller cities in China with populations greater than San Francisco; all have typical big-city problems, such as income disparity, pollution or inadequate healthcare, but the people that live there have more opportunity today than ever before. Standards of living are rising. According to the World Bank, which charts poverty around the globe, China's rate has dropped substantially, from 88% in 1981 to 0.7% in 2015⁴⁸ (latest numbers available). That puts China's poverty rate below that of the US and on par with several EU member states. Technology is part of that, particularly with ecommerce and fintech; as Mr Xu says, it brings more people into the economic system and "changes people's mentality and is a very fundamental and psychological driver." There is a new confidence in the lower tier and confident consumers buy more, buy higher quality and don't accept imitations or lower safety standards, as Mr van Dillen points out. For consumer-facing businesses, this large, still growing part the country holds outsize potential. More than 70% of Alibaba's new active consumers during the 2019 fiscal year (2018/19), for example, were from China's less-developed cities.⁴⁹ Lower-tier buildout holds opportunity for basic materials and consumer goods, as well as in the sectors mentioned in this

report such as fintech, luxury goods and healthcare. State-run medical services are often highlighted in media reports as underserving China's large population, which underscores Ms Hu's observation that private healthcare may balloon in the coming years. China's new growth centres are likely to drive much of that.

Without a visit to China, these icebergs may be challenging to see. But walking on the sleepy streets of Shenzhen in 1980, or the tired ones of Shanghai of the same era, was an entirely different experience than today. The cities have transformed into vibrant, consuming centres where the next Pinduoduo or Didi Chuxing emerges regularly. When you walk through Shenzhen and spot electric charging stations for NEVs everywhere, QR codes for mobile payments displayed on every kind of business (including street buskers), and you can reach Hong Kong on the city's HSR in 14 minutes, the immensity of change and opportunity becomes more visible.

China's economy is not without risks or challenges; often side effects of its compressed development timelines can be pitfalls for entrepreneurs, investors or established corporations. And as global brands have found, even seemingly innocuous references to political hot buttons, like a map on a T-shirt, can bring harsh government reaction. But the country's growth advantages are still largely the same recipe that drove the US, from the 1820s, to become the world's biggest economy. That's a position China is likely to reclaim just over 200 years later in the 2030s.⁵⁰

"As an upper middle-income country going to high income," says Mr Huang, "China is actually growing faster than it should because it's still living off the legacy of past inefficiencies. This is both a positive and negative thing. Negative: they're not getting as much [growth] as they should. Positive: they have more potential than you would expect."

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⁴⁸ World Bank, <https://data.worldbank.org/indicator/SI.POV.DDAY?end=2015&locations=CN-1W&start=1990>

⁴⁹ Alibaba Group full fiscal-year 2019 results, as at 15 May 2019. Fiscal year end 31 March 2019.

⁵⁰ The Economist Intelligence Unit, Country Forecast Main, China, April 2019

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