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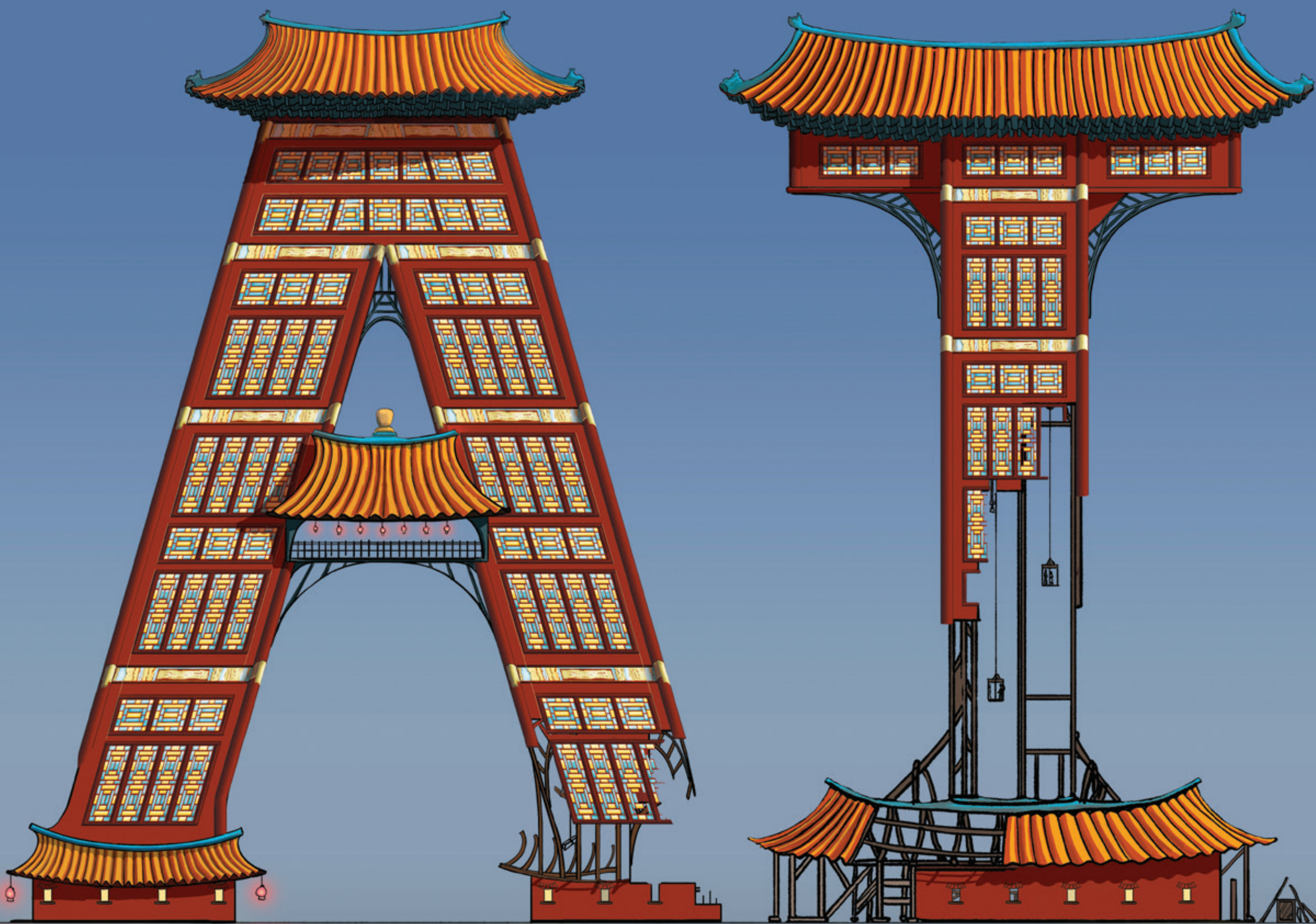

DATA STREAMS

Large Chinese companies have rapidly adopted AI, but smaller firms are finding it harder to jump on the AI bandwagon

- Despite similarities on the surface, China is unlikely to repeat Japan's lost decades
- International use of the yuan has grown, but it is still a long way behind the dollar
- China's local governments are having to search for new revenue streams

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Economy and Policy

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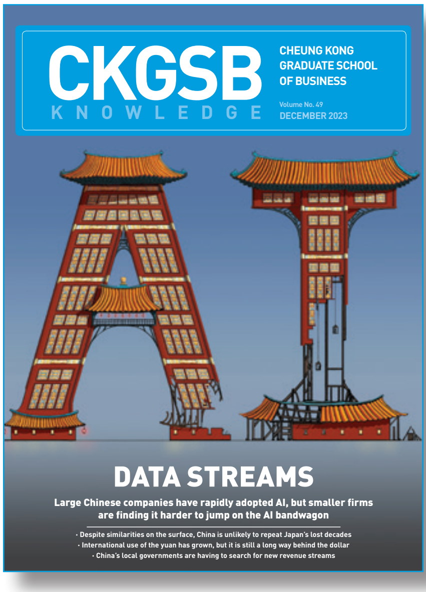


The recent acceleration of AI development around the world has been a topic of great discussion given the potential it has to revolutionize almost every aspect of our lives. For businesses, the proper adoption of AI is an unmissable opportunity, and in many senses will become a requirement in order to properly compete in the years ahead.

China is at the cutting-edge of AI development and many of its larger companies are already benefiting from utilizing the various technologies, systems and algorithms that fall under the AI umbrella. But for many of China's small and medium enterprises (SMEs), there are knowledge, finance and technology barriers to overcome before widespread AI utilization across the country's businesses can be realized. We take a closer look at the broad implementation of AI access for businesses in our cover story "**Future Intelligence**" on page 40.

The dollar's hegemony in international finance and trade has also come to the fore in recent months, with many experts suggesting that there is a possibility for another currency or currencies to take a leading role in global trade. The Chinese RMB is one of those in contention for a greater presence in the market, and there has been a steady increase in its usage in recent years, albeit having started from a low base. But there are just as many, if not more, experts that consider any significant level of de-dollarization to be unlikely, particularly in the short-to-medium term. We delve further into the details in "**Time for Change?**" on page 8.

In order for China's economy to play a greater role on the international stage, it requires a solid domestic foundation. There are currently a number of headwinds threatening that foundation, one of which is the inability of local governments around the country to develop new revenue streams to deal with their mounting debt levels. Options such as capitalizing on social media trends and developing tourism are potential stop-gaps for some municipalities, but deeper reform is needed. We discuss what such reforms could look like in "**Local Issues, Local Solutions?**" on page 27.

As well as these topics, we also take a look at China's changing demographics and the difficulties they present (page 16), as well as the growing focus within the country's populace on maintaining a good quality of life and the related development of the health and wellness industry (page 61). We are also joined by Chris Reitermann, Chief Executive for APAC and Greater China at Ogilvy, who discusses changes in Chinese consumer behavior post-COVID and the massive digitalization of Chinese advertising (page 48).

We hope you find the topics addressed in this issue provide useful insights into the contemporary China business world. If you have any comments or opinions to contribute, please feel free to contact us at (lzhou@ckgsb.edu.cn or ckgsb.knowledge@ckgsb.edu.cn).

Yours Sincerely,

Zhou Li
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/*

COMMENTARY

Correlation, not Repetition

While there are several surface-level similarities between China's current economic position and that of Japan 30 years ago, China is unlikely to recreate Japan's lost decades

Zhou Li, Editor-in-Chief of CKGSB Knowledge

All commentaries reflect the personal opinion of the author and are not necessarily the official position of the school and the magazine

China's economy currently faces a number of headwinds such as slow consumption and export growth, an aging population, the bursting of the real-estate bubble and a sluggish stock market that have many global experts predicting a continued and perhaps long-term slowdown in the country's economic development. Many of these experts have also come to the conclusion that China is doomed to experience a similar economic malaise as Japan did after its high growth period ended in the late 1980s. But the quick answer is: not necessarily.

The world is different now

To begin with, the global context of China's current situation is very different from that of Japan, whose economic rise was initially boosted by the Korean War and the subsequent market access it gained through an alliance with the West. Japan's economy was beginning to slow after the Plaza Accord which it signed alongside the US, UK, France and West Germany in the mid-1980s. The rapid appreciation of the yen against the dollar created bubbles in both Japan's real estate and financial markets, the bursting of which at the beginning of the 1990s sparked a severe economic downturn that cut the valuations of both by half and created a long-term sense of economic depression. At the time of the shift from Japanese to Chinese expansion, global economic development was led by the US and Europe, but today Asia as a whole contributes two-thirds of all global growth thanks, to a large extent, to China. The recent growth of India and ASEAN means that this Asian share is expected to continue to grow.

China is also taking a much more aggressive approach to participation in Asian and other emerging economies than Japan did 30 years ago, but more importantly the country is much better positioned in terms of two new economic trends: the digital and green economies. China has been a clear leader in digitalizing its consumer market and is now also gaining ground in AI technology and its commercialization. It is also leading in clean energy, solar in particular, and electric vehicles (EV), two major future markets.

One of the factors that compounded Japanese losses was the growth in size and competitiveness of the Chinese economy, taking a share of what had previously been markets dominated by Japan. A slowdown of the Chinese economy similar to the Japanese one 30 years ago would require the emergence of a "new China" to emulate China's role in pushing Japan aside in global markets. India's recent rise draws some comparisons as a threat to China's market presence, but, given China's scale, even if the country grew at half of India's pace it would still remain a larger economy for decades to come.

Spotting the difference

As well as this difference in positioning, there are a number of key factors that mean viewing China's prospects through the lens of Japan's economic downturn is not actually very useful in terms of predicting the country's future.

1. Independence and self-confidence

One of the main differences between China and Japan is the staunchly independent nature of China's development. As one of the longest-lasting civilizations and for centuries the largest economy in the world,

Opportunities abound: China still stands to gain from greater urbanization

China has recently gained back a level of self-confidence, becoming increasingly assertive in making its own decisions both domestically and in the Western-dominated international arena. Japan was never at the top of the pyramid in the same way, and the country's lack of independence and confidence in economic decision-making reflects this.

A key inflection point was the 2008 Global Financial Crisis, after which, in the eyes of Chinese leaders, the US model had proven to have failed, resulting in immense negative consequences for both global markets and regular people. This made China more certain in its decision to find its own way towards prosperity. The subsequent trade and tech wars with the US have cemented this choice and China is more determined than ever to expand domestic markets and build out its own supply chains.

2. Domestic economy - Demand

Japan's economic boom was primarily based on exports, and while the same can initially be said of China, the country's huge consumer population, around 11 times larger than Japan's, sets the countries apart.

Although China's per capita GDP is still much lower today than Japan's in the 1990s, the optimistic viewpoint is that this means there is still significant room for further growth. The market opportunities presented by this will enhance the development of what is already the world's fastest-growing middle class. This, of course, presupposes a continued recovery from the impact of COVID-19. But there are some positive signs, including a 4.1% jump in October Golden Week trips in 2023 versus the same week in 2019, even though spending per capita fell.

The positive impact of urbanization on growth is also well evidenced, with studies showing a strong correlation up until around a 68% urbanization rate, and China's rate is still currently only 63.56%. In contrast, Japan's urbanization rate in 1990 was already 77.34%.

3. Domestic economy - Supply

On the supply side, China is also in a strong position compared to Japan, an island country with limited natural resources. For example, according to Adamas Intelligence, China is home to 85% of global rare-earth processing capacity.

China is also home to the most developed and comprehensive supply chains in the world. The country is responsible for 20% of global manufacturing trade and is currently moving up the manufacturing value chain away from the low-cost high-quantity model of previous decades. At the same time, and to allow for self-sufficiency, it is also quickening the development of a number of critical technologies that have been subject to US trade controls—Huawei's recent return to prominence using its new self-developed technology is a good example. Japan had never been able to do this on such a scale.

When it comes to the workforce, despite having an ageing population similar to Japan's, China has a key short-term option that could deal with potential labor shortages—the comparatively low, and mandatory, retirement ages of 55 for women and 60 for men. Given the size of the country's population, raising both retirement ages to 65, for example, would immediately expand the country's workforce by over 130 million, larger than the entire Japanese population. Such a change may prove popular with those who wish to continue working after the current retirement ages, but would also have to do be done carefully and require a remarkable level of public buy-in.

4. Openness to the outside world

While the political relationship between China and many Western countries is currently unsettled, there are many more Chinese students studying in the West, as well as more business people traveling to and learning from the rest of the world, than Japanese students and business people 30 years ago. Chinese people who travel abroad have a much greater understanding of the outside world as a result and bring back fresh ideas to supplement the education on offer at home.

5. The ecosystem for innovation and entrepreneurship

Japan, while it does not have the state-owned enterprises which play such a dominant role in the Chinese economy, has a small number of very influential inter-invested business groups called *keiretsu*. These groupings have diminished in power over the past two decades but they continue to play a role in dampening the dynamism of Japan's economy.

Entrepreneurs, technological developments and opportunities for businesses to grow are all more abundant in the China market, evidenced in part by the large number of unicorns minted in the country. The country has had the second largest number of unicorns (169 in 2023) behind the US for more than a decade, Japan (20 in 2023) has never been in the top ten. There are also any number of self-made entrepreneurs to be found in China, such as Alibaba's Jack Ma and BYD's Wang Chuanfu, whereas the prevalence of comfortable jobs with good benefits in Japan mean that there are few such people found there.

The automobile industry provides a telling example of the drawbacks of Japan's incremental approach to innovation. While large Japanese car manufacturers such as Toyota, Honda and Nissan were busy perfecting their hybrid cars iterated upon the internal combustion engine, Chinese manufacturers developed entirely new products that now dominate the EV market. Innovations like this are what will set economies apart in the decades to come.

The well-known cutthroat competitiveness of the Chinese market also tends to make companies efficient, stronger and more resilient. And China is proportionally home to many more STEM graduates than Japan, which helps to boost business development at a time when knowledge in such subjects is the crux of cutting-edge advances.

China's tech infrastructure is also well ahead of Japan's. For example, with 20% of the total global 5G network deployment, China is well ahead and is also expected to lead in the application of these networks in areas such as unmanned vehicles.

6. Political and economic structure

While Japan has basically been dominated by one party since 1945, the Japanese system does have advantages in terms of participation, accountability and transparency. The centralized nature of decision-making in the China system, while in many ways less flexible, has its own advantages, providing independence from outside influences when necessary and a directness in dealing with both short- and long-term issues.

One of the key factors that many economists attribute the slow growth of the Japanese economy to, was the tendency of Japanese policy makers to keep problematic companies and industries alive with public funding. Their Chinese counterparts, due to the nature of the system, are able to make harder and sometimes unpopular decisions with long-term national benefits in mind. For example, the Zhu Rongji-led reforms of the SOEs in the early 1990s, during which many non-performing SOEs were privatized or shut down, resulted in an estimated 40 million job losses, but that was offset by explosive growth in later years. Of course, there are also examples where the "visible hand" has made mistakes, but what is clear is that, over the next few decades, the Chinese government will have a stronger role in guiding the economy when compared to Japan in the past 30 years.

The massive infrastructure development driven by the government, despite inefficiencies in some areas, has led to the creation of several huge regional business ecosystems across the country. The economic efficiency of Shenzhen and the Yangtze River Delta speeds up innovation and product development, while at the same time making them almost irreplaceable in global supply chains.

> As with all other countries in the world, China will make mistakes in the future, but they will almost certainly be its own.

Lessons learned

The opportunity to learn from Japan's experience is another reason why China is not necessarily fated to repeat the lost decades. For example, Chinese policymakers have tried to control speculation in the property market in light of Japan's past experiences. And although the recent crises of overleveraged real estate companies has caused serious concern in the Chinese capital markets, the process has been intentional and has had a smaller impact on the wider economy than when it happened in Japan.

Both Japanese and Chinese governments have a larger influence on the economy when compared to many other countries, especially the US. But in recent years, the Japanese government's influence has shrunk along with economic growth. The Chinese government, on the other hand, is continuing to exert direct control by providing a clear industrial policy and investment in infrastructure and research.

It must be said, however, that while the Japanese economy has definitely slowed over the past decades, looking beyond GDP, life for Japanese people has continued to improve in many ways. Japan has risen significantly up the UN Human Development Index, has a higher average life expectancy and boasts one of the lowest crime rates in the world. China has been learning from this and is now aiming for high-quality development instead of just the high GDP growth rate of the past four decades.

Future Chinese characteristics

There are, of course, myriad issues that China needs to address in order to ensure quality future economic development, and there are still many areas in which it may face difficulties. But the nature of those challenges will most likely be new or unique to China as it has taken and will continue to take a different path of development from Japan. It has also had plenty of time to learn from the experience and mistakes of Japan, as well as other countries around the world. As with all countries, China will make mistakes in the future, but they will almost certainly be its own.

TIME FOR CHANGE?

The dollar's hegemony over global financial transactions is being scrutinized, but a realistic alternative is yet to be found

By Shi Weijun

Image by José Luna

While the number of yuan-denominated trades are growing, countries are still not noticably increasing their reserves of the currency

Sergio Massa had his eye on China as early as 2011 when he was mayor of a city on the fringes of Buenos Aires. He had just launched the first program in Latin America sponsored by the Chinese embassy to provide free Mandarin classes in public libraries. "We are preparing the future generations for the world to come," he told local media.

Fast-forward a dozen years and Massa is currently Argentina's Minister of Economy, with his eyes on a bid for President, and has turned again to China for support. In May, flanked by Argentina's central bank president and China's ambassador to the country, Massa announced that Argentina would start to pay for all Chinese imports in yuan rather than dollars.

This amounts to an average of $790 million worth of payments every month, and it seems the primary reason for using the yuan is to relieve pressure on Argentina's dwindling reserves of the more useful US dollar.

Superficially this development indicates the yuan is gaining ground in its quest to end the dollar's global hegemony. But while there has been an acceleration in yuan-denominated trade in the past year, the total remains minimal and the real key to a genuine shift away from the dollar depends on countries deciding to hold reserves in other currencies.

"There's a lot of discussion these days about de-dollarization and whether the US dollar will lose its standing as the world's sole reserve currency," says George Magnus, an associate at the China Centre of Oxford University and former chief economist at UBS. "The other side of the coin is often the internationalization of the Renminbi."

"The question is what exactly does the latter mean? Does it mean people are going to use the yuan more in international payments? Or does it mean it's going to become much more of a global reserve currency on a par with the dollar and euro? There's a world of difference between the currency you settle your trade in, and the currency you accumulate your balances in and it all relates to the level of confidence you have in the stability of those currencies."

Down with the dollar

The US dollar has been the world's reserve currency since World War II, playing an outsized role in global trade. Indeed, it was not until March 2023 that the yuan dethroned the dollar as China's most popular currency for settling its own cross-border transactions.

Talks of a move away from the greenback picked up in 2022 after Washington's Ukraine-related sanctions effectively locked Russia out of the dollar-dominated global financial system—causing concern for China and emerging economies from the Global South.

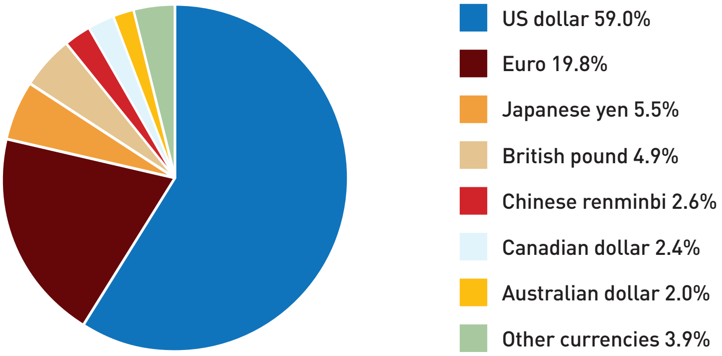
"In Beijing they were shocked by what the US did in freezing Russia's dollar currency reserves," says Yu Yongding, a former president of the China Society of World Economics and director of the Institute of World Economics and Politics at the Chinese Academy of Social Sciences. "They were not prepared for this possibility."

While China's leaders have not openly referred to the geopolitical risks of dollar dependence, Beijing has made clear its deep concerns about the vulnerability of the Chinese economy to the dollar's supremacy during the process of decoupling. Hence its desire to develop alternative systems to hedge against dollar risk. "The hegemony of the US dollar is the main source of instability and uncertainty in the world economy," the Foreign Ministry declared in February.

The sentiment is shared by other BRICS nations. "Every night I ask myself why should every country have to be tied to the dollar for trade?" Brazilian President Luiz Inácio Lula da Silva said on a visit to China in April 2023. "Why can't an institution like the BRICS bank have a currency to finance trade relations between Brazil and China, between Brazil and all the other BRICS countries?"

The rhetoric has not been confined to China and the Global South. In April French President Emmanuel Macron suggested Europe should reduce its dependence on the "extraterritoriality of the US dollar." At the same time, China's economic diplomacy in the Middle East

IN RESERVE | Well over half of all foreign exchange reserves globally are held in US dollars



Source: CFR, IMF

and Latin America has resulted in a steady drumbeat of announcements for arranging more yuan payments to settle international trade.

On a visit to Saudi Arabia in December 2022, Chinese leader Xi Jinping told regional leaders that China wanted to buy more oil and natural gas in yuan. Sure enough, at the end of March, one of China's biggest oil companies used yuan for the first time to pay for a 65,000-ton cargo of liquefied natural gas sourced from the UAE.

Russia's economic isolation following its invasion of Ukraine last year prompted Moscow to dramatically increase use of the yuan in trade with China, with the Chinese currency replacing the US dollar as the most-traded currency in Russia in 2022.

When Xi visited Moscow in March, Russian president Vladimir Putin said: "We support using Chinese yuan in transactions between Russia and its partners in Asia, Africa and Latin America. I am sure that these types of payments will grow between Russian businesses and their counterparts in other countries."

King Dollar

Reports of the dollar's demise, however, appear to be greatly exaggerated. It was involved in 88% of all foreign exchange trades in April 2022, compared with 31% for the euro, 17% for the Japanese yen and just 7% for the yuan, according to the Bank for International Settlements. The US Federal Reserve estimates that between 1999 and 2019 the dollar accounted for 96% of trade invoicing in the Americas, 74% in the Asia-Pacific region, and 79% in the rest of the world.

The yuan has a growing role in global finance trading but it still remains at less than 10% across all categories. But while the yuan has made inroads in international payments, as it was used to settle 5.8% of transactions worldwide in September, its highest level in five years and beating out the euro, according to data from SWIFT, the dollar still maintains the lion's share at 42.60%. Additionally, while the yuan's 7% share of forex trades is a small part of the total, it was nevertheless up from 2% a decade ago.

"If you use the analogy of the solar system to think about currencies, then the dollar is clearly the sun, around which all other currencies revolve," says Hao Hong, partner and chief economist at GROW Investment Group. "But there are patches of space where other large celestial bodies, further away from the sun can have a significant influence, and here in the Asia Pacific region, the yuan is clearly that currency."

While the use of a currency in trade is important, far more significant are the currency reserves held by central banks and foreign institutions—primarily to provide stability and to purchase key imports during periods of domestic or global economic crisis. For decades, the dollar has been the currency of choice for these reserves, to the tune of $6.5 trillion at the end of March 2023. The euro is a distant second at $2.2 trillion.

The yuan is among a number of contenders seeking reserve currency status, but pales in comparison with the dollar. Data from the International Monetary Fund (IMF) shows the yuan's share of world forex reserves has more than doubled in the last seven years to 2.58% during the first quarter of 2023, while the dollar fell to 59.02%—the lowest since the euro launched in 1999. The yuan's growth has far outstripped any other currency, albeit from a very low level.

The nominal amount of international reserves held in yuan stood at $288 billion at the end of March, down from a record $337 billion at end-2021. But in a pool of global reserves totaling $12 trillion—of which nearly three-quarters was denominated in dollars and euros—these figures are negligible. There remains a long way to go for the yuan to reach even the levels of the Japanese yen and pound sterling at a respective 5.47% and 4.85%.

The way it is

The global reserve system has orbited the dollar for nearly 80 years since 1945, from which the US emerged in better economic shape than virtually every other major power. At the 1944 meeting at Bretton Woods, the origins of the dollar as the world's primary reserve currency began to take shape.

"Under the Bretton Woods system, the dollar was pegged to gold and most other currencies were pegged to the dollar," says Brad Setser, an economist and senior fellow at the Council on Foreign Relations. "It was a formal acknowledgement that the dollar was going to be at the center of the initial post-war international monetary architecture. Even as we moved out of a world of fixed exchange rates to a world of floating exchange rates, the size of the US economy means a lot of people want and need dollars. There are network dynamics at this point... in the end, if everybody else accepts dollars, you need dollars."

In the post-war era, the rise of Germany and Japan as major economic powers led to the view that the deutschemark and the yen would rival the dollar, dividing the world into three currency blocs. The yen's share of global foreign currency reserves did rise in the 1980s, but peaked at close to 9% in 1991 and since has declined to less than 6%.

"It has been Pax Americana nearly all the way since the end of World War II," says Magnus. The US still boasts the world's largest economy which remained 42% bigger than China's at the end of last year and prominent forecasters expect it to stay in pole position for another 10-15 years.

Washington's willingness to run a current account deficit—the shortfall between the money paid out and money coming in—has also been a key driver. "People have called the dollar's international role an 'exorbitant privilege,' but it's also an exorbitant burden because it actually means America has to pick up the tab for everybody else," says Magnus.

Deep, liquid and open financial markets have also ensured the dollar remains the de facto global currency. The total value of the US stock market stood at $40.5 trillion at the end of 2022, nearly four times bigger than second-placed China's valuation of $11 trillion. "The US has capital markets that nobody else can even approximate in terms of depth and breadth. It has the rule of law. And it still commands trust for the most part," says Magnus.

Something different

The idea of de-dollarization has been on the radar for at least 20 years. Yu recalls how momentum picked up after the Global Financial Crisis in 2008, which led to his participation in a United Nations expert commission on reforming the US-dominated international monetary and financial system.

"I participated in the commission for two years and we had many meetings without any result, because the US economy stabilized, the dollar stabilized and the US current account imbalance stabilized, so it slipped out of people's minds," says Yu. "Now, fears over how the US froze Russian assets have reignited talk again."

The sanctions against Russia provide a cautionary reminder of the power Washington and the dollar wield in the current monetary era, according to Hao. "The way the US froze Russian central bank assets and disconnected Russian banks from SWIFT last year, coupled with the US debt limit fiasco in June, have got people thinking, 'Perhaps now is the right time to look for a new alternative currency.' That's why there's so much talk in this space."

The global reach of the dollar extends the impact of US sanctions, which has been felt by the likes of Cuba, Iran, North Korea, Syria and now Russia. "Most dollar payments will ultimately involve a payment system that touches an American bank when they get cleared, and when it touches an American bank, the sanctions apply," says Setser.

The debate over whether the dollar will lose its standing as the world's sole reserve currency overshadows the problem that there are few good alternatives.

The yuan has made inroads in overseas trade settlement, but the consensus is that it has little chance of taking over as the dominant reserve currency anytime soon. The yuan's status as a controlled currency is also a significant long-term obstacle. Policymakers in Beijing exercise control over the exchange rate which reinforces the view that the yuan can be a risky asset.

Backed by the dollar's reputation, US treasuries are seen by large investors like central banks and sovereign wealth funds as a 'safe haven' to park hundreds of billions of dollars of wealth, as protection against balance of payments crises.

This is not the case with China debt, as underlined by a recent sell-off in Panda bonds by foreign investors who feared Beijing's ties to Moscow could potentially expose overseas holders of Chinese assets to international sanctions. There needs to be confidence in the system underlying the

Shipping out: More of China's exports are being paid for in yuan

currency before people will be happy to hold it. "It is very hard to create a reserve currency, without attractive reserve assets," says Setser.

Building the yuan into a serious challenger to the greenback essentially requires other countries to decide to accumulate China's currency—something that Magnus says can practically only happen if China imports more than it exports, thereby giving out yuan, or if it abandons capital controls, so that domestic firms and citizens can freely invest yuan abroad. "What we're really asking is, is China ever likely to run big trade deficits on a permanent basis? I don't think that looks likely," says Magnus.

