China and Globalization

Huiyao Wang · Lu Miao Editors

Transition and Opportunity

Strategies from Business Leaders on Making the Most of China's Future

CCG 全球化智库 CENTER FOR CHINA & GLOBALIZATION

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China and Globalization

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Center for China and Globalization

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Preface

Multinational corporations (MNCs) have long played a crucial role in the Chinese economy, a role that is set to continue in the post-pandemic era as the nation strives to transition to a high-quality growth model that is more sustainable and driven by innovation. With their global experience and leading expertise in some of the most pressing economic, technological, and environmental issues of our day, MNCs and other business organizations are ideally placed to provide guidance on policymaking and formulating strategies to "make the most" of China's future. This book is an attempt to share some of those insights with a wider audience.

Since the launch of Reform and Opening-up, the role of MNCs in China has evolved as the economy has developed. Early in the Reform and Opening-up era, MNCs were often attracted by China's cost advantage in key inputs such as labor. Nowadays, wages have risen, but the country continues to be a big draw due to its enormous market and growing middle class, quality infrastructure, large pool of skilled talent, and the presence of mature supply chains for advanced manufacturing. This enduring appeal can be seen in new investments and the expanding local footprints of major MNCs such as BASF, Exxon Mobil, Tesla, Toyota, Volkswagen, and Daimler as we enter the 14th Five-Year Plan period (2021–2025). The year 2020 marked a major milestone for China's evolution as a destination for foreign capital with foreign direct investment (FDI) inflows growing 4% to reach USD163 billion, according to the United Nations Conference on Trade and Development, surpassing the United States to make China the world's top recipient of FDI. Given China's promising growth outlook, the Chinese market is assuming an even more important role in the global strategies of most MNCs, and high levels of foreign investment will continue for many years to come. As China marks two decades since its entry to the World Trade Organization (WTO), recent developments herald further opening up in the years to come. These include the signing of the Regional Comprehensive Economic Partnership (RCEP), China's formal application to join the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP), and the creation of 21 free trade zones across the country, including the Hainan Free Trade Port. At the same time, the post-pandemic era will see a continued rise of Chinese MNCs as more Chinese companies expand abroad.

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While MNCs have reaped significant profits from their investments in China, the flow of benefits has certainly been a two-way street. Since the start of Reform and Opening-up, MNCs have contributed to China's development in many ways—not only by generating employment and tax revenue, but also by bringing technology, talent, production techniques, and management skills to China.

Although MNCs have played an important role in the nation's development, their voices have often been lacking in public discourse and policy discussions in China. This is a shame because MNCs are in a unique position to provide valuable insights on business strategies and policymaking. Their global resources and experience make MNCs useful commentators on best practices in global policy and business. They are able to draw on their diverse experiences in different markets to offer suggestions on key issues. MNCs are also often home to cutting-edge sector-specific expertise in their respective fields and industries, making their views especially useful when formulating policy on emerging sectors and issues.

Since it was founded, the Center for China and Globalization (CCG) has worked to build channels and platforms to enhance communication between foreign businesses and policymakers in China in an attempt to bridge the gap. These include high-profile events such as seminars, workshops, and CEO Roundtables at our annual flagship events the China and Globalization Forum and the Inbound-Outbound Forum.

In 2019, at the 6th China Inbound-Outbound Forum, CCG released a list of the "Top Ten Multinational Corporations in China 2019," recognizing the achievements of MNCs in various sectors. In 2020, despite the challenges of the pandemic, the 7th Inbound-Outbound Forum was held in Beijing as part of the China International Fair for Trade in Services, featuring distinguished figures from the international business community discussing important topics such as China's Opening-up, the implications of China-US friction for MNCs, the Belt and Road Initiative, and regional free trade. CCG also published the 2020 Global Enterprises Report: MNC New Development in China, which recognized the top 25 foreign investors of the year across the automotive, energy, chemical, and high-tech industries.ing the two sides face by strengthening trade and economic exchanges.

At annual forums and other special events, CCG strives to create channels for dialogue between the business community and policymakers, providing ways for entrepreneurs to convey suggestions to the government, and also ways for government agencies such as the Ministry of Commerce to engage foreign business and explain new laws and policies.

CCG has also launched an initiative to establish a network for international chambers of commerce, which play an important role in gathering views and data on key issues and helping their members, to grow and develop in China. This initiative will seek to promote communication between international chambers of commerce and the Beijing municipal government as well as local chambers of commerce in Beijing, researching and formulating policy suggestions on the operations of chambers of commerce in China.

Since launching these various roundtables and initiatives, we have found the perspectives that MNCs and other business groups have shared with us to be both

illuminating and invaluable—not only in conveying the views and experiences of their own enterprise or industry, but also for their insights into the global economy and China's development. We have long wanted to be able to share these perspectives with a wider audience to contribute in some small way to the conversation on China, globalization, and other pressing topics of our times. It is in this spirit that CCG has compiled this volume of original works by CEOs and senior business representatives from various countries such as Brazil, China, France, Germany, Switzerland, the UK, and the United States, to provide balanced and diverse perspectives from the business community. This group of authors includes companies and advocacy groups working in a wide range of fields that bring diverse perspectives to issues such as China's development, international economic cooperation, and China-US competition.

This book is divided into three parts with a total of 22 chapters. Part I, "The Big Picture," looks at how different countries can balance their own interests and ensure their companies become a part of China's development to find that delicate "win-win" formula. It begins with an essay by Martin Mueller, Chairman at the Swiss-Chinese Chamber of Commerce and Director of SKC Group Ltd, which emphasizes the importance of international business in today's globalized world from the perspective of economics, politics, competition, and culture. The second article is by Jörg Wuttke, President of the EU Chamber of Commerce in China, in which he outlines a roadmap to bolster relations between the EU and China by strengthening trade and economic cooperation. Next is a piece by Timothy P. Stratford, Managing Partner of Covington & Burling LLP Beijing Representative Office and former Assistant U.S. Trade Representative, which discusses ways to stabilize America's all-important economic relationship with China, particularly following the Phase One trade agreement. This is followed by an essay by another American, Craig Allen, President of the US-China Business Council, which focuses on the impact of decoupling on employment in the United States, with ten specific policy suggestions on how to maximize employment in cooperation with China. From the perspective of the technology sector, Sean Randolph, Senior Director of the Bay Area Council Economic Institute, explores how to "thread the needle" in achieving a balance for Silicon Valley tech companies doing business in China despite an increasingly challenging geopolitical landscape.

Back across the Atlantic, Joseph Cash, a Policy Analyst with the China Britain Business Council, examines trade relations with China after Brexit, with a particular focus on the potential of regional free trade agreements (FTAs). Next, Christophe Lauras, President of CCI France Chine, provides a French perspective on an increasingly competitive environment that, while becoming more accessible in terms of industries and sectors, is no longer one in which foreign enterprises can assume they will receive the "red carpet" treatment. The final essay in this section provides a perspective from Latin America. Luiz Augusto de Castro Neves and Tulio Cariello of the Brazil-China Business Council provide insights into the reality of China's increased presence in Brazil and the rest of Latin America as well as Brazilian investment in China.

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Part II takes the theme of "Analysis and Advice" and looks at the role consultancies and advisors play in helping multinationals make the most of China's development. It begins with a piece by James Chang, PwC China Regional Economic Clusters Managing Partner, which focuses on opportunities for China in an age of "Globalization 3.0" from the perspective of changes in supply chains. Next, Samantha Zhu, Chairperson of Accenture Greater China, paints a bright future for China's economy with insights into the "dual circulation" model, digital technologies, environmental efforts, and innovation. Following this is an article by Vaughn Barber, Global Chair of KPMG's Global China Practice, Co-Head of Infrastructure for KPMG in China and Chair of the China-Australia Chamber of Commerce, which probes opportunities arising in China's transition to a "New Development Paradigm", reexamining the impact of China's scale, its efforts in innovation, and the role of foreign investment.

The next essay in Part II is a proposal for continued reform of China's capital markets by Mark Austen, CEO of Asia Securities Industry & Financial Markets Association, which not only recognizes the significant steps that have been taken but also highlights the need for further improvements in equities, foreign exchange, regulation, and operations to create a more level-playing field. Following this is an essay by Weiwen Han, Managing Partner of Bain & Company in Greater China and James Root, a Bain & Company Senior Partner, which looks at the state of multinationals in China amidst a growing tendency towards "deglobalization" in the rest of the world. The final essay in Part II is by Denis Depoux, Global Managing Director of Roland Berger, which looks at how China approaches the idea of the "multinational" company and deals with global uncertainties, examining challenges facing China's global drive and possible solutions to them.

Part III, the final part of this book, takes the theme of "On the Ground" and examines the experiences of individual companies and how they have worked to adapt and thrive in China and make the most of this period of "transition and opportunity". It opens with a piece by the CEO of Airbus China, Gang Xu, which tells the story of Airbus' journey through more than 50 years of China's recent development and the trials and successes of China's economic miracle from the perspective of the aviation industry. Continuing the focus on transport, Chairman & CEO of Daimler Greater China, Hubertus Troska, writes about the remarkable rise of premium cars in China, which he says has become the engine of growth in the global car industry and a "second home" for Daimler. Kamran Vossoughi, President and CEO of Michelin China, examines how to achieve success in a market through adaptation under the mantra of "being Chinese in China," including Michelin's active role in supporting China's green initiatives, innovation efforts, and the expansion of domestic demand.

Turning to talent and human resources, Yanping Wang, General Manager of Public Affairs at LinkedIn China, examines China's digital economy through the lens of the LinkedIn Economic Graph. The next piece is by Kamal Dhuper, Country Head of NIIT China, which looks at how companies can succeed in developing talent using adaptive learning. Education, the foundation of a strong talent pool, is the topic of focus for Mengyan Wang, China Country Manager for Educational Testing Service, who analyzes five trends for the future of educational testing in a post-pandemic China. The penultimate essay in this section is by President of DSM

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China, Joe Zhou, and describes how his company is working on health and nutrition along with local partners to provide a brighter, more sustainable future for both the Chinese people and DSM. The last piece in the book is by Qunyi Zheng, Senior Vice President of Herbalife Nutrition and Chairman of Herbalife China, on opportunities and challenges arising in the health and nutrition industry that come with the rise of younger consumers.

We are exceptionally grateful to all of the business leaders that have contributed to this volume and all of those that have participated in our events over the years. Without their inspiration, insights, and generosity, this publication would have never been possible.

Despite the uncertainties and challenges facing both China and the world today, the fact that so many experienced business leaders remain upbeat and enthusiastic about China's growth prospects and role in the global economy is heartening. A common thread through these commentaries is that while the post-pandemic era is full of tough challenges, there is also a lot of room for cooperation to overcome these challenges, and many opportunities for mutual gain if the global community can work together. We firmly believe that candid, open discussion is the key to building mutual trust and facilitating deeper cooperation, and we look forward to continuing our work with the business community both in China and abroad to further this mission.

We hope the articles in this volume will offer readers a rich spectrum of perspectives and provoke further thought and conversation on these important topics. In the meantime, we will continue our efforts to facilitate discussion between the business community, policymakers, academics, and other experts from around the world so they can join in the conversation, deepen their understanding of this exciting period of "transition and opportunity," and make the most of China's bright future.

Beijing, China October 2021 Huiyao Wang, Ph.D. Lu Miao, Ph.D.

Acknowledgments

As co-editors, we are grateful and indebted to the countless people who have contributed generously to the creation of this book. The greatest debt we owe is to the Presidents of Chambers of Commerce and CEOs of multinationals in China, who have taken the time and effort to draft informative and valuable content for this volume. We would also like to recognize the continuous support the business community has given CCG over the years.

We also wish to express our sincere gratitude to our commissioning editors at Springer Nature Group and their team, particularly Yingying Zhang and Yan Li. We applaud their vision to publish a work that brings together so many perspectives. Even in the post-COVID era, China remains an engine of growth and an economic powerhouse to which the world is inextricably linked. The ability of businesses to adapt and adjust to China's current transition from the 'world's factory' to a more mature economic entity ensures that they can take advantage of the opportunities that will come of a future with China.

Our thanks also go to the professional team within the CCG Publishing Centre, who have worked with contributing authors to ensure each work we publish is both relevant and timely for today's world. The final outcome of their work is a source of pride for us and we would like to express our warmest thanks and appreciation to Yueyuan Ren, Joshua Dominick, Yunfeng Bai, Yanjie Li, Beijie Tang, Hong Liu, Yunxue Gao and Zhanjie Zhao.

In today's world, globalization and the diversification of the global economy have resulted in amazing developments, not the least of which is the massive shift of power from West to East. CCG's relationship with the business community is essential to keeping our pulse on the latest developments in trade and economics. That is why it is such an honor to publish this collection. We would also like to thank our readers for their continued support and encouragement, which gives us the confidence and drive to continue to produce innovative and insightful publications like this one.

Huiyao Wang

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Dr. Lu Miao is Secretary-General of CCG, Young Leader for Munich Security Conference (MSC) and the Deputy Director-General of the International Writing Center of Beijing Normal University. She received her Ph.D. in contemporary Chinese studies from Beijing Normal University and has been a visiting scholar at New York University's China House and the Fairbank Center at Harvard University. Dr. Miao is a co-author of many Chinese Social Science Academy blue books and Chinese Social Science Foundation's research project reports. Dr. Miao has published a number of books in Chinese, which detail China's outbound business and global talent. Her latest publications in English are China Goes Global: The Impact of Chinese Overseas Investment on Transforming Business Enterprises (2016) and International Migration of China: Status, Policy and Social Responses to the Globalization of Migration (2017).

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The Big Picture

The Significance of International Business



Martin Mueller

Abstract A *free flow of business relationships* and *person-to-person interaction* has been the life blood of commerce for much of the last few decades, but this has been suddenly interrupted due to the *Covid-19 pandemic*. It is especially important in this context to take a step back and "*look over the fence*" to assess where relations currently stand. In this assessment, the importance of the *cultural environment* cannot be overlooked.

Keywords Free flow of business · Person-to-person interaction · Covid-19 pandemic · "Look over the fence" · Cultural environment

1 The Fundamental Importance of International Business Relations

Every entrepreneur knows the importance of occasionally taking a bird's eye view of one's own business activities. In Switzerland we call this taking "a look over the fence". We are now well into 2021. More than a year has passed since COVID-19 interrupted the free flow of people-to-people business relationships and this has happened in an entirely unexpected, unprepared, and unprecedented way. This tiny virus has initiated a tug of war: fear versus faith, apathy versus hope, greed versus fairness, selfishness versus generosity, and ignorance versus awareness. This may sound dramatic, but it accurately reflects the times we are currently living in—a time that feels extreme and critical on many levels. Let's step back for a moment, widen our view, and examine why the free flow of international business between individuals, enterprises, and organizations is and always will be of vital importance to the human race.

The prevalence of international business has increased significantly during the last part of the twentieth century, thanks to the liberalization of trade and investment and the development of technology. Of course, there are many other international exchanges in place such as diplomatic, cultural, scientific, tourism, and international

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sporting events. These are essential and necessary, but they are mostly just short-term or related to small groups. Only international business can create wide-range, long-term, grassroots, people-to-people exchanges through strong networks with pragmatic development that is nonviolent, mindful, and respectful of each other's differences and strengths.

In countries where media is very much focused on purely domestic information, some people have exaggerated ideas about themselves. They think of themselves as bigger than they really are, and only their own worldview is the right one. Only through in-person international business travel and exchange are such individuals and enterprises granted an eye-opening reality check and only then do they discover their real position and the value of their capabilities. In recent history, some governments and groups of people have begun to promote division and isolation, developing concepts that conceal their unilateralism. Such selfish actions are hostile toward the world. Greed and protectionism are hurting hundreds of thousands of small businesses and millions of individuals. As a result of this trend, we will most likely experience even more profound polarization in the next few years as the firestorm of misinformation continues to burn.

Fortunately, businesspeople of all races and beliefs, who have personally experienced other countries and have developed personal relationships, will be able to distinguish between lies and truth.

Despite the struggle conveyed above, I believe the coming years will initiate a continuous progressive curve toward a more humane world. Jointly addressing climate change, equality, and expanding political alliances is entirely possible, but this will most likely take place against a background of natural disasters, violence, and extremism. Building trust, understanding, solving problems, and achieving success together is the only way to—finally—build a better future for all mankind.

If the leading people of all nations would critically and honestly analyze themselves, everybody would have to admit that, on the whole, we have done a terrible job. How is it possible, after thousands of years of evolution and development, that we are still acting so immature and primitive, to put it nicely? There is still a huge amount of gender suppression toward women or toward groups of people who adhere to a different belief system, or have a different skin color, or carry a different country's flag. We are still polluting our beautiful planet as if there were no tomorrow! Think about it. What could we, the inhabitants of this planet, achieve if we were to learn how to work together and create just a simple five-year plan together? What is keeping us from becoming smarter, more sustainable, and acting more responsibly?

We need an integrative, inclusive world economy that does not continue to produce more losers and victims. This is not just the idealistic wish of some dreamers; many international organizations have put this at the top of their agenda. Repeating this sentence over and over does not help, we must take action! Every entrepreneur and institution is responsible and must be asked to take a sustainable, holistic approach instead of carefree, narrow-minded, short-term thinking.

We do not need to wait for a government or a world organization to take the initiative. Many of us can start now by acting in a responsible way in domestic and, even more so, in international business projects. The good thing is that even one

bold decision by a single country may create a ripple effect that spreads throughout the world. For example, new environmental regulations implemented in one country may force foreign enterprises to comply or watch their business in that market or become irrelevant. With a little bit of common-sense guidance from local lawmakers, international businesses can become the vehicles driving organic growth toward a sustainable, accountable, and comprehensive world economy.

2 Understanding of Cultural Environment is Key to Success

Now let us take a closer look at some international business projects. International business occurs in many different formats: from the movement of goods from one country to another to the licensing of products or processes, and franchising, as well as the formation and operations of sales, manufacturing, research and development, and distribution in foreign markets.

Participation in international business allows countries and their enterprises to leverage their local comparative advantage, their unique specialized expertise, and an abundance of different factors related to the production of and delivery of goods and services into the international marketplace. International business also promotes competition in domestic markets and introduces new opportunities to foreign markets. Global competition helps companies become more innovative and efficient in their use of resources. Today, global competition affects nearly every company—regardless of size. For consumers, international business introduces them to a variety of goods and services. For many, it enhances their standard of living and increases their exposure to new ideas, devices, products, services, and technologies. To ensure success in a foreign market, international businesses must understand the many factors that affect the competitive environment and effectively assess their impact.

2.1 Economic Environment

Economic environments may be vastly different from one country to the next. The economies of various countries may range from developed and emerging, to less developed. This brings a vast array of variations, which have a major effect on everything from education and infrastructure to technology and healthcare.

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2.2 Political Environment

The political environment of international business refers to the relationship between government and business, as well as the political risk of a nation. Therefore, companies involved in international business must be ready to deal with different types of governments and institutions. Because international companies rely on the goodwill of governments, international businesses must consider the political structure of the country in which they intend to operate.

2.3 Competitive Environment

The competitive environment is constantly changing based on economic, political, and cultural contexts. Competition may come from a variety of sources, and the nature of competition may change from place to place. The level of technological innovation is also an important aspect of the competitive environment as firms compete for access to the newest technology. There is no common roadmap.

2.4 Cultural Environment

The cultural environment of a foreign nation remains a critical component of the international business environment, yet it is one of the most difficult to understand. The cultural environment of a foreign country is rooted in commonly shared beliefs and values, formed by elements such as language, religion, geographic location, government, history, and education. It is common for many international firms to conduct a cultural analysis of a foreign country in order to better understand these factors and how they affect international business efforts.

Over the past 40 years of opening-up and development in China, many foreign enterprises have entered the market. Some of them have succeeded and are still flourishing, while others did not and were forced to leave. Based on my observations, a key reason that companies leave is a lack of deep cultural understanding, whether of their clients, employees, their local suppliers, the legal framework, etc. From far away, it all looks very simple, but in fact, a lack of cultural understanding will affect your business sooner or later. Of course, this is not only true for China, it is true for any international operation, even for business exchanges between neighboring countries.

One example from Europe, which I experienced when I managed international sales, is about communication, specifically verbal expression. The second most spoken language in Europe is German, which is spoken in Germany, Austria, Switzerland, and Lichtenstein. So, if someone wants to open a production facility, an R&D, or logistics center there, everything may go well. But if you want to do personal sales,

no single person would be able to cover the entire geographical region. The cultures of these countries are considerably different when it comes to sales and sales talk, which makes local people essential if you want to be successful.

We are living in turbulent times and doing business internationally is often a complex process, but that is fine. We all know after some rough weather, smooth sailing will ultimately return. The world needs millions of cross-border business transactions, and we can do our part by ensuring that the projects we personally conduct are sustainable, efficient, legal, honest, and beneficial for all involved.

My organization, the Swiss Chinese Chamber of Commerce in Mainland China, is ready and well equipped to support Chinese and Swiss entrepreneurs. Acting "smart and sustainable" is our goal and the principle that we promote together with institutions from the Swiss government. Every single person counts when it comes to leaving our children a better economy and a healthier planet.



Martin Mueller is Chairman of the Swiss-Chinese Chamber of Commerce, Founder and Director of SKC Group, Martin's hometown is St.Gallen in eastern Switzerland where he obtained several degrees in mechanical engineering, an MBA, and a Swiss degree in marketing and sales. During a term at the University of St. Gallen (HSG), he developed new management systems for virtual companies. Later Martin headed the international sales division of the leading Swiss telecommunications company for 16 years and expanded its business into 46 countries. During that time, his personal key customers included Fortune 100 companies such as Airbus, Lockheed Martin, Samsung, etc. As an expert in intercultural business development, Martin acquired expertise in many industries, such as mobile communications, defense, aviation, motorsport, renewable energy, and more. In 2008, he founded the SKC Group in Beijing, which specializes in sustainable construction and concepts for high-end architecture.

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A Roadmap to Bolstering EU-China Relations



Jörg Wuttke

Abstract European multinational companies (MNCs) in China are not making plans based on the next one or two years—they are looking to the next one or two decades. While there is no sign of "decoupling" between Europe and China, there is a growing political story to be told and business is becoming increasingly politicized. China's economic rise follows historical norms, the way that the EU interacts with China in business should emphasizes existing institutions and WTO reform, ultimately producing an environment in which European business acts as a transition catalyst in China.

Keywords No sign of "decoupling" between Europe and China · Business becoming politicized · WTO reform · Transition catalyst

International coverage of China in 2020 was dominated by two stories: the COVID-19 outbreak and the resulting economic challenges, which have left companies navigating in the dark, and created the potential for various markets to decouple from China. While the former was all too real, the latter is a far less straight-forward story.

In the areas where European Chamber members are able to participate in China's economy, they report no significant change in plans to redirect current or planned investments elsewhere. Findings from the European Chamber's Business Confidence Survey 2020 (BCS 2020) indicate that only 11% of member companies were considering doing so last year, which is towards the lower end of the norm for the last decade.

Even taking into account the potential economic upheavals that could follow the COVID-19 crisis, European multinational companies (MNCs) in China are not making plans based on the next one or two years—they are looking to the next one or two decades. Their small and medium-sized enterprise (SME) partners remain similarly committed to serving the market here, as do the European SMEs that target Chinese customers directly.

However, there is certainly now the potential that the economic impact of COVID-19 will result in increased diversification of certain supply chains. Many companies

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are naturally seeking to build resiliency after suffering supply shortages since China was the first market to be flattened by the pandemic. However, this should not be misunderstood as "leaving." Instead, it is likely to mean less new investment into China as resources are spent elsewhere.

Discussions on this topic with various business leaders reveal some clear trends. European MNCs' increasing investment are looking to onshore their supply chains into China and deepen their local production capacity to insulate themselves from further disruptions. Of those that have left or are planning to leave, most were in China for export markets rather than for local consumers.

1 No Major Economic Decoupling Yet, But a Growing Political Story

While there are currently no economic factors strong enough in and of themselves to drive European investors out of China, business decisions are not made in a vacuum.

Political voices calling for a tougher stance on China are building into a chorus across the world. The only thing Americans seem to agree on these days is that the United States must embark upon a new era of relations with China, and abandon the engagement-at-all-costs approach that defined previous administrations in favor of something considerably more hawkish.

When former EU President Jean-Claude Juncker delivered his 2017 State of the European Union speech, he spoke of the need for the EU to strengthen its trade agenda. "Yes, Europe is open for business," he said, "But there must be reciprocity. We have to get what we give." This signaled something of a departure from the more conciliatory approach that Europe had previously taken in its dealings with China. Since then, Europe's tone has continued to evolve in response to China's slow-moving economic reform agenda and what many view as an increasingly aggressive stance coming from Beijing. The EU's approach hardened further in a strategic communication released in 2019, which labeled China an "economic competitor" and a "systemic rival." A toolbox is now under development, including an investment screening mechanism, to better protect the EU common market from outside distortions.