"No one to my knowledge is actually issuing a lot of yuan-denominated bonds to finance their current account deficits," says Setser. "Deficits are still financed in dollars, pounds, rupee or lira, so we are a long way away from a world where the yuan is an important source of financing for countries running a current account deficit."

Neither will these structural issues be solved by a government-backed digital yuan. Issued directly by the People's Bank of China (PBOC), the electronic currency remains niche with ¥13.61 billion ($1.88 billion) in circulation at the end of last year—equivalent to just 0.13% of all cash circulating in China.

It remains unclear how the digital yuan might help Beijing improve the global standing of its analogue equivalent, as a programmable central bank digital currency would allow governments to trace all transactions and dictate which purchases could be accepted—a level of control that would be anathema to many countries. There are also concerns, though, that a digital yuan could be useful in helping Beijing evade international sanctions, such as those applied to Russia as a result of the invasion of Ukraine.

But Yu is circumspect about the prospects of the digital yuan. "We have stopped talking about this," he says. "The existing options available through Tencent's WeChat and Alipay from Ant Group are very convenient. So, people would ask why we need a digital currency?"

The euro made up 19.77% of forex reserves held by central banks in Q1 2023, but its chances of becoming the primary reserve currency have come and gone, according to Hao. "It's been around for decades now, so 20% is pretty much it. The euro has tried for nearly one-quarter of a century already so I think we should give the yuan the same amount of time too," he says.

Like the US and the dollar, the European Union and the euro have the benefit of rule of law, openness and transparency, and deep capital markets. But euro-skepticism has, to some degree, hobbled greater adoption of the euro, which remains an imperfect fiscal and monetary union. "There is still a reservation about the euro system in a way that there isn't about the dollar system," says Magnus. "People really understand what the US is and what it represents."

There is a possibility that a new multilateral currency initiative—like the BRICS currency, an idea floated by Brazilian president Lula in April—could be an answer to the current dollar hegemony. In August 2023, the group announced a number of new members that would join in early 2024, this includes Argentina, Egypt, Ethiopia and economic heavyweights Saudi Arabia and the UAE.

But for many it is still unlikely to be the answer, given the countries that form the backbone of the growing geopolitical grouping are too disparate to underpin a cohesive currency.

"The expansion of the BRICS certainly has geopolitical intent," says Magnus. "As a group though, it is even less economically coherent and still further away from the kind of currency area that's compatible with a common currency that could rival or supplant the dollar. They might try to use the yuan a bit more to invoice one another in trade but ironically, they all use and need to accumulate financial balances in US dollars."

No credible replacements

Virtually all of these options lack credibility. Even though China was the largest trading partner to twice as many countries as the US last year, the greenback remains the world's global settlement currency because of its stable value, the size of the American economy and the US' geopolitical heft. "The trust and confidence that the world has in the ability of the US to pay its debts keep the dollar as the most redeemable currency for facilitating world commerce," says Setser.

It is financial market participants that ultimately determine a currency's status, and it is clear they have found the yuan lacking when it comes to reliability, convertibility, transparency and control over their finances. The renminbi's status as a reserve currency has been impeded by Beijing's unwillingness to free up its exchange rate, allowing the currency's external value to be determined by market forces, and to fully open the capital account. Moreover, China's financial markets are limited, with a number of constraints such as a rigid interest rate structure.

"The blockages on capital outflows, and misgivings over the trust and respect of China's legal system and its capital markets are also a serious problem," says Magnus.

Here to stay

China's central role in the global economy means de-dollarization in international trade and finance will inevitably continue as the yuan chips away at the commanding shares of the dollar and euro. But this does not necessarily spell the end of the greenback's hegemony.

Setser points to how the launch of the euro in 1999 reduced the dollar's use for trade within Europe, but has not diminished US global power. "If you're the government of China, Iran or Russia, it may be unsatisfactory that the dollar is still the first amongst equals in terms of global currencies, but it is what it is," says Magnus.

The yuan's acceptance as a reserve currency is likely to be much more measured—growing in importance in the decades to come but unlikely to dethrone the dollar. "No other country can kick the dollar out as the de facto international reserve currency," says Yu. "Only America. It is theirs to lose."

Taking Risks

Kent Kedl, a partner at global risk consultancy Control Risks, discusses the challenges in the Chinese regulatory system and the difficulties this can cause with compliance

China's economic rise in recent decades has provided unmatched opportunities for businesses seeking to lower costs and increase profits. The level of risk faced by companies looking to operate in China was generally easily offset by the potential return on investment (ROI) from a successful foray into the market. But times are changing and the risk-reward ratio is beginning to shrink.

In this interview, Kent Kedl, a partner at global risk consultancy Control Risks and head of their Greater China and North Asia practice, discusses the challenges within China's regulatory system, the tentative rebound of foreign investment after COVID-19 and the continued requirement for foreign enterprises operating in China to be more flexible.

Q. How important is the reliability of a regulatory system to major companies looking to invest or operate in a country?

A. It's always been critical and is even more critical now, in part because many US and European companies have a regulatory regime in their home countries that have an extra-territoriality to their laws, which means that the behavior they expect in their own country, they expect globally as well. For example, if you can't bribe government officials at home, you also can't bribe them anywhere else around the world.

Q. What are the main factors within such a system that facilitate ease of compliance for companies?

A. Obviously reliability, but I'd use two terms to describe that, transparency and consistency of enforcement. First of all, transparency is the ability to know what the rules are, what is okay to do and what is not okay. All legal systems are aimed at providing transparency to some extent but there is also a reason why we have lawyers, who figure out exactly what it means.

Consistency of enforcement means that everybody is equal under the law. Big companies don't receive special treatment and you can't use personal connections to get ahead. Now, this is a pipe dream anywhere around the world, but I think at least aiming for both of these goals is the key to ease of compliance.

Q. How apparent are these factors in the China system and how has this changed over the last decade?

A. Over the past decade, enforcement of whatever rules are in the books has been quite strong. The challenge at the start of the administration was that many rules either weren't there or were decades old and not really fit for purpose. But instead of going through a massive legal reform and really figuring out what they wanted, they just started enforcing what was already there. In

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some cases, this was fine: for example, there were fairly robust regulations on anti-corruption, anti-monopoly and environmental laws in place.

But data and data security are newer parts of the Chinese regulatory system, with the first cybersecurity law coming out around 2015, but it was very general and a lot of the terms were not defined. This was frustrating for many of our clients as the specificity required wasn't there, and it can be doubly frustrating if the definition of compliance isn't clear but the enforcement of regulation is aggressive. The change has been quite hard for companies in China, who were used to a more laissez-faire system that was supportive of foreign investment.

At the same time, you can't be upset at China enforcing its own rules. Companies face different legislation all over the world and understanding that compliance is necessary, but if specificity isn't there, it can cause unpredictable issues. Going back to the data laws, they have become more specific over time, but it's still a work in progress and that bothers companies trying to operate in the market.

Q. To what degree has data regulation been the change that has had the most impact on foreign entities in China?

A. It is certainly front and center for them, in part because it's a major issue in various areas around the world. Europe is also quite active when it comes to data regulation with things like the GDPR.

> We're seeing more rigidity from foreign companies now, with pretty much all of the decision making having to go back to headquarters

The interesting part about data enforcement in China, though, is that if you look at the real milestone cases in the country, they have involved Chinese companies. There is often a perception in certain foreign media that when a foreign company is regulated or investigated, the whole world comes to a standstill. But at the same time there have been thousands of Chinese companies that have been investigated under the same laws that don't get the international news coverage.

Didi is an example that did get some coverage, but the regulations were criticized and talk of a tech crackdown was rife. However, the company had not gone through a data security review in China before listing. They didn't do what they were supposed to do, so it shouldn't have come as a surprise that they faced repercussions there.

Q. What are the areas and issues that most commonly trip up foreign companies operating in China?

A. In terms of regulation, I think the threat of slipping up is probably the same for both domestic and foreign firms. The major difference for foreign companies is vulnerability, rather than being specifically targeted. They are certainly more vulnerable for a couple of reasons. One is that they don't necessarily understand where regulatory pressures are going to be coming from because they haven't been looking at China as an aggressive regulatory environment from the beginning. In the US and EU, businesses have people sitting in the power centers seeking to understand and get ahead of what is going on, work out efficient market access and obtain licenses, but not many foreign companies have invested the resources to do that in China.

This is why a lot of what we do here is regulatory risk assessment and working out what a company's vulnerabilities are. This has little to do with the legal side, but asking questions such as: What type of company are you? Where is enforcement going in that sector? Where is that likely to intersect with what the company is doing? Frankly, it is not going to be possible to change the threat environment, but a company can reduce its vulnerability.

Second is geopolitical tensions. In the West, companies are thinking any number of deep thoughts about the impact geopolitical tensions will have on business, but in China CEOs are still just moving forward with business, making and selling. Companies are wondering if they can still work with China and that's a legitimate concern based on changing regulations, but from the Chinese side the interest is still there.

Q. The EU Chamber of Commerce in China has indicated that some companies are reconsidering their position in China, with many looking at lowering their exposure to the country's market. To what degree do you see this happening?

A. We tend to forget that this has been happening for the last 15 or 20 years to some degree. China's development has been going on over the last 40 years, but reconsidering and rebalancing has increasingly occurred in the latter half. If you are making sports equipment, small electronics or clothing of any kind, you started reconsidering China 15 years ago.

Once the cost base started to rise, it was a bit more difficult to exclusively choose China and the trade war got people thinking again because they couldn't be overly reliant on China for their entire supply chain. At that time, resilience wasn't a key performance indicator (KPI) in procurement because the primary KPI was to reduce costs, so many businesses didn't diversify their suppliers across countries, instead using multiple suppliers within China because of how cheap it was. Nobody thought about what would happen if China's supply chains slowed or halted altogether.

Geopolitics has certainly been a factor as well. We don't see a massive amount of companies leaving, but we do see them rebalancing and right-sizing. For some of them, that means choosing to build new factories away from China. China is no longer a low-cost country, but it is still massively convenient in that you can find suppliers, buyers and sellers all within its borders, not to mention it was the most active economy during the early stages of COVID.

Financial investors are doing a rethink as well, with many pausing some China-related activities. This is partly due to a lack of confidence, but also because some of them feel like they are over-leveraged or over-exposed here and they need to balance out their investments.

Q. Now that COVID is over and the geopolitical arrangements are becoming clearer, what are you seeing in terms of companies making decisions that had perhaps been delayed with regard to investment and business strategy?

A. There were a number of companies looking at strategic investments in China in 2020 and 2021 in particular, manufacturers buying assets, M&A, that kind of thing. We have a pre-investment due diligence practice and it was doing very well in the early days of COVID, but we started to see things slow down at the end of 2021, before the COVID situation got tricky in China.

There were also some deals that were in the pipeline pre-COVID and then once everything cleared, they didn't happen, and that was due to them no longer making strategic sense, market shifts, priority shifts or the fact that the target was still demanding their pre-COVID valuation. We saw a number of companies walking away from deals. They wanted to see how the dust settled and the China premium was harder to justify.

I do think that in the next couple of years we'll see companies returning in a more balanced way, and we are already starting to see some green shoots of interest in additional investment. At the end of the day, China is still a massive growth market and companies are finding that the China habit is hard to break.

Q. Do you have a wishlist of regulatory changes that would make China a more hospitable place for business over the next 10 years, and realistically, how many of these do you think could happen?

A. I certainly would like to see the regulatory environment becoming even more specific and more transparent, that would be helpful for everyone, foreign and Chinese companies alike. For example, they are releasing new additions to data regulations seemingly every six months, but it would be good to know exactly what these mean for business and what they require from businesses. I'm confident this will happen but I doubt it will happen as fast as we all want it to.

> [China's] data laws have become more specific over time, but it's still a work in progress

But along with that, the other thing I hope that happens is foreign companies start to understand that the regulatory regime is not going to reform as quickly as they'd like and they can't just sit around complaining about it. Geopolitics is in a similar state, and the tensions aren't going to relax any time soon. The Americans will continue to be aggressive with their policies and the Chinese will continue to respond. We all just have to work with what we have on the table at the time.

It all boils down to flexibility and a willingness to adapt, and we're seeing more rigidity from foreign companies now, with pretty much all of the decision making having to go back to headquarters. This has obviously not been helped by changing regulations, but the rigid corporate structures in the West don't suit this market very well.

To end, none of us are thinking that China is going to go back to what it once was, simply because China is changing and it has a completely different role in the world now. But it will be exciting to see what the next stage will look like.

Interview by Patrick Body

The graph in the image is the age and gender distribution of China's population in 2023
Source: populationpyramid.net
Image by Jamie Stevenson

DEMOGRAPHY MANIFEST

China's demographic problems are becoming clearer to see and if corrective actions aren't taken, the country's economy will face repercussions. How can China prepare itself for the future?

By Patrick Body

China is suddenly worried that it doesn't have enough people. In a meeting of the Central Financial and Economic Affairs Commission in May 2023, Chinese leader Xi Jinping stated that "population development is a key issue for the rejuvenation of the Chinese nation." The statement comes as the country faces an unprecedented combination of demographic issues that could potentially have serious economic ramifications.

Chinese authorities have since announced they will take measures to stabilize employment levels, improve the quality of the labor force and ensure a solid supply of jobs. China was just overtaken by India as the world's most populous country, and the population graph will only go down from here if current trends continue. The demographics trap is easily China's biggest long-term issue, and while there might not be much of a noticeable effect in the short term, any solutions will need a long lead-in time to take effect.

The country needs to actively address the problem to shore up its economy and avoid getting stuck in the middle-income trap, and changes need to happen soon. While attempting a return to population growth would be the traditional approach, the impact of technology, and in particular AI, might provide another way for the country to keep its economy on track.

"China has quite a problematic mix of demographic issues facing them," says Michael O'Hanlon, Director of Research, Foreign Policy at The Brookings Institution. "There are other countries around the world that are facing similar problems, but China still has huge ambitions and wants to do big new things, and that's going to be hard if [current] trends continue."

People power

A growing population has throughout history been seen as a key factor to the development of an economy. Other countries around the world, such as Japan and Hungary, are also facing shrinking populations, but many of them have avoided the middle-income trap and reached an average level of prosperity well above China's today. Populations tend to shrink once a certain level of financial success has been reached, but for China the decline has started early and the middle-income trap yawns.

China's population declined by 850,000 people in 2022, the first fall since the early 1960s. And while it is now the second-largest economy in the world, China only has a GDP per capita of around $12,500, well below the level of Japan or South Korea when their population growth went negative—each had per capita GDPs of $35,991 and $34,997 respectively at that time.

The decrease is expected to continue in 2023, but it is unclear by exactly how much as 2022 may have been something of a statistical outlier. "The COVID-19 lockdowns and subsequent deaths from infections at the end of the year made both having new children harder and the death rate higher," says Xiaolin Shi, Assistant Professor of Economics at Northeastern University. "Additionally, cultural issues might have had an effect on birthrates due to parents waiting for 2024, which is the year of the Dragon, with babies being born in such a year being deemed stronger, braver and luckier than others."

While there may be some merit to this explanation—birth rates across Asia have historically dropped in the year of the Tiger and risen in the year of the Dragon—the country's population growth had been

> China has not fully made the transition to middle- or upper-class living for all of the population
>
> Michael O'Hanlon
> Director of Research - Foreign Policy
> Brookings Institution

trending downwards in previous years and a declining population is not the country's only demographic issue. Marriage rates are also declining. The number of couples married in 2022 was down 10.5% on the previous year and marks a record low since 1986 when China's Ministry of Civil Affairs began releasing statistics. Fertility rates have also dropped.

"The infertility rate is increasing as the age of marriage and childbearing is delayed," says Fuxian Yi, author of *Big Country with an Empty Nest*. "The age of first marriage for Chinese women was 23 in 2000, but increased to 28 in 2020. That has in turn led to the infertility rate increasing from 2% in the early 1980s to 18% in 2020."

The result is that China's population is ageing quickly, with the country's working age population expected to fall by 9% over the next 10 years. "This is obviously not a very good place to be economically," says O'Hanlon. "Having to spend a lot of money on simply keeping older people alive through medical bills and pensions is going to hamper the production of output for the purposes of raising your standard of living as a country, building up your science and technology base or your infrastructure."

Unemployment is also high, particularly in the country's urban youth with record-setting numbers occurring month on month: in May 2023, just over 20% of urban-dwelling 18-24 year-olds were out of work. But at the same, the country is facing a labor shortage in some, particularly blue-collar, industries thanks in general to perceptions that this work is below many who are now qualified with degrees.

"China's gross enrollment rate in higher education is rising rapidly," says Fuxian Yi. "But college graduates are reluctant to take up manufacturing [jobs]."

Cause and effect

There are multiple reasons as to why China finds itself in the situation that it's in. The most obvious are the lasting effects of the country's erstwhile one-child policy, which for many years kept birthrates well below the 2.1 required to meet the replacement threshold as well as causing the discrepancy between the number of men and women in the country, thanks to the societal preference for male children.

"Decades of China's intrusive and overbearing family planning policy coupled with anti-religious education have undermined family values associated with traditional beliefs," says Fuxian Yi. "This has made it socially acceptable, and even desirable, for couples to have one child—or none." The lack of an uptick of births after the one-child policy's relaxation and subsequent cancellation in 2016 illustrates this point, with birth rate declines ranging from 3.81% to 17.95% per year from 2017 to 2022.

The rising costs of having children have also been an issue. The competitive nature of the education system in China, for example, means that there is a huge amount of money required for extra-curricular tutoring and classes that parents deem necessary to get their children the right opportunities in life. The recent crackdowns on the after-school tutoring industry was a measure taken to deal with this, but there has been a resurgence of off-the-books tutoring in recent months, indicating that things have not really changed.

"The competitive nature of education in China means that Chinese parents are particularly afraid of their kids falling behind their peers," says Shi. "So there is something of a rat race in terms of education and a lot of prospective parents now don't want to get themselves involved in this race unless they are prepared. This means they will avoid having children until they are psychologically, physically and financially prepared."

Family pressures and filial responsibility are further reasons for a shifting attitude towards marriage and having children. There are minimal social safety nets for Chinese citizens and the absence of a real pension or old-age care requires children to look after their ageing parents. For some, this can be a reason to have a child, to secure their own care, but for many it is a stress that reduces their freedom of choice in life. High-pressure work environments also add to these already out-sized stresses.

While all of these factors are usually more important in Asian cultures, other more global concerns are also helping lower birthrates in China. For example, the idea of bringing a child into a world that is progressively heading towards environmental disaster and geopolitical turmoil is not a choice that some would like to make.

"There are many problems that we're starting to see now in the world that are only going to get worse unless changes are made," says Minmin Zhang, a 28-year-old office worker in Shanghai. "I don't really want to bring a child into a world if it means that they're going to have to deal with a worse situation."

Pending problems

Added together, these issues have not only resulted in the first population decline in recent Chinese history, but they also have myriad economic consequences. China is still very much at risk of falling victim to the middle-income trap—a middle-income country failing to transition to a high-income economy due to rising costs and declining competitiveness—because of the economic slowdown and for systemic reasons. And longer-term, the prospects for China's economy will depend on whether the country can spur population growth, or at least productivity growth.

"China has not fully made the transition to middle- or upper-class living for all of the population," says O'Hanlon. "And now they have this new set of problems, a lot of people who are still relatively poor, in a country with fewer children to take care of those aging parents and grandparents, and the country hasn't quite generated the productive output to make it easy to build and fund a social security system."

Consumer spending-driven economic growth is a major part of the country's future development plans and with less consumers being born, this becomes less feasible over time. In China, household consumption accounts for only 38% of GDP, compared with 50-60% in the West, and disposable income is 44% of GDP, compared to 60-70%.

"China needs to raise disposable income as a share of GDP to increase domestic demand," says Fuxian Yi. "But doing so could undermine governmental power, and while it would likely be a benign reform for China's economy, society and politics, it would probably encounter quite a lot of resistance."

A lack of demand inevitably has a knock-on effect on business across almost all sectors of the country's economy. "China needs to make sure that the manufacturing sector does not decline," says Yi. "Germany, Japan, Greece and Spain are all facing similar ageing, but Germany and Japan have higher economic growth rates than Greece and Spain due to their relatively strong manufacturing sectors. To strengthen manufacturing, China needs to reform education by reducing emphasis on four years of college education and increasing vocational education."

The education industry will also take a hit that will gradually get worse as the years go by, as fewer children will mean fewer schools, universities and educational institutions. Property developers, which have already been struggling with massive debt issues over the last few years, will also struggle from a lack of demand for housing.

Further, there are other countries that are still growing at a rapid rate which will challenge China's current supply-chain dominance, potentially taking away more business from the country. India, for example, has already overtaken China's population in mid-2023 according to UN estimates, and offers a number of advantages over China for foreign businesses looking to expand. China's competitors all benefit from having lower labor costs, more open foreign policy and a more accessible financial industry.

Growing necessities

Faster economic growth is a necessity for China to maintain its development trajectory and this means the country is really only facing two options. Either it needs to restart population growth or it needs to find a way to increase economic growth without restoring population growth. And the experts are divided as to which of the options is more viable.

The first option, encouraging more marriages and by extension more childbirth, requires greater widespread confidence in the future. This could be achieved with a more predictable and transparent regulatory environment, giving Chinese citizens a clearer path to being able to plan their futures.

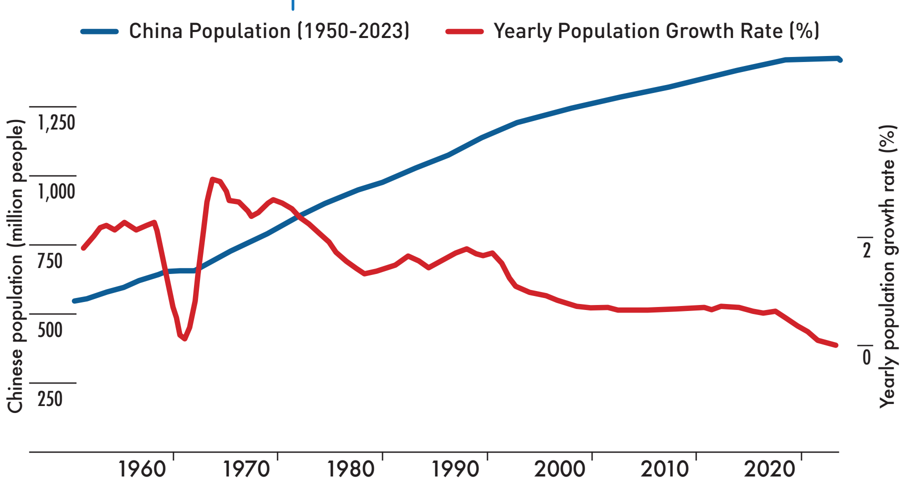
"In order to get statistics moving in the right direction, significantly improving a country's economic prospects appears to be one of two main approaches," says Ouyang Hui, Distinguished Dean's Chair of Finance at CKGSB. "The other is the creation of strong government policy support, such as that found in Nordic countries."

Policy measures aimed at increasing birth rates work best with multiple approaches and the more generous the better. "Sweden's perennially high fertility rate is, in part, related to its impressive per capita GDP of over $50,000, but even accounting for this, the country's fertility rate can be considered high," says Hui. "There are also incentives in place for shortening the time between births, a robust system of childcare services and there is a strong support system that allows parents to raise kids without interrupting their work." Total family welfare spending in Sweden is over 3% of GDP, much higher than in countries like Japan, South Korea and Singapore.

But restoring population growth in a society which has fallen into negative growth is extremely difficult. Countries like Japan and South Korea have undertaken

UP AND DOWN

China's population declined for the first time in 2023, but population growth has been falling for years



Source: World Bank

long-term approaches to restore population levels with little to no positive outcomes. Japan, a country whose policies the Chinese government has already emulated, managed to temporarily boost fertility between 2005 and 2015, from 1.26 to 1.45, but by 2022 it had returned to the 2005 level.

"Belatedly, Chinese authorities have rushed to launch a series of policies, largely paralleling Japan's demographic policy response to boost fertility, such as reducing school fees and providing convenient childcare, childbirth subsidies and housing benefits to young couples," says Fuxian Yi. "But Japan's approach has proved expensive and inefficient and China, which is "getting old before it gets rich," does not even have the financial resources to fully follow Japan's path."

Some businesses are also trying to play a role in encouraging childbirth. Trip.com Group whose CEO James Liang is noted as a demographics expert has announced a scheme worth around ¥1 billion that would pay an employee ¥50,000 over five years for each new child they have. But such a payment is unlikely to make a real dent in the cost of raising a child.

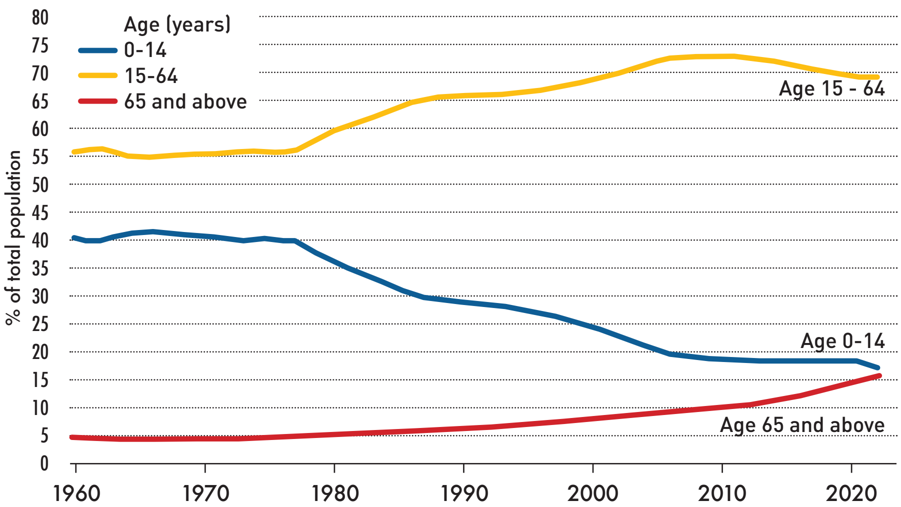
A new way

It is highly likely, given the long lead time for any solutions to restore population growth, that China will have to choose the option of trying to innovate its way back to economic expansion through the increase of average worker productivity. The country has a history, particularly over the past two decades, of spending big on R&D and becoming highly innovative once it has acquired basic levels of knowledge from elsewhere.

There are now high levels of digitalization across all aspects of the country, including business and industry, and this appears to be one viable option for increasing productivity without increasing population. Another option would be a quicker shift towards a service-based economy, which could also be facilitated by the digitalization of manufacturing and the adoption of AI, but would face the same difficulties of human replacement rather than job creation.

"If you are able to educate people and equip them with the ability to utilize high-end technologies, then the number of people shouldn't matter so much when it comes to the economy," says Dr. Xiaobing Wang, Associate Professor in the Economics of China at Manchester Universtiy. "So if China can successfully upgrade its economy through animating the upper end of manufacturing and provide a more passive income, population shouldn't be as much of an issue in relation to productivity."

GROWING OLD | China's population is aging, with the only growing demographic group being those aged 65 and above



Source: World Bank

There are many benefits from the new wave of AI tools available both in the B2C and B2B spaces. These include lowering costs, lowering labor requirements, increasing efficiency and reducing errors, all of which in effect raise productivity. But there is one major barrier that seems to trump any of the benefits.

"Simply put, artificial intelligence and robots do not consume, and consumption is the major driver of any economy," says Fuxian Yi.

One solution often proposed is the introduction of a scheme along the lines of universal basic income, to act as a catalyst for consumption as well as a boost to fertility rates, but the cost, especially for a country with a slowing economy and such a large population may well be prohibitive.

Growing up

China's demographic issues are wide-ranging, complex and unique given the size of the country's economy, its level of growth and population size. Most efforts to reverse population decline around the world have centered on a combination of financial benefits to families and lower parenting costs. China has already started doing both.

"Many people are worrying about the demographic shifts but in the short- to medium-term I'm not that worried because it's a long-term issue," says Wang, "The worry is that in the future, there will be too few young people and the labor supply will be low. But China is moving towards a high-tech economy and if successful, labor should not be a problem."

But the current issue for China seems to be stimulating consumer demand. Without this, alternative solutions to population growth, such as AI adoption will be unlikely to stimulate productivity enough to offset the issues currently caused by shrinking demand.