1.1 Several Months of Increasing Tensions

While China and Europe regularly experience friction outside the economic realm, the last couple of years have yielded an astonishing number of issues that have raised concerns and increased risk for businesses. These include the political ramifications of the National Security Law aimed at Hong Kong, the extensive allegations of forced labor and internment of ethnic and religious minorities in Xinjiang, the insertion of the Communist Party of China (CCP) into every aspect of civil society and even business,

and the politicized nature of the narrative around the early days of the COVID-19 outbreak. One of these on their own would present a serious point of contention between the political leaders of Europe and China. Together, they risk creating a long-term, downward spiral, as evidenced by the measures already applied by the United States in response to developments in Hong Kong and the Xinjiang, which have the potential to seriously impact European companies.

1.2 The Politicization of Business

In the Chamber's BCS 2020, 43% of members reported that the business environment had become increasingly politicized over the previous year, compared to just 10% that felt it was less so. Members identified the Chinese Government and Chinese media as the most likely sources to increase political pressure on businesses.

European companies in China can predict economic trends, shifting consumer tastes and the supply and demand of inputs, but they cannot predict ever-shifting political demands. Regardless of the areas where progress has been made in China's business environment over the past year, companies now have the added concern that arbitrary punishment may be handed down to them due to the actions of their home-country governments.

For example, the 2020 conclusion of the EU-China Agreement on Geographical Indications (GIs) will help to protect the quality of 100 different European and Chinese food and beverage products, and increase consumer confidence. However, there is now a risk that producers and importers of these newly protected items may suddenly face disruptions if they become the focus of Chinese retaliation in response to political issues.

2 China's Economic Rise Follows Historical Norms

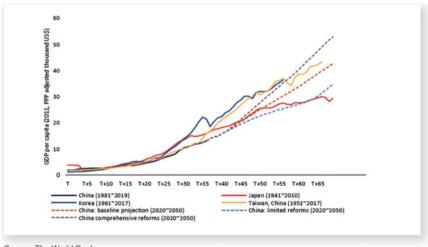
China has become a pivotal market for European players over its four decades of economic opening, and it has the potential to follow the trends of other economic miracles predating its own. Although it is commonly stated in China that its rapid rise over the last 40 years is somehow unique, the European business community sees it as yet another example of how economies bloom when modernization is prioritized and their development is predicated on market opening.

Mass and rapid industrialization and modernization have been experienced by multiple economies throughout the last 150 years. China is following a path similar to the "Four Asian Tigers" of South Korea, Taiwan, Hong Kong and Singapore. These markets transitioned from largely undeveloped economic systems/trading ports to highly developed, competitive centers for industry, innovation and finance, all over the course of around four decades.

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Larger economies have historically done the same. Like many countries during the second industrial revolution at the end of the nineteenth century, Germany, shortly after its unification in 1871, rapidly industrialized. An even more dramatic process of modernization emerged over a similar period of time when Meiji Japan went from a feudal, chiefly agrarian economy to an economic force on par with the strongest nations of the day. So long-lasting were the lessons of those experiences that even after the heavy bombing sustained by both countries during the Second World War, they were able to rebuild themselves into the powerhouses that they became just a few decades later.

The European business community views China no differently than these earlier examples. The Chinese economy has followed similar growth trends over comparable timelines, as demonstrated in the World Bank chart, which shows GDP per capita in PPP terms since the introduction of the market reforms in respective markets. European companies are ready to play a key role in the development of yet another economic powerhouse in East Asia.



Source: The World Bank

3 In China for China, and the World

European companies derive far more from being in third markets than just the immediate benefit of increased sales. They also benefit from the global nature of the talent they acquire, increased competition and their exposure to new forms of innovation. China is no different in this respect.

The success of many of Europe's best companies comes from decades of competing with peers at home and abroad. The formation of the European common

market paid immediate dividends as companies previously protected by borders and tariffs were suddenly forced to cut the fat or fall behind. The winners of that race then entered international markets as globalization took off and the World Trade Organization (WTO) gave them access to other fields of competition, while also keeping them on their toes as their home markets welcomed new entrants.

With China remaining only partially open, and with a level playing field only reported by half of European companies operating here, the resulting loss of competition for both European players and China's own champions is a grievous one.

The foreign companies that used to have their pick of China's best and brightest now face strong competition from local companies, further underlining how necessary it is to have a presence here, as well as to be able to easily assign talent from other parts of the world to China operations. European companies are keen to send their global talent into China for them to foster new skills and gain experience that can be applied elsewhere. It also helps companies unlock synergies by bringing the best local and foreign talent together. Unfortunately, China is far more restrictive to foreign talent than the EU's various member states.

In the interests of creating a more competitive business environment, an important part of China's ongoing opening-up and development must therefore include reducing the restrictions currently placed on foreign talent, bringing it more in line with the EU.

4 China's Market Access Lags Behind Its Market Potential

For many years, the European Chamber has advocated for more complete opening in China, and equal treatment for foreign enterprises. The current web of restrictions facing foreign companies trying to invest in China are extremely burdensome and actually hold back China's overall development. It will be only possible to unleash the full potential of the market by increasing foreign investment, which in turn will also strengthen competition.

Foreign companies that want to invest must first navigate the Foreign Investment Negative List (FINL), a table of different industries in which foreign investment is either forbidden or accompanied by conditions for entry. Restrictions include, for example, equity caps or requirements that the Chinese partner must have majority control in a joint venture (JV).

The list underwent a revision in late June 2020, with seven items being removed, leaving 33 restricted/prohibited sectors. Most of the removed items are of limited significance, such as seed development, nuclear fuel and nuclear radiation processing, oil and gas exploration, and pipe network facilities. However, the remaining items are composed of sectors across a broad spectrum of interest—traditional Chinese medicine production is not exactly a priority for European business, but legal and telecommunications services certainly are.

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In addition to the FINL, foreign investors must also navigate the less frequently discussed Market Access Negative List (MANL). This list affects all market players, not just foreign ones, which serves as a reminder that China's private companies are also subject to the onerous regulatory framework here. While the MANL has 130 broadly defined items—which translate into restrictions on the provision of hundreds of different goods and services—the vast bulk of these are not prohibited, but instead require various permissions.

European business leaders report being twice as likely to face such indirect barriers compared to direct ones. Foreign banks, for example, were finally able to enter without JV requirements as of just a couple of years ago. However, once allowed in they found a fully saturated market, in which only a few niche opportunities in areas like cross-border services held meaningful potential. Furthermore, the requirements for obtaining an operating license remain considerably outside of international norms. To date, only a handful of foreign banks have been successful, though recent announcements by the China Securities Regulatory Commission could signal that things are moving in the right direction.

Insurers, which have just seen their industry removed from the most recent FINL, face different, but no less burdensome, bureaucratic barriers to full entry. To offer their services nationwide, they must apply for a separate license in each individual province, with only one application being accepted and processed at a time. With the China Banking and Insurance Regulatory Commission issuing those licenses at a pace of about one a year, this means that any foreign insurance providers wanting to offer services in even just one-third of the country would need a decade to acquire them, assuming that they were all smoothly approved. Meanwhile, lying in wait for them are China's biggest insurers, which have been able to easily secure their positions across the country relatively unimpeded.

In information, communication and technology, there are rapidly emerging sectors with plenty of market share up for grabs. Unfortunately, most telecommunications infrastructure providers are increasingly squeezed out of procurement as China fights to support its national champions, and licenses for value-added telecoms—including cloud and virtual private network services—remain largely out of reach to foreign companies. At the same time, digital solutions developed elsewhere by European firms have to deal with the Great Firewall and its seemingly ever-growing list of blocked sites.

In addition to the removal of certain items, the revised FINL also now includes a provision that gives the State Council the power to supersede the restrictions on the list for any company that it selects. It seems likely that this is meant to allow the State Council to "pilot" opening in certain sectors after the previous piloting model, through China's free-trade zones, failed to deliver any meaningful results.

This could be good news for foreign companies that the State Council gives the green light to. However, it also raises concerns within the European business community with respect to China's increasingly politicized business environment, as outlined previously. It is not beyond the realm of possibility that a company that gains favor one year, may suddenly fall out of favor the next if its home-country government comments on an issue that is deemed to be sensitive.

4.1 Procurement Blues

For many that have successfully navigated China's entry requirements, they face further limitations in a public procurement market that remains largely closed to foreign players, with "regulations and policies favoring domestic over foreign goods and services." In terms of inputs, European companies have identified some opportunities, but only to play niche roles and mostly in areas where they have a certain technology that local competition cannot replicate.

Service providers are similarly marginalized. For example, construction service providers (CSPs), long limited to only a handful of potential projects, remain tiny players within the technically open market. With only four possible types of projects open to foreign CSPs, it is not surprising that their market share is less than 2%. The only option they have is to play a "consulting" role in which they do the work for a domestic CSP and receive only part of the revenue and limited recognition.

5 Rhetorically? Things Couldn't Be Better

On paper, it appears that China is opening up its economy and moving in the right direction. In recent years, the Chinese Government has continuously reiterated this narrative. The ambitious statements in President Xi's first Davos address in 2017 offered hope for a brighter future when he said that "pursuing protectionism is like locking oneself in a dark room," and that no one would emerge as a winner from a potential trade war. Plans for increased opening up the economy to foreign investment seemed a foregone conclusion at that point in time.

These plans were formalized through the State Council's *Notice on Several Measures on Promoting Further Openness and Active Utilization of Foreign Investment (State Council Document No. 5 or Guofa [2017] No. 5)*, released in January 2017, and the *Several Measures for Promoting Foreign Investment Growth (State Council Document No. 39* or *Guofa [2017] No. 39*), released in August 2017. An additional positive shift in China's management of foreign investment was expected with the 2019 adoption of the Foreign Investment Law (FIL), which came into effect on January 1, 2020. All of these had the intention of streamlining existing regulations for foreign businesses and stimulating foreign investment.

In reality, the results have lagged far behind the promises. As recognized in the European Chamber's 2018 report 18 Months Since Davos, which analyses China's reform progress in the 18 months that followed President Xi's 2017 Davos address, there was some indication that the pace of reform had increased. However, the actual reforms resulting from the two State Council documents were found to be "still insufficient and incomplete." Although the report identified some small market openings that had taken place, as well as improvements in the R&D environment and more stringent enforcement of environmental regulations, it also found serious issues

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remaining in China's economy, including SOE domination, unfair technology transfers and a burdensome regulatory environment, among others. These conclusions are still accurate nearly three years since this report was published.

A recent World Bank study pinpoints a combination of macro-economic forces and policy choices that have limited China's development and resulted in untapped potential. In the late 1990s and early 2000s, China's productivity in diverse sectors was a major contributor to decades-long, double-digit economic growth. However, the choice not to reallocate resources from sectors with traditionally low productivity, such as agriculture, towards more productive industries and services—as well as from inefficient SOEs to private firms—has resulted in a steady drop in productivity since 2007.

Even though weaker growth was undoubtedly exacerbated by the financial crisis, the World Bank study highlights that the lack of efficiency within SOEs, and the fact that they still lag far behind private enterprises in terms of efficiency, has also played a role in this. While China's growth potential still remains, its per capita income and productivity are far below advanced economies. In order to close this gap, China will need to allocate more resources to the private sector, invest more in human capital, and upgrade industrial processes and management practices.

6 Policy Miscalculations

There are host of other factors limiting market potential and preventing meaningful opening in China. Political and economic mismanagement—as well as the increased incidences of aggressive diplomacy and a tendency to define its own forms of multilateral engagement—has seen China's international image slowly deteriorate. At the same time, a failure to establish transparent, effective and impartial institutions, and a loss of talent from within its bureaucracy, raises questions over China's actual capacity to implement the changes needed to establish a fair, open and competitive business environment.

6.1 Sustainable Development Requires Sound Institutions

When businesses are looking to make long-term investments, they require a high degree of certainty that solid institutions provide. If a country fails to create a sound institutional and economic framework, it will struggle to sustain its development. The resulting lack of transparency, consistency and predictability in legal and administrative processes erodes trust and can ultimately cause long-term damage to economies.

China's opening up measures have in some cases been highly promising. The removal of certain industries from the negative list has, in theory, paved the way for investments in previously off-limits sectors of the economy. However, as previously

mentioned, a host of indirect barriers prevent many companies from actually being able to fully contribute to China's development.

This approach to managing foreign investment provides no real transparency or legal certainty, and therefore makes China's market less attractive, particularly in the current climate in which companies are becoming more and more risk-averse. Increasing predictability—by creating reliable mechanisms for granting licenses and approvals based on transparent and measurable factors—would not only boost business confidence, but also raise the credibility of China's government.

The need for institution building is recognized by many in China. For example, it was a central recommendation in *China 2030*, a report jointly produced by the Development Research Council and the World Bank. Chinese and international experts agreed that without strong institutions, China's development will sputter just at the time that it needs additional forward momentum to escape the middle-income trap.

7 EU Must Prioritize Existing Multilateral Platforms

It is important that the EU continues to work together with China to follow through on pledges to reform the WTO. This is particularly salient given current trends: China has been increasingly engaging with the rest of the world through its own mechanisms, and the continued deterioration of US-China relations is sucking so much oxygen out of the room that there is a real danger that efforts to reform the WTO may be abandoned altogether.

One example of China's homegrown form of engagement is its preference for its "17 + 1" initiative, instead of using the already well-established European Union and its various dialogues with neighboring non-member states to reach the same audience. With Europe having long upheld a "One-China" policy, it begs the question of why China does not reciprocate and implement a "One-Europe" policy.

As already alluded to, the BRI provides another example of how China is forging its own ways to engage with the world outside of established global norms. While third countries previously had to rely on existing multilateral organizations to fund major infrastructure projects, through the BRI, China has created the circumstances that see it freely investing in these countries' strategic infrastructure, under conditions that, on the face of it, appear favorable. At the same time, the BRI is functioning as a platform to steadily introduce "Chinese standards" outside of China, at the expense of globally approved ones. According to the US-China Economic and Security Review Commission's 2018 Report to Congress, "Chinese companies are seeking to define import and export standards for a broad set of technological applications, which, taken together, could alter the global competitive landscape."

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7.1 EU Poised to Further Protect Against Market Distortions

The continued lack of significant and meaningful opening of China's market has increased calls within the EU for China to offer reciprocal access to its market. Europe must maintain its open market, but it can no longer afford to continue with a naïve approach in its dealings with Beijing. Instead, the EU looks set to develop and deploy stronger mechanisms—including the investment screening mechanism and the international procurement instrument—to protect its market from non-market distortions, such as investments made with state-backed capital.

The unfortunate conclusion is that former US President Clinton may have been wrong when he asserted in 2000 that China would "import one of democracy's most cherished values: economic freedom." Instead, it is looking more likely, at least for the time being, that Western liberal markets will need to become more like China's in order to protect themselves from the more pernicious aspects of China's economy.

8 European Business as a Transition Catalyst

European companies are ready to deepen their positions in China given the right opportunities. Ongoing investment in China by Europe's top companies means more than just numbers on a ledger. The new factories and plants currently being built are cutting edge, and will be among the most modern facilities in the world, integrating emerging technology, like AI, 5G and cloud platforms, to create operations that will set new standards. They will provide well-paid jobs that teach new skills to China's growing pool of skilled workers, laying the foundation for further industrial upgrading in China through the high-quality inputs they provide and by raising the expectations of Chinese consumers.

The current US administration's efforts to force decoupling from China could have a serious impact on what technology is allowed to be sold to China. Its push to impose export controls on American semiconductors to key Chinese companies has already exposed the potential economic damage that could be caused in areas where China is far behind, as well as the increased harm this would have on the US-China relationship. Similarly, the United States has the ability to seriously impact China's best companies by restricting their access to, and ability to complete transactions in, USD, since China's tight control over its monetary system has left the RMB with only a tiny share of global transactions. However, such measures would likely be used only sparingly and in a highly targeted way by the US Government, if at all.

In areas where China is comparatively strong, efforts to decouple or cut-off access to American technology are likely to have a more muted impact. In some areas of technology, Chinese firms have already surpassed their American competitors. This holds true for China's internet companies, many of which are world leaders. Coupled with a robust venture capital culture, China can endure and even thrive if deprived of American inputs in these areas.

But Chinese companies are overwhelmingly behind Europe, Japan and the United States in industrial technology. To survive decoupling in this area, China would need to bring other partners closer to compensate. This would be crucial for China to boost its productivity sufficiently to escape not only the middle-income trap but also the demographic cataclysm that could result from its rapidly aging population.

European and Chinese technological edges are complementary, and they could together endure in a world undergoing deglobalization. If this is to stand a chance of happening, China must develop sound institutions to create a transparent, consistent and predictable business environment, eliminate regulatory barriers and offer the EU reciprocal access to its market in a timely manner.



Jörg Wuttke is President of the EU Chamber of Commerce in China, as well as the Vice President and Chief Representative of BASF China. From 2001 to 2004 Mr. Wuttke was the Chairman of the German Chamber of Commerce in China. He is currently President of the EU Chamber of Commerce in China—an office he previously held from 2007 to 2010 and from 2014 to 2017. From 2013 to 2016, and again since 2019 Mr. Wuttke has been Vice Chairman of the CPCIF International Cooperation Committee, a group representing multinational companies in China's Chemical Association. Mr. Wuttke is a member of the Advisory Board of Germany's foremost Think Tank on China, MERICS, in Berlin. Mr. Wuttke holds a BA in Business Administration and Economics from Mannheim and studied Chinese in Shanghai in 1982 and Taipei from 1984 to 1985.

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Candor, Wisdom, and Persistence: The Keys to Stabilizing the All-Important Economic Relationship Between China and the US



Timothy P. Stratford

Abstract Issues in the US-China trade relationship remain a barrier to truly sustainable and mutually beneficial trade between the two countries. The *Phase One agreement* between the US and China dealt with some issues, but did not address "interoperability" challenges arising from differences in the two countries' economic systems. *National security* concerns, especially in telecommunications, are also a sticking point. Lessons learned from Phase One negotiations have resulted in both countries taking measures that *reduce mutual reliance*, but ultimately should result in a shared goal of seeking "harmony despite differences".

Keywords Phase one agreement · National security · Reduced mutual reliance · Harmony despite differences

Over the past 38 years, I have devoted my career to promoting sustainable and mutually beneficial trade relations between the US and China, because it seemed to me that getting this relationship right is one of the most consequential tasks and challenges of our time. I have done this as a lawyer, US diplomat, general counsel of a major American company's operations in China, and as three-term chairman of the American Chamber of Commerce in China. As a former US trade negotiator, I salute the extraordinary efforts of our negotiators from both countries today and understand the daunting challenges they face.

In this paper, I would like first to discuss—from an American perspective—the trade policy issues that have negatively impacted this incredibly important relationship, and the extent to which they are addressed in the Phase One agreement concluded between the US and China on January 15, 2020. I would then like to discuss the agreement's place within the context of the overall US-China economic relationship, which is increasingly defined by competition and increasingly inseparable from national security considerations. Finally, I would like to offer some thoughts on lessons learned, as well as on US objectives over the coming months and years and possible approaches for achieving them.

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1 Issues in the US-China Trade Relationship

As I see it, US trade negotiators have thus far confronted three types of issues with China, with the three types listed below in ascending order of difficulty and criticality:

First, there are issues on which China has previously made commitments, either multilaterally or bilaterally, but has not fully delivered on its promises to the reasonable satisfaction of its trading partners. These can be very specific pledges to open a particular sector or change a regulation, or they can be broad statements of principle, such as a commitment to strengthen intellectual property protection or refrain from state interference in commercial transactions. In some cases, the commitment has arguably been implemented only partially; in others, not at all; or in many cases, it has been nominally implemented, but then Chinese officials have taken other actions that have had the effect of denying the intended benefit to China's trading partners.

Second, there are issues on which no commitments have been made but where existing measures and practices clearly stand in the way of fair and reciprocal trade. For example, Chinese companies are able to do business in certain sectors and sell certain products and services in the US market, while American companies are not permitted to do the same for these sectors, products, and services in China. Chinese cloud service providers, for example, can freely operate in the US, but US providers of cloud services cannot have a meaningful commercial presence in China.

Third, there are issues that are systemic and stem from differences between the economic models of China and other countries—differences that create uneven competitive conditions for producers and service providers. When China joined the World Trade Organization, the hope and expectation of China's trading partners was that China would gradually converge with international norms and evolve into a more market-oriented and transparent economy. Although China has opened markets and welcomed foreign investment in a number of sectors, the state's decisive role in certain key sectors such as financial services, telecommunications, energy, and transportation, and its ambitious goals in important high-tech sectors as exemplified in the Made in China 2025 program and more recent initiatives work to advantage Chinese national champions domestically and globally—through subsidization, protectionist industrial policies, and opaque informal measures that defeat the assumption that trade is conducted on the basis of comparative advantage. These issues have intensified in recent years as China has, in various ways, doubled down on this state-led model and strengthened controls over the economy and businesses.

The limitations of the approaches and tools that the US has relied on over the past two decades to address these issues have become increasingly apparent. For an international agreement to be effective and durable, each side must believe that implementation of the agreement is in its own interest, and the agreement must usually establish an effective enforcement mechanism. However, multilateral and bilateral trade agreements and dialogues with China have often produced incremental commitments that China—over time—has not regarded as fully in its interest, and that have not been supported by processes to effectively enforce their implementation. The WTO's disciplines, for example, simply do not speak to many of the most serious

problems, and the WTO dispute settlement mechanism, while successful in many cases, has often required so much time to complete that the damage was done by the time a final ruling was issued and implemented.

As we know, the Trump Administration took a radically different approach, returning to Sect. 301 of US trade law—a unilateral tool that had been used to address unfair trade practices before the WTO dispute settlement mechanism was established. This led to the imposition by the US of additional tariffs of approximately USD 370 billion on Chinese goods and retaliatory tariffs by China of nearly USD 100 billion on US goods. Eventually, both sides found their way back to the negotiating table, with a sweeping negotiation agenda far broader than the issues covered in the Sect. 301 report—which had focused on technology transfer and cyber-theft of intellectual property. As Ambassador Robert Lighthizer has stated, the Administration was "pressing for significant structural changes that would allow for a more level playing field."

2 Assessing the Phase One Trade Agreement

The resulting Phase One agreement secured commitments from China in five areas that were often the subject of past negotiations: intellectual property, technology transfer, agriculture, financial services, and currency. In some cases, these commitments broke new ground and significantly exceeded the results of past negotiations. In other cases, they affirmed, clarified, or expanded somewhat upon existing commitments.

On intellectual property, the agreement includes specific provisions related to trade secrets, patents, online piracy, geographical indicators, bad-faith registration of trademarks, and enforcement. With respect to trade secrets, many of the promised reforms—which could significantly strengthen the protection of this form of IP—had already been codified in recent Chinese legislation. But it is no doubt the case that this legislation was catalyzed in part by the negotiations, as well as by China's own desire to foster innovation and improve its image on IP protection. The agreement breaks the most new ground on patent protection for pharmaceuticals, in some cases reflecting reforms that China had contemplated but until now had not actually adopted. These commitments include provisions for patent term extensions and a mechanism for early resolution of patent disputes.

However, the agreement does not address other areas where US stakeholders in other industries—especially in the Information and Communications Technology (ICT) sector—have had serious concerns, such as China's approach to standard, essential patents, and the impact of Chinese competition law enforcement on licensing agreements and global patent disputes. The agreement builds modestly on existing bilateral commitments in the areas of online piracy and geographical indicators. It also addresses bad-faith registration of trademarks, though it does not commit China to take any specific action in this regard. It commits China to strengthen criminal deterrents to IP theft, reflecting in part new measures that China

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rolled out last year; but it stops short of requiring more fundamental reforms to China's judicial system. With respect to enforcement, the agreement emphasizes one-time "campaign-style" enforcement initiatives against specific types of infringement, though this is a model that has failed in the past to produce lasting change.

Overall, as observed by noted Chinese IP law expert Mark Cohen of the Berkeley Center for Law and Technology: "The reforms in the Agreement...in many cases appear more focused on yesterday's problems. While the continued emphasis on administrative agencies and limited focus on civil remedies is disappointing, there are nonetheless many notable IP reforms in the Agreement in addition to legislative reforms already delivered."

On technology transfer, which occupies a mere two pages of the text, the commitments are on the level of general obligations not to compel the transfer of technology or direct outbound investments to acquire technology. China's government has consistently denied engaging in forced technology transfer, and the agreement does not address the incentives in China's system that create informal pressures on foreign companies to transfer technology. But the general principles, which were also codified last year in China's new foreign investment law, may provide an enforcement hook or a foundation for future negotiations.

On agriculture, the agreement represents significant progress in the form of detailed commitments to remove a long list of specific non-tariff barriers that impede US agriculture, seafood, and biotech exports, while also calling for improved transparency in Chinese regulatory processes. The value of these commitments will depend on whether China introduces new barriers to keep out the same products, and if it does, on whether the enforcement mechanism can effectively address this issue as it arises.

On financial services, the agreement memorializes and modestly expands upon China's recent actions to open its financial sector to greater foreign participation. The main value-adds contributed by the agreement are to commit China to timelines for the approval of licenses and to clarify the permitted scope of business in individual sectors of financial services.