"The problem will be if China fails to upgrade its economy from a high labor-intensive growth model, to a high-tech and consumer-driven model," says Wang. "If that happens, the demographic issues the country currently faces will surely have a negative impact on the Chinese economy."

What's Next for China's Economy?

China's economy faces difficulties in the short term, and some of the problems are structural and not easy to solve, but in the long term, we have reason to be optimistic

by Li Wei, Professor of Economics, CKGSB

The meeting of the Chinese Communist Party's Politburo decided upon a number of priorities and set out guidelines for economic policy directions for the second half of 2023. Of particular interest to the market, were the directives related to boosting consumption, supporting private enterprise and stabilizing real estate, employment, local debt, capital markets and exchange rates, among other issues.

The meeting effectively acknowleged the various challenges and difficulties facing China's economy, including a lack of domestic demand, the operational difficulties facing some enterprises, growing risks in key sectors and a complex and severe external enviornment.

But while the economic recovery after the relaxation of pandemic restrictions in late 2022 has been up-and-down, China's economy still has great developmental resilience and potential, and the fundamentals for its long-term improvement have not changed.

On July 17, 2023, the National Bureau of Statistics (NBS) released a series of economic data for the first half of the year, showing that Gross Domestic Product (GDP) grew at a rate of 5.5% year-on-year. The GDP growth for the first quarter was 4.5% and 6.3% for the second quarter. On a quarter-over-quarter basis, GDP grew by 0.8% in the second quarter.

The release of the data attracted global attention, and various domestic and foreign analysts interpreted the data in differing ways, with one viewpoint suggesting that China's economy is now showing signs of weakness. This is evidenced by the 0.8% sequential GDP growth rate in the second quarter, compared to the 2.2% sequential growth rate of the first quarter's GDP.

There are always "short-sellers" and "long-sellers," who pay attention to different indicators and consequently come to different conclusions. And even if the indicators are the same, interpretations will be different, so it is not surprising that there are different or even opposing views in the markets.

However, it should be noted that most of the current analysis of the economy focuses on short-term economic growth, such as whether the government's growth target can be achieved this year, and whether China should further drive economic growth by further boosting infrastructure investment.

All of these discussions are very important, but focusing too much on short-term issues will cause us to overlook more important long-term issues and could cause us to lose sight of our future goals. Therefore, this article will provide an initial view of the short-term issues in order to shape the more important analysis of the long-term potential of the Chinese economy.

Short-term issues

Let's look at the short-term problems first. There are at least three pressing issues that threaten China's short-term economic future: a decline in economic growth rate, a lack of confidence in economic growth and a low rate of domestic consumption.

Firstly, looking at the decline in economic growth, World Bank figures show that China's year-on-year GDP growth rate in 2022 is only 3.0% in constant 2015 dollars, with inflation and exchange rate changes accounted for.

As far back as 2007, China's year-on-year GDP growth rate managed highs of 14.2%, and even just 10 years ago in 2013, China's GDP growth rate was 7.8% year-on-year. It is therefore fair to say that China's economic growth rate has declined rapidly, and while all countries face some level of slowing growth eventually, in China it is proving to be unusually quick.

Secondly, there are various data and examples that show that people's confidence in the prospect of future economic growth is low. For example, in the past two years, few people are leveraging to buy a house, and many are deleveraging to pay off their loans early.

Lack of confidence in economic growth and weakened expectations of income growth have led people to start arranging their personal financial allocations with the goal of minimizing debt. A direct consequence of this is lower aggregate demand.

In addition to the consumers' lack of confidence in economic growth, private companies' expectations for the future are not as optimistic as in the past. In this context, their willingness to invest has also declined.

According to the NBS, in the first half of 2023, the year-on-year growth rate of the country's fixed-asset investment—excluding farm households—was 3.8%, but the year-on-year growth rate of private investment instead slipped 0.2% to 0.7%.

Thirdly, the rate of consumer spending is too low. China's economy has many structural problems, but the core problem is the low ratio of consumption to GDP.

The purpose of our economic development is to enable people to lead a more affluent life, and this is reflected in economic indicators by the level of consumer spending. The causes of low spending are complex, and the structural problems will not be resolved overnight. I will not go into details here, but in brief, this is still effectively a short-term problem.

China's economic potential

After 1949, China established a planned economic system modeled on that of the Soviet Union, but this system failed, and China's economy stagnated throughout a long period of weak growth. After 1978, China shifted its entire focus to economic development, beginning a process of reform and opening up, and gradually implementing a market economy.

We know that the market economy has unparalleled advantages over the planned economy in promoting economic growth, but at the time people were unsure of what impact this new new economic system would have on China.

It turned out that the market economy encouraged a tremendous economic vitality, moving the Chinese economy towards a period of massive growth. According to the World Bank, China's GDP grew at an average annual year-on-year rate of up to 9.1% from 1978 to 2022 in constant 2015 dollars. Using the same measurements, China's GDP was $364.4 billion in 1978, and this number saw a 45-fold increase to $16.3252 trillion in 2022.

A consistent level of economic growth this high was unprecedented in human history and something that took many people by surprise, so it is unrealistic to expect that China's economy can continue to grow so fast for another two decades. While we have now reached a point where it is unclear what potential for growth still remains, China's economic prospects are not what they used to be.

Gaining a clear understanding of this issue is a concern as the results will have a major impact on the formulation and implementation of economic policy over the coming years.

Looking at historical examples, many countries have shown that catching up to advanced economies is a possibility, with Japan being a prime example. According to the World Bank, in constant 2015 dollars, Japan's per capita GDP in 1960 was just 32.7% of that of the US, at $6,261 and $19,135, respectively.

By 2022, the GDP per capita of Japan was $36,032, 57.3% of the United States figure.

Based on this, we can see that from 1960 to 2022, the average annual growth rate of GDP per capita in Japan was 2.9% and 1.9% in the United States.

Using this as a comparison, we know that China's 2022 GDP per capita in constant 2015 dollars was $11,560, 18.4% of the US number and significantly lower than Japan's 32.7% in 1960. Without considering demographic factors, if US GDP per capita continues to grow at the same average annual rate in the future, then in 20 years, in order for the ratio of China's GDP per capita to reach even 30% of the US number it will require an average annual growth rate of at least 4.9%.

Taking this further, and without taking population into account, if the US GDP per capita continues to grow at an average annual rate of 1.9% in the future, then growing the ratio of China's GDP per capita to the US's GDP per capita from 18.4% to 57.3%—Japan's level in 2022—would require China's GDP per capita to grow at a compounded annual rate of 3.9% over the next 60 years.

Don't underestimate the difficulty of hitting 3.9%, which is the compound growth rate after taking out inflation and exchange rate changes. Under CAGR, a difference of 2 percentage points in GDP per capita over 60 years—3.9% growth in China vs. 1.9% growth in the US—ends up making a huge difference.

Following the assumptions and calculations above, we can clearly see that even by 2042, China's GDP per capita will be less than one-third that of the United States. And by 2082, this indicator will not even have passed 60%.

The Chinese government's economic growth target for this year is 5%, which for emerging economies is still part of a gradual decline until it stabilizes at a lower level once it reaches a certain point of economic development.

Under these circumstances, either 3.9% or 4.9% means that China's economy is well placed to maintain a relatively high rate of growth for a long time to come.

But at the same time, a 5% growth target implies a certain level of pessimism about current economic growth prospects given that China remains an emerging economy.

Fighting tough battles

The economic policies that China pursued prior to the reform era clearly struggled to overcome the laws of economics, but the considerable corrections to these policies subsequently allowed the country to reap the rewards of rapid development.

If we start counting from the first Opium War, China's modernization process is less than 200 years old. During this period, we have traveled a very tortuous road, with many ups and downs.

In recent history, although China was penniless in the early days of the reform era, policymakers have generally pursued sound economic policies, allowing private enterprise to develop domestically, but rather opening to the international markets and actively integrating China's economy into the global supply chain.

With this combination of policies, Chinese manufacturing began to expand, the Chinese economy grew rapidly, and hundreds of millions of people were lifted out of poverty. In a sense, China's modernization has made it halfway down the road, but the road ahead is not a good one, or at least not as good as the first half.

The Chinese economy is now facing a series of headaches, at least in the short term. Perhaps we will have a weak economy or even a recession of some sort in the future, and are we ready to meet these challenges?

No economy is free of structural problems, and the emergence of crises is the norm, not the exception, and in this regard a look at the United States will provide a clear example.

Since the 1980s, the United States has seen the Savings and Loan Association crisis, then the collapse of the high-tech stock bubble, then the financial crisis of 2008, and that doesn't even include the Great Depression of the 1930s.

Spending cooldown: Chinese consumer spending has not bounced back post-COVID

Despite facing large economic crises every now and then, the constant adjustment of the relationship between the market and the government has made the United States economy generally thrive and move forward, eventually becoming the largest economy in the world.

This trajectory is true of most developed countries, and emerging market countries are also in line for similar development paths, one such example was South Korea's financial crisis in 1998. There were many reasons for the crisis, but it all boiled down to the hijacking of public policies and the plundering of public resources by domestic vested interests, which were mainly plutocrats.

For many years, the financial system of South Korea had been suffering under the haphazard influence of the chaebols—large family-owned business conglomerates—and the situation finally became untenable in 1997.

In 1998, Korea experienced a full-blown financial crisis, which dealt a heavy blow to the Korean economy, contracting at a rate of -5.8% that year. The number of poor people increased from 6 million to 10 million, suicide and divorce rates skyrocketed by almost 50%, drug addiction increased by 35% and the crime rate exceeded 15%.

However, the Korean government and people did not back down in the face of the crisis. They rallied and carried out a series of reforms, restructuring and injecting capital into the financial system, dispelling the myth that chaebols are "too big to fail," and so on.

These efforts quickly yielded results, so despite the severe short-term economic pains felt in the country, it continued to grow soon afterward, and the country's economic and financial systems became healthier and more sustainable.

According to the World Bank, in constant 2015 dollars, South Korea's GDP per capita was $15,072 in 1997, fell to $14,196 in 1998, but quickly rebounded to $15,712 in 1999, and in 2022 South Korea's indicator had risen to $33,645, reaching a point where it is on par with Japan.

The example of South Korea tells us that such a crisis is not scary; it is the fear of facing up to the crisis and the determination to deal with the crisis that can be the most frightening.

I often point out the problems in China's economy, but I also have great confidence in its long-term development.

Although we are facing a series of difficult problems in the short-term, as long as we face the reality, push forward with the reform and opening up process, and fight hard battles and gnaw on hard bones, no economic crisis can stop China's economy from realizing its potential for development, and there is certainly still plenty of potential there.

Limitless Supply Economics

The new economy has a number of characteristics that require a re-think of economic theory and practice

By Zhou Chunsheng, Professor of Finance at Cheung Kong Graduate School of Business (CKGSB)

Since the invention of the first computer, digital and information technologies have been in a constant state of development. Technological advances have not only brought about improvements in life and work efficiency, but also created a new economic model and a research topic—the limitless supply economy.

In his book, *Limitless Supply: New Economy in the Digital Era*, Cheung Kong Graduate School of Business (CKGSB) professor Zhou Chunsheng discusses the exact meaning behind the term limitless supply, the impacts of limitless supply on business and financial markets and the impact of the limitless supply economy on GDP.

Excerpt from the Foreword

A new economic field is developing in the rolling torrent of China's economic transformation, and new technologies, products and sectors—particularly driven by smart technologies and digitalization—are emerging.

In this new era, the corporate, financial and even political sectors are in urgent need of a set of new economic theories to help interpret the various new phenomena and the issues they create. These theories can also aid in understanding and predicting new economic and commercial development trends, as well as guide industry-specific decisions on scientific and rational investment, production, R&D, marketing and industrial development.

For a long time, economics has been a discipline that studies the laws of economic operation and resource allocation on the premise of resource scarcity. According to this assumption, since resources are limited, and production must consume resources, output is limited by supply, creating product scarcity.

But in the new, increasingly digitalized economic era, this is quickly changing. Some products remain limited in production and supply, but there are also a growing number that are not constrained by such limits. Microsoft's Windows operating system, Apple's iOS, Tencent's WeChat, and Baidu's search engine are all typical examples of limitless supply products.

In the same way that it is not persuasive to use Newtonian mechanics to explain particle movement, it is even more inaccurate to analyze and understand the concept of limitless supply economics using traditional economic frameworks that are based on ideas of limited resources and limited supply.

Therefore, the importance of establishing a new theoretical system that subverts traditional economic thinking is self-evident. This is especially true at a time when the smart economy, digital economy and other new economies and business models are booming, and limitless supplies are becoming more common.

But creating such a system is not easy. *Limitless Supply: New Economy* *in the Digital Era* is the result of several years of consideration and revision by the author, and the book analyzes the basic characteristics of limitless supply products, and compares them to the production and operation of limited supply products. And in terms of China's current economic development, the book argues that the contribution of the new economy, including its scientific and technological progress, has been seriously underestimated.

The core objective of the book aims to construct a preliminary, simple, but relatively complete theoretical framework for the economics of limitless supply, and to use it to interpret important phenomena in the new economy and explain the behavior of enterprises operating in its sectors.

This includes analysis of demand and pricing issues for limitless supply products and the discussion of revenue models and derived benefits, helping to understand how such products, such as software, data and online games can be priced in a balanced way. It also aims to solve the mystery of how so many of these new products can operate on a zero-revenue, or even negative-revenue, model.

In addition, the book points out the essential differences between limitless supply product producers and their limited supply counterparts, in terms of growth mode, growth rates, competitive strategies and the importance of user stickiness.

New economic era

Over the years, the Chinese and global economies have changed dramatically, both from a financial and technological point of view. Firstly, the rise of the digital economy and smart technology development, which have provided more new products, services and business models, have coincided with the rapid slowdown in China's GDP growth rate.

Second, we have seen the appearance of new economic phenomena. For example, it is logical to assume that with technological progress and the development of new industries, products and business models, we would have seen faster growth in fixed-asset investment. But the reverse has been true in China, with annual growth rates dropping down to 5% from 20% a decade ago. Theoretically, technological progress should also increase productivity, but again, there has not been a rapid increase in total factor productivity—the relationship between output in real terms and the inputs involved in its production—and compared with 20 years ago, the growth rate of total factor productivity has actually declined.

New incrementalism

When we talk about changes in the economy, the process of rapid industrialization is basically coming to an end, and the growth rate of traditional industries is slowing. In terms of the laws of economics, final consumption expenditure is the ultimate gauge of economic development.

Engel's Law states that the higher the income in an economy, the lower the share of food expenditure should be. By extension, the higher the income, the lower the share of rigid demand—also known as the stock sector—in the overall GDP. In China, there are signs that many areas of traditional industries are becoming saturated with capacity and there are relatively few opportunities for expansion of investment with limited incremental development space.

There are obviously some opportunities available, but in order to develop further, we have to find other opportunities for incremental improvements—usually through product innovation—to act as growth drivers. The technological progress, digitalization and smart development within the country's economy over the years have brought about many of these improvements, including new business models, products, services and meeting changing consumer demands.

Emerging industries are relatively rich in incremental opportunities, but they are asset-light industries, with high levels of asset intangibility. These industries do not require large-scale fixed-asset investment in things like plants or equipment, so the presence of such investment, which has played a role in the rapid growth of traditional industries, is falling.

But in order for these new industries to act as successful economic drivers for China, there are two key requirements. The first is scientific and technological substitution. In core fields, there is a need for China to fill the gaps in its knowledge base and develop original technologies to avoid being pinched by large global powers.

The second relates to consumer demand. If China wants to be able to rely on its domestic economy, consumer demand must be increased in order to create more domestic capacity. Without the impetus of consumption, more investment will inevitably result in overcapacity. Moreover, if consumption does not rise, enterprise investment will become increasingly economically inefficient and ultimately enterprises will lack the incentive to invest.

Therefore, upgrading consumption in addition to demand should be a major focus.

Finite to infinite

Many of these macroeconomic issues are related to the concept of limitless supply, which should act as the central tenet of any new economic thinking. But what exactly is limitless supply?

In April 2023, the Party Central Committee and State Council issued a document proposing improvements to the production factor market, which has historically been focused on business investments in land, capital and labor. Today, there is a growing need to add investments in smart technology and digitalization to this list.

Supply limitations are the key difference between the traditional production factor market and the new additions. While land value, capital and labor will continue to depreciate or deplete, data, once produced, will always exist and can be reused multiple times, if not infinitely. Because of this limitless supply, there is little cost in converting these elements into a product, there is also no risk of a supply shortage, nor an oversupply. For example, it is impossible to have a surplus of Microsoft Office software. Similarly, WeChat and other such apps can be supplied by the company to anyone that requires them.

> The idea of limitless supply is a complete reversal of traditional economic thinking, challenging the assumptions that make up the discipline

This is fundamentally different from the limited supply of cars, houses, bread and milk in the traditional era. Because of this, enterprises will undergo radical changes in product pricing, business model design, competitive strategy and corporate growth, and these changes will have a direct impact on the entire macro-economy, affecting GDP statistics.

Challenging the norm

The idea of limitless supply is a complete reversal of traditional economic thinking, challenging the assumptions that make up the discipline. It is no longer possible to make decisions based on the assumption of scarcity because data and digital technologies, whether as a factor or product, have no scarcity. Limitless supply also challenges the idea that market forces ultimately put supply and demand in equilibrium, due to the fact there can be no surplus, in its original meaning, nor oversupply issues.

Similarly, traditional economic theories often use the "production function" to characterize the input-output relationship that makes up both enterprise and national economic growth. Economic growth theory is based on a certain production function, both at the macro level and at the micro level of enterprises. Traditional finite goods producers, no matter how strong the demand is, must increase their production capacity in order to get bigger. Limitless supply product producers do not have a simple production function, and because the product supply is unlimited, growth is entirely dependent on demand-side growth. This means that the original theory of enterprise growth that makes up economic growth theory, should also be reconsidered.

Intangibles and assetization

Limitless supply will also require major changes to the relationship between business and financial markets, and customers. Many limitless supply product producers are now what would be considered asset-light companies—with few fixed assets such as equipment—but they do have a large amount of intangible assets. These intangible assets will become an important part of the development of the new economy, and also explain some of the decline in the growth rate of fixed-asset investment.

Additionally, the growth scale effect of limitless supply is mainly reflected in user numbers, meaning the customer is now the most critical resource for these companies, and should therefore be regarded as the core asset of the enterprise.

In limited supply sectors, customers often engage in once off transactions with suppliers, on the other hand, limitless supply enterprises and users are beginning to develop mutual long-term relationships. By using an app, users constantly create a variety of value and income for the supplier. Traffic realization is where the enterprise uses the customer to create income for themselves. This type of customer has particular characteristics, and utilizing them properly is called customer assetization. Properly done, this will have a major impact on the nature of new economy businesses.

Financial transformation

The increase in asset intangibility and the assetization of customers will have a significant impact on valuation models. If the customer is now an asset, then we must consider a new financial valuation model. For example, this brings into play a "burning money" model as an investment tool, where businesses can "burn money" to obtain customers, which is akin to a traditional business making investments to obtain land.

Of course, the relationship between customer acquisition costs and customer value should be considered. Companies with light or intangible assets do not have much to offer for collateral in the traditional sense, so borrowing and financing are often limited, and new economy enterprises and technological innovation rely more on direct equity financing.

In this new economic era where intangible assets become the core growth drivers and customers become the assets themselves, we need new accounting methods to provide more accurate data for national economic accounting.

Limitless opportunities

It is clear that the new business models brought about by the increasingly intangible nature and limitless supply of assets make economic accounting more difficult. When combined with the effects of product substitution brought about by technological innovation (e.g. cell phones replacing cameras and film), it would seem that there has been a major underestimation of these new-era businesses' impact on the economy.

There is no doubt that there is an opportunity for a shift in economic theory to suit the rapidly changing nature of a world increasingly limitless in supply.

To find out more about the book, please visit: https://english.ckgsb.edu.cn/faculty/zhou-chunsheng/

LOCAL ISSUES, LOCAL SOLUTIONS?

China's local governments are in need of new revenue streams, but finding long-term sustainable solutions is proving difficult

By Chu Yang

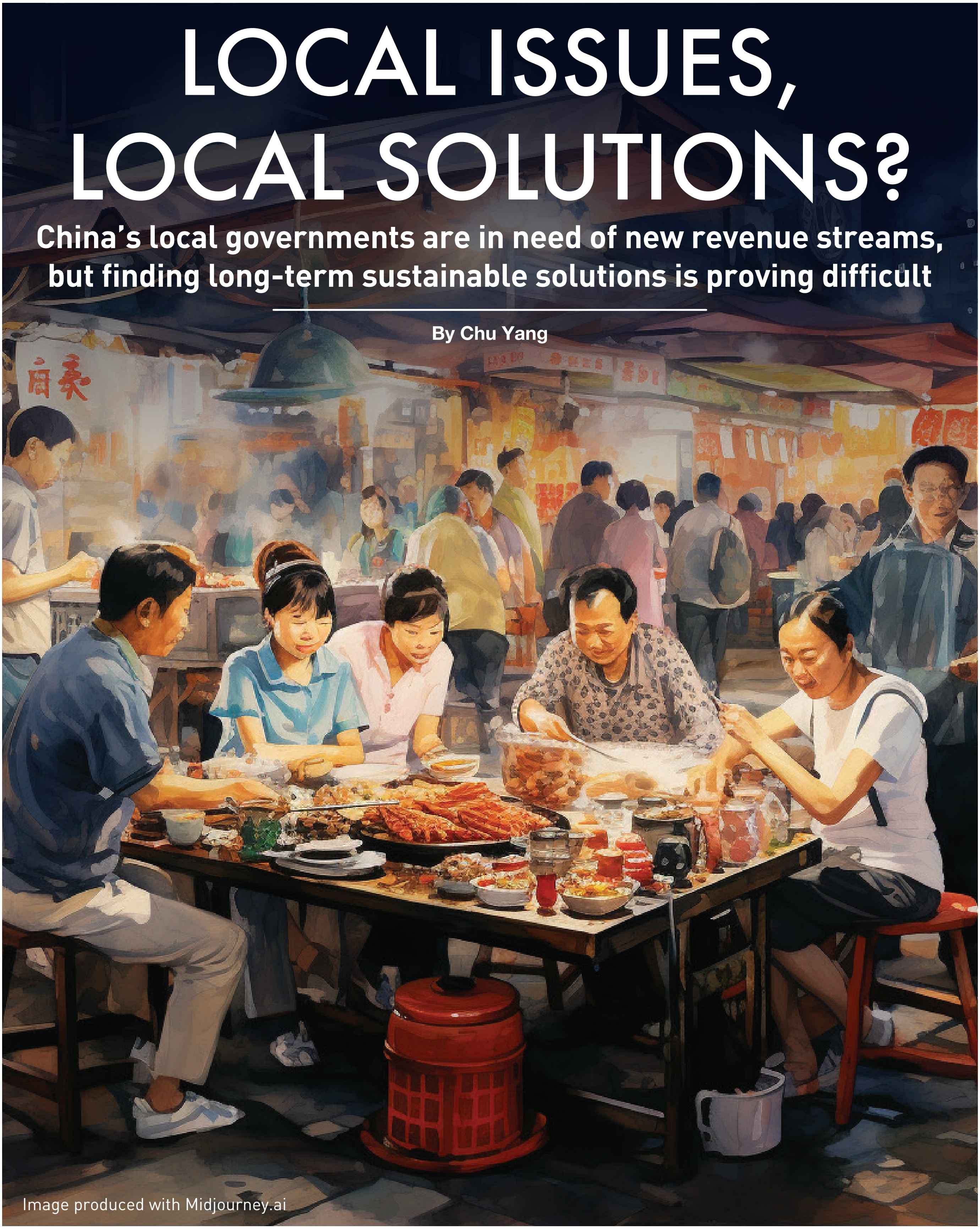


Image produced with Midjourney.ai

There is a lack of centralized financial support for China's local governments, so many of them are becoming creative in the production of new revenue streams

Mouth-watering images of sizzling skewered meat grilling on open charcoal dominated Chinese social media in early 2023, and they were all taken in one place—Zibo, an obscure industrial city in China's eastern Shandong Province. Zibo is not a typical tourist destination. You could even consider it off the map, but it had suddenly become one of China's top travel spots thanks to its cheap and delicious barbeque.

The local Zibo government capitalized on the initial social media buzz, driving the city's newfound popularity by providing support to and promoting local businesses. It is one of a growing number of examples of local governments across China attempting to diversify their income streams in the face of growing economic headwinds.

Local governments need to come up with sustainable solutions to tackle their mounting debts and falling revenues, and boosting tourism—like in Zibo—is one solution.

"Something that was captured by one group of people and circulated online became much bigger because of a feedback loop," says Carwyn Morris, assistant professor of Digital China at Leiden University. "That led to more people wanting to go to be a part of this event. The whole thing was intensified through online hype."

Finding success in skewers

The Zibo barbecue example provides a good case study of a local government harnessing a trend and then the subsequent successful promotion of a local product, because maintaining a base level of business and building it into a functioning ecosystem requires more than just social media buzz.

During the 2023 Labor Day holiday, Zibo launched a high-speed train specifically to serve the massive influx of tourists, with free shuttle buses and free parking. At the same time, the local administration took measures to ensure the prices at barbecue stalls, hotels and other tourist sites were reasonable.

"In order to facilitate high-quality travel experiences for tourists, the local authority has worked really hard across a number of areas," says Ma Liang, professor at School of Public Administration and Policy, Renmin University. "The fundamental goal for them was to build a trusting relationship with visitors which is the key to the success of the tourism and catering industry."

Local banks also got involved to help ensure those wanting to expand their business could.

One of them, the Qishang Bank, launched a low-interest business loan of up to ¥1 million ($140,000) available to existing restaurants and suppliers in order to make sure that they were correctly equipped to deal with the surge in popularity.

According to the *Zibo Evening News*, passenger numbers at Zibo Railway Station shot up by 55% in 2023 over the same Labor Day holiday period in 2019, before the COVID-19 pandemic. According to data from Meituan, a food delivery and hotel booking app, accommodation bookings in Zibo, a city of 4.7 million people, also increased by 800% compared to 2019.

The craze even led to the local authorities issuing a statement telling people to stay away because the city was at full capacity. By the end of April, Zibo Business Bureau data showed that since March, the city's barbecue business operators served an average of 135,800 people per day, and the city's March revenues were up 4.2% year-on-year to ¥11.1 billion ($1.6 billion), compared to declines in the previous two months. It was a dramatic turn from an unknown, decaying old industrial city to a buzzing 'Internet Famous' city, and it happened almost overnight with the local government deftly catching the wave.

Bigger fish to fry

While the Zibo government's success in forming a new short-term revenue stream is a positive example, there are more pressing issues for municipalities around the country that an influx of tourism is unlikely to solve.

"Tourism is a partial solution for some provinces, but the real issue is that local governments are bloated," says Alicia García-Herrero, chief economist for Asia Pacific, at Natixis. "Local governments have large amounts of debt held by local government financing vehicles (LGFVs) and then were subsequently the cushion for the central government when it came to COVID-related expenses."

In recent years, mounting debt at all levels has become a major drag on the Chinese economy, and in April 2023, Goldman Sachs Group estimated that China's total government debt had reached $23 trillion, or 126% of the country's GDP.

This is a particularly pressing issue at the local level, where the Chinese Finance Ministry estimates that there were around ¥35 trillion ($4.88 trillion) in outstanding on-the-books liabilities at the end of 2022. But this number does not represent the full extent of the problem, and Rhodium Group estimates that there is also an additional off-the-books debt related to local governments of around ¥59 trillion ($8.25 trillion).

In recent decades, local governments in China have generated income through various means including land sales as well as through the use of LGFVs which usually take the form of an investment company that borrows money to finance real estate development and other local infrastructure projects.

But given the economic headwinds in China as a whole, real estate is no longer the big source of revenue that it once was—prior to the 1.3% growth in Q1 of 2023, the property sector had experienced six down quarters in a row—and it is now necessary for local governments to find new revenue streams to stay afloat and pay back their mounting debts.

"With revenues down from land sales, which made up around 40-60% of balance sheets, there really needs to be a restructuring," says García-Herrero.

"Over the last 20 years, China allowed local governments to inflate the property bubble and use land as a tax stopgap," says Andrew Collier, an analyst at Global Source Partners, a macroeconomic and geopolitical research firm focused on emerging markets. "This was easier than restructuring the tax system and reforming the banks and allocation of capital. Unfortunately, as with most bubbles, they come to an end. There is no easy solution at this stage."