On currency, the agreement breaks almost no new ground, largely reiterating commitments that China has already made in the G-20, the IMF, and bilaterally, such as to refrain from competitive devaluation—which has not been an issue for several years, and to enhance transparency around intervention in foreign exchange markets.

In addition to addressing issues in each of these five areas, the Phase One agreement also includes two novel features that distinguish it from past agreements and are potentially quite impactful—at least in the short run, namely, specific commitments to increase imports from the US, and an agreement to implement a new type of enforcement/dispute resolution mechanism.

On expanding trade, China committed to import an additional USD 200 billion of US goods and services during the 2020–21 time period—beyond what it would have imported if it simply maintained the annual level of imports it achieved in 2017. This commitment arguably presented real sales opportunities for US firms, especially given the specific annual purchase amounts agreed upon for 20 subcategories of

manufactured goods, agricultural products, energy, and services. But China's short-fall in implementing this commitment, especially given the impact of the Coronavirus outbreak, has been disappointing.

Moreover, there was an inherent tension in this chapter of the agreement between specific purchase commitments and language stating that purchases will be made based on commercial considerations and market conditions. There is also a disconnect between what amounts to managed trade and the emphasis on market-based reform included elsewhere in the agreement. Some commentators have flagged a potential conflict with China's WTO obligations—to the extent that these commitments are deemed as binding restrictions on trade flows. The agreement attempts to address these concerns about possible trade diversion by stressing that reforms undertaken according to the agreement—and the resulting increased trade flows—will expand exports to China from other countries as well as from the US.

The dispute resolution mechanism is unlike that of the WTO and most free trade agreements in that relies not on an independent arbitral body, but instead on the right of the complaining party to impose "a remedial measure in a proportionate way" to address an alleged violation of the agreement—following a process of escalating bilateral consultations. If the responding party believes that the complaining party is acting in bad faith in taking such an enforcement action, its only recourse is to withdraw from the agreement. This right to be "judge, jury, and executioner" could provide swifter and more certain enforcement. But it may also increase the fragility of the agreement.

For example, if China feels the US is acting unfairly in unilaterally enforcing the agreement, it could in retaliation claim US infractions of some kind and impose its own remedial measures. The result could be an unraveling of the Phase One agreement and a return to the retaliatory tariffs and downward spiral in the relationship that the agreement was intended to address. Nevertheless, speaking as a former US trade negotiator, I would have been delighted to have had access to this new dispute resolution process as I worked to remove barriers American companies experienced in China, because in the past—with respect to most issues—we essentially had no enforcement option other than to launch a WTO case.

In summary, on the substantive commitments, the agreement represents new progress primarily in protecting intellectual property—especially for pharmaceuticals, and in addressing long-standing trade barriers to American farm exports. Most of the issues affecting US technology companies—such as digital trade, technology licensing, and cybersecurity regulation—were not addressed, nor were those affecting services other than financial services.

Many of the commitments included in the agreement fall into the first category of issues that I described at the outset and are aimed at reiteration, amplification, and clarification of previous commitments. In addition, a fair number fall into the second category and represent new commitments addressing various discrete trade barriers and specific examples of non-reciprocal treatment. But virtually nothing in the agreement substantially addresses any of the category three "systemic issues," which arise because of differences in the economic models of our two countries. Unfortunately, as noted above, it is the systemic issues that are most critical, as they

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are the ultimate source of the imbalances in our economic relationship and the basis for the perpetuation of an uneven playing field.

3 Impact of National Security Concerns on the Bilateral Economic Relationship

One of the reasons these negotiations have failed thus far to address the systemic issues is that national security concerns on both sides have greatly complicated the trade relationship. For the US, national security policies have traditionally had a relatively limited impact on trade policy. But now, both the US and China are justifying a wide range of measures that have enormous impact on trade and investment in the name of national security. This is in large measure due to technological change, where ubiquitous and rapidly evolving consumer technologies such as those found on our mobile devices—and the use of big data associated with them—may also have advanced military applications or create sobering national security vulnerabilities.

Moreover, China's aggressive pursuit of its Made in China 2025 strategy and other similar industrial policy goals have heightened concerns in the US, Europe, and elsewhere that China is exploiting differences in our economic systems to advance its own system and strategic interests at others' expense. These concerns are amplified by the growing strategic competition between the US and China. As the race for technological superiority between our two countries intensifies, and each country takes steps to protect its national security that grant advantages to its own companies, each side is growing increasingly wary of the intentions of the other regarding the future of bilateral economic relations. Concern is growing in the United States that China's ambitious industrial and technology acquisition policies are aimed at achieving military and geostrategic dominance. And China seems increasingly convinced that the intention of the US—including through the instrumentality of the trade negotiations—is to impede China's technological development and ultimately to undermine the rule of the Communist Party.

Under these circumstances, it is likely that China will resist more strongly than ever US pressure to reduce industrial policy support for domestic high-tech industries or to open its markets further to the US—especially when it believes that it could be hit at any time by new tariffs or sanctions that make reliance on US goods, services, and technologies a vulnerability. It is therefore hard to see how our two countries will be able to address the systemic trade issues unless a broad and shared understanding is reached regarding which technologies each country must control, which data flows they should restrict, and which supply chains and infrastructure they must protect on national security grounds.

4 Lessons Learned from the Phase One Trade Negotiations

Looking ahead, we can be sure that future developments in US-China economic relations, in the economic development policies of each of our two countries, in the business plans and activities of individual American and Chinese businesses, and in the economic policies and strategies of governments and companies in other countries—will all be profoundly impacted by what we each have learned in the course of the Phase One trade negotiations and the trade war that accompanied them. And what exactly have we learned?

Perhaps most significantly, the Chinese government has almost certainly concluded that—from its perspective—the US is not as "reliable" a trading partner as previously assumed. The importance of this new assessment cannot be overstated. For the first time since China joined the WTO two decades ago, the US has demonstrated a willingness to impose substantial tariffs on a vast array of Chinese goods and to significantly tighten restrictions on Chinese businesses' access to various US technologies and high-tech components—either to increase US leverage in the trade negotiations or to address national security concerns.

As a result, the Government of China—as expected—is rapidly accelerating its efforts to become self-sufficient in key technologies, components, and commodities, in order to reduce future vulnerability to US pressure. This is particularly evident with respect to elements of its economy that it regards as "critical infrastructure." This means that in these particular sectors, opportunities for US companies to participate in the hugely important China market are diminishing in significant ways, and the Chinese government is strongly incentivized to increase its industrial policy support for Chinese companies rather than engage in the types of systemic reforms sought by the US. It also means that addressing these systemic issues in "Phase Two" negotiations will be extremely difficult, and that the Chinese government will likely want to maintain the current fragile truce and draw out the negotiation process as long as possible in order to extend the time period it has to prepare for the next time the US decides to impose tariffs or other sanctions.

The US government has learned that the imposition of tariffs can certainly help bring Chinese officials to the negotiating table, but that tariffs alone are not enough—at least at present—to persuade the Chinese government to make commitments it believes are not in its own interest, especially when such commitments would require significant changes to its existing economic model. The US government has also come to better understand the near-term cost and disruptive impact on American businesses, on American competitiveness and innovation, and on the US and global economies that can result from raising tariffs and applying additional restrictions on bilateral economic cooperation. However, as discussed below, the full cost and disruptive impact of engaging in this tariff war have only just begun to be felt; the full extent of the long-term impact will depend on how wisely China and the US manage the next stage of this relationship.

American companies have learned that their businesses cannot rely as fully as in the past on suppliers or customers in China—and the same is true for Chinese 28 T. P. Stratford

companies relying on Americans—because of the risk that new tariffs or trade and investment restrictions may be applied by one or both of the two governments. Again, the importance of this development cannot be overstated, though it is taking time for the full implications to become evident, and the impact is being felt in some sectors much more heavily than in others. Depending on the sectors in which they operate and the primary markets in which they wish to sell, American companies must often now adopt either an "in China for China" strategy, or a "China plus one" strategy.

Under the first, American and other foreign companies seek to meet Chinese industrial policy and national security requirements by working with local partners to design and manufacture products (or provide services) in China for the China market. This strategy is most likely to be attractive to companies that prioritize the China market. It is most likely to be accepted by Chinese regulators (a) so long as pure domestic companies are unable to provide equivalent products and services of adequate quality, or (b) after domestic Chinese companies have already established market dominance in the particular sector.

Under the "China plus one" approach, American companies that look to China for inputs seek to supplement their existing Chinese suppliers with suppliers outside of China, and American companies that have relied critically on China as a market, seek to develop other markets—in both cases to help mitigate the risk that trade flows between the US and China may experience further disruption. Indeed, no matter what country you hail from, if a new factory needs to be constructed or a new supplier brought on line, and if you hope to sell into the two largest markets in the world—namely, the US and China—then the safest bet is to invest in a location other than one of these two countries, to avoid the risk that one of them may restrict trade flows from the other.

5 Achieving a New Equilibrium in US-China Economic Relations

Most Americans doing business with China understand the imperative each country feels to safeguard its national security and foster its own economic and technological development, and most acknowledge that circumstances have changed over the past 20 years, requiring a major recalibration of the US-China economic relationship. As this recalibration unfolds, many are making adjustments to their business strategies and plans. However, we should not accept the simplistic and largely unexamined view, embraced by some in each country, that their side will ultimately be better off—both economically and from a national security perspective—if the two economies are "decoupled."

Indeed, we should be especially concerned if such decoupling proceeds largely unguided and unbounded as a result of conflicting policy signals emanating from Washington and Beijing. We should remember that despite the challenges we face, both countries have benefited enormously from our bilateral economic engagement,

from China's development over the past two decades, and from the relatively positive relations between our two countries that have accompanied these developments. Given the complexity of existing supply chains, the revenues our high-tech companies have received from China that have largely funded their ongoing R&D efforts, and our own vulnerabilities if these supply chains are disrupted, Americans should only contemplate decoupling if it would involve critically sensitive technologies that are narrowly defined—and if the feasibility of a specific decoupling measure has been confirmed on the basis of a careful cost/benefit analysis. The American and Chinese people will both benefit greatly if we limit the negative impact of national security measures on our economies by erecting "high walls around small spaces," and by providing more predictability for businesses.

With respect to the systemic trade policy issues, it appears that a new approach is required. In the past, US-China relations were guided largely by a shared interest in helping China "align with the world" (与世界接轨), i.e., to participate in and conform to a world order that frankly was largely established and has largely been led by the United States. China's accession to the WTO after a very lengthy negotiation period was a major milestone in this process, and since that time, US trade negotiations with China have generally focused on China's often imperfect *compliance* with the US view of how WTO members should regulate their economies.

However, in the course of the Trump-era negotiations and in the face of substantial pressure from the United States, the Chinese government evidently decided to reject more explicitly and forcefully than before the US view of how economies and economic relations with other countries should be regulated. China wishes to be seen as a champion of "globalization," but its interpretation of "globalization" is a kind of "globalization with Chinese characteristics" that comfortably accommodates China's own economic model and political system.

For this reason, since China is not likely, within the short-to-mid-term, to make further meaningful changes to its system, it makes sense, in future US-China negotiations, to adopt a new paradigm. Rather than focusing on (and arguing about) China's level of conformity with the existing world order, this new paradigm would focus instead on "interoperability," i.e. explicitly acknowledging China's different approaches and—to use a Chinese phrase—seek "harmony despite differences" (和 $\overline{\mathbb{M}}$ $\overline{\mathbb{M}}$). Such an approach could be implemented in a way that respects China's sovereignty, and at the same time, it could result in a more proactive and clear-eyed response to the challenges presented by China's economic development model. This approach could include:

- 1. The two countries objectively and forthrightly listing differences between our two systems and identifying those differences and practices that result in unfair advantages for one side or the other;
- 2. Allowing each country to explain in reasonable terms the nature of the harms it is suffering, and to quantify the harms—if possible; and
- 3. Inviting the country whose system and practices cause the harm to propose ways to mitigate it, while understanding that if the harm cannot be addressed through

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such mitigation, the country suffering the harm may take reasonable, measured actions to address it on its own.

Of course, before deciding how to address the harm, the harmed country will need to identify remedial actions that don't themselves cause greater harm to its own interests than the original harm being suffered. The other country can then judge whether the actions taken are reasonable under the circumstances. In addition, the harmed country should take care not to overstate the negative consequences of the other country's actions, recognizing that the harmed country's own policies within its own borders may ultimately matter more than the policies of the other country.

Such an approach would require high-level negotiations between the US and China where the negotiators on each side would be empowered to address a broad array of bilateral issues. It would also require a level of candor, wisdom, and persistence that neither country has fully demonstrated in its dealings with the other. During the height of the Cold War, American and Soviet negotiators were able to develop shared language and analyses that allowed them to manage the risks inherent in their large nuclear arsenals. Today we face challenges with China on economic issues, national security issues, and issues that lie between.

When candor is not forthcoming by one side regarding its policies or practices that may be harmful to the economic interests of the other side, the complaining side could transparently announce, justify, and apply adverse inferences and reasonable mitigation measures. Hopefully through this process, the level of trust and predictability in the bilateral economic relationship would rise as each side sees the value of transparency in its economic policies and practices and the importance of reasonable proportionality in its responses to the harmful conduct of the other side.

On the US side, working through all of these issues will require close coordination and communication—between the legislative and executive branches of the government and also between the government and the private sector. We are entering uncharted waters, as there is no modern precedent for two countries to be at the same time each other's main economic partner and major military and geopolitical rival.

At the same time, the US will need to work much more closely and actively with Europe, the UK, Japan, Australia, India, South Korea, and other nations as well as international bodies to develop constructive multilateral and plurilateral responses to shared concerns about China's policies and practices. And most importantly, the US government and private sector will need to focus more on their own path for future economic and technological development—to ensure long-term success in competing with China and other powers.

Addressing each of these challenges will require exceptional creativity and fore-sight. But few undertakings will affect so profoundly our own national interests and the well-being of so many people as this one. The bilateral economic relationship has served as the ballast for the overall relationship between the US and China since the normalization of diplomatic relations in 1979. We cannot afford to ignore or mismanage this important stabilizing influence and driver of economic benefits and goodwill.



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The Impact of Decoupling on US Employment



Craig Allen

Abstract The transition in trade policy from the Trump era to the Biden era, while maintaining certain themes, will be very different. In terms of employment, the *trade war caused job losses* and the *Phase One agreement* and the elimination of tariffs on both sides will lead to job creation. Ten policy recommendations suggested by the author provide a guideline for job creation through *deescalation of the trade war*, a transition to *Phase Two negotiations* and a *lifting of travel restrictions* on both CCP members and students to the US.

Keywords Trade war caused job losses · Phase one agreement · Deescalation of trade war · Phase two negotiations · Lifting of travel restrictions

US-China relations in the early days of the Biden Administration present a difficult conundrum.

Speaking at the State Department on February 4th, President Biden said, "Every action we take in our conduct abroad, we must take with American working families in mind." Full employment is a key goal of this Administration.

In the same speech, the President said, "We will confront China's economic abuses; counter its aggressive, coercive action; to push back on China's attack on human rights, intellectual property and global governance."

There is built-in tension between these two sets of foreign policy objectives. How will the United States maximize economic employment for Americans while disagreeing with and confronting China where it thinks it must? It will take deft diplomacy to accomplish both goals.

This chapter will offer ten policy suggestions on how to maximize employment in the United States by leveraging China's growth without compromising US geopolitical or diplomatic objectives.

There are, however, three big caveats.

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The first caveat is that the correlation of trade policies to specific outcomes in the labor market is weak. President Trump, for example, pursued a protectionist trade policy yet employment in the pre-Covid period was strong. President Trump was on track to add some nine million jobs, mostly due to a combination of loose fiscal and monetary policies, as well as de-regulation. Trade policy does have an impact on employment, but it is relatively small; the tail being wagged by the dog.

The second caveat is that future technological change will impact the US labor market in ways that are impossible to predict. The future of autonomous driving, for example, will have a far larger effect on employment than trade policy.

But technological competition is also a key element of US-China relations. China's technology policies of "self-reliance and self-strengthening" are of course relevant and will be discussed later.

The third caveat is that distortions in China's domestic macroeconomy are also pertinent when examining US trade policy toward China.

In 2007, Wen Jiabao described China's economic growth as "unstable, unbalanced, uncoordinated and unsustainable." Premier Wen's observation is probably as true now as it was when he said it—and this has profound implications for policy makers around the world.

In summary, China's household consumption is far too low; it was less than 40% of total GDP in 2020. This contrasts with between 60 and 70% in OECD countries. From a comparative perspective, China hugely over-saves and over-invests in often uneconomic infrastructure at the expense of family consumption. This drives over-capacity, over-investment, and (implicitly) subsidized exports—at the expense of both Chinese workers and consumers, and China's foreign trade partners.

The good news is that the Chinese government recognizes these imbalances and has articulated an intention to address the underlying issues.

At the National People's Congress in March, a "dual circulation" policy was introduced along with plans to expand consumption as a percentage of GDP. Will these policies help grow the middle class and actually raise consumption as a percentage of GDP? Will they be WTO compatible? What will the impact be of the "dual circulation" policy on China's trading partners?

The transition from an economy based on capital investment and net exports to one based on domestic consumption will be a difficult and long-term process for China. China will need to move as much as two to three percentage points of GDP from investment to consumption each year for ten years if it is to escape Wen Jiabao's "unstable, unbalanced, uncoordinated and unsustainable" paradigm.

1 Trade Policy and US Employment

Having recognized the primacy of macroeconomic adjustments in the United States and China, the focus now is on trade policy. Notwithstanding the importance of macroeconomic adjustment and changing technology, trade policy will continue to impact employment in the United States.

Future economic historians will look back at the Trump Administration with interest for its many innovations in trade policy. The last four years provide much data on the costs and benefits of tariffs and other protectionist policies.

While the benefit of sufficient hindsight is not yet available, evidence suggests that—despite what may have been the best of intentions—tariffs and other tools of the Trump era trade war had a very negative net impact on US employment.

It is true that some jobs may have been created. But it is certain that many more jobs were lost as a result of the tariffs.

Ambassador Robert Lighthizer and Professor Peter Navarro would likely discuss the jobs in aluminum smelters and steel mills that were saved. What they might not share is that each job saved in those industries cost USD 900, according to Chad Bown of the Peterson Institute.

In manufacturing, the hit to US employment has been direct through decreased exports and indirect through declines in total factor productivity and competitiveness. Described here is an example of a company that lost sales and market share due to the tariffs:

A tool maker imported parts for tools from China, assembling them in the US and then selling his branded tools around the world. When tariffs were introduced, many of the components his company needed were hit by 25 percent tariffs and alternative suppliers at a good price could not be found. As they were manufacturing in the US with Chinese components, they had to raise prices and subsequently lost market share in the US market and abroad to competitors, making everyone in the US worse off.

This type of story was repeated ten thousand times across the US manufacturing sector.

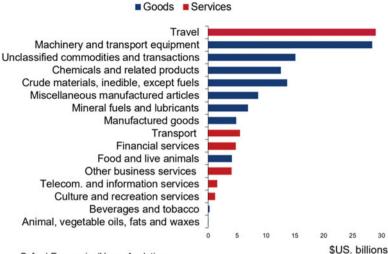
USCBC recently commissioned Oxford Economics to study the impact of the tariffs on employment. It concluded that, at the height of the trade war, approximately 245,000 American jobs were lost.

The following charts describe the industries and geographies where jobs were lost due to Trump's trade war. The first chart shows total US exports by category to China. Services are a vital part of the export mix to China, making up as much as 40% of our total exports—and they had been growing rapidly.

The second chart focuses on the manufacturing sector in both China and the United States, showing the impact of the trade war on these sectors in terms of gross value added. This chart demonstrates well that Trump's tariffs had their intended effect in China: Chinese GVA declined in all these industries. But, in all cases, US GVA in the same industries also declined...sometimes more and sometimes less. Both sides lost.

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US Exports to China by Category (2019)



Source: Oxford Economics/Haver Analytics

The third chart shows the unequal effect of the trade wars on employment from a regional perspective. The underlying data are only on job losses or gains from US exports to China; total factor productivity is not included. Nonetheless, it is instructive that the impact of these trade policies was the most severe for those states that rely most on commodity production and manufacturing.



Excessive reliance on bilateral tariffs on our trading partners typically rebounds on American farmers in the grain-growing areas of the US Midwest. When other countries retaliate against the WTO-illegal use of tariffs by the United States, they retaliate by hitting American farm exports—as this is where they will have the biggest political impact.

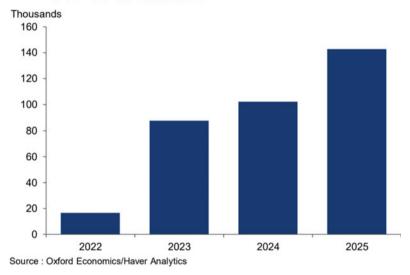
President Trump spent some USD 28 billion compensating American grain farmers for their losses. But the compensation was unevenly distributed and it could not nearly make up for the lost, hard-earned market share and these farmers' long-term prospects for selling in China and elsewhere.

These subsidies make the unemployment effect of the tariffs on American farmers very hard to calculate. By way of example:

In 2018, a small American dairy family in Wisconsin had to sell his 80 cows to a neighbor with 800 cows due to low prices that were partly caused by retaliatory tariffs that the Chinese put on US dairy. The farmer then took a job as a long-distance truck driver. While he was not technically unemployed, the composition of the labor market changed.

Finally, Oxford Economics also projected the economic and employment impact of de-escalating tariffs from 2022 to 2025. The assumption underlying this graph is not the total removal of tariffs, but rather a reduction of bilateral tariffs from the current average rate of 20% to a more moderate 12%. This would lead to 145,000 new jobs by 2025.

Employment impact under trade war de-escalation



If the assumption is changed to a total removal of the tariffs and the counter tariffs, the total job gain would be much higher—but difficult to estimate exactly.

2 Ten Policy Prescriptions to Maximize US Employment

The examined data provide the background for the following policy prescriptions:

First, the United States and China must reinstate a forum to discuss important macroeconomic issues that impact the well-being of the other. There is an urgent

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need to reestablish regular dialogue to recognize—and perhaps shape—macroeconomic decisions to be made in the United States and China. A format like the Strategic and Economic Dialogue would, for example, allow the United States to better understand Chinese decisions that will affect US employment while providing technical support to assist China in adjusting its economic model toward greater consumption as a percentage of GDP. Alternatively, more narrowly defined technical dialogues could be instituted to address and resolve specific problems.

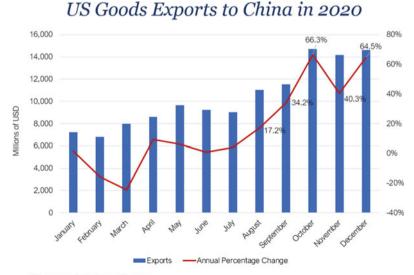
Specific issues that could be discussed regarding excess savings could include:

- Winding down industrial overcapacity
- Improving the social safety net
- Preparing for a rapidly aging society
- The misallocation of capital to SOEs and their corporate governance
- Greater transparency for government subsidies to ensure WTO compatibility
- Abolishing the hukou system

Another reason to reintroduce regular dialogue with the Chinese government is the need to change the bilateral conversation from protectionism and containment. A more realistic and pragmatic conversation is needed to ensure that China's rise is peaceful and not deleterious to China's neighbors and trading partners. The question is how to square a state- and party-run economic system within the global system that the WTO envisaged.

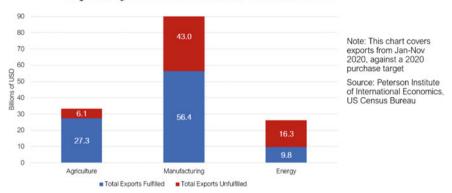
These are big issues without easy answers. But talking is better than not talking.

Second, we should maintain and fully implement the Phase One deal. Phase One has many critics who note that the Chinese have only met approximately 60% of their purchase obligations under the first year of the deal.

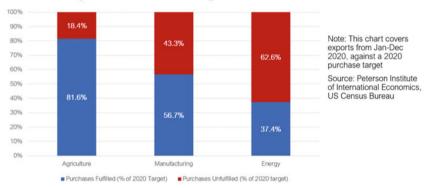


Source: US Census Bureau

Exports of Phase One Items to China in 2020



Progress on Phase One Exports to China in 2020



Chinese government officials have said that China fully intends to meet its commitments under the deal, and this should be encouraged. USTR, DOC, DOE, and DOA should initiate negotiations to understand when and how the Chinese will meet these obligations. If successful, this would lead to a significant increase in US exports and much-needed jobs over the 2021 calendar year.

Perhaps even more important for the longer term, the Chinese government has met its commitments under the deal to change Chinese policies to improve market access for American agriculture and financial service firms. It has also increased protections for intellectual property. Much progress has been made in these areas; this progress should be defended and expanded.

The Phase One deal is only in place until the end of 2021. This leads to the third recommendation.

Third, negotiations on a Phase Two agreement should urgently be started so that these talks can be completed prior to the expiration of Phase One. A target date for completion would be when President Biden and President Xi meet on the margins of the Annual APEC meeting to be held November 10–13, 2021 in New Zealand.