The problems have become more pronounced with reports from cities such as Tianjin of bus drivers failing to receive their salaries, and government officials in other areas being encouraged to purchase second, third or fourth homes to boost the property market.

One option for increasing local government income is the identification of marketable local industries including manufacturing and other products and services that can create revenue streams that can be taxed. Once an opportunity is identified, the subsequent development and promotion of business, both public and state-owned, can generate taxes as well as provide the impetus for the further development of existing infrastructure.

Beyond barbecue

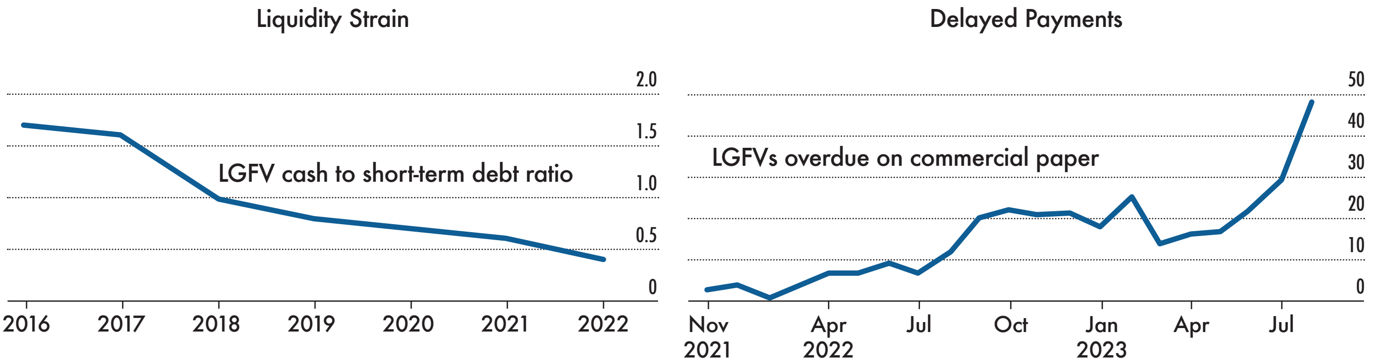
Cities and provinces across China have made efforts to build upon their local points of interest to attract more visitors and derive income by developing ecosystems around them. The 2022 unearthing of cultural relics at the Sanxingdui Ruins archaeological site in Sichuan province was widely publicized with museum visits in the city skyrocketing. The success was such that the local government played a role in funding a ¥1.4 billion extension to the museum, which had a trial opening in July 2023 and includes exhibits such as a glasses-free 3D version of the ruins.

Also in 2022, the tourism bureau in the eastern city of Hangzhou distributed ¥10 million in vouchers for local tourist attractions and surrounding businesses, including hotels, in an attempt to bring in more visitors. Similarly, Guizhou Province partnered with travel website *Mafengwo* to promote itself as a destination, offering discounts and vouchers for travel.

But looking to tourism for extra income is not going to work everywhere, nor is it a complete solution for local government finances. Various municipalities have been working hard to attract businesses to set up production bases within their borders, with many putting on events or sending trade delegations around the country and even internationally.

The city government of Hefei, capital of Anhui province, has been trying to become an electric vehicle (EV) manufacturing powerhouse, attempting to attract both domestic and international automakers to the region. Local authorities have introduced measures to promote all forms

LOCAL LIABILITIES | China's local government financing vehicles are facing increasing financial strain



Sources: Bloomberg, Huaan Securities, Goldman Sachs Group

> **Technology like EVs offers some assistance in economic growth, but such sectors remain too small and too competitive to fully solve the financial gap**
>
> Andrew Collier
> Analyst
> Global Source Partners

of environmentally clean transportation, including subsidies for EV manufacturers, streamlined approval processes and infrastructure development.

Partnerships with Volkswagen, BYD and NIO have also facilitated technology transfer, accelerated research and development, and provided access to international markets, positioning Hefei as a crucial hub for EV production and innovation. The city's EV output makes up 7.5% of China's total.

"Technology like EVs offers some assistance in economic growth but such sectors remain too small and too competitive to fully solve the financial gap," says Collier.

Authorities in Fujian province announced a plan to hold provincial-level events to attract business and infrastructure projects between 2023 and 2025 that should yield more than 300 contracted projects worth over ¥800 billion. Of those, 240 projects should be from Fortune Global 500 companies.

And some local governments, several cities in Guangdong Province for example, have been particularly active in sending delegates overseas to garner business interest. In November 2022, Guangzhou City sent a 160-person delegation to a beauty fair in Singapore, and in January 2023, the Shenzhen government set up the first Middle East-China cooperation fund with Saudi Arabia's PIF, valued at $1 billion—part of Guangdong's ¥200 billion ($29 billion) fundraising target. But these approaches have all been somewhat flawed.

"Inward investment from abroad will not solve the problem of growth," says Collier. "Earlier FDI was aimed at generating exports, which are now weaker due to the global economic situation. Besides, foreign capital no longer trusts the economic growth or political situation in China and is less willing to make large-scale investments."

And while local governments have shown the ability to identify and nurture profitable projects, their degree of control is limited, which can hamstring growth. "Local governments have greenlit a number of profitable plans since 2008, and their balance sheets were blooming," says García-Herrero. "But the centralized tax system means that only a few things are actually in the hands of local governments and they have been quite constrained in their capacity to increase revenues rapidly."

Central influence

While local governments bear the responsibility for developing local businesses, clear guidance and support from the center is often lacking, which is crucial given the highly-centralized nature of the Chinese system. Policy changes are often made nationally with local governments being given a goal to achieve with no clear roadmap to do so. Additionally, central government funding is getting harder to come by as China's economic growth slows.

Local governments are basically left with only two options, raise tax revenues or sell bonds. Because of this, projects with a quick return on investment, or those that quickly fulfill government requirements, have become the priority for local governments. This means that short-term solutions are prized, even without a guarantee of long-term sustainability.

The situation also tends to reinforce the importance of state-owned enterprises (SOEs) over private companies, as they offer more direct income streams to the local government, even though they tend to be less efficient.

"SOEs have better access to bank loans than private firms but the misuse of capital remains a problem," says Collier. "What local governments may do is attempt to sell off state assets to generate cash, but they will face significant political opposition among powerful state interests."

But some areas are trying to allay these concerns. In early 2023, the southern manufacturing hub of Guangzhou put forward a draft paper that seeks to grant equal market access to private businesses.

The national government is also providing more guidance and economic incentives in some parts of the country. There are a number of special economic zones (SEZs), areas that bring together related economic activities, such as manufacturing, industry or R&D. There are seven such SEZs across the country, as well as a number of other categories of clustered business activity, such as free trade zones and high-tech industrial development zones.

Hainan, an island province on China's south coast, also got a boost from the national government when it became a duty-free zone in an attempt to create tourism and boost domestic consumption. The scheme has been reasonably successful, particularly in the sales of luxury goods.

The concept of ‘Red Tourism’—the promotion of tourist sites with cultural links to the country’s communist history—has also been encouraged by the national government to help local areas attract more visitors to what are often poor or remote areas.

Many of the nationally-driven schemes have been successful, suggesting a need for greater central government involvement in developing local areas. But for the moment, those areas that fall into one of these categories are generally left to go it alone.

Funding for local projects can also come from loans from the large number of small- and medium-sized state banks across China. But many of these small banks, particularly in Central China, are facing insolvency issues and there are always concerns whether the longevity of new trends can become sustainable sources of business growth.

“The banks are also having to lend to sectors that they may not find appealing because the local government obliged them to,” says García-Herrero. “The exposure of local banks to small developers is much higher than the large five state commercial banks. And because the demand for loans is not growing, their balance sheets are not growing. Clearly, the model is broken.”

History matters: The Sanxingdui museum is being expanded to attract more visitors

Flash in the pan?

For local governments, creating long-term reliable income streams is of the utmost importance given their current economic hardships and the main question raised about leaping on social media opportunities such as the Zibo barbecue, is how valuable and sustainable they will turn out to be.

“Urban development and local employment are both issues improved through tourism,” says Ma. “But again, it’s all about timescales.”

Even when Zibo’s popularity was at its peak, there were already skeptical voices questioning whether it would last, which Manya Koetse, editor-in-chief of *What’s on Weibo* and social media expert, sees as a natural part of the cycle. “Overall, it will maintain an elevated level of popularity compared to before,” she says. “But the main thrust of it will be transferred to the next new thing, likely somewhere else entirely. There is always an initial storm, and then it calms down.”

“The other issue is that China can’t use tourism or new technology like artificial intelligence to replace property as a driver of the economy because they are not large enough segments,” says Collier. “A short-term solution to at least ease the problems would be to allow the gig economy to grow, but the leadership seems reluctant to do that. Otherwise, the only answer for China is full-blown economic reform, to allow banks to provide capital to productive companies instead of monopolistic stateowned firms.”

Without appealing to the central government for funding that may never arrive, attracting business investment appears to be a better long-term solution for local governments to overcome income issues. It is clear that some regions have made smart moves to position themselves at the leading edge of nationally strategically important industries—Hefei being an example—but for many, there is still a long way to go to pay off their debts and not many avenues available.

“It’s about attracting talent and attracting investment,” says Ma Liang. “Local governments need to carefully assess what makes them unique and what can be developed. Despite heavy debt, there is still room to reroute spending and direct more funds to support relevant and critical areas, rather than wasting them on mindless replication in oversubscribed sectors.”

CRYPTIC CRYPTO

Trading of cryptocurrencies is banned on the Mainland, but China is still looking to play a leading role in the global crypto market through Hong Kong

By Sean Matthews

It is more the technologies underlying cryptocurrencies than the digital tokens themselves that are of interest to China

China and cryptocurrencies have had a turbulent relationship in recent years, but a recent event in Hong Kong seemed to suggest the opposite. In early 2023, investors and regulators rubbed shoulders to discuss a new version of the Web built on blockchain infrastructure—the same technology that underpins crypto transactions.

In attendance at the inaugural Web3 Festival were crypto exchange CEOs, representatives of major cryptocurrencies like the popular USDC stablecoin, and key local industry officials including Hong Kong's financial secretary Paul Chan. "I will boldly say that now is a golden opportunity for the development of Web3, and also the most thrilling moment," Chan told delegates.

Hong Kong's bullish tone for the next stage of the decentralized internet known as Web3—and by extension cryptocurrencies—contrasts starkly with the outright hostility from Chinese regulators toward the crypto industry. Beijing first forbade local banks from handling Bitcoin (BTC) transactions in late 2013 and has turned the screws tighter over the past decade with a ban on initial coin offerings in 2017—the hottest component of the crypto industry at the time—and then full bans on crypto mining and trading in 2021.

"When you look at crypto, it does not solve many problems within the Chinese financial system—it only introduces risks," says Zennon Kapron, managing director of fintech research firm and consultancy Kapronasia. "While China's position has become more formalized over time, the authorities were saying pretty much from the start that they didn't see the benefit in crypto so they didn't want it."

The restrictions have decimated the market for digital currencies in China, which once accounted for more than 90% of global BTC trading. But while the hard line on crypto appears to suggest that China does not care for digital assets—which remain risky, volatile and highly speculative—the ongoing development of a Chinese central bank digital currency (CBDC) indicates Beijing's interest.

The digital yuan—now the most mature CBDC by far—is emblematic of how China has pooled resources and investment to spur innovation in blockchain, a peer-to-peer network made up of actors that can interact and exchange information without the involvement of a centralized entity. While this embrace of blockchain amid a crypto crackdown may seem inherently contradictory, it is important to note China's interest is more in the technology itself than in its most popular application.

"This is a technological frontier so it makes sense that the government is emphasizing it," says Zou Chuanwei, chief economist of Wanxiang Blockchain Labs, a research institution that cohosted the Web3 Festival in Hong Kong. But despite the government's policy stance on cryptocurrency, it is clearly interested in the underlying blockchain technology, although with some restrictions.

"They have also made it very clear that only consortium blockchains developed by organizations are allowed. The development, promotion and use of public blockchains—which anyone on the internet can join and participate in—is banned in China," says Zou.

Crypto's China downfall

China's crypto caution is perhaps understandable given its control-oriented governance system. Cryptocurrencies like BTC and Ethereum (ETH) are digital currencies that use cryptography—mathematical techniques for encoding and decoding information—to secure and verify transactions. Verification and record-keeping are done via blockchain, which allows the currency to operate as a decentralized system, theoretically beyond the control of any central government authority.

Transparency, decentralization, permanence and security are all hallmarks of crypto, which has the potential to simultaneously transform a variety of industries and blunt the power of authorities to impose strict social and financial controls.

Interestingly, in the early 2010s, China was the world's biggest crypto mining hub, with local miners responsible for an estimated 95% of all newly minted BTC. And as recently as September 2019, the country made up 75.53% of the total ‘hash rate’ or processing power of the BTC network, dwarfing the 4.06% share of the US, according to research from the Cambridge Centre for Alternative Finance (CCAF). The Chinese share of global bitcoin mining capacity officially plummeted to zero in July 2021, weeks after the government called for the restriction of crypto mining and trading, for environmental reasons and over concerns that digital currencies could be used for fraud or money laundering.

But the extensive mining prior to the mid-2021 crackdown means China is a ‘whale’—crypto speak for a massive holder of digital currencies. Chinese authorities seized 194,775 BTC, 833,083 ETH and varying amounts of seven other coins from a massive crypto scam in 2020, with the BTC and ETH alone worth a combined $7.17 billion at the time of writing. China’s central government holds more than 1% of the 19.49 million BTC currently in existence.

China’s efforts to stamp out crypto mining didn’t completely quash activity in the country either. CCAF research showed China’s share of global BTC production had bounced back to 22.29% in September 2021, thanks to under-the-radar operations that were geographically scattered and small-scale, and has stayed steady at that level since.

And despite Beijing’s anti-crypto stance, it remains technically legal for Chinese citizens to hold crypto. Some 78 million people in China—equivalent to 5.5% of the total population—still owned a cryptocurrency as of mid-May 2023, according to crypto payment gateway Triple-A. But this lags the 18.73% share in Vietnam, along with 13.7% in the US and 7.1% in India. These numbers can vary depending on the source, but the general distribution remains consistent across each outlet.

Hong Kong’s aim to be the world’s crypto hub is a more recent development, with the international financial center positioning itself in the same way Macau has done for gambling. As underlined by the Web3 Festival, the city has embarked on a charm offensive to attract crypto businesses, scrapping a yearslong ban on crypto trading by small investors and launching a new licensing regime for crypto exchanges. Crypto trading volume in Hong Kong stood at $74 billion between July 2021 to June 2022, compared with slightly more than $100 billion for Singapore, according to analytics firm Chainalysis.

The welcome mat for Web3 represents something of a pivot for Hong Kong as the Asian financial hub has not always been so open to crypto. In 2018, it introduced rules limiting crypto trading to institutional investors, sparking an exodus of digital startups to Singapore and other less strictly regulated jurisdictions.

“It’s a natural business for Hong Kong to get into ultimately,” says Wang Yikai, an associate professor in economics at the University of Essex in the UK. “It is a financial hub where institutions make money from international financial flows, so they could just as easily make money from cryptocurrency movements.”

CRYPTO OWNERSHIP

Vietnam has the highest percentage of its population that own some form of crypto currency

Country	Ownership (people)	% of population
China	78m	5.5%
Vietnam	18.6m	18.73%
US	46m	13.7%
India	97.5m	7.1%
UK	4.2m	6.2%

Source: Triple-A.io

Big on blockchain in Beijing

The transparency of blockchain creates a decentralized digital public record of transactions that is secure, anonymous, tamper-proof and unchangeable. Making use of this technology, a government could control all activities in the financial field. Blockchain technology can also be used in nearly every other industry. In addition, automation on the blockchain, widely referred to as “smart contracts,” could also appeal to Chinese authorities.

With an enthusiasm that comes from the top—Chinese leader Xi Jinping called for China to “seize the opportunities” presented by blockchain in a 2019 speech—Beijing is throwing considerable resources into this potentially disruptive technology.

China’s embrace of blockchain shows up most prominently through its development of a CBDC known as the e-CNY or digital RMB, a virtual version of the Chinese fiat currency and the first to be issued by a major economy. Cumulative transaction value of the digital RMB had topped ¥1.8 trillion by the end of June, compared with just ¥100 billion in August 2022, while ¥16.5 billion of the digital currency was in circulation, former People’s Bank of China (PBOC) governor Yi Gang said recently. This was up from the ¥13.61 billion in circulation at the end of 2022.

According to Yi, the amount of digital RMB in circulation represented just 0.16% of China’s currency in circulation, meaning there is plenty of room for its expansion.

“Mobile payments have already completely penetrated the daily lives of Chinese people, a shift that has made Alipay and TenPay important parts of China’s financial infrastructure,” says Zhang Xiaoxi, China financial analyst at Gavekal Research. “The PBOC does not want to be solely dependent on private-sector infrastructure, so they are creating a public-sector backup.”

“The digital RMB likely does not pose an immediate threat to other channels for private payments, but it does create competitive pressure that limits how much revenue the internet companies can extract from their users."

Beijing is looking to cement its early leadership in blockchain with continued investment. In May, a national blockchain research center backed by the Ministry of Science and Technology launched in Beijing with the aim of training at least 500,000 blockchain professionals for China's Web3 industry. It also aims to establish a national-level blockchain network that will connect existing blockchains in China and support other industries.

An additional arrow in Beijing's quiver is the Blockchain Service Network (BSN), a major state-backed digital infrastructure company launched in 2020 with the support of the State Information Center, China Mobile, China UnionPay and Red Date Technology. The BSN oversees the development and operation of the national blockchain infrastructure.

"The BSN was meant to underpin many other blockchain services, but my anecdotal view is that the BSN hasn't really met expectations in terms of what it could have been, so I think that's limited the uptake of those services in mainland China," says Kapron.

And while China has cooled toward crypto, some of the sector's biggest global players have links to the country. Five out of the 10 most liquid crypto exchanges count Chinese nationals among their founders, a heritage that has occasionally complicated their operations—for instance OKX's Xu Mingxing was detained by Chinese police for more than a month in 2020 to assist with an investigation.

The complicated relationship extends to Binance. Jiangsu province-born cofounder and CEO Changpeng Zhao launched the company in Shanghai in July 2017 before relocating it overseas weeks later as an official crackdown started to bite—although the claim that Binance completely exited China has been disputed. Even though Binance is inaccessible in China, the country reportedly remains the company's top market with more than 900,000 active users who traded up to $90 billion of crypto assets in May 2023 alone.

READY TO GO

Hong Kong is demonstrably ready for the widespread adoption of cyrpto currencies by the general public

Number of crypto ATMs · ATMs per 100,000 people · Area per crypto ATM (km)

Legislation · % Minimum capital gains tax rate for individuals

Number of blockchain startups · Crypto searches · Crypto readiness score /10

Country	Number of crypto ATMs	ATMs per 100,000 people	Area per crypto ATM (km)	Legislation	%	Number of blockchain startups	Crypto searches	Crypto readiness score /10
1. Hong Kong	149	2.0	7	2	0.00%	3.0	1,581	8.6
2. United States	33,720	10.1	271	2	10.00%	0.6	2,573	7.7
3. Switzerland	152	1.7	260	1	0.00%	12.9	710	7.5
4. Georgia	45	1.1	1,544	1	10.00%	0.4	758	6.2
4. UAE	4	0.0	17,755	2	9.00%	1.2	3,342	6.2
4. Romania	131	0.7	1,756	2	10.00%	0.2	923	6.2
4. Croatia	12	0.3	4,716	2	12.00%	0.8	1,941	6.2

Source: cointelegraph.com

Hong Kong's cryptic role

Some have suggested that Hong Kong, through its recent pivot toward crypto, could be serving as a testbed for China to experiment and innovate on digital asset regulation. The city's government recently introduced a HK$30 billion ($3.83 billion) mutual fund to boost the financial sector—including fintech, blockchain and digital assets—and aims to provide grants and funding opportunities to blockchain entrepreneurs.

"Hong Kong is an international financial center and is very open to financial innovations, including Web3 and cryptocurrencies," says Zou. "Hong Kong's financial regulators are very capable and experienced, so they know how to regulate this new market."

Kapron believes Hong Kong's motives for rolling out the red carpet could be more financially motivated given how the city was roiled by protests and then COVID-19 in the past four years. "Hong Kong did not fare well through the pandemic because of lockdowns and other recent challenges that it has faced. This is a much-needed opportunity to reset for Hong Kong because its role in Greater China has always been to be more innovative and one step ahead of mainland markets, to serve as the gateway into the wider country."

A regulatory milestone took place in early August when the Hong Kong Securities and Exchange Commission permitted retail investors on HashKey Exchange and OSL—the only two crypto exchanges licensed by the commission—to trade BTC and ETH.

This extended the momentum of the crypto and blockchain space in Hong Kong, where new developments have come thick and fast. Recent milestones have included the establishment of the Institute of Web 3.0 in early 2023 to focus on the digitalization of traditional industries and the virtual asset economy that includes cryptocurrencies and non-fungible tokens. The institute is headed by a former leader of the Hong Kong central bank and counts China Mobile, Huawei and the Hong Kong University of Science and Technology among its founding members.

The end of 2022 and early 2023 saw the launch of three crypto-asset exchange-traded funds (ETFs) on the Hong Kong Stock Exchange, making the city the first in Asia to provide such access to crypto ETF products. Investor interest has been lukewarm though, as their daily turnover averaged just HKD 9.3 million ($1.19 million) from mid-December 2022 to early February 2023.

Not content with just hosting the Web3 Festival, Hong Kong plans to continue expanding access for crypto investors and entrepreneurs. More showcase events backed by the government are planned, including Hong Kong Fintech Week at the end of October.

Beijing's quiet backing of Hong Kong's push to become a crypto hub has generated excitement over the border, but Zou says the crypto community should be wary of great expectations. "Hong Kong is not a sandbox for mainland China regarding crypto markets," he says. "What happens in Hong Kong is irrelevant, as the mainland usually views Hong Kong as an overseas market."

"Hong Kong has its own currency, its own financial regulator and set of laws. There is a clear firewall between the financial markets of the mainland and Hong Kong. I think the central government is confident that Hong Kong can develop a crypto market and regulate this market very well, with no risk of spillover to the mainland market."

And far from a policy relaxation, there could be more headwinds incoming for crypto on the mainland given Beijing appointed prominent BTC skeptic Pan Gongsheng as PBOC governor in July. Six years ago, Pan commented that "if you sit by the river and watch, one day the corpse of Bitcoin will float in front of you." At the time, he also defended regulatory action against crypto and admitted to being "a little scared" to consider what would have happened if China had not curbed digital assets.

Chinese blockchain

At first glance Hong Kong's crypto-forward moves may be difficult to square with the anti-crypto actions of the Mainland. But continued Chinese investment in blockchain points to a recognition in Beijing that digital payments of all kinds—presumably including cryptocurrencies—will make up a major part of the cashless financial system of the future.

"It's fair to say that the digitalization of money, payments and the financial system is a key motivation," says Wang. "Digital payments are already super-important. Of course there is debate on how important cryptocurrency will be within digital payments, with some saying it could account for a large fraction and others saying it will always be small because of the instability of cryptocurrency values. But generally, digital currency and digital payments are critical, and cryptocurrency will be part of it."

China's harsh line on crypto also looks increasingly justified given how often the space is marred by corruption and fraudulent activity. In 2022 alone we saw the multibillion-dollar meltdown of crypto exchange FTX that marked the fall of former golden boy Sam Bankman-Fried, the collapse of stablecoin Terra and cryptocurrency Luna and the collapse of crypto lending platform Celsius.

The numerous scandals underline how crypto remains a relatively niche, highly volatile phenomenon that potentially poses a risk to financial stability and investor security.

"Crypto-assets have no intrinsic economic value and do not serve the needs of the real economy whatsoever, according to the Chinese government," says Zou. "This is especially problematic given the country's leaders believe serving the real economy is the single most important goal of the financial system."

Some also view the development of digital RMB as an attempt to centralize the blockchain technology, which is ironically fundamentally about decentralization. China is now home to the world's most centralized internet—again, a technology that many thought would enable more openness and independence from authorities—so perhaps it is no surprise that Beijing believes it can bend blockchain to its will. After all, shorn of their anonymity, distributed ledgers like blockchain can be a boon for regulators: they can provide visibility, for instance, on who owns what.

"Technology is neither good nor bad, it's what you make of it," says Kapron. "China fully understands the potential of blockchain to either reinforce government control or negate it, so it is perhaps no surprise that the authorities have chosen to embrace it as a tool as much as they have done."

The acceleration of the digital RMB project also dovetails with Beijing's deep concerns about the vulnerability of the Chinese economy to the US dollar's supremacy and its desire to develop alternative systems to hedge against dollar risk. China's dependence on the dollar has long been a source of frustration in Beijing as it not only cements the country's vulnerability to sanctions, but also exposes China to America's macroeconomic whims.

A digital RMB could be useful in helping China evade international sanctions should the US and its allies ever decide to impose financial restrictions, according to Wang. "It makes a lot of sense because at present, a Chinese company making payments to a company in Argentina would need to rely on US or Western institutions like SWIFT," he says. "The money has to go through a system run by America or its allies. But now, with a CBDC, as long as the network is working, the money can go to Argentina directly."

Crypto's tip-toe to relevance

Once the promised land for cryptocurrencies, China has stamped out most activity in the space—although trading continues on the fringes. Mounting concerns about the health of China's economy mean there is little possibility that policymakers will ease their position in the next five years at least, predicts Zou.

"Authorities want to manage risks to the financial market stemming from real estate and local government debt, and so while that is ongoing, there is no chance China will change its cryptocurrency policy."

China's experimentation with the digital RMB and blockchain suggest at least some recognition that cryptocurrencies are here to stay as the future of money becomes increasingly digital. The digital RMB may initially be a mere footnote in China's financial system, but government backing could see it eventually become mainstream.

Shifting Tides

Benjamin Speyer, CEO of global technology and financial advisory firm Serica, discusses trends in China's technology sector and M&A environment, as well as the changing dynamics of cross-border trade and investment from direct to indirect.

An increasingly strained geopolitical relationship with much of the rest of the world has been the dominant story regarding China in recent years, which combined with an economic slowdown and its consequences have had a knock-on effect on the country's business environment. But while businesses, both foreign and domestic, are having to deal with new constraints, companies on both sides have shown great resilience and creativity when it comes to maintaining or even increasing their cross-border trade and investment activities.

In this interview, CEO of global technology and financial advisory firm Serica, Benjamin Speyer, discusses the impact of public perception, government policy and economic headwinds on a company's ability to expand into—or out of—China and the shifting patterns of Chinese FDI.

Q. How has the appetite for businesses entering the China market changed in the last few years?

A. Increasingly complex economic, regulatory, and geopolitical headwinds have created unprecedented uncertainty of the Chinese market resulting in foreign investment turning negative for the first time in Q3 2023. But that being said, China's burgeoning middle class, world-leading manufacturing capabilities and increasingly sophisticated technology are still highly alluring to countless companies around the world.

This has created a conundrum for many companies, leaving the majority in a state of strategic paralysis while the rest pursue disparate courses of action. For example, Apple is derisking by implementing the "China +1" principle, Carrefour is decoupling with heavy divestments and Volkswagen is nearshoring by doubling down its efforts in what is becoming known as an "in China, for China" approach.

For me, I think what's undeniable is that China is at a major crossroads in its economic development, and companies - both domestic and foreign - are having to adapt their strategy and approach to the new normal.

Q. What are the key barriers faced by businesses looking to enter the market today?

A. The first barrier would be the geopolitical environment, including the deteriorating relations with the US and the trade war expanding restrictions on key technologies such as semiconductors. In Europe, in light of the Russian invasion of Ukraine, there is also a sense of a need to reduce their economic reliance on China through friendshoring and enhanced foreign trade controls.

But honestly, these issues pale in comparison to the core historic challenges of doing business in China—language barriers, cultural differences, contrasting professional practices, bureaucratic hurdles, localization challenges, IP protection, extremely fierce local competition, etc. So ultimately, as much as things are changing, the core challenges remain a constant and shouldn't be underestimated.