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The issues that were not resolved in 2019 relate to state-owned enterprises, subsidies, industrial technology policy, and cyber. While all of these issues are very difficult, the Chinese side has indicated that it is willing to discuss the problems. The China–EU Comprehensive Agreement on Investment, though not yet ratified, contains modest commitments on SOEs and subsidies.

The United States could reach back to the Bilateral Investment Treaty negotiations and ask the Chinese to bring forward commitments made at that time. The Obama–Xi cyber agreement could also be resumed. While negotiations would be difficult, it is possible to make incremental progress on all of these issues.

The Biden Administration might not wish to call this a Phase Two agreement; it could be a succession of smaller agreements on specific topics. But some momentum in bilateral trade negotiations must be created and the previously agreed-upon road map might be helpful in this regard.

Fourth, tariffs on both sides should be eliminated. Tariffs on goods going both ways across the Pacific are currently at an average of about 20% and there is a danger that they could become permanent if they are not addressed soon. Tariffs tend to be easy to put up and sticky to come down. The longer they are up, the harder they are to bring down.

Tariffs are job killers that simultaneously impoverish consumers in both the United States and China. If these tariffs become permanent, they will distort US–China trade and investment—possibly in perpetuity, condemning bilateral relations to an instability from which it might be difficult to recover.

USCBC research suggests that if the tariffs were lowered to 12%, there would be a net gain of about 145,000 jobs by 2025. If the tariffs were fully removed, especially in concert with incremental improvement on the outstanding issues, these job gains would be much higher.

Fifth, following the completion of Phase Two negotiations and the elimination of tariffs, negotiations should continue, using the CPTPP as a discussion framework. Asia's economic architecture today is starkly different to the situation four years ago. The Chinese and their partners have successfully concluded a 15-country RCEP (Regional Comprehensive Economic Partnership) agreement. The Chinese and the Europeans have concluded a Comprehensive Agreement on Investment that is awaiting ratification. Belt and Road investments have further strengthened regional economic integration. China's trade negotiators have been extremely busy.

Finally, President Xi and Premier Li have both stated that China will consider entering the CPTPP (Comprehensive and Progressive Agreement for Trans-Pacific Partnership). They should be taken at their word. Chinese economists have commented that this would be the next logical step in China's reform and opening program. While China's entry into CPTPP will certainly take time, neither their ability nor their determination to do so should be doubted.

While it is not politically feasible for the United States to consider joining the CPTPP in the near term, perceptions may change if China appears to be moving to join the group without the United States. If China were to accede without the United States also joining, the United States would be locked out of Asia—the world's fastest-growing market. This would be a historic turning point and it might be difficult for the United States to recover from this situation.

To hedge against this risk, it makes sense for the world's two largest economies to talk with each other in terms of the rules associated with an agreement that they may both—one day—join. The CPTPP is largely based on US trade law and it closely complements the USMCA (US-Mexico-Canada Agreement).

This recommendation is long-term. The employment effects of joining CPTPP cannot be clearly known at this point. However, a strategy to move forward is needed and, in the view of this author, having discussions with the Chinese structured around the CPTPP is in America's long-term economic interest.

The next three recommendations are much more short-term, and they lie outside the traditional bounds of trade diplomacy, but they would have immediate quantifiable benefits for American workers.

Sixth, in preparation for the post-COVID world, visa restrictions against CCP members should be removed and Chinese tourism to the United States should be facilitated. Travel and tourism is the single largest US export to China, worth as much as USD 30 billion a year prior to COVID-19. However, the Trump Administration put into place restrictions on 92 million CCP members and their families visiting the United States. These regulations are offensive, as well as completely unenforceable, and they should be abolished immediately.

Travel and tourism is a very labor-intensive sector and continued expansion of these services to Chinese nationals would especially benefit lower-income Americans, such as those working as waiters, drivers, in retail, or in the hotel industry.

Undoubtedly, demand for these services and continued expansion of this market are likely in the post-COVID era—if the US government gets out of the way. Abolishing the visa restrictions on CCP members and their families would be smart and easy, and it would generate income for hundreds of thousands of Americans, especially those whom the pandemic has hurt mostly badly.

Seventh, the Biden Administration should be clear that civilian Chinese students are welcome at American universities in all fields that are not directly related to national security. Education is roughly a USD 15 billion-dollar export market and Chinese students remain committed to studying in the United States, if they know that they are safe and welcome. There are many competitors wishing to supplant the United States in this market, and we must not be complacent.

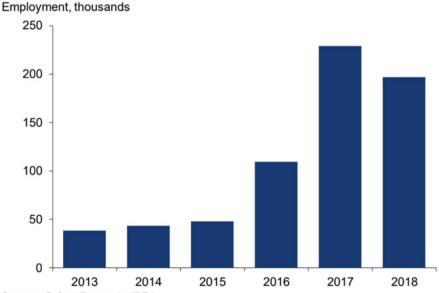
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Excesses and inappropriate behavior by Chinese researchers at American institutions have been well reported. It is also clear that China's Thousand Talents campaign is insufficiently transparent and induces researchers into relationships that may be improper. But it is also true that the US response to such excesses has led to unfair treatment of individual Chinese and Chinese American academics.

Universities and research institutions should deal with these problems by tightening governance, reporting, and ethical procedures, while maintaining academic freedom and expanding collaboration and technical exchange with civilian Chinese counterparts.

Eighth, Chinese investment in the United States should be welcomed in all industries and localities that do not have clear national security implications. US economic history shows that countries with large trade surpluses eventually invest in our markets to make products here. This industrial migration is positive. It helped to mitigate tensions with Japan in the 1970s and Taiwan and Korea in the 1980s and 1990s.

Employment in the US by Chinese multinational firms



Source: Oxford Economics/BEA

Today, more Chinese investment in the United States is needed, particularly in areas that have high unemployment and suffer from chronic underdevelopment.

There is a huge demand in China to invest in the United States in industries that mostly have no national security implications. The US government should welcome such investment. Mayors and governors want Chinese investment in their jurisdictions, while the federal government appears less keen. The implications for US employment are some 30,000 fewer jobs in 2018 compared to 2017.

CFIUS and FIRRMA, the US's regulatory regimes for in-bound investment, are necessary. However, they have been applied in a manner that suggests that the Federal Government wants to limit investment from China to as little as possible. This is counterproductive. It hurts American workers.

To be balanced, it should be noted that the Chinese government has also been regulating outbound investment to the United States and elsewhere, so US policies are not the only impediment.

Nonetheless, if Chinese investment into the United States is not allowed, the United States is condemning itself to long-term economic imbalances with China. This is not a future to which we should aspire.

Ninth, supply chain resiliency issues should be addressed with incentives rather than trade-distorting tariffs or other government-mandated barriers. As a result of COVID and a concern for potential shocks to the US supply chain, it is reasonable to aspire to greater resilience and flexibility—to ensure the continued flow of critical goods in times of emergency. However, the US government should be extremely careful before using coercive tactics to reshore manufacturing or force companies to produce in a particular place.

Tariffs are an incredibly blunt instrument. There are precious few cases where tariffs have incentivized manufacturing investment in the United States. Yes, the tariffs have moved manufacturing from China to ASEAN countries. But does that really help resilience? Does it help employment in the United States?

If the US government wishes to induce companies to invest domestically, it should provide WTO-compliant incentives toward this end and allow companies to decide what to buy and where.

Finally, the challenges of data, export controls, and technology policy need to be addressed more comprehensively—preferably in alignment with Europe and Japan. Technology is the most difficult and important element of the bilateral relationship, especially over the long term.

There should be zero doubt that the Chinese also believe that technology self-reliance and self-strengthening is a key national objective. It is unfortunate that Chinese policies associated with technology self-reliance and self-strengthening are so often WTO-illegal and outside of OECD norms. In addition, the Chinese R&D establishment is too often plagued by waste, fraud, and abuse.

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In addition to the trade policy and governance problems associated with tech in China, there is also the specter of civil-military fusion and the Chinese Intelligence Law, both of which cast a chilling light on any civilian technology cooperation with Chinese universities, institutions, and academics. China should reconsider these laws; they are complete global outliers and are not found in any other country.

Without being naïve, there is some degree to which international negotiations and better bureaucratic hygiene could lead to China transitioning from playing a predatory role in the global economic ecosystem to playing an integrated and trusted partnership role along with the world's other great research countries. It is in the interest of Chinese civilian institutions to better integrate with global R&D norms, values, and procedures.

As this issue is so critical and multi-dimensional, I believe that the establishment of a new office in the White House to coordinate global technology and data policy is necessary. Its first job would be to coordinate the dozen or so agencies that are involved in this matter.

In addition, the office could coordinate with US allies. It should also negotiate with the Chinese and others on the rules of the road for technology cooperation, for technology competition, and, most importantly, for mechanisms to enforce such rules.

Technology is the most difficult issue in US-China relations and a much more focused, coordinated, and sophisticated approach to this subject is needed within the US government. This issue is long-term, so investing in its proper management would be prudent.

Better coordination among countries would help. Common standards on export controls, common standards on in-bound investment, and, if possible, a common research and development agenda and budget should be our goals.

3 Conclusion

In summary, the policy ideas outlined here would help to grow employment in the United States over the short, medium, and longer terms, without prejudicing overall geopolitical and diplomatic challenges with China. The ten policy recommendations made here would lead to a much healthier American economy and job opportunities for American citizens.

The United States and China have a complex security and economic relationship. The overall dynamic of the relationship must be changed to be more competitive and less confrontational, while being mindful of **both** countries' security and economic needs and trying to bridge differences whenever possible.



Craig Allen is the President of the US-China Business Council, a private, nonpartisan, nonprofit organization representing over 200 American companies doing business with China. Before joining the council, Craig had a long, distinguished career as a US diplomat serving around the world, mostly in Asia. From 2015 to 2018, Craig served as the United States ambassador to Brunei Darussalam. He is also a former Deputy Assistant Secretary for Asia at the US Department of Commerce's International Trade Administration and a former Deputy Assistant Secretary for China.

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Threading the Needle: The United States and Silicon Valley Business in a Changing China



Sean Randolph

Abstract Successfully navigating issues due to uncertainties in *US-China relations* will require executives to thread a needle between the opportunity presented by China's market and a geopolitical landscape that is generating a growing range of barriers. While there policy approaches will change from Trump to Biden, many policies will remain, especially in the technology sector. Businesses believe that despite fewer legal restrictions, the issue of a level playing field will remain in China, but that this will not affect overall profitability in the Chinese market.

Keywords US-China relations will require executives to "thread a needle" · Policy approaches · Fewer legal restrictions · Level playing field

Recent years have witnessed significant changes in the economic and policy land-scape in China, matched by shifts in the United States that have altered the long-term strategies of many US companies doing business there. Businesses dislike uncertainty, particularly when making decisions on long-term investment. The uncertain path forward in US—China relations therefore raises both tactical and strategic issues for China's overseas partners, including investors and technology companies in the San Francisco/Silicon Valley Bay Area. Successfully navigating those issues will require executives to thread a needle between the opportunity presented by China's market and a geopolitical landscape that is generating a growing range of barriers. Because the Bay Area is at the core of the United States' technology and innovation system and is home to a disproportionate number of its leading technology companies and tens of thousands of startups, how this pathway is navigated will be consequential for both sides.

1 Navigating an Uncertain Policy Environment

The barriers and uncertainties relate to both trade and investment, as well as trust.

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Turning first to trade, the US—China trade war that began in 2016 and paused in late 2019 with the Phase One trade agreement imposed escalating reciprocal tariff barriers on a broad range of both United States and Chinese products. While damage was done in China, businesses in the United States were hurt as well, particularly in agriculture and manufacturing, where American producers saw the cost of components imported from China rise. While the Phase One agreement rolled back some tariffs, most remain in place. This raises both the question of what circumstances would enable their removal, or whether they might become permanent. Significantly, although the trade war was initiated by the Trump Administration with the goal of reducing the US trade imbalance with China, it was unsuccessful in achieving that objective. As consumer demand in the United States rose during the pandemic and Chinese production recovered, US imports grew despite the tariffs and at the end of 2020 the goods deficit stood at USD 310 billion, only marginally lower than the USD 345 billion recorded in 2019.

How the Biden Administration chooses to address those legacy tariffs will impact both costs and markets. That will start with the Phase One agreement. While some progress was made toward its goal of increasing Chinese imports by USD 200 billion above 2017 levels, the pandemic of 2020 disrupted its implementation and at the end of the year China's imports were far below the targets—meeting 82% of the target in agriculture, but only 57% for covered goods and 37% for energy. With China the only major economy to achieve positive growth in 2020, and with targets spanning a two-year period, there is room to make up the difference and China should endeavor to meet those commitments. But the status of the Phase One agreement as a framework for long-term trade relations remains an open question. Some observers would note that while it set quantitative targets for imports, the mechanism for achieving them was through government mandates, which strengthened the hand of the state, but did little new to bring about structural, market-based opening.