In fact, I'd say that the silver lining of the geopolitical climate is that it has spurred companies to invest time and resources into analyzing the market, identifying reputable local partners, and developing robust strategies to determine if and how they can be successful here.

Q. What are the most popular sectors for cross-border investment and M&A in the technology sector right now?

A. Certain areas, such as telecommunications, semiconductors, surveillance technology, bleeding edge AI, advanced robotics, and other similar dual-use tech, are now completely off limits. This was inevitable, given that some differences between China and the West will never be bridged. But there's more that unites us than divides us. Sectors that are addressing shared existential challenges such as climate change, food security, healthcare access and poverty alleviation are all booming. This is where we've seen most of the success stories in recent years.

> China's burgeoning middle class, world-leading manufacturing capabilities and increasingly sophisticated technology are still highly alluring to countless companies around the world

Benjamin Speyer is CEO of Serica, a global technology and financial advisory firm specializing in the Chinese market. He is also an advisory board member of the UK National Committee on China and a Northern Powerhouse International Champion in China for the UK Department for Business & Trade.

It's also supported by wider policies in both China and the Western markets. So, for example, here in China they've repealed many foreign ownership restrictions, established grant and subsidy programs in different economic zones, and have rolled out initiatives like Healthy China 2030 and Net Zero 2060. In the West, the Reduction Act in the US and the Green Deal in the EU are having a similar effect. The overall outlook looks very positive for these sectors.

Q. How do you think the advent of generative AI will affect business in China and will they be able to reach AI parity with the US anytime soon?

A. It's undeniable that the US still dominates globally in AI. Compared to China, they have almost five times the amount of high-level AI talent, private investment into the sectors is around three times higher and they dominate most of the advanced chip technologies. But China has advantages that they could snowball over time to reach AI parity with the US. It has high technology adoption rates, widespread government support, the world's largest AI model and an army of STEM graduates that averages around four and a half million a year.

But here and now, Chinese companies currently cannot compete technologically. Instead, they are forced to work lean, investing in practical solutions across a wide range of sectors banking on an increase in their bottom line in the short term with the hope of snowballing the development of their AI capabilities down the line.

The real battleground for the future of AI will be in complex, rapidly changing emerging markets across Asia, Africa and Latin America where the Chinese approach has an inherent advantage. If Western companies continue to underestimate or fail to learn from China's approach to innovation, they'll struggle to compete in these emerging markets and risk falling behind as a result.

Q. How have Chinese technology companies adapted to the new normal? Are there any markable changes in their business activities abroad?

A. We have seen an unprecedented number of Chinese companies aggressively expanding overseas. Companies such as BYD, Shein and Temu are winning customers across the US and the EU. Xiaomi and CATL are setting up manufacturing bases in traditional low-cost markets like Mexico and Eastern Europe, as well as inside the US itself as part of a nearshoring strategy to bypass trade tariffs and reduce costs. Financially, the capital markets in China have dried up and cross-border transactions are more complicated, so a lot of companies are setting up their operations in places like Singapore and the Middle East, while others are using countries like the UK and Germany as talent and R&D bases. One development that has really picked up steam recently is a surge in Middle Eastern investment into Chinese tech firms that has gone some way to filling the void left by US-led venture capital and private equity firms. All-in-all, it feels like the era of global China is truly upon us.

Q. What type of unique or special technologies does China possess that it can effectively compete with on the global stage?

A. They have highly practical technology that comes at a very competitive price, which governments and consumers across the world need. Using greentech as an example, from the consumer point of view the vast majority of the mass production and sales of solar, wind, hydrogen and electric vehicles (EVs) are all Chinese. For green infrastructure, such as grid management technology and high-scale solar farms, China is uniquely placed to fill that gap for a price and speed that other countries cannot currently compete with.

It all broadly links back to China's core innovation advantage, its unrivaled ability to rapidly adopt, scale and monetize new technologies. We've seen this in countless sectors such as digital commerce, fintech, clean energy, electronics, telecommunications, and more recently EVs. This is an approach that a lot of the world can learn from, particularly now as investors are tightening their belts and costs are rising.

Q. What are the main challenges Chinese companies face when entering Western markets?

A. The first major issue is that the general sentiment towards China is at an all-time low, but that will hopefully improve. It is in many ways reminiscent of the sentiment towards Japan in the 1980s and 1990s. I think Japan ingratiated itself more when it started setting up manufacturing bases abroad and creating jobs there rather than just within Japan.

But honestly, the biggest challenges are similar to what Western companies face when they're coming into China—language barriers, cultural differences and contrasting professional approaches that result in very poor literature and communication practices. Most Chinese companies are also fairly homogenous and have few senior foreign leaders in their headquarters to help them internationalize and compete more effectively. That can result in an unwillingness or inability to adapt to unique market conditions. More modern companies, such as unicorns have founders who studied and worked abroad and will do much better than traditional companies in this respect.

Q. How do you see trade and investment between China and the West developing over the next five to ten years?

A. As with any China prediction, my take could be completely wrong, but I think the amount of trade and investment will increase significantly, but it will not be direct.

What I mean by that is that there is a split being driven by politics and shifting regulations, but the economic reality is that both sides are still highly reliant on each other. What will change is where and how that is done. For example, Mexico recently became the US' largest trading partner but Chinese FDI into Mexico over the same period grew sharply. Within the US, Chinese companies are establishing manufacturing bases nationwide, and companies like Temu and Shein dominate the app charts. The US is still buying all things Chinese; they are just not necessarily buying them directly from China.

From an investment and M&A perspective, most of that is going through Singapore and other similar tax-efficient and politically neutral jurisdictions. Using FDI flow analysis to understand the scope and scale of trade and investments between them will become less and less effective as time goes on.

China and the West have a highly symbiotic relationship that won't change at the fundamental level, but will at the operational level. I envision that nearshoring and friendshoring will characterise 2024 much like 'derisking' has this year. Who the winners and losers of this new normal will be remains to be seen.

Q. What advice would you give to companies expanding into, or out of, the Chinese market?

A. There is no manual or step-by-step guide for success in China, but there are key principles to follow that will help guide you toward success. The first is to strive for objectivity. It's easy to get emotive about such an unfamiliar market, so making decisions based on market data and expert advice, rather than hearsay and anecdotal information is a good place to start. Next is assessing your market readiness, and taking the time to understand whether now is the right time to enter the market. Maybe it is worth waiting a couple of years or perhaps you should go somewhere else.

Another is investing the time into understanding how to localize your approach. If you are a Western company entering China, focus on agility and flexibility, and if you are Chinese, focus on details and linear planning, so that you can successfully adapt to the market. Lastly, leverage local partnerships. Take your time to find reputable people and companies to augment your entry, governance, operations and commercial activities. Without that local knowledge and talent, you'll find it hard to grow and succeed. If you follow all four of those principles and be mindful of them, whatever stage in your journey you're at, I think you can be successful.

Interview by Patrick Body

FUTURE INTELLIGENCE

There are several key knowledge and financial barriers that are slowing the adoption of AI in China's SMEs

By Patrick Body

Image by Jamie Stevenson

Chinese SMEs face similar barriers to their global counterparts in the adoption of AI tools

Looking around her Shanghai factory, Jocelin Chen laments the current difficulty of integrating new smart tech into her production lines. "We're currently adding in a new Industry 4.0 system using a contractor and after that we will want to introduce AI as well," she says. "But even though there are a couple of subsidies for that, we can't really access them given the small size of our business, so we're pretty much on our own."

The implementation of AI tools into business processes is becoming increasingly important for companies to stay competitive the world over, and in China's currently turbulent economy there is even more of a need for businesses to stay ahead of the curve. But for many of the country's small businesses, knowledge and price barriers remain high and, in many cases, prohibitive.

While the country is well known for its high level of digitalization, this mostly relates to consumer technology, and China's enterprise technologies tend to lag behind. Improving business and manufacturing through AI adoption across all sizes of organization will be crucial to ensure continued growth and stabilizing a shaky economy. But there isn't yet a clear roadmap to equal AI distribution.

"Because of the differences in progression between consumer and enterprise technologies, China is likely to see rapid AI adoption on the consumer side," says Hongli Chen, CEO of Edgenesis, which specializes in AI-driven industrial solutions. "But if you look at enterprise or B2B technologies, adoption in China is probably going to be a lot slower, especially for smaller companies, so there is a real opportunity to try and speed this up."

Across the circuitboard

AI has become something of a catch-all term for what is actually a wide range of technologies and tools, both in the media and the population at large around the world. Although there is some level of cross-pollination in the underlying computing logic of all AI tools, each involves a different development process, requires different data input and produces different outcomes. For example, although Large Language Models (LLMs) such as ChatGPT and image production tools such as Midjourney both give output based on text prompts, the coding and learning processes for the AI behind each output vary significantly.

"AI really refers to a multiplicity of technologies, it is not just one unipolar technological hub with everything emanating from there," says Denis Simon, former Clinical Professor of Strategy and Entrepreneurship at the UNC-Kenan-Flagler Business School. "There are applications in everything from aerospace to agriculture, so you have to recognize that the deployments are all going to be at least initially driven by the specialized opportunities that are raised within particular industrial sectors."

Tailored solutions will also vary from company to company within the same industry, meaning that implementation timelines across and within different sectors vary significantly.

"There is not a lot of risk involved in adopting AI tools within an industry like video game development, so we will see changes quite quickly in the larger companies," says Hongli Chen. "But with something like manufacturing, where the product is physical and can be sensitive to the environment around it, you can see adaptations taking as long as a decade."

They, Robot

China has shown a great interest in AI development, with numerous organizations, both governmental and private, investing heavily in the field. According to global market research firm International Data Corporation, China's AI industry is expected to be worth $14.75 billion in 2023, which makes up around 10% of the worldwide total. Annual growth of the market is expected to surpass 20%, reaching around $26.5 billion in 2026.

In 2017, the government released its New Generation Artificial Intelligence (AI) Development Plan with the goal to build up indigenous capacity at home and encourage its technology companies to pursue a

AI ADVANCES

AI development will see a number of major advances by 2030

	PRE-2020	2020	2022	2023	2025	2030
TEXT	Spam detection Translation Basic Q&A	Basic copywriting First drafts	Longer form Second drafts	Vertical fine-tuning gets good (scientific papers, etc.)	Final drafts better than the human average	Final drafts better than professional writers
CODE	1-line auto-complete	Multi-line generation	Longer form Better accuracy	More languages More verticals	Text to product (draft)	Text to product (final) better than full-time developers
IMAGES			Art Logos Photography	Mock-ups (product design, architecture, etc.)	Final drafts (product design, architecture, etc.)	Final drafts better than professional artists, designers, photographers
VIDEO/3D/ GAMING			First attempts at 3D/video models	Basic/first draft videos and 3D files	Second drafts	AI Roblox Video games and movies are personalized dreams

Development Mid-stage End-game

Source: Global X ETFs

"going out" strategy, namely, to invest and expand abroad.

As well as government promotion of AI, China's academic institutions, particularly Tsinghua University and Peking University, have strong AI research programs, often in partnerships with public and private entities. It is also very likely that large sums of money are being invested in AI tools for the military, but information on this is understandably sparce.

The private sector in China has been making the most visible headway with AI development, for consumers and enterprises alike, and it is the country's internet giants that are the frontrunners.

Baidu, China's equivalent to Google, has established the Institute of Deep Learning and has developed various AI products including an autonomous vehicle platform called Apollo, as well as an LLM named Ernie Bot, which has been designed as an equivalent to ChatGPT. Both Alibaba and Tencent have also established AI research centers. Alibaba Cloud has produced a number of cloud-based services for businesses, and Tencent has integrated AI tools in a number of its products, including the ubiquitous messaging app, WeChat.

There are also a number of other AI-specific companies such as SenseTime and Megvii, which specialize in computer vision and deep learning technologies, and iFlytek which is a global leader in transcription and translation tech. Most of these big firms are working on digital AI tools, but there is also an opportunity for companies to produce practical solutions for the application of AI into industry.

"We have already gone through several stages of AI development which have allowed it to develop into what it is today—an autonomous agent that has the potential to understand and interact with its environment—but the key now is 'embodiment'," says Hongli Chen. "That is, creating physical tools and products that allow for AI to actually interact with the real world."

Chen's Edgenesis is one of the companies working on embodiment, building a system that allows for the physical application of AI tools.

"We have so much computing power available to us at the moment that we don't really struggle with capacity limits when it comes to developing the digital side of AI," says Hongli Chen. "But the real issue is embodiment because each individual business within an industry can have unique requirements, so the one-size-fits-all approach isn't easy to apply."

Another company that is providing such solutions is the humanoid and smart services robot company, UBTECH. Headquartered in Shenzhen, the company produces 'full stack'—that is, the physical product plus the underlying technologies and the associated services—humanoid robots for a variety of consumer and commercial uses. The industrial unmanned factory solutions are being applied across various industries such as automobile, battery and tire manufacturers.

It's not SMEasy

While large Chinese companies and digital platforms have clearly made headway in the AI space, SMEs are the foundation of much of the country's economy, and it is these smaller businesses, particularly those in less tech-oriented sectors, that are finding it harder to harness the various uses of AI.

"AI is mostly being implemented by companies that are already tech-oriented, such as IT companies, and tech-oriented services companies, such as digital healthcare platforms, fintech, etc.," says Qian Zhou, Manager at China Briefing, a publishing subsidiary of multidisciplinary professional services firm Dezan Shira & Associates. "In contrast, the adoption of AI in smaller companies that are not already tech-oriented or digitalized seems to be more limited."

The main opportunities for AI implementation in China's SMEs relate to manufacturing and e-commerce where digitalization has already taken hold, and there is huge potential for streamlining these processes.

"AI has the capability of significantly lowering operating costs and increasing revenue for Chinese SMEs, by improving operational efficiency and creating new revenue streams," says Qian Zhou.

But there are three main barriers to adoption that need to be overcome. Wei Ruiqi, assistant professor of Marketing at the Emlyon Business School, in his studies of AI adoption in China, found that the first key barrier facing SMEs is a lack of knowledge. Some companies are almost entirely ignorant of AI, while a second group were aware of the concept, but had no idea how to utilize it to better their business practices.

"The third group has an understanding of what AI could do for them, but lack the technical knowledge of how to actually do it," says Wei. "Many SMEs may not have an IT team with the capabilities required for AI integration."

Knowledgeable IT staff are often too expensive for SMEs, and the high up-front investment costs for AI technologies is the cause of the second key barrier to AI adoption, a lack of infrastructure. AI requires both physical technologies such as sensors and cameras, and digital resources such as algorithms and digital platforms, all of which can be pricey.

"The bigger companies are going to have to test the waters for premature technologies," says Hongli Chen. "They have the budget that allows them to absorb some level of failure, but for SMEs it is going to be another five years or so before they can realistically get involved with AI."

It is the natural state for a market that larger players are first movers and smaller companies lag behind, so it is understandable that these issues are not just limited to the adoption of AI in SMEs in China. There is a global shortage of AI talent and SMEs in Europe and the US struggle to compete with the high salaries paid out by large tech firms for top-end machine learning engineers and data scientists.

The final major barrier for many SMEs is a lack of data. AI works best when fed with a significant amount of relevant information, and for many SMEs they either lack the data or do not have it organized in a useful way.

Solving problems

There have been a number of solutions proposed to help SMEs move forward with AI integration, not least of which is the use of government subsidies to help cover the costs of AI adoption. Some subsidies are already on offer through competitions run by public-private platforms such as China's Artificial Intelligence Industry Alliance and similarly public-private-structured Government Guidance Funds.

But SME access is still limited, usually due to the requirement for AI intergration and ability to be demonstrated prior to the receipt of any funding. This is the case for Jocelin Chen at her factory in Shanghai's Qingpu district.

"The government has made us aware that there are subsidies available for AI implementation," she says. "But there are a couple of reasons why they don't really offer anything for us at the moment."

The Qingpu government is offering companies subsidies of ¥1 million, ¥2 million or ¥5 million depending on their level of AI integration. But firms have to first introduce some AI into production processes before they are eligible to apply for a subsidy, and there is a limit on the number of companies in any given area that can receive the money. So there is no guarantee of receiving funds even if the company is successful in implementing AI.

"We know that we don't have the same level of knowledge, expertise or finances as the bigger firms in the area," says Jocelin Chen. "So spending time integrating AI into our systems in the hope of getting some of the money back from the government is unrealistic."

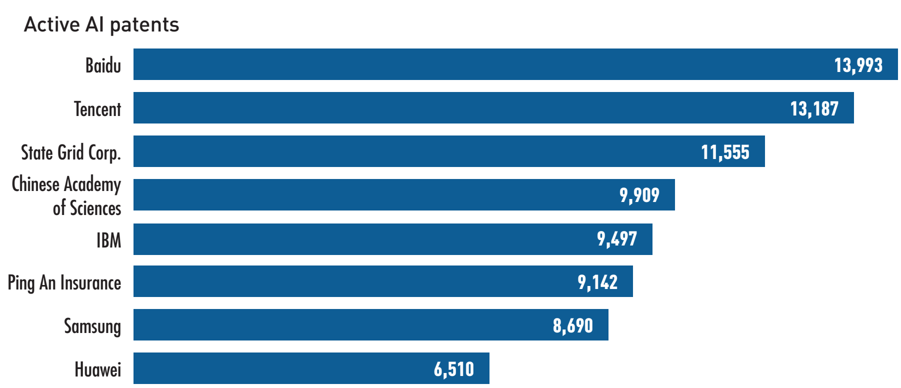
Acknowledging these difficulties, it is also important to note that it is understandable to have some barriers to subsidy access so that the money goes to the right companies. But interestingly, Edgenesis' Hongli Chen has also had trouble getting subsidies on the AI development side. "There are definitely some available," he says. "But they are mostly designed for the bigger firms. We would definitely like to see some more made available [for smaller enterprises]."

"In some areas across the country, you can receive a subsidy if a certain percentage of your business revenues comes from the development of AI," says Wei Ruiqi. "Businesses have the option to move or register in these areas, but I think a larger innovation ecosystem that helps these businesses work together more would also help."

There is also clearly a role for the government, industry associations and larger businesses to play in providing AI-related education to SMEs, according to Wei Ruiqi. "Education is very important because AI is still such a vague concept for many SMEs," he says. "The training needs to cover what it is and how individual businesses can use it. Also important would be the creation of some kind of platform that SMEs can use to share their newfound knowledge with their contemporaries."

A further option, particularly in the e-commerce area, is for China's dominant platform companies, such as JD.com and Alibaba, to provide the infrastructure and application knowledge that SMEs do not have access to. One such example was the

PATENT PENDING | Chinese companies dominate the list of businesses with the most AI and Machine Learning patents



Source: Tech In Asia

August 2023 release to the public of 100 patents by Alibaba's in-house research initiative, Damo Academy. The patents span multiple AI application scenarios including image processing, video technology and 3D visualization.

"One of the SMEs that I talked to used JD.com to help them develop an AI chatbot that was personalized to their products and is able to operate 24 hours a day," says Wei. "But there was a trade-off for this, which is that smaller companies have to hand over their data to the larger platforms, and there is every chance that this might be used to either push them out of the market or end up with them being bought out entirely."

Law of robotics

Data is the fundamental currency within AI development, meaning that the more data an algorithm has to work with, the better its output will be, and this is a major discrepancy between large enterprises and SMEs. While some regulation has already been put in place to deal with this issue, there does appear to be a need for wider-ranging supervision of AI development at both national and international levels.

Given the existing power and rapid rate of improvement of AI technologies, avoiding a concentration of control over AI is critical to avoid the development of too-powerful monopolies.

"First-mover advantage in the AI market is going to be very important," says Simon. "Those who are already past the starting gate have a much bigger advantage because they have a broader view of the potential playing field in terms of applications and utilization, among many other things."

The Chinese government has already made moves to regulate AI development from a number of different directions. Data protection has become a major topic of discussion in China, with rules around the import and export of data causing issues for many international businesses operating in the country. But the Personal Information Protection Law and the Data Security Law that were passed in 2021 introduced stringent controls on data collection, storage and transfer, all major parts of AI development. Interestingly, these issues have led to a number of Chinese AI companies being registered outside of China, while maintaining headquarters in the country.

In 2019, the Beijing Academy of Artificial Intelligence introduced the "Beijing AI Principles" in 2019, which set ethical guidelines for AI research and development, including ensuring the safety and controllability of AI, sharing the benefits of AI among all of humanity, and using AI to promote social good and protect human values.

There are a number of laws in place aimed at safeguarding National Security, as well as sector-specific regulations. "Different sectors also have specific regulations regarding AI," says Tony Tong, Professor of Strategy and Entrepreneurship at the University of Colorado Leeds School of Business. "One such example is healthcare, where AI medical devices have to get certification from the National Medical Products Administration."

"China's approach is underpinned by the government maintaining tight control over data and internet services within its borders, with a focus on AI's potential for social change/management and public security," says Tong. "Other countries, such as the US, are more *laissez-faire* allowing for the relatively free flow of data which fostered innovation and growth in tech. Though they do have some tighter sector-specific regulations for things like healthcare."

There are also calls for greater regulation of AI development on an international level in order to ensure countries are not left behind. There is already an internet gap which holds back countries in the developing world and there is the prospect of a similar AI gap on the horizon.

Existential Threats

There are also more ethical and existential issues that require some form of regulation. The potential for AI to develop beyond what humans can control is a very real threat and one which needs to be managed accordingly.

"We must recognize that in any form, even without consciousness, AI can become intelligent enough to pose a threat to humanity," says Hengjin Cai, Professor at the Institute of Artificial Intelligence at Wuhan University. "We should not overly worry about or hinder the development of machines attaining self-awareness, which is unlikely to be prevented. Instead, we need to guide machines in forming a self-awareness that can resonate with human emotions and, by incorporating technologies such as blockchain, assist us in monitoring and balancing the rapid progress of AI in a reasonable manner."

And there is also a danger that the pace of AI advancement, given its generative nature, will become uncontrollable. "We should consider mandating the inclusion of hard-coded rules in systems that would allow for owners or governments to shut them down," says Hongli Chen.

End game

While these existential threats rightly generate concern, interest in continued AI adoption is at least as high in China as anywhere else. "While companies and start-ups implement these solutions, the widespread application is underpinned by governmental policies," says Tony Tong. "The Chinese government's national AI strategy not only involves becoming a leader in AI research, but also encourages AI's broad application across the economy and society."

But without greater understanding and infrastructure development, as well as assistance in the form of government subsidies, China may be relatively slow at reaching the levels of widespread AI adoption throughout its SMEs that it is aiming for.

Having said that, the general trajectory of China's AI industry is on par with global leaders and there are opportunities for those that successfully harness AI to grow rapidly. "There is definitely a chance for some of China's AI companies to become huge," says Hongli Chen. "But like any other industry, only the best will make it to the top."

Fundamentally Unchanged

Management strategy has been reinvented many times over, but the effective fundamentals have been around for millennia

By Anu Rathninde, President of Johnson Controls for the Asia-Pacific region

Management strategy is always a topic of discussion given the ever-shifting nature of business trends and the increasingly globalized nature of business operations. The last 100 years in particular have seen the creation of myriad frameworks and solutions designed to address new business issues, but the fundamental logic behind many of them remains much the same, and has for thousands of years.

Solutions to different management issues always run the risk of being overengineered and more of a hinderance than a help, but getting the fundamentals of management right adds an immense amount of value. Larger-scale business success is often predicated on multiple smaller successes, and concentrating on the basics helps offset the stress of knowing that in business as well as in life there are no certainties.

Leadership has become less about the individual and more about creating a dynamic culture that both fits with the requirements of a specific company and the larger ecosystem in which it operates. What were once seen as buzzwords now represent a pressing need for change, therefore to realize greater business success, leaders should cultivate and act in accordance with a culture that takes these goals seriously.

Managing uncertainty

To start with a recent example of an event that caused a shift in management thinking, we can turn to the pandemic. Firstly, it had an impact on the development of company culture due to the rise of remote working, and we have seen a resulting decline in the levels of productivity and real-time problem-solving efficiency that can be achieved in an office environment.

On top of this, it caused an increase in uncertainty across the board. Uncertainty is inevitable because the future is always unknown and the pandemic not only created a greater level of uncertainty, but also reminded everyone how little control we have over our own fate. It is therefore important to look at this greater sense of uncertainty through this lens of history in order to find ways to address it.

Anu Rathninde is the President of Johnson Controls for the Asia-Pacific region, a role that includes the development of the company's growth strategy in APAC and China. He has had extensive engineering, technical and leadership experience gained through living and working across the world. Anu has recently published the Chinese version of his book *Tackling Complexity*, a book aimed at sharing those experiences, as well as his philosophy towards leadership and some practical strategies to help drive performance excellence.

Common business practice when dealing with an unclear potential outcome is centered on the term VUCA—volatility, uncertainty, complexity and ambiguity. But to me, all of these words mean the same thing as they all reflect our inability to predict what the result of any decision will be. One of the fundamental ideas underlying good management strategy is that while the outcomes of decisions you make are uncertain, you remain accountable for making things work and a manager therefore needs to take steps to reduce or side-step that uncertainty.

People in positions of power in the business world are increasingly realizing the value of ancient wisdom in dealing with this issue. Books such as Sun Tzu's *Art of War*, written in the 5th century BC, is regularly quoted to this day by leaders around the world, showing the fundamental value in the wisdom from ancient thinkers, leaders and strategists.

That is not to say that the modern scientific approach has no value, but it does demonstrate a need for modern business leaders to integrate new and old together, finding the right balance of the two in the formation of their management strategies.

To illustrate the point, we can compare a modern day SWOT analysis with the ancient quote from Sun Tzu, "If you know the enemy and know yourself, you need not fear the result of a hundred battles." The fundamental point of the quote is that the only way to win a battle is to know and understand both yourself and your enemy, it's not an either/or. Today, people don't often understand how this can apply to business situations and often disregard it as an old fable.

But when we look at the logic behind a SWOT analysis, it has the same message. Analyzing strengths, weaknesses, opportunities and threats all lead to a greater understanding of the stakeholders in any given situation which, in a battle, would be yourself and your enemy.

The key difference, and why the ancient wisdom may have more to offer than its modern counterpart, is that a SWOT analysis is done on a much smaller scale.

> It is very important to truly be a functioning part of the whole ecosystem, and this is how a business can generate the most value from and within the China market

The longevity of Sun Tzu's analysis shows that there is a truth that has worked, and worked well, for thousands of years, and we need to understand that building new framework after new framework to deal with problems is not necessarily going to give us the results we want. Instead, modern scientific solutions need to be founded on the fundamentals to ensure that they continue to serve their purpose.

The contradiction we have to deal with here, is that we often do require some level of conceptual framework to apply this ancient wisdom to a specific situation, but the ancient wisdom often says there is no grand narrative to apply it to. So what we must do is recognize that the new conceptual model is not designed to supply you with outcomes—which we have established are almost always uncertain and difficult to quantify—but provide a way to focus on producing a sturdy framework for future development.

Overall, it's about having the right mindset and getting the little things that matter the most right, because progress in a wider sense is the accumulation of a number of smaller successes, both in life and at work. Business leaders need to create better cultures within their organizations to ensure consistency with the wider ecosystem and make the world a better place. In order to do that, they always need to start with a clear business strategy.

Managing in China

Looking at this within the China context, the country still has a huge amount of growth potential given the size of its population and although it is already the second-largest economy in the world, it is still well below its preferred percentage of middle-class people in the population. The country has big ambitions and is generating the technology required to challenge for global leadership.

Twenty years ago, when China was cementing its place as the factory of the world, foreign companies operating in the country were almost exclusively managed by expatriates. But if you look at these companies today, this has changed significantly, with most management positions now populated by locals.

In order to develop a management strategy for modern-day China, we need to understand the capabilities and talents of local leaders. Chinese factories, for example, are probably the most efficient and well-run in the world, with an affinity for adoption of new technologies and digitalization in a more general sense. Any business that comes to China needs to embrace this approach.

Another change over the last two decades has been the gradual shift of knowledge sharing and tech development from being almost entirely one directional into China, to a more even, bidirectional process. Understanding that both sides can provide value to a business is also important.

The final key issue to remember is that you can no longer simply enter the China market to make a profit without providing personal and societal development as well in some way. For example, the country's widespread adoption of social media and sharing of information is something that needs to be well-understood because a company that does not live up to the values it espouses may find itself with reputational difficulties that are hard to overcome. Younger generations of leaders appear to have a greater understanding of this, and in turn are less likely to work for people who are not committed to the wider value system, including issues such as the Carbon Goals or sustainability.

It is very important to truly be a functioning part of the whole ecosystem, and this is how a business can generate the most value from and within the China market. It is also important for global companies to understand that this may require a level of ambidexterity, but how the balance of decision-making lies between your global headquarters and local leadership is an answer that varies between companies and industries.

Operating a business in China often requires a greater level of local autonomy than leaders may realize, in order to provide the flexibility and speed in decision-making that is necessary. All companies around the world find themselves somewhere on this spectrum, from old and rigid to new and flexible, but it is important to find the right balance for your company to be successful in China.

Old knowledge: Anu Rathninde believes in the use of ancient wisdom

Strategies in context

Johnson Controls has been in China for around 30 years and now has about 8,300 employees, 10 manufacturing plants, three R&D centers and 49 branch offices across the country. The company is in the business of building technologies which are generally aligned with the external value system given that 40% of carbon emissions come from buildings. This provides a massive opportunity to grow.

The company has also used the past 30 years to develop a strong local leadership presence at all levels across the board. Many of its enterprises and products have been entirely localized after the relevant technologies were brought into the market. There is also an effort to work as part of the wider ecosystem with academics, policy makers and institutes to help develop the whole sector.

The company obviously operates like any other company looking to thrive in a market, but the increase in quality leadership that adds value to the wider system is beneficial to everyone, and transparency and knowledge sharing is important.

External environments are always fluctuating and the pressures we see now are obviously different to those 10, 20 or even 100 years ago. For China, as the market expands geopolitical issues are always going to be there, but regardless of what the external environment might look like at any time, there is still the underlying necessity for humanity to make progress in various fields, such as sustainability, business practices or product quality. But whatever the issues, better contributions by companies and individuals will improve society as a whole.

In general, I think leaders today spend too much time on the physical and technological requirements of their company. Any working technology can be effective as long as the right leadership and culture is in place.

There are different phases of leadership and involvement, but the world is now realizing that good leadership is fundamentally about ensuring an organization has the right culture and this is where strategy needs to focus first and foremost. If you don't get that right, then it will not matter what technologies or other advantages you may have.

New Market Horizons

Chris Reitermann, CEO for APAC and Greater China at Ogilvy, discusses changes in Chinese consumer behavior post-COVID and the massive digitalization of Chinese advertising

There is a growing understanding that to successfully operate in the China market, foreign companies need to show a level of flexibility and responsiveness that may not be required in their home countries, and nowhere is this more true than in marketing and advertising. The industry has become highly digitalized in China in recent years and looks set to continue on that track. But just as foreign companies face challenges in China, so do the increasing number of Chinese companies looking to enter foreign markets.

In this interview, Chris Reitermann, CEO for APAC and Greater China of Ogilvy, the full-service creative agency, discusses the advertising and marketing trends in China post-COVID, Chinese consumers' purchasing considerations and the breakdown of different companies' spending within the digital advertising space.

Q. What are the main advertising and marketing trends that have emerged in China's post-COVID era?

A. It's a very big question. Post-COVID, there are two big trends in China, one of which is changes in consumer behavior. This is more of a macro trend that is influencing a lot of what our clients do, due to the short-termism that has appeared and the uncertainties in the economy. It has been very hard for companies to build over the last three years, and also hard for us to help our clients get a clear view of how the next few years will pan out. A lot of our clients are trying to understand what consumers want and what the changes in consumption have been. But I'd also say that these issues are somewhat universal, rather than China-specific. There is a lot more cognizance of quality of life, self-indulgence and living a better life which influences a lot of our clients' brands in the way they go to market and the way they innovate and position themselves.

The other key trend we are seeing is consumers trading down, especially when it comes to everyday-use products, where many are choosing cheaper or local brands. What traditionally used to be a big middle layer of market positioning is now struggling a lot. In response, our clients are either trying to premiumize their products or, through various different ways, trying to come up with more competitively-priced lower-end products.

Q. Imported products have for many years had a special attraction for Chinese consumers. How important is the 'country of origin' factor today?

A. We have done research over the years looking at how much country of origin influences purchase behavior and found that it is less of an issue for consumers than it is at a political level. When China had geopolitical issues with France or Japan, it didn't really affect consumer behavior at all in the long-term. There are obviously some links, like people aspiring to own French luxury products or Italian fashion, but there also isn't a general trend to buy local. But Chinese products have improved a lot and often consumers don't really see a shift in purchasing these products from a nationalistic point of view, but more from a practical one. If it's 30% cheaper and just as good a product, then why not buy the local one?

Also in some cases, political pressure doesn't affect consumer behavior at all. China has tried not to encourage any kind of K-Pop growth in the country, but it still sells well. And it can even have the opposite effect and increase sales.

When you look at successful multinationals operating in China, there is a common thread that has been consistent over the last 30 years. These companies invested long-term in their China business, their brands and they produce competitive products, but they have also localized very successfully to local tastes and behaviors. In general, consumers will respond to a brand on the basis of whether it is good or bad, rather than where it comes from.

Q. To what extent is digital now the most prominent channel for advertising in China and what advice would you give in terms of balancing an advertising budget between digital and other channels?

A. It's all digital to some extent. For most clients, spending on digital is around 70-80% of their marketing budget and the large majority of the rest is digital in some way. Even, for example, the tiny amount of money spent on radio is often done through podcasts, which are inherently digital.

People like to put things in buckets, so you get the idea of digital as a whole, but it is also split into various categories depending on a client's objectives. I would say that if a client has $100 to spend, they spend $80 on digital and within that, about $40 is spent on e-commerce-related things. With the other $40, they put money into things like online video, which is money they would have spent on TV advertising in the past, and this is functionally a digital version of brand advertising in the traditional sense. Another large chunk of the remaining cash is spent on social and key opinion leader (KOL)-related routes. Those are the three main buckets: e-commerce, digital brand advertising and social and KOLs.

What is interesting about China is that e-commerce and social media overlap a lot, with any number of social platforms, livestreams and things like that offering ways to purchase products or promote products.

Chris Reitermann is Chief Executive Officer for the Ogilvy Group in APAC and Greater China, with responsibilities for the strategic development and daily operations of the agency across 17 markets. He is a member of Ogilvy's Worldwide Executive Leadership Board and is also a Global Client Leader for WPP, overseeing global key client relationships across WPP.

Q. What is your balance of clients between those looking to enter the China market and Chinese companies looking to expand abroad?

A. We work with very few new multinationals that are looking to enter China now. We usually work with very large companies, most of which have been here for many years. This means that a huge trend for us over the past few years has been domestic brands, where there has been a lot of growth. The pattern is often similar, with them coming to us wanting to build their brand into a significant business in China and at some point later wanting to move beyond China to become a global brand in some form.

While there are a lot of Chinese companies that sell and operate in international markets, there are still very few that we would consider as global brands in the usual sense, such as Coca-Cola or Unilever. But you can see that this will happen in the future, and with the domestic challenges in China, I believe we will see an acceleration in large domestic companies looking to move outside of China—there isn't enough space to grow in the domestic market.

The main difference is the locality of decision-making and processes. For domestic companies, it all happens here, but for international companies, most of it comes from their headquarters and they are looking to localize their China business.

Q. What are the barriers for Chinese companies looking to expand out of China?

A. They face the same barriers that every other global company faces and I don't think that these are uniquely Chinese. Looking at history, we have seen Korean, Japanese, American or even German companies all facing similar challenges to internationalization. I think the main difference is that the Chinese companies are still at the very beginning of that journey. It is a huge step for a company to go global because it involves overcoming massive talent, cultural and structural issues, and these things take time. Multinationals coming into China still face similar issues because they tend to be HQ-driven and that doesn't allow for the flexibility required to be successful in China.

I think that is something where a company like Ogilvy, or WPP in general, is attractive because it has a presence in pretty much any market, meaning it can cover the practical and pragmatic issues of entering a specific market, more than the nebulous idea of 'going global.'

Q. What are the major markets or regions that Chinese companies are looking to expand into?

A. You can definitely say that, broadly, Chinese companies tend to follow the prevailing government direction, so the US is not that popular at the moment. The same is true for Europe in some categories and less so for others. But generally speaking, Southeast Asia, the Middle East and Africa are the first places that Chinese companies would consider going. Eastern Europe and Latin America are also options. Anything that is either closer to home or more geopolitically aligned are where companies tend to go first. At the same time, for the automotive market, there is a huge push for companies entering Western Europe, because of the size of the market there, and the current political agenda of allowing open competition, so it can vary by category as well.

> It is a huge step for a company to go global because it involves overcoming massive talent, cultural and structural issues, and these things take time

Q. What are your expectations with regard to the growth of the Chinese consumer market over the next decade and how do you expect Ogilvy's market share to change over that period?

A. Looking at macro figures, demographics and any other data that's available, you can fairly assume that growth in the next decade or so will not be the same as it was in previous years. That said, I do think that consumer confidence and consumer spending will return, maybe not immediately, but in the mid-term we should be expecting something of a rebound. Consumers become more cautious when faced with uncertainty in capital markets, but I think that the Chinese government will stabilize some of that, and hopefully incentivize companies and consumers to spend more. Also, coming from Germany where negative GDP growth is common, I always remind people that three, four or five percent growth is not bad at all. There are still opportunities for expansion and there are sectors that are doing very well indeed. It will require more strategic rigor and innovation though.

For us, compared to many other multinational agencies in China, our setup is probably a bit more sustainable because we are working with a lot of Chinese companies and this is where the growth is going to be. Chinese clients make up around 40% of our business, but when you look at it in more detail, what we do with and for them is only scratching the surface because a lot of it is still brand or advertising driven. Domestic companies are only now starting to bring us much more complex issues to solve as they mature with the market.

Q. The e-commerce revolution seemingly changed the face of marketing and advertising. What do you see as the next possible revolution?

A. AI will certainly revolutionize our business in many ways. A lot of companies are seeking more efficient ways of doing things and AI will drive huge improvements in how they do marketing, generate content, plan and buy. This will massively shift how marketing is done in the future and how agencies will operate. Beyond business efficiency, I also think that AI will open a lot of doors when it comes to creativity and will change the tools you have at our disposal for the better. If these two come together in the right way, there are a huge number of opportunities and we will see great changes.

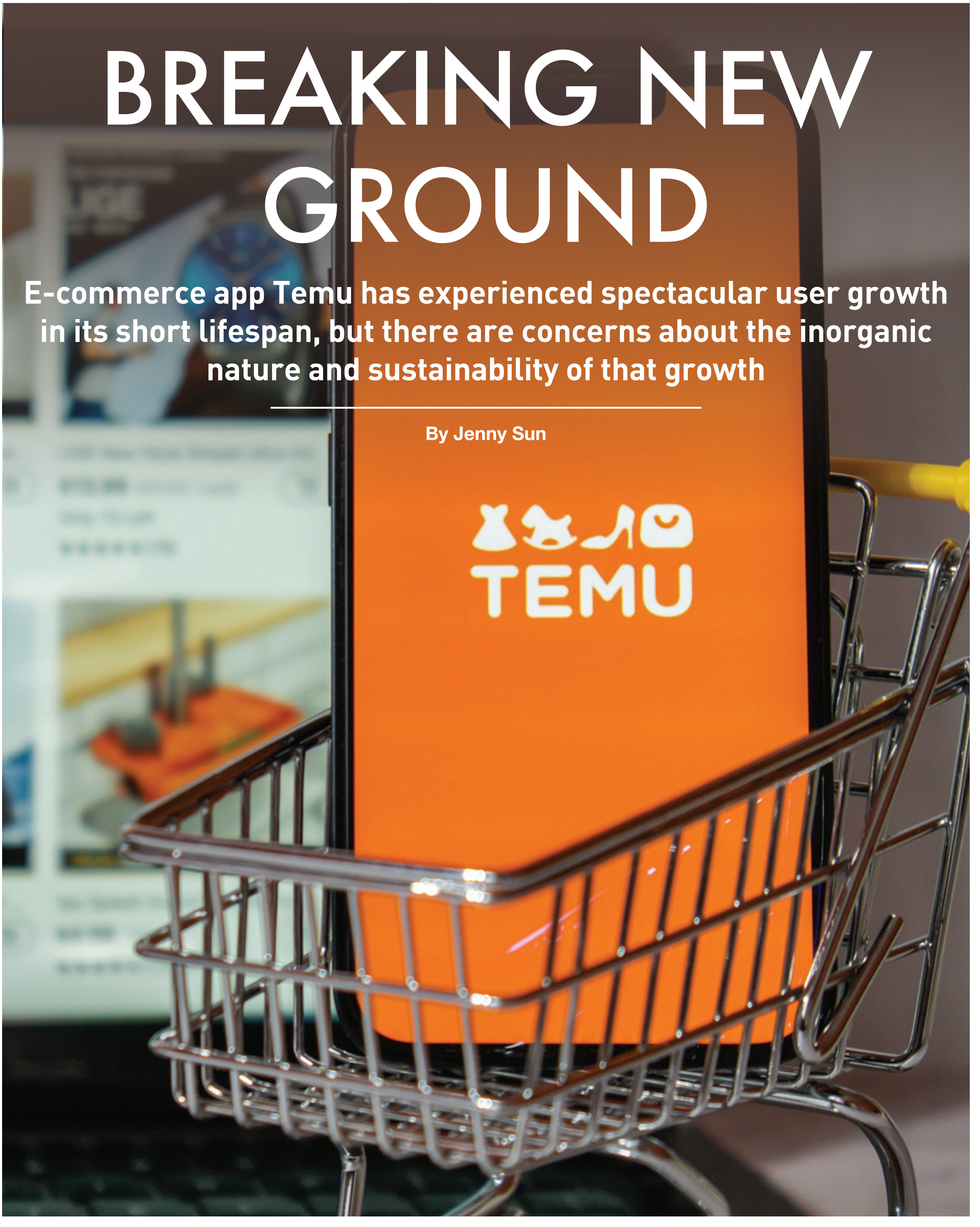
It will be interesting to see how China's big tech companies will evolve and develop in the coming years. I think we'll see a few new players emerging and the likes of Alibaba and Tencent will transform to focus more on the expansion of certain existing areas and social platforms.

Interview by Patrick Body

BREAKING NEW GROUND

E-commerce app Temu has experienced spectacular user growth in its short lifespan, but there are concerns about the inorganic nature and sustainability of that growth

By Jenny Sun



Temu has grown rapidly but is still losing money on each transaction, so turning a profit is still a way off

The NFL's Super Bowl is almost as well-known for its commercials as it is for its sporting entertainment, with many tuning in specifically to see how iconic American brands will wow them each year. But the 2023 Super Bowl featured a rather unusual spectacle—a commercial for a Chinese product, and one that was just five months old. Chinese e-commerce app Temu's 30-second time slot cost the company $7 million, but that sort of spending seemed apt considering the "Shop like a billionaire" tagline that punctuated the commercial.

Launched in September 2022, Temu's user numbers surged in the month following the Super Bowl and it only took the company a record-breaking seven months to achieve 50 million app downloads. The feat is even more impressive when compared to e-commerce giants Shein and Wish, both of which took nearly three years to reach the same milestone. But remarkably, this was only the beginning for Temu.

Temu, linked to Chinese e-commerce giant Pinduoduo under parent company PDD Holdings, is charting a fresh course for Chinese companies in Western markets, offering a wider range of products than the originally grocery-focused Pinduoduo. The unprecedented success of Temu in its initial months is in sharp contrast to the historical struggle faced by many Chinese companies in penetrating Western markets, but there are caveats.

"We've never seen such a rapid rise of an e-commerce app in terms of adoption and usage among US consumers," says Sky Canaves, a senior retail and e-commerce analyst at Insider Intelligence. "However, the sustainability of its growth rate is still in question."

New horizons

Temu is a cross-border e-commerce platform offering a wide range of products including clothing, home appliances, shoes, electronics and more. The company offers items at surprisingly low-price points—consumers can buy a wireless headset for $9, dresses for $2 or a digital camera for $12.

"Temu is really effective at conveying its message of low prices," says Canaves. "This is particularly appealing in the current climate where inflation has pushed up prices and made consumers more value-conscious."

The establishment of Temu was seen as a strategic move by Nasdaq-listed PDD to expand beyond China's stagnating domestic economy and e-commerce market. According to China's National Bureau of Statistics (NBS), online retail sales only grew by 4% year-on-year to ¥13.79 trillion in 2022, down from 14.1% in 2021 and 10.4% in 2020.

"This decline in growth signaled a need for Chinese companies to explore opportunities abroad," says Kai Xie, a Beijing-based e-commerce analyst at a private equity fund specializing in Chinese internet giants. Xie adds that PDD also recognized the need for Chinese manufacturers to export goods overseas due to the escalating pressure on China's exports and the severe surplus in China's manufacturing industry. "Selling goods at low prices, or even at cost, can still yield minor profits," says Xie.

Seizing this momentum, Temu has quickly carved out a unique place in the Western e-commerce landscape. The platform operates under the ethos of "Team Up, Price Down," which mirrors the marketing strategy of Pinduoduo, PDD's China app. This approach encourages users to invite others from their social circles to participate in deals, allowing them to gain discounts. But unlike Pinduoduo, which has a strong focus on agricultural products, Temu's product range is broader, resembling global online retailers like Amazon.

Currently, Temu operates primarily in the US market. The Boston-headquartered platform's gross merchandise value, which is the total sales before expenses, grew quickly from $3 million in September 2022 to $192 million in January 2023 to $400 million in April. The company has not yet released any profit and loss numbers.

In the US, the company has been targeting young and price-conscious shoppers in search of discounts, with over 80% of users under the age of 44 and over 60% aged 34 or under, according to

Daxue Consulting. The platform's success in the US has encouraged its next move—expansion into Europe and the Middle East. Temu has now started selling to European markets including France, Germany, Italy, the Netherlands, Spain and the United Kingdom.

In terms of the operational strategy, Temu employs a direct-to-consumer model, which creates a direct link between Chinese manufacturers, where its warehouses are located, and the young and price-conscious consumers across the world, significantly streamlining the logistics process. By circumventing the conventional route that involves wholesalers, retailers, and multiple warehouses, Temu ensures a more efficient delivery processes.

"From zero to something is always the easy part," says Mark Greeven, a professor of innovation and strategy at International Institute for Management Development (IMD), Switzerland. "It's hard to call it a success yet. Such a short-term boost could have many reasons—not saying much about actual performance or sustainability."

Speedy strategy

Temu's rise in the US stems from an aggressive customer acquisition strategy primarily driven by heavy marketing investment. The firm intends to spend $1.4 billion on advertising campaigns in the US in 2023, and $4.3 billion the following year.

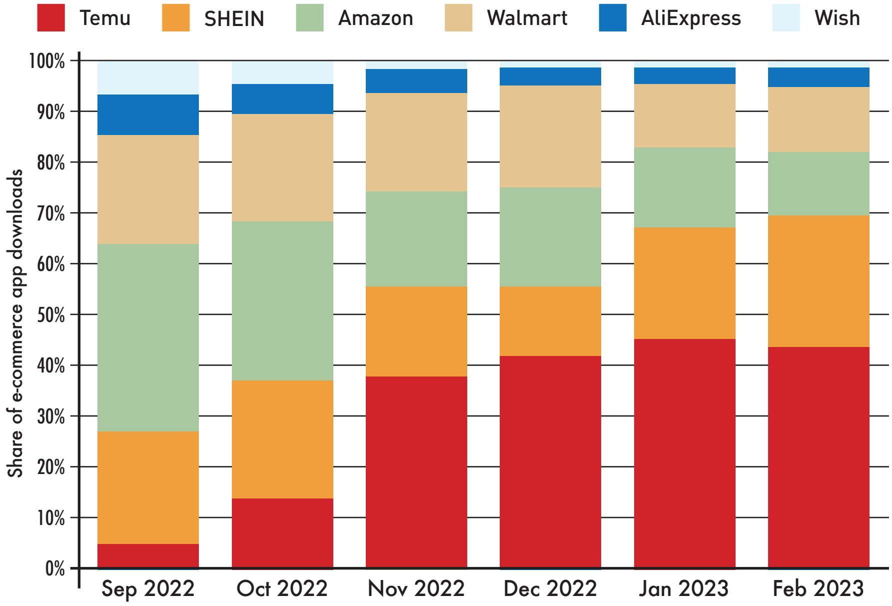
"Without the significant earnings from PDD's stronghold in China to back it up, Temu wouldn't be able to sustain such high losses to gain customers," says analyst Xie. "This kind of aggressive approach is reminiscent of Pinduoduo's early strategies in China, snatching a piece of the market from Alibaba, and focusing relentlessly on acquiring customers and increasing traffic."

According to a *WIRED* analysis, Temu is losing an average of $30 per order as it tries to penetrate the US market, with PDD and suppliers subsidizing many of the costs in the hope of returns later on. So far, the company has avoided any scrutiny regarding anti-dumping laws in the US market, despite the impossible low prices.

Canaves says that there are plenty of e-commerce companies that have lost money for a long time as they grow and acquire customers, with Amazon as probably the best example. "But the strategy of selling low-cost goods—already a low-margin business—at a loss for a sustained period is definitely more risky," she adds.

RAPID GROWTH

Temu experienced a meteoric rise in the number of app downloads over the first six months of its existence in the US



Source: Apptopia

Still, utilizing PDD's strong financial position, Temu employs various enticing marketing techniques, such as paid offers for site sign-ups, referral rewards and limited-time flash deals with discounts of up to 90%, all aimed at luring cost-conscious consumers into the app.

The firm's approach has certainly garnered attention. "Temu ads were just all over the place —Instagram, Meta and even Chinese game platforms," says Yi Liu, a Houston-based consumer. "But the whole shopping experience was fun and addictive, just like playing games."

Liu's feelings towards the app speak to the success of Temu's gamification strategy. Gamified options include spinning wheels, growing virtual trees, a daily gift box and benefits for logging in multiple times and inviting friends—all measures meant to drive acquisition and consumer retention.

Temu's connection to Pinduoduo's robust supply chain also provides a significant competitive edge. "Temu benefits from the vast network of Chinese manufacturers it can access, which was utilized effectively," says Canaves. "It offers an extensive range of products that can be sold and marketed not just to US consumers, but also globally."

In terms of shipping and delivery, Temu operates a domestic and international joint transport model. Domestic sellers send their goods to Temu's warehouse, from where Temu manages international shipping and last-mile delivery in the US. Standard delivery orders usually arrive within 7-15 days, whereas expedited orders usually arrive in 5-10 days. If the delivery is not there on time, then consumers get a cash benefit. The company manages this by subsidizing the expensive shipping, which makes up a major part of their losses on each transaction, as well as taking advantage of a duty-free shipping loophole that allows for tax-free shipping on $800 or less of goods.

Temu now also uses a "fully-managed" or "all-inclusive" marketplace approach. Manufacturers agree on a selling price to Temu and ship goods to its warehouse. Temu then handles everything else: sets the consumer price, marketing and shipments to consumers.

Competition

Temu has frequently been compared with Shein, the fast-fashion company known for its exponential growth rates. But despite their similarities, these two Chinese-born companies hold distinct positions in the market—Temu operates like an online mall, offering a wide variety of products from merchants and brands. On the other hand, Shein is primarily a fast fashion retailer.

In May, Temu achieved a notable milestone, surpassing Shein in US sales. According to Bloomberg Second Measure, which analyzes billions of credit and debit card transactions, spending on Temu was 20% higher than Shein.

"Temu may eventually adapt its strategy to sell more branded goods, seeking a slice of the higher-margin business," Canaves says.

Both Temu and Shein's meteoric rise demonstrates the potential they possess in reshaping the e-commerce landscape. However, despite Temu's rapid ascent in the e-commerce space, it's been a struggle to gain traction against the likes of Western competitors such as Amazon and Walmart. Currently, Amazon still holds a nearly 40% share of the US e-commerce market, followed by Walmart, with a 6% share.

"Temu can chip away at Amazon's and Walmart's revenues by competing on price, particularly for mass-market inexpensive goods," Canaves says. This positioning has led to comparisons of Temu to the online equivalent of dollar stores, which currently have limited online presence, but "it's still a long way off."

US China tech analyst Rui Ma says that Temu is very likely to become a substantial competitor to established Western e-commerce brands like Amazon, adding that Temu could potentially replicate Amazon's nearly infinite product selection and quick delivery times.

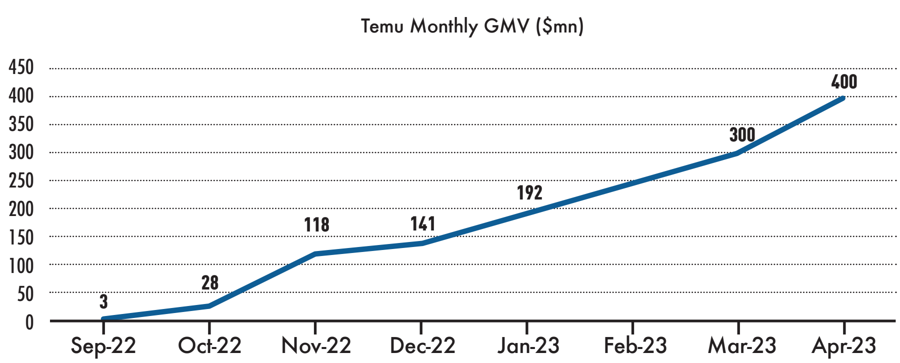
"Temu has proven its ability to utilize the existing, albeit imperfect, logistics system to deliver goods within about nine days, and the time will definitely reduce in the future," says Ma. "With the right strategy and enough time, Temu could follow Amazon's logistics playbook."

Recognizing the threat, Amazon has recently excluded Temu from its price searching algorithm, which checks if products sold on its platform are competitive with rivals.

Canaves interprets Amazon's move as an unwillingness to acknowledge Temu as a competitor and suggests that it could be due to Amazon's inability to compete on price, given the numerous fees it charges sellers.

Overall, while Temu's unique model and pricing strategy may pose a challenge to the likes of Amazon and Walmart, these Chinese upstarts still have a long way to go before they could substantially threaten the Western giants' domination of the US e-commerce scene.

MOVING GOODS | The total value of items sold by Temu has been growing steadily since its opening in September 2022



Source: YipitData

Challenges

Despite Temu's growing gross merchandise value (GMV) and downloads, it is currently having trouble retaining customers. This struggle can be attributed to a myriad of reputational issues that have begun to tarnish the company's image and dampen consumer trust.

For instance, Temu has been inundated with complaints about non-delivery of products, and reports of incorrect orders being dispatched. In addition, Temu has also been criticized for its poor customer service. The company has reportedly been unresponsive to customers' grievances, further undermining its reputation.

Interestingly, another unexpected challenge that Temu is wrestling with stems from its ultra-competitive pricing strategy. While the intention was to attract customers with remarkably low prices, the strategy seems to have backfired. Many consumers are questioning the quality of the products due to their cheap price tag.

These issues have impacted the company's ratings. With 520 complaints lodged to the Better Business Bureau, the company has been slapped with a subpar customer rating of 2.55 out of 5 and a C- for the BBB Rating and Accreditation.

Subpar product quality not only impacts the trust consumers place in Temu, but also hints at the broader challenges within the supply chain. Due to Temu's aggressive pricing model, there's an evident strain on the production side of things—the aggressive price competition is pressuring Chinese manufacturers to reduce their prices to unsustainable levels, posing an existential threat to these small businesses.

Many of these sellers, lured by the promise of accessing overseas customers, are being pressured into offering deep discounts and potentially sustaining losses. Canaves notes that the pressure on these smaller sellers could be significant, and that this is a "tough situation" for them, especially if they've come to only rely on Temu.

Xuan An, a clothing seller and factory owner in China's southern Guangdong Province, expressed his concerns after losing money on 100 orders over two months. He says that he had little control over pricing as Temu frequently asked him to lower prices even to only 70% of the wholesale price. "Does Temu think us small businesses are running cross-border charities?"

But there are more difficulties waiting in the wings, especially related to Temu having a Chinese parent company. US officials worry that the consumer data collected by Temu could be accessed by Chinese authorities or used in ways detrimental to US interests. The difficulties faced by social media app TikTok in the country may be an example of what is to come.

"What happens to TikTok will have repercussion on every Chinese platform," says Zhengyuan Bo, partner at Plenum Research, an independent policy consulting firm. "Sanctions won't come right now. Political momentum is building, but it takes time."

Bo opines that these issues could pose mid-term surprises, within two to five years, potentially becoming more tangible around 2024-2025, especially given the upcoming US presidential election in 2024.

Another challenge that looms over Temu is the potential closure of the $800 duty-free shipment loophole. By shipping small packages from its warehouse in Guangzhou, the company effectively operates in a duty-free manner within the US. However, small business lobbies are advocating for a reduction of the threshold to as low as $10, which would dramatically increase Temu's operating costs.

Furthermore, another component that poses a challenge for Temu is its still-nascent logistics infrastructure, which heavily relies on a third-party logistics provider, J&T Express, also a company with a short track record in the US market.

Moreover, a US-China Economic and Security Review Commission report also flagged other concerns such as forced labor and violations of intellectual property rights. These issues not only present additional operational challenges for Temu, but also further complicate the company's relationship with US regulatory bodies.

Besides the geopolitical issues, the recent fall in US consumer spending growth, as reported in March 2023, marked the weakest quarterly gain since the economic blow delivered by COVID-19 in 2020.

What's Next?

In a recent strategic move, Temu's parent company, PDD Holdings, shifted its headquarters from Shanghai to Dublin, Ireland. The decision, filed with the US Securities and Exchange Commission, indicated that its "principal executive offices" would henceforth be based in Dublin, Ireland.

The move mirrors a recent trend among Chinese-owned companies, seeking to alleviate Washington's concerns about Chinese ownership of popular digital platforms. This follows in the footsteps of ByteDance, which relocated its TikTok operation to Singapore, and Shein, which also moved its headquarters to Singapore.

Relocating to Ireland offers various advantages for Temu, including tax benefits and a smoother path to a potential standalone listing of the business.

"PDD may be setting the stage for a separate overseas listing of Temu," said Eugene Weng, a Shanghai-based attorney at Wintell & Co, who represents Chinese companies listed overseas.

Weng adds that Temu going public separately could not only allow it to serve as an independent entity to avoid geopolitical risks, but also Pinduoduo's financing activities could be directly invested in the development of Temu itself.

However, the shift in corporate domicile to Europe introduces a new set of regulatory considerations. Europe's stringent data regulations, particularly the General Data Protection Regulation (GDPR), present a potential hurdle for Chinese companies seeking to expand their operations in the region.

"The geopolitical issues Temu faces in the US will possibly be the same in Europe," says policy analyst Bo. "However, while EU regulations often mirror US policies towards China, these either lack enforcement for existing rules or are yet to be enforced. What's more, Europe's segmented market and slower policy response make decision-making more complicated."

This underscores the intricacies of global market navigation for Temu in its ambitious expansion.

"Temu's competitors have started taking it to court, and I expect to see many more lawsuits in the US and elsewhere, though Temu may be able to brush many of these off as a cost of doing business," says Canaves.

Despite the possible challenges, Temu has made a robust start in its global expansion efforts, targeting consumers in 27 European countries, including Italy, Greece, Finland, France, Germany and Spain.

In the European market, Temu is more inclined to cooperate with local logistics companies, with third-party logistics companies responsible for warehousing and distribution, as per Six Degrees Intelligence, a global qualitative research platform. Additionally, due to the more fragmented European market, Temu needs to do more localization work in Europe to adapt to the demands of different countries, while the US market is relatively uniform in comparison.

However, Six Degrees Intelligence predicted that in the long run, Temu may adjust its strategy in the European market and gradually move closer to the model of the US market.

On track

The company appears to be on track to rival established competitors like Shein in the US market. Nonetheless, the rapid pace of growth, fueled largely by inorganic means such as app downloads, raises questions about the long-term economic viability. The company's trajectory in the coming months and years will be pivotal in determining the effectiveness in ability to secure a stable position in the global market.

"The deep pockets backing Temu will ensure that it continues to grow globally," Canaves says. "But it will face an increasing number of challenges as it grows and attracts more scrutiny. Profitability will pose the bigger challenge, and that path isn't entirely clear yet and may take years to realize."

CKGSB BUSINESS CONDITIONS INDEX

A Troubled Economy

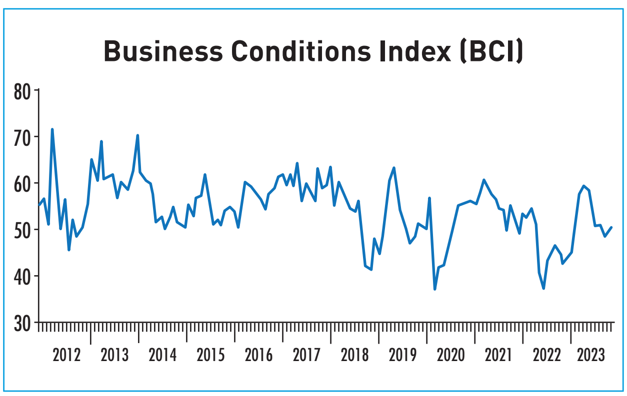
CKGSB's Business Conditions Index, reflecting confidence levels in China business, shows that China's economy is still in a troubled period

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

The CKGSB Business Conditions Index (BCI) registered 49.8 in October, a small decrease on September's figure of 49.9, and under the confidence margin of 50.0. It suggests that the economy has not yet emerged from its troubled period.

Introduction

The CKGSB Business Conditions Index (CKBCI) 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 a value below 50 means that the variable is expected to fall. The CKGSB BCI uses the same methodology as the PMI index.

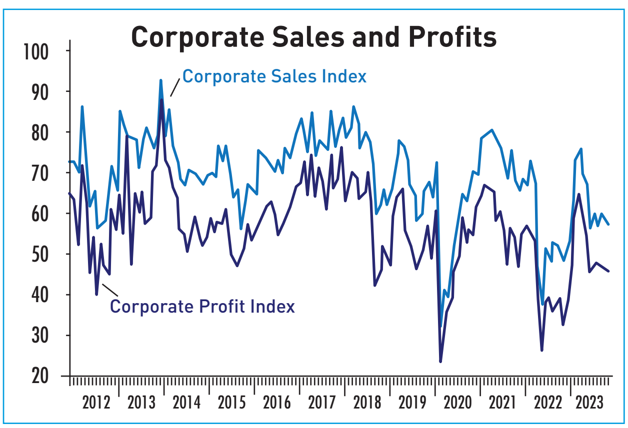


Key Findings

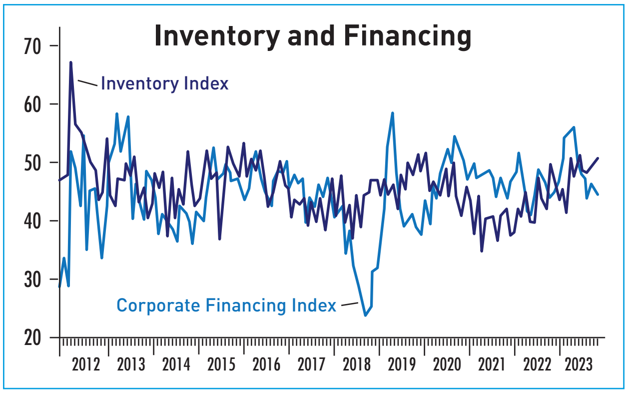
- Investment and recruitment indices continue to trend downwards
- The consumer price index showed good improvement, but starting from a low score in September
- China's economy has shown improvements but remains in a troubling period

Analysis

The CKGSB BCI comprises four sub-indices: sales, profit, financing environment and inventory. Three measure prospects and one, the corporate financing index, measures



the current state of affairs. In October 2023, they performed as follows:



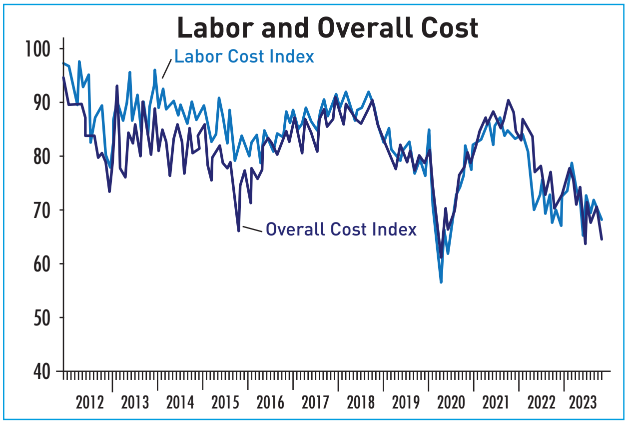
Three of the four subindices rose this month. The corporate sales index fell somewhat from 59.1 to 57.8, while the corporate profit index fell slightly from 46.7 to 45.9. Profit expectations staying below the confidence threshold for an extended period has not often been seen in our 12-year-long survey.

Corporate financing prospects fell somewhat from 46.1 to 44.9, remaining deep below the confidence threshold. The index for inventory rose marginally from 50.0 to 50.2.

Important to note is that, unlike for sales, profit and financing, when it comes to the subindex measuring inventory, a falling index means overcapacity. While for the first three sub-indices, a rise means that the situation is improving, and a fall, deteriorating, for inventory a fall suggests stocks may be gathering dust in the warehouse.

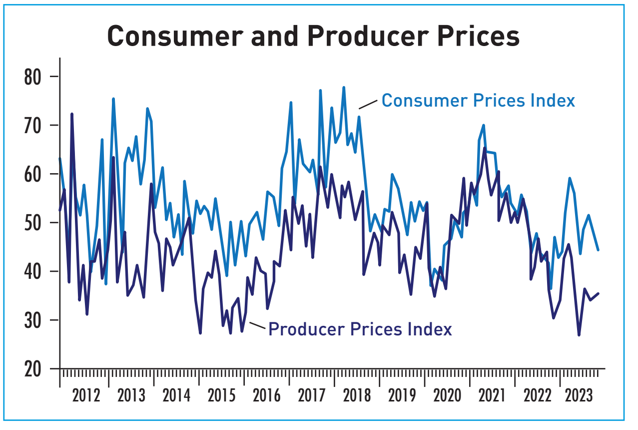
Aside from the main BCI, we also forecast costs, prices, investment and recruitment demand over the next six months.

This month, labor cost expectations fell slightly, from 71.5 to 68.4. The overall costs index fell similarly, from 69.9 to 65.2. The still high overall cost predictions mean most companies anticipate rising staff costs in the next six months, and the same is true for overall costs. Although high labor

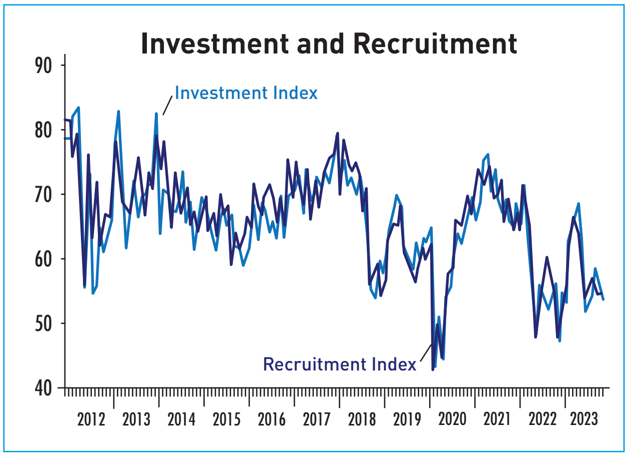


and overall costs increase pressure on companies' bottom lines, they do not necessarily mean a deterioration of business conditions in China over the next six months.

The consumer price index rose this month, from 50.0 last month to 44.7. The producer price index also rose clearly this month, with an index of only 34.4 last month turning into one of 35.4 this month, an improvement but from a low-level score.



We now turn to investment and recruitment. These indices have both been at the more confident end of the scale since the BCI began. In the past few months, they have continued to trend downwards, and this month has been no exception. Since the Chinese economy is largely investment-driven, and investment has a strong link with job recruitment, they are important to follow. In other words, these two indicators look at plans for expansion in China's business world. The index for investment fell from 57.6 to 53.9; the index for employment fell slightly from 54.9 to 54.7.



Conclusion

There is a lukewarm feeling towards the economy in these indices. While there are some signs that the economy may be warming up, there are still plenty of causes for concern.

CKGSB CASE STUDY

Unexpected Item in the Bagging Area

There is still a lot of resistance to the digital transformation of retail, but businesses that ignore the trend do so at their own risk

by Shi Weilei, Professor of Managerial Practice at CKGSB,
Gu Chongqing, Senior Researcher at the CKGSB Case Center,
Lekuan Zhang, Research Assistant for the CKGSB Digital Transformation Project

The retail industry has a storied history, one which includes a number of large shifts such as the graduation from local neighborhood stores to world-spanning hypermarket chains. The most recent trend in the market is the emergence of the unmanned convenience store, as evidenced by AmazonGo. While they are called unmanned, human labor is still required, but the key difference with regular stores is the lack of a cashier, an approach that hopes to improve the customer shopping experience as well as save on labor costs.

As one of the possible changes in future of the retail industry, companies that follow the unmanned retail outlet trend will not necessarily succeed, but those that ignore the trend entirely will certainly see a decline in business. Therefore, we will take a closer look at the current situation and how unmanned convenience stores are developing.

The Rise of (Un)man

Digitalization is the utilization of data obtained through a company's operations, processing what is found and then developing business practices based on the results, all with the fundamental aim of reducing costs and increasing efficiency. For a convenience store, this can include updating product positioning within shops based on purchase frequency and even the design of individual shelves. These decisions can be copied across entire store chains.

AmazonGo is at the leading edge of the unmanned convenience store revolution, with the first store being opened to Amazon's employees in December 2016, and the first public store opened in early 2018.

In order to use the store, customers simply download the AmazonGo app before entering and link it to their existing Amazon account. The app produces a QR code which the customer scans to enter the store. After entering, the process of shopping for goods mirrors that of a regular store, the only difference being that the customer can leave without checking out at the end of their visit. A bill will be generated and sent to the account associated with the scanned QR code and automatically debited from the Amazon account.

To facilitate this, each of AmazonGo's unmanned stores are fitted with a large number of cameras that detect various customer actions, including which products they pull off the shelves and in what quantity, in order to create an itemized bill. Additionally, they detect other actions such as how long the customer spends in front of which shelves, the quantity of items bought, and so on. Based on this data, AmazonGo can adjust the types of products available and the product layout in real time.

As a method of intelligent store

management, it replaces reliance on the experience of the seller with the automated capture of customer information.

AmazonGo's unmanned convenience stores aren't entirely unmanned, however, and there are employees at the door to welcome customers and answer queries. There are also others at various places within the stores, making fresh foods and checking IDs for legally-restricted purchases such as alcohol. The key breakthrough lies in the elimination of the cashier, which allows customers to simply "take things and go."

To date, Amazon has opened 28 AmazonGo stores in cities across the US and the model has inspired retailers in a number of countries, including China, to study and implement the format.

Jane24, founded in China by Lin Jie, is one such company that has tried to explore this new model, but there is still a considerable technology gap between it and Amazon. AmazonGo's cutting edge technologies can sense customer location through cameras placed on the ceiling alone, and each shelf is equipped with a camera to capture and recognize the products the customer removes. In contrast, Jane24 needs to place cameras on the shelves as well as the ceiling to sense customer location, and the gravity sensors that are used to detect the movement of goods on the shelves were bought cheaply from Taobao—Alibaba's Amazon equivalent.

The gap in technology also translates into a gap in utility. *Fortune* magazine has reported that AmazonGo stores can handle around 20 customers at a time, while Jane24 claims to be able to support only 10. But customers with direct experience using the Jane24 store have stated that only three or fewer were let in at any one time.

This also leads to a large sales gap between the two companies. A Jane24 outlet has daily sales of around ¥6,000 result in annual sales of around ¥2.2 million, while each AmazonGo store is expected to generate around ¥10 million ($1.37 million) per year.

Overall, Jane24 simulates the vision of a cutting-edge unmanned convenience store to a certain extent, but due to technological shortcomings, the level of efficiency and accuracy are not up to a true commercialization standard. However, it does remain a useful reference for the development of unmanned convenience stores in China.

But Amazon is a tech company with no previously existing offline retail business, and Jane24 is a startup which created its stores from scratch with no legacy infrastructure holding it back. While it is possible for traditional retailers, which have a large number of existing stores, to start an unmanned convenience store business, remodeling existing locations is a difficult hurdle to cross.

Overcoming resistance

Any change to a business involves a redistribution of benefits. Some people gain and some lose, and countless business evolutions have been aborted because they have failed to address this issue properly. The digitalization of business is a difficult thing to do, but it is also an unstoppable trend and whichever business is one step ahead will benefit greatly. This view is now a consensus within the industry and the key lies in how to effectively implement.

Resistance 1: Company-wide resistance to unmanned convenience stores

There are always difficulties in getting people to accept something new. A lack of understanding of the unmanned convenience store and the changes it brings to the existing vested interests in a company will result in resistance to the new idea. It is important, therefore, to promote greater understanding of the unmanned convenience store and then provide support through the whole process of change.

1. Company leaders must be supportive of change

Leaders must consider the significance of the changes and have the determination to implement them. In terms of motivation, employees often believe that once digitalization takes place, a lot of work will be done by machines and the company will employ fewer staff. People facing potential unemployment are unlikely to support such a change. They may also attempt to slow or halt development, perhaps not overtly, but rather through lower-level processes. In response to this, leaders must continue to push forward with digitalization despite whatever resistance is encountered.

2. Make it clear to middle and senior management that the change is in their interests

Achieving the full optimization of new processes and fully explaining them to middle and senior management is key to them understanding that the changes can help them reach existing goals. Streamlining purchasing and insulating it from fraud or corruption, for example, will make the lives of middle and senior management significantly easier and help them to reach their KPIs.

3. Help low-level staff understand that if they are able to stay, they will earn more

Under the old system, there may have been three staff in any one store sharing $10,000 earned, but with the new system there could now be two staff sharing $9,000. The workload may be greater than before, but compensation will go up. Some of the money saved through digital change can be divided among those who remain, which will promote healthy competition amongst those who stay with the company.

Resistance 2: Company leaders lack understanding of the implications of new technology

The next issue is making sure that company leaders are motivated to stick with changes. The major point here is helping them fully understand what it means to embrace new technologies. Many of today's leaders are typically in their 50s or 60s and it can be hard to get them to buy into the concept of digital change.

There are three ways that may improve the situation: going to business school; hiring industry professionals as strategic executives to keep leaders informed; and hiring outside experts, such as consulting firms, to help with planning.

Resistance 3: Dealing with existing misconceptions

Pre-existing assumptions about unmanned convenience stores and the lack of awareness inherent in these assumptions can lead to frustration in the development of the system. Properly understanding the difficulties, a company will encounter in the creation of unmanned convenience stores and the potholes to be avoided is a key part of successful digitalization.

One such assumption is that a drop in labor costs will save money, but given the price of the technology replacing them, this may not always be the case. A 2022 report from KPMG China and the CCFA shows that the average annual salary of a worker at a convenience store chain in China in 2021 was ¥51,351, with the average salary in Shanghai being a little higher. This means that if we take the average annual salary as being ¥60,000, and we eliminate two people from the workforce, we would save ¥120,000 per year.

The technology investment for Jane24's first store was ¥1 million, a cost that will drop somewhat but will remain around ¥600,000, which means that with a saving of two employees' wages, it would still take around five years to pay off.

For some traditional convenience stores, transformation into an unmanned store will also incur significant expense due to hardware and software costs. The number one ranked convenience store chain in China has around 28,000 stores, and if each store requires multiple cameras, each costing ¥1,000, the total cost could reach well over ¥28 million. The report shows that the top 20% of companies had a net profit margin of 2.84% in 2021, meaning that to cover the cost of the cameras alone, sales must reach around ¥1 billion—not an easy feat.

The labor cost-technology trade off would appear to be more feasible in developed countries where labor costs are significantly higher, and therefore we should expect to see unmanned convenience stores appear earlier in developed, rather than developing countries.

Resistance 4: Negative impact of high investment in technology on company operations

Significant investment is required in order for the technology in stores to be able to properly track consumer actions and preferences, and while Lin Jie spent a huge amount of money on technological development, the final results were still riddled with issues, and this led to the Jane24 project facing a number of difficulties and struggling with commercialization.

The future of digital transformation

1. Digitalization and the transformation of vending machines

Given that digital change is the current trend, we may see intelligent vending machines as the next investment hotspot. Currently, the replenishment of traditional vending machines mainly relies on manual labor and human decision-making to place orders and restock machines. Using digitalization, an intelligent vending machine can accurately relay its replenishment needs to staff, meaning that while in the past one person could manage around 20 vending machines, they are now able to work with up to 100.

According to Frost & Sullivan, in 2021, China saw 22.52% year-on-year growth in the number of vending machines across the country. In the face of a large number of players entering the market, it is crucial for enterprises to improve their competitive advantages through the digitalization of their operations and supply chain networks.

2. Internationalization is a must for China's unmanned convenience store enterprises

Labor costs in developed countries are high and therefore so is the potential demand for unmanned convenience stores. In Japan, for example, 35% of retail companies are facing labor shortages and 7-ELEVEN, the country's largest chain, is in the process of gradually cutting business hours due to the decline in the workforce and rising labor costs. They are utilizing robotics in order to fill these labor gaps.

It is entirely possible for China to export relevant technologies and business models to countries like Japan, while continuing to do back-office work in China to further reduce costs. Some companies have already attempted internationalization but there is a lack of substantial progress so far.

3. Increase domestic unmanned stores in suitable areas

Unmanned convenience stores lack an environment for large-scale popularization in China, but this does not mean that it is not suitable in all places. They can be considered in places where there is not enough foot traffic to support manned stores but still a reasonable level of demand, such as mountain tops in tourist areas. In addition, the seasonal nature of the tourism industry and changes in traffic flows lend themselves to unmanned stores.

4. The future of unmanned convenience stores

Current technologies cannot support a completely unmanned convenience store, and even AmazonGo has been unable to achieve this feat. With this in mind, we must consider what is currently achievable, what has commercial value and what is commercially viable.

Reflecting on the Jane24 project, Lin Jie believes that it is impractical to rely entirely on machines. While people make mistakes, so do machines, and Lin believes that we should adopt a "machine plus labor" approach to operating convenience stores, with machines taking on the lion's share of the work.

Concluding remarks

There are some successes to be seen in the digitalization of the retail industry, and there are also a number of immature technologies that still remain, but as the cost of digital hardware and software decline, we will see many new developments in the space.

Overall, it is clear that retail enterprises must follow the inevitable forward march of digitalization because even though there are a number of limitations today, the future is very promising.

QUALITY TIME

As we start to live longer, many Chinese people are increasingly focusing on improving their quality of life

By Mable-Ann Chang

Image produced with Midjourney.ai

Living longer is desirable, but maintaining your quality of life is just as important and many Chinese are trying to do just that

As the sun rises over a park in the Chinese city of Nanjing, octogenarian Liang Wei performs his morning Tai Chi and muses, "When I was young, the notion of aging scarcely crossed my mind. Today, I wish for nothing more than to live healthily for as long as possible and I think there are more and more ways to do that."

Over the past few decades, the human endeavor in medicine has seen astounding advancements, incrementally nudging the average human lifespan closer to the century mark. There are now more than half a million people aged 100 or older around the world, compared to around 110,000 in 1990, and the number of people aged 80 or older is expected to triple over the next 30 years, reaching a massive 426 million.

But the modern era comes with an increasing number of mental and physical health-related difficulties, so while growing old is one thing, doing so while maintaining a high quality of life is another. Traditionally, Chinese people have been known for their hard-working nature, and while this hasn't changed, there is a growing movement of people in the country looking to increasingly include physical and mental wellbeing to their priorities in life.

"Scientists are guessing that humans have a longest potential lifespan of 150 years and are working on achieving that through further research," says Hui Zhang, professor of preventive medicine of the Feinberg School of Medicine at Northwestern University. "But when we talk about longevity, we should look at the reasons behind why we want to achieve human longevity, which shouldn't be associated with a loss in quality of life."

What do we live for?

Trying to understand the meaning of life has been the pursuit of philosophers for millennia, and there have been a number of different answers proposed, from long articulate essays to simple one line mantras. But there has never been a definitive answer, and there likely never will be.

Given this, personal motivations play a huge role in defining our lives. For Chinese citizens, these motivations have historically been work-related, and people in the country have developed a well-justified reputation for being hardworking. But there is now a growing awareness that lifestyle and a better work-life balance can affect how you feel, which in the longer-term leads to a better quality of life.

"For me personally, having zero work is as painful as having too much, so I still believe work-life balance is important to maintaining a healthy lifestyle," says Alex Wang, a 29-year old from Chengdu who works in finance. "But I do find it crucial to be part of at least one community outside of work, whether that be a common interest or hobby, as it helps to combat negative feelings and boost mental health."

And it is not just physical wellbeing that is coming to the fore. "To me, a good level of physical and mental health are the foundations of being a human," says Minmin Xu, an office worker in Shanghai. "You can't really do anything without a body that works, and a strong and positive mind can help in all aspects of your life, including personal and professional areas. It's especially important to set up a good foundation now, so that as you age you can maintain it."

Although these priorities are not new to China—the country has years of holistic practice using Traditional Chinese Medicine (TCM), which seeks to maintain a balance between mental and physical wellbeing—their recent return to prominence has had an impact.

A lifestyle shift towards a more quality of life-oriented approach to health and wellbeing in China is underway, utilizing a combination of health and wellness-focused lifestyle, science-based medicine and TCM.

"The focus is shifting from just physical health to a more holistic view that includes mental, emotional and social well-being," says Fifi Kao, founder of SpaChina, a Shanghai-based health and wellness media organization.

The Fountain of Youth

Driven primarily by the expanding middle class and the shifting priorities of younger generations, China has seen a massive boom in health and wellness-related products and services that have sprung up to cater to the needs of a growing number of customers who wish to target these issues.

"People are looking for greater value from their purchases in the wake of COVID," says Grace Wu, general manager of Le Bonta Wellness, and spa and wellness consultant. "Monetary value of products is one thing, but there now also has to be a practical, emotional or even spiritual value attached to something in order for the purchase to be justified."

Individuals with access to more disposable income are increasingly seeking ways to enhance their quality of life, and the market has responded with a wide range of innovative products and services designed to promote health and well-being. This has led to China's health and wellness industry now being valued at $683 billion, making it the second-largest such market in the world behind the US, which is valued at around $1.2 trillion.

"The Chinese, especially the younger generations, are showing a greater interest in health and wellness as a lifestyle choice," says Kao. "People are becoming more conscious of the importance of preventive health measures rather than solely relying on medicine to treat illnesses. They are realizing that adopting a healthy lifestyle can help prevent various health problems and lead to a better quality of life."

There are many health and wellness startups in China which offer a variety of solutions to cater to the growing demand for a healthier lifestyle. Fitness apps and wearable devices, such as Xiaomi's Smart Band series of watches, enable individuals to track their physical activity, sleep patterns and other health-related metrics, empowering them to make informed decisions about their well-being.

Fashion brands are also getting in on the act, offering a wide range of products and services, including activewear and athleisure made from eco-friendly materials, organic beauty products and even mindfulness and meditation tools.

There has also been a rise in health and wellness-motivated tourism, offering packages for wellness retreats providing opportunities for relaxation, mindfulness and self-care, and allowing individuals to recharge and rejuvenate both physically and mentally. Additionally, herbal supplements derived from TCM principles are gaining popularity as natural remedies to support overall health and vitality.

One of the main drivers behind the health and wellness trend has been the rise of social media. Influencers and celebrities sharing their fitness routines, healthy eating habits and overall wellness practices have helped create an image of staying healthy as aspirational. "As with many social media trends around the world, the effect on younger generations has been quite pronounced," says Kao.

The scientific approach

While the health and wellness trend is set to continue as people search for a better quality of life, there are also widespread medical issues in China that need to be dealt with and which simply can't be cured by a lifestyle shift.

"When we talk about longevity, we should examine the reasons behind longer lifespans," says Zhang. "The main cause of death, currently, are diseases such as cardiovascular issues and cancer, so to enhance lifespans, we either have to cure or slow down these diseases, use predictive technology to help us prevent them, or use human interference and artificially extend the development of human life."

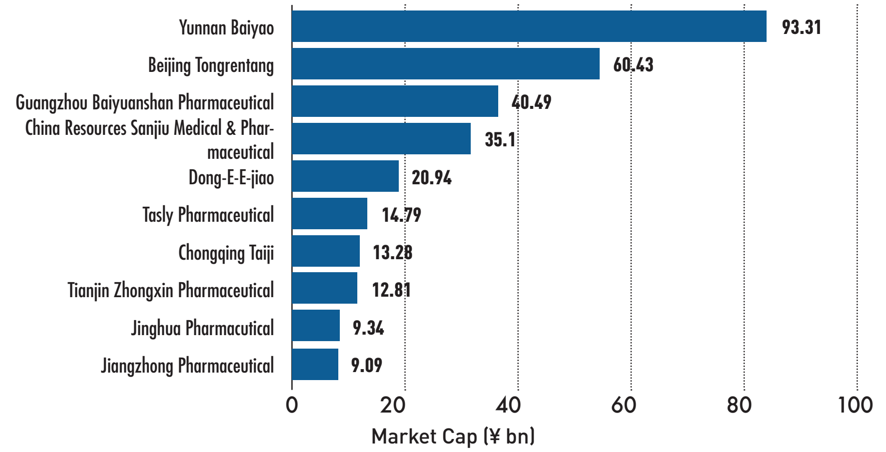
One major disease affecting life quality and length around the world is cancer, but the problem is particularly acute in China due to its large population size and high pollution levels. There are around five people dying from some type of cancer every minute across the country, and for some cancers, such as gastric cancer, hepatocellular carcinoma and esophageal cancer, over half of the global cancer burden is diagnosed in patients from China.

While the statistics are alarming, China's progress in meeting R&D goals for oncology has been rapid, evidenced in part by the wave of new biotech companies in the country. In 2021, China had 14 medical firms—out of 350 representatives—on the prestigious Forbes Global 2000 company rankings, which contains the top 2,000 companies in the world across all industries, up from zero when the list was first compiled in the year 2000. While the country trails the US, which had 31 medical companies on the list in 2021, it now sits in second place.

Chinese biotechs are also leading in IPO fundraising—seven out of the world's top ten largest biopharma IPOs from 2018 to 2020 were in China, according to global management consultancy McKinsey. BeiGene, a leading biotechnology firm listed on both the NASDAQ and in Shanghai, focuses on developing and commercializing innovative cancer treatments, with a pipeline of targeted therapies and immunotherapies.

HOLISTIC VALUE

The largest companies producing Traditional Chinese Medicine have a market cap of almost ¥100 billion



Source: China Market Data

McKinsey also points out that China's work in cell therapy is also helping drive its oncological goals. In 2021, the National Medical Products Administration (NMPA) in China approved the first CAR-T cell therapy for the treatment of an aggressive form of blood cell cancer, marking a breakthrough in the field of personalized medicine. This groundbreaking therapy, which modifies a patient's own immune cells to attack cancer cells, has shown promising results and is being further explored for other types of cancer.

"Stem cell research can theoretically help cells rejuvenate," says Doris Rathgeber, the founder, general manager and medical director of Body & Soul, a group of Traditional Chinese Medicine (TCM) clinics in Shanghai. "They can be coaxed into becoming induced Pluripotent Stem (iPS) cells somewhat mimicking Embryonic stem (ES) cells—which are found in human embryos."

China has seen the establishment of approximately 100 stem-cell banks, and around 10 stem-cell drugs are currently undergoing the approval process. But although the National Natural Science Foundation of China allocated roughly $576 million to 8,050 stem cell programs between 1997 and 2019, funding still lags behind countries like the US—where, since 2009, funding for all types of stem cell research was $5.44 billion.

The integration of AI and digital technologies is also revolutionizing healthcare delivery, paving the way for improved quality of life and extended longevity. AI-powered diagnostic tools enhance disease detection accuracy and efficiency, enabling earlier intervention and better treatment outcomes. Machine learning algorithms analyze vast amounts of medical data to identify patterns and predict disease progression, aiding in personalized medicine and proactive care.

A novel example of China's healthcare system in action is BoAo Lecheng in China's Hainan Province. The area is a pilot zone containing, as of 2023, 26 different medical institutions, and there are another 20 under construction. The area has special licensing rules that allow for the use of FDA or clinical evaluation (CE) approved pharmaceuticals in the area after short approval periods.

While it is not technically a resort, it serves as a one-stop-shop for various medical treatments and customers can utilize the hotels in the area in order to address all of their medical needs at one time.

Yin and Yang

Something that makes China's healthcare industry different from that of the rest of the world is the intertwining of preventive health measures and alternative treatments with science-based medicine, and traditional Chinese medicine is returning to prominence in the country.

"In China, healthcare has never been merely about treating diseases," says Rathgeber. "It's a multi-faceted system aimed at overall well-being."

While there is some well-founded skepticism as to whether many of the herbal remedies proposed within TCM are effective—some have even been proven to be dangerous to health—some of the treatments used, such as acupuncture and Tai Chi have been shown to improve patients' quality of life and act as effective complimentary treatments to science-based medicine.

"TCM and Western medicine should be used together," says Yuhyeu Lai, a doctor at Nanjing Yunhetai TCM Clinic. "The essence of TCM lies in its aim to harmonize the body's systems, fostering health and resilience."

The country's dynamic biotechnology and pharmaceutical industries co-exist symbiotically with TCM, and the intertwining of these contrasting medical systems often result in patients receiving treatments from both realms for the same ailment.

"Western medicine is particularly effective in quickly managing acute conditions such as strokes, heart attacks and trauma, which can be more challenging for TCM," says Lai. "On the other hand, TCM, including practices like acupuncture, bone setting and moxibustion, can contribute to recovery and rehabilitation efforts."

TCM is also used in an attempt to curb the lifestyle factors that lead to ill-health in the first place. "Preventive care, a fundamental principle of TCM, goes beyond simple disease avoidance," explains Rathgeber. "It involves lifestyle adaptations promoting holistic health." TCM emphasizes the importance of balancing the body and mind, addressing the root causes of imbalances, and maintaining overall well-being rather than solely focusing on treating specific ailments.

While TCM has its unique characteristics, similar practices can be found in other cultures and traditional

Keeping healthy: Tai Chi has long been a way for Chinese people to keep active

medicine systems around the world. For example, Ayurveda in India and Naturopathy in the West also prioritize holistic approaches to health, emphasizing the interconnectedness of the body, mind and environment.

However, what sets TCM apart is its integration into mainstream healthcare and its impact on the social aspect of improving quality of life. In China, health is seen not only as a medical issue, but also as a social issue. TCM plays a significant role in this regard, as it focuses on maintaining balance and preventing diseases before they occur. "TCM has a significant advantage in China, because there's no other country with the cultural acceptance it has here," says Lai.

Barriers to Progress

However, as in all quests, challenges persist. There is an ongoing concern of the socio-economic divide hindering equitable access to advanced medical treatment. While major cities in China boast world-class medical facilities and expertise, rural areas often lack access to quality healthcare. Efforts are being made to bridge this gap, as well as the potential gap between rich and poor, but ensuring equal access to innovative treatments and therapies remains a challenge.

Similar concerns also exist regarding access to health and wellness products, which can be costly and are mostly the domain of China's growing middle class. The industry is still growing, but it is fundamentally a consumerist pursuit, particularly excluding those with little disposable income or those in rural areas.

Despite its significant contributions to improving the quality of life and extending life expectancy, TCM faces challenges in gaining recognition worldwide. Many research findings and practices within TCM are still not widely accepted outside of China, as the field has had difficulty replicating results using Western scientific methods. But experts say that including it is crucial in the fight to live longer, healthier lives.

"We shouldn't rely on a Western-centric lens to look at TCM, there are still some different but quantifiable elements to it," says Zhang. "Western scientific methods, such as lab research and clinical trials should be adapted to be applied to TCM. We should develop scientific and objective evaluation methods that are suitable for, and to promote the progress of, TCM, instead of simply using what we presently do to evaluate Western medicine. TCM should have a unique set of its own methods to be evaluated."

Legal restrictions around some experimental treatments also present obstacles, and riding the line between promoting innovation and ensuring patient safety is crucial. Regulations need to keep pace with advancements in medical science to facilitate responsible development and deployment of new therapies. It is essential to establish robust regulatory frameworks that keep pace with scientific advancements, allowing responsible development and deployment of new therapies.

The case of Chinese biophysicist He Jiankui, who created two gene-edited babies, highlights the ethical and legal dimensions of medical experimentation. His actions resulted in global outcry and legal consequences, with He being sentenced to three years in prison at the end of 2019. This high-profile case underscores the need for clear guidelines and ethical boundaries in scientific research. It prompts society to reflect on what constitutes acceptable experimentation and the potential consequences of crossing ethical boundaries.

Moreover, philosophical and ethical debates around what constitutes acceptable research and the implications of extending life continue to be hotly debated. Questions of resource allocation, the meaning of a longer life, and the potential impact on society require careful consideration. Ethical frameworks and guidelines must evolve alongside scientific progress to address these complex issues.

A Glimpse into the Future?

While improving quality of life through preventive practices and products as well as curative medicines is well within the bounds of possibility, there are also those with the aspirations of extending human life beyond what we currently believe possible. But the path to significant lifespan extension, or even immortality, is complex and fraught with challenges.

Many researchers are focusing on studying cellular aging mechanisms, investigating processes such as telomere shortening, DNA damage and cellular senescence. While others are exploring genetic engineering's potential to extend human life, questioning the role of genetic factors in aging and longevity, seeking to identify genes and pathways that influence the aging process. Gene-editing technologies like CRISPR-Cas9 offer the potential to modify genes associated with aging-related diseases and enhance cellular repair mechanisms.

"There's a thin line between the aspirational and the attainable," says Zhang, "While we're yet far from achieving immortality, significant lifespan extension is becoming increasingly plausible.

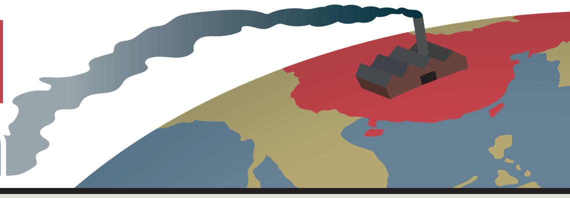
A Shared Prosperity

China's unique blend of product development, traditional wisdom and cutting-edge innovation offers great promise for improvement of the quality of life for its citizens. By embracing the holistic principles of Traditional Chinese Medicine, investing in medical research and technology, and fostering a culture of wellness, China is making significant strides towards healthier and longer lives. However, to fully realize the potential of these advancements, collaboration, inclusivity and ethical considerations must be at the forefront.

"It's going to be Western science that takes us beyond the current limits," says Rathgeber. "But it's going to be things like TCM that deal with quality of life, as well as mortality within those years."

As the sun sets over the park in Nanjing, Liang Wei concludes his Tai Chi practice, grateful for the opportunity to embrace the beauty of life. "As I move through the slow, deliberate motions of Tai Chi, I am reminded that our wish for an extended and fulfilling life is not just a dream, but a deep-rooted human longing."

Environmental Evaluation



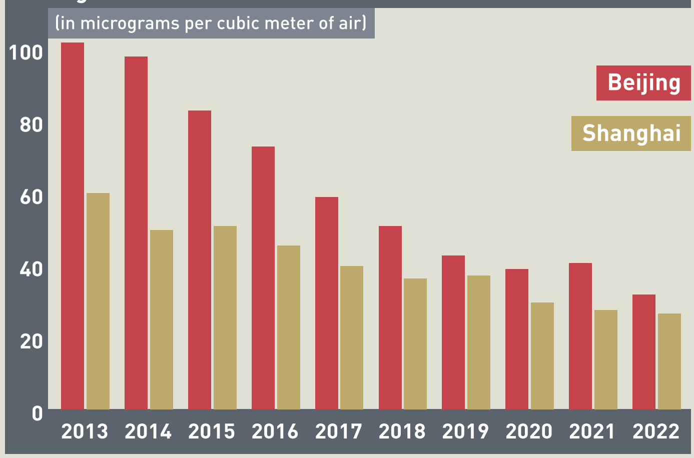
In its role as the factory of the world China has experienced spectacular growth, but one of the results of this has been the increasing degradation of the country's natural environment. Steps have been taken to reduce air pollution levels, safeguard biodiversity and counteract deforestation, and some improvements have been made, but there is still a long way to go for China to get back on the right environmental track.

Clearing The Air

Air pollution has been on the rise around the world, and most of China's cities have been affected, particularly those in the north. The PM2.5 levels, which refers to the number of particulates of a certain size in the air, reached very dangerous levels, with Beijing reaching record levels in 2012, over four times the count that is classified as "good" air quality.

Air quality in most cities has improved dramatically since, but to take Beijing as an example, the annual average of PM2.5 levels in the city are still three times that of Japan's capital Tokyo.

Average Annual PM2.5 Air Pollution Levels from 2013 to 2022

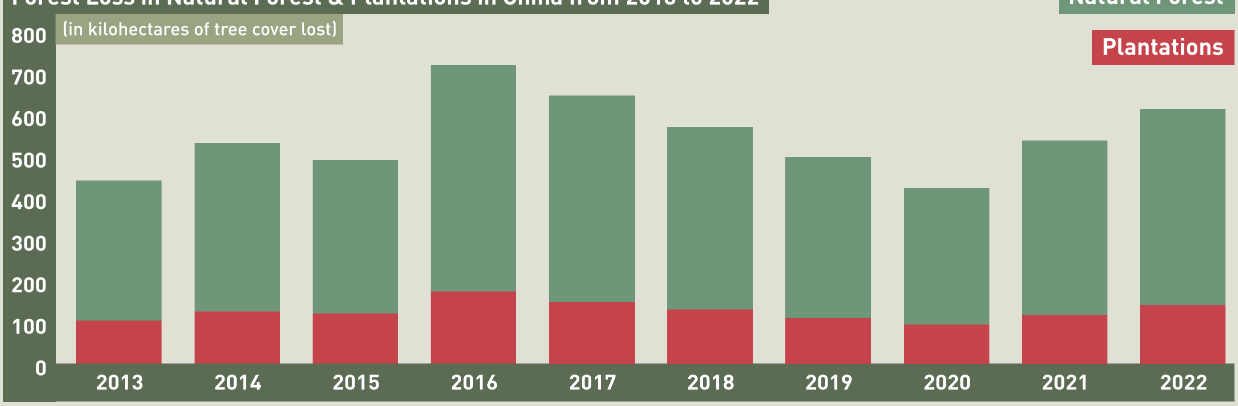


Signing Tree-ties

China has made a number of efforts to increase tree coverage in the country, the biggest of which was the initiation of a "Great Green Wall" in 1978—a project which is slated to continue until 2050.

But, these seemingly impressive reforestation activities in the north of the country, obscure the fact that 77% of tree cover loss in China between 2013 and 2022 occured within natural forests, which have a much greater level of biodiversity than man-made plantations.

Forest Loss in Natural Forest & Plantations in China from 2013 to 2022

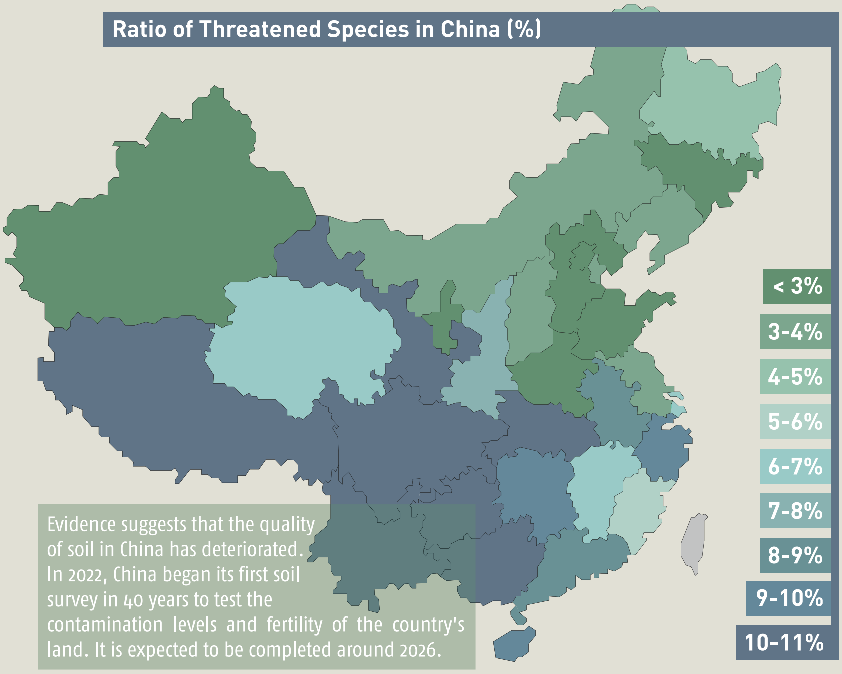


Goodbye Biome

China is one of the 12 mega-biodiverse countries in the world and it is also one of the eight centers of origin for crops, with nearly 10,000 species, both cultivated crops and their wild relatives. The country is also rich in wetlands, grasslands and deserts, each home to a diverse range of animal and plant life.

But despite some positive trends, many of the country's natural areas and habitats are still under threat, especially in the Central and Southern regions, posing the threat of even greater degradation of biodiversity levels.

Ratio of Threatened Species in China (%)

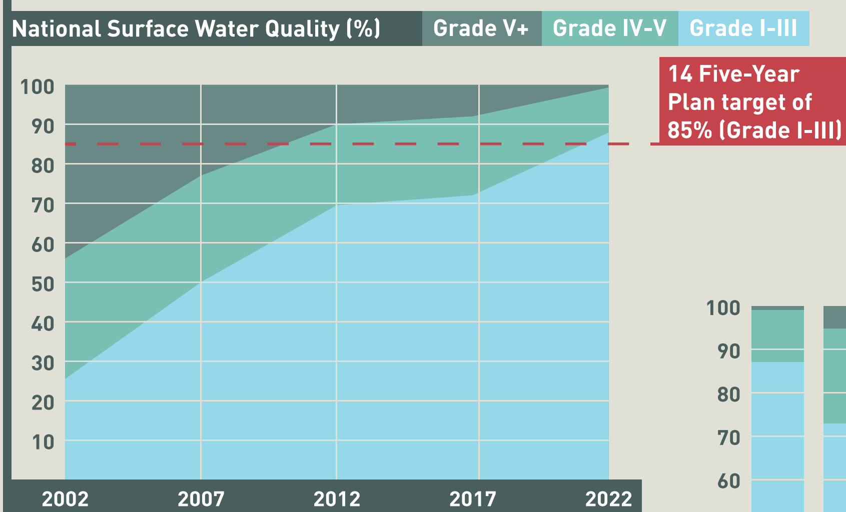


Evidence suggests that the quality of soil in China has deteriorated. In 2022, China began its first soil survey in 40 years to test the contamination levels and fertility of the country's land. It is expected to be completed around 2026.

Water Way To Go

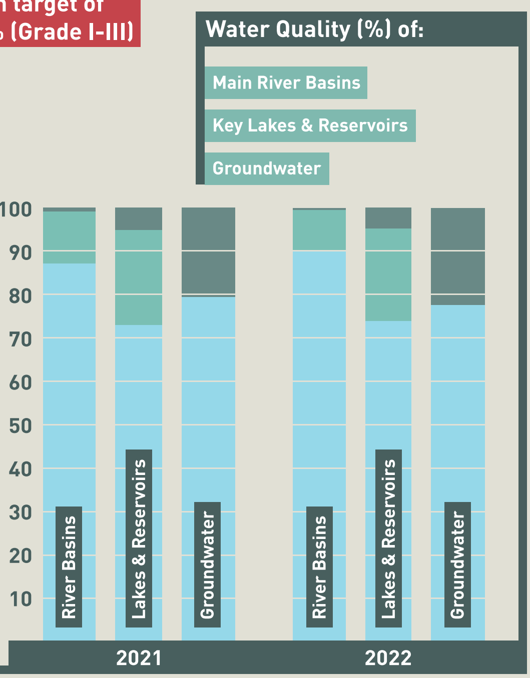
The environmental quality of surface water—any body of water found on the earth's surface, as opposed to underground—in China is an area that has seen rapid improvement since 2001.

National Surface Water Quality (%)



Between 2021 and 2022, the overall surface water quality of China's main river basins improved greatly, while that of key lakes and reservoirs also improved slightly. Groundwater quality, however, worsened slightly.

Water Quality (%) of:



Sources: AQI, Global Forest Watch, Earth.org, Science.org, Ministry of Ecology & Environment

The stats you need to know

Macro

Collating Coal

More than half of China's energy needs are currently met by coal and the country's coal consumption has increased **3.3%** since 2017, reaching around **4.04 billion** tonnes in 2022. Total coal consumption will further rise to **4.2 billion** tonnes in 2026 before sliding to **2.4 billion** tonnes by 2040 and **1.4 billion** tonnes by 2050, the report said.

Source: *Rystad Energy*

Happily Ever After

Changshan county in eastern China is offering couples a "reward" of **¥1,000 ($137)** if the bride is aged 25 or younger, the latest measure to incentivize young people to get married amid rising concern over a declining birth rate. The reward is designed to promote "age-appropriate marriage and childbearing" for first marriages.

Source: *Reuters*

Crop Cycles

China has cultivated its second harvest of genetically modified (GM) giant rice at trial farms in southwest China's Guizhou province. In the area famous for challenging soil conditions, the yield reached **12.6** tonnes per hectare, marking a **5%** increase from **12** tonnes per hectare in 2022, China's average rice yield of non-GM strains is **6.5** tonnes.

Source: *SCMP*

Business

Up, Up and Away

Chinese e-commerce giant JD.com completed its **first** international cargo flight between China and Vietnam as the company expands its overseas logistics operations. The route, which will run **three** times a week, will ferry cross-border e-commerce parcels and agricultural produce between the two countries.

Source: *SCMP*

Director Diversity

Just **14%** of the directors serving on the boards of the **100** most valuable Chinese companies listed on the Shanghai and Shenzhen stock exchanges are female. State-owned enterprises (SOEs) had a lower rate of female directors than private sector companies, and nearly **one** in **five** SOEs companies had an all-male board.

Source: *ACGA*

Income and Again

The biggest US companies are badly trailing their Chinese counterparts when it comes to generating income from renewable energy. Companies that make up the S&P 500 produce just **3.4%** of their revenue from clean-energy sources, which is roughly **half** what companies on the Shanghai Composite Index earn on average.

Source: *Bloomberg*

Taking off

China will account for a **fifth** of the world's new aircraft deliveries over the next **20 years**, according to Boeing Co. Two-thirds of the new deliveries will be for fleet growth, while the rest will replace older jets. As such, China's commercial fleet will more than double to nearly **9,600** planes by 2043.

Source: *Bloomberg*

Technology

Tiked Off

TikTok has been hit with a **€345 million** (**$364.13 million**) fine from the EU over the way it processed the personal data of children and teenaged users. This is the first time the Chinese-owned social media platform has been fined by the EU.

Source: *Financial Times*

Ailing Supplies

There is a shortage of millions of artificial intelligence professionals in China, just as generative AI projects begin to kick into high-gear, with many qualified graduates receiving offers from multiple companies. Skilled AI recruits can earn between **¥1-3 million** (**$137,000-$410,000**) a year.

Source: *Nikkei Asia*

Expansion Plans

Panasonic has scaled up its staff in the Chinese city of Dalian by **40%** since 2020, expanding the company's sofware development capabilities in the country. With a staff of **1,000** people in 2022, the center is now the Japanese electronics company's biggest overseas software development hub in terms of headcount.

Source: *Nikkei Asia*

E-sports is Go

The delayed 2022 Asia Games in Hangzhou played host to the tournament's first ever e-sports events, with a total of **seven** different competitions on offer, both team and individual. China won **four** gold medals and one bronze medal, picking up the **first** ever gold medal available, which was in the MOBA game *Arena of Valor*.

Source: *Asia Games 2022*

Consumer

Boozy Beverage

Kweichow Moutai and coffee brand Luckin Coffee recently launched a latte advertised as containing the fiery Chinese spirit baijiu, an attempt by the Chinese luxury liquor maker to pull in younger consumers. The drink, which costs **¥38** (**$5.23**) contains around **0.5%** of the alcoholic addition.

Source: *Reuters*

Time for Travel

China's inbound and outbound trips surged during the eight-day Golden Week holiday this year, recovering to **85%** of their pre-pandemic level but remained lower than an earlier government estimate. The average number of inbound and outbound passenger trips a day reached **1.477 million** during the break.

Source: *Reuters*

Staying Home

The number of young people leaving China to study abroad has fluctuated wildly in recent years and is yet to return to pre-pandemic levels. The country's total cohort of outbound students reached a record high of **703,500** in 2019, but plunged to **450,900** in 2020 before recovering to **662,100** in 2022.

Source: *SCMP*

BOOKSHELF

Taiji Teachings

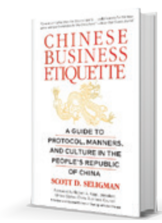
Patrick Kelly, Managing Director of real estate capital markets advisory and investment company Erin Feury International, discusses the importance of understanding Chinese history and etiquette for business success in China

Patrick Kelly is the Managing Director of Erin Feury International, a real estate capital markets advisory and investment company and Shanghai Fengying Arts & Culture Development Co Ltd, a media and production company. Patrick is a longtime resident of Shanghai having made it his home in 1997. His first visit to China was in 1988 for the World Wushu Championship.

Which China business book are you reading currently?

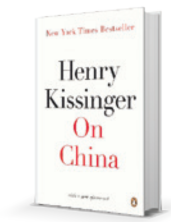
I'm in the middle of *Into the Dragon's Mouth* by Benjamin Wood. More of a memoir than a business book, it is full of outrageous stories from the architect behind the success of Xintiandi, the premier entertainment district in Shanghai. It is one of the most transformational real estate projects in the city and probably China. A careful reading provides insight on how to be successful in business in China. There is a lot I like in it: the theme of serendipity; the clarification of adaptive reuse versus the ossification of preservation; the importance of the spaces in between; designing the unbuilt; and a dedication to leaving the place better than it was found.

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



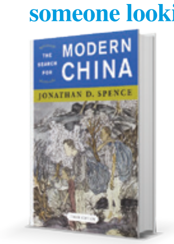
One book that I must have read and re-read for reference multiple times is Scott D. Seligman's *Chinese Business Etiquette: A Guide to Protocol, Manners, and Culture in The People Republic of China*. No less than James McGregor (whose *One Billion Customers* has showed up in these pages before) said that Seligman's book "should be a mandatory carry-on item for all business travelers to China." Some sections might be due for an update, for example the discussion of business cards might benefit from an addition to include the evolving etiquette of exchanging WeChat contacts, but the core remains as valid now as it did in 1999 when I first read it.

What book helped you understand China business in a global context?



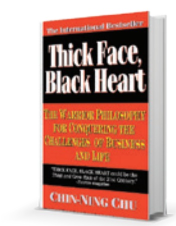
One book that may provide a historical continuation of Spence's book discussed above, is *On China* by Henry Kissinger. It references Nixon's instructions to Kissinger for a secret mission to China that was the start of normalizing modern relations between the US and China and continues to the present. *On China* is about the most important strategic geopolitical relationship on the planet. It's a first-hand account from someone who was there and had the security clearance to see all the details in the bigger picture.

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



My number one recommendation for a business person, or anyone for that matter, looking to learn more about China would be to start with Jonathan Spence's *The Search For Modern China*. I would suggest it to anyone who intends to do business here they ought to read a bit of Chinese history to help understand where their Chinese counterparty or partners are coming from, read a bit of Chinese history. It has to be number one English language history book on China and that's why it is essential reading.

Which China business book do you think is the most underappreciated?



Underappreciated might not be quite right, but I recommend *Thick Face Black Heart* by Chin-Ning Chu. Its based on *Thick Black Theory* by Li Zhongwu written in 1911. Li's book is perhaps similar to *The Prince* by Machiavelli. Chu subtitles her book *The Warrior Philosophy For Conquering The Challenges of Business and Life*. While not as well-known as Sun Tzu's *Art of War*, I imagine *Thick Black Theory* and The *Art of War* together, like Yin & Yang in the Taiji symbol, offering Chinese perspectives and insights into competition and the reality of leadership.

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