How the United States will address trade issues with China points to both bilateral and multilateral paths. There is a growing belief in United States and wider policy circles that China is not in compliance with key commitments it made on joining the WTO—specifically that courts would be independent in their judgments, that investors would not be required to transfer their technology, that MFN and national treatment would be afforded on a non-discriminatory basis to foreign rights holders of intellectual property, and that state-owned enterprises would make decisions on commercial terms without government guidance or direction. While China may not be out of technical compliance, many also believe that subsidies to state-owned enterprises and their subsequent transmission through the production value chain are non-compliant with the WTO's guiding market principles.

It was widely believed at the time of China's accession to the WTO, that its economy would evolve in a direction increasingly compatible with those market principles, and for many years there was reason to believe that was occurring. The recent strengthening of China's state sector, however, and the prominent role played by government direction and subsidies has challenged that belief. The increased influence being exerted by the central government over China's private technology companies has further deepened concerns regarding the independence of private

companies and the role of the state. This opens another field of debate that will particularly impact multinationals, namely how disputes should be resolved within the WTO if China is ultimately considered to be less than a market economy or out of compliance with its obligations. This is not an issue of whether China is entitled to its own system, but rather how it interacts with the United States and other market economies in a rules-based global order. Changes at the WTO either through cases filed or through structural reforms could significantly impact multinational operations in China through both trade or investment.

Investment has emerged as an issue parallel to trade and is closely entwined with it. Two-way venture and Foreign Direct Investment (FDI) between the United States and China peaked in 2016 and has sharply declined since then. The drop in China's investment in the United States is attributable, in part, to capital controls imposed by the central government that are unconnected to political concerns and particularly impacted investment in fixed or non-strategic assets such as real estate. Some part can also be attributed to a cooling of venture activity within China. A significant part of the drop, however, reflects a cooling of the domestic climate for Chinese venture investment, occasioned by the lead up to and passage of the Foreign Investment Review and Modernization Act (FIRRMA) in September 2018. That act increased the authority of CFIUS (the Committee on Foreign Investment in the United States) to review inbound foreign investment for national security concerns. While not specific to China, CFIUS' caseload is made up primarily of Chinese transactions.

Its new authority has allowed CFIUS, with expanded staff resources, to review not only major acquisitions but also the purchase of minority stakes in smaller companies producing important technologies, where the transaction would enable an investor to participate in important decisions or gain access to the technology. The list of technologies considered sensitive is long and includes many of the most important emerging fields. Transactions that would give the investor access to significant amounts of sensitive personal information are subject to particular scrutiny. CFIUS also has the power to unwind deals that have already been concluded. In practice, its framework doesn't fully prevent Chinese investment, since greenfield investments from China or other countries fall outside its jurisdiction and legal mechanisms are available to enable otherwise sensitive transactions to go forward by separating the investing party from decision-making. Nevertheless, the breadth of CFIUS review and the likelihood of more intensive scrutiny can be enough to discourage investment from China and is significantly impacting venture flows, particularly to Silicon Valley.

This includes investment from both smaller Chinese VCs and large Chinese companies such as Baidu, Tencent and Alibaba that have been particularly active in both investment and acquisitions in the Valley. The weakening of what had been a growing investment bridge between China and Silicon Valley reflects increased concern by the US government over the potential leakage of technologies considered strategic from the perspective of either defense or global competition. In contrast to the concern over Chinese investment with comparable investment from other countries such as Japan, the issue for the US government is less one of economic competition in the traditional sense than of the potential linkage of particular investments to

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the strategic and military goals of China's government. Underlying that is the recognition that under Chinese law and policy private companies are ultimately answerable to the state and are required to cooperate with it. Therefore, where a transaction with a Japanese or German company might raise competitive issues, a transaction with a Chinese company has implications that may touch on broader policies. Efforts by the central government to extend Party influence deeper into the corporate structures of private Chinese companies have done nothing to dispel those concerns.

2 Changing Approaches from Trump to Biden

The US approach to how it manages relations with China has moved in a more positive direction under the Biden Administration than under its predecessor and will be more constructive on the whole. The aggressive rhetorical edge that characterized the Trump Administration has diminished and Washington will seek out areas where cooperation with China is possible, including climate change, nuclear proliferation and possibly global health. Economic decoupling, a goal explicitly embraced by the Trump Administration, will fade from the lexicon as the nature of the deep interconnections between the United States and Chinese economies is recognized. This shift has been welcomed by both multinationals and smaller companies in the San Francisco/Silicon Valley Bay Area and California as being indicative of a more pragmatic view toward China that will enable more stability and certainty for investors. The region enjoys strong historic and cultural ties with China and in recent decades its companies have been prominent partners in China's economic development. At the sub-national level, state, regional and city organizations continue to actively support stronger business ties. The Biden Administration's more balanced approach to China will enable them to sustain historic channels of economic cooperation and pursue new opportunities even as national debates continue.

Still, it was clear during the 2020 election and in the Biden Administration's early months that the Trump Administration's policies toward China would not be rejected outright and that many would be retained. Senior appointees including Secretary of State Tony Blinken have expressed the view that the United States and China are global competitors and that differences on a range of non-economic issues such as Xinjiang and the future of Hong Kong will not go away. Internal reviews of China policy at other US agencies suggest that while the tone will change there will be more continuity than discontinuity with Trump policies. This reflects a broad bipartisan agreement in Washington on the nature of the challenge that China poses and the need to address it.

The current business climate raises particular issues for US internet and online content companies, which are predominantly based in the San Francisco/Silicon Valley Bay Area. This comes as greater control is being imposed on the internet in China. One example is the requirement by the Cyberspace Administration in late 2020 that Apple remove a large number of gaming apps from its Apple Store, impacting both Chinese and overseas app developers. Trip Advisor, a non-gaming app, was also

required to be removed. By one report Apple had 272,000 games in its China App Store in 2019, 94,000 of which were removed in 2020, a number far higher than the 25,000 taken down the previous year. Apple states that it complies with local laws but in addition to limiting market opportunity restrictions of this nature place Apple and companies like it in an increasingly difficult position with both users and critics outside China where access to apps and information don't face similar barriers. A similar issue may confront Silicon Valley internet companies in Hong Kong if the new security law there requires them to share user data with the government.

Another variable affecting multinationals will be the degree to which the United States and Chinese economies and technology systems will remain linked. Under the Trump Administration, pressure grew to decouple the two systems. That outcome would reduce US vulnerability to disruption in key technology supply chains. The Trump Administration's actions to restrict access by Chinese companies to key products such as advanced semiconductors, however, also served to accelerate China's efforts to reduce its dependence on foreign technologies. It is unlikely that the Biden administration will embrace decoupling as a strategic goal. This stems from a practical recognition that the United States and Chinese economies are intertwined and that is neither desirable nor possible to fully separate the two.

As a sign that future US technology policy will be more nuanced, in January 2021 the Biden Administration suspended implementation of a Trump Administration order that would have prevented Americans from investing in companies believed to have ties to China's military, an edict that caught up companies such as Xiaomi and China Unicom whose ties to China's military were questionable. And despite its continuing focus on the security issues posed by the presence of scientific researchers from China on US university campuses, in July 2021 the Justice Department dropped its legal cases against five visiting academics who were accused of not disclosing their ties to China's military.

Like its predecessor, however, the Biden Administration will devote significant attention to the concept of secure global supply chains for key products and technologies, which points to a further separation of the countries' technology systems over time. It is noteworthy that in February 2021, in one of its first actions, the administration issued an executive order establishing a 100-day review of steps needed to ensure secure, resilient supply chains. While much of that focus will be on domestic investment and production, concern with international vulnerabilities in fields such as pharmaceuticals, semiconductors and ICT lie in the background and the process will look to "areas where civilian supply chains are dependent on competitor nations." For some multinationals and other companies producing in China, this suggests a China-plus strategy, where production remains in China, but dependence on a single source of supply is reduced by spreading production to one or more other countries. Southeast Asia will likely be the prime beneficiary, but India and Mexico could also see growing investment flows.

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3 Executive Views of China's Business Environment

A February 2021 poll of global technology executives conducted by the Brookings Institution found that most respondents expect the United States and Chinese governments to continue a range of policies that will lead to greater decoupling, causing the global technology industry to increasingly bifurcate into two spheres; under a tenth believe that in the next ten years the technology industry will be global and open. They also believe that China will continue its industrial policy model of subsidizing national champions in technology sectors and tilting procurement rules toward local companies. They do not want the United States to follow a similar path of subsidization and politically driven procurement but recommend instead that it maintain its openness to foreign capital and technology while sustaining its more activist policies to limit the transfer of key US technologies abroad.

Respondents to the poll came primarily from the high-tech hardware, IT services, semiconductor and internet sectors, as well as the financial and professional services, telecommunications, and biotech and healthcare industries. Approximately half were from companies headquartered in China and the rest from US, Japanese, Taiwanese, Korean, UK and German companies. In answer to specific questions, 85% of respondents believed that despite calls for fair access for American firms to the Chinese market, the Chinese government will increasingly close its tech markets to foreign firms, providing access only to foreign companies with joint ventures or local partners with the possible exception of foreign companies with special, leading technologies. Sixty-three percent believed that while the PRC's technology market will become more open legally, there will continue to be an unfair playing field for foreign technology companies. Two-thirds expect Beijing to use heavy subsidies to support national champions and achieve self-reliance. Only one in ten expect the Chinese government to pursue deregulation initiatives.

Regarding the United States, 62% of respondents to the poll believe the US government will increase restrictions on high-tech exports to China. They do not, however, expect the global distribution of the technology industry or the mutual dependence of the United States and Chinese technology industries to significantly change, with Chinese companies showing continuing strength in developing system or solution-level technological applications, and the United States retaining its strength in core components such as semiconductors and software, and in upstream advanced manufacturing and design industries such as leading-edge foundries and semiconductor manufacturing equipment and materials. Most believe, for example, that in the next five years China will be home to a top-three global electrical vehicle company and a top-three global cloud services provider, but few believe that China will produce a top three GPU, CPU or operating systems provider, or that it will successfully build a top-three global player in leading semiconductor tools.

Despite the political headwinds, these views suggest a reasonable degree of continuity in US-China business relations, at least for the near term. The respondents believe that Chinese companies will continue to work pragmatically with American suppliers. While future US government policies will impact their path, the great

majority (95%) expect Chinese companies to welcome back American suppliers to which they are currently denied access but expect those companies will have a back-up plan to replace American suppliers if and when there is a comparable Chinese-sourced product or technology. This means that the success of most American companies will turn more on their ability to stay ahead of Chinese competitors in technology and supplier value (including price, quality and time to market) than on government policies. This would be consistent with the view of Chinese companies participating in the poll that American companies will continue to dominate global technology markets in the next 10 years, and with a parallel belief among many that Chinese government efforts to achieve self-reliance will be uneven across different sectors of the economy and in some cases ineffective.

US respondents to the poll also recognize their dependence on China for both customers and revenue and have signaled their desire to maintain their presence in China, even as they comply with US laws and export controls. Four out of five say they will continue to vigorously compete in China, with more than half saying they will focus on localizing their operations. A substantial minority, however—one in five—say they plan to leave the Chinese market. Leaders in both Chinese and US companies want the United States to strengthen its commitment to globalization and avoid the Chinese path of subsidies or industrial support. Interestingly, fewer than 20% believe that US policy should take a hands-off "let the market decide" approach to addressing US—China business issues, with half being supportive of US cooperation with allies to manage China's access to critical technologies. Multinationals with China-headquartered companies are more likely to suggest the "hands-off" approach but significantly were just as supportive as their non-China headquartered counterparts of tighter restrictions on technology transfer.

One major takeaway from these views is that while multinationals will continue to compete on a global basis they may not operate in the same way in the United States and China or their respective ecosystems but will customize their activity for the United States and Chinese spheres. That will impact decisions regarding where to locate intellectual property and core R&D. Not wishing to exit either market, they will need to absorb the growing cost and complexity in their operations.

4 Looking Forward

AmCham Shanghai's 2020 China's Business Report indicated that, despite the trade war, more than 78% of the 346 companies responding to its survey were profitable, slightly ahead of recent years, and 32% projected profits greater than in 2019. The importance of China's consumer markets should continue to grow for multinationals, as China's strong recovery from the COVID-19 crisis has produced surging demand for products ranging from cosmetics to automobiles. For many overseas companies, strong revenues in China have helped offset weak revenue in economies where recovery from the pandemic has been slower. In 2020, China was the only major

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economy to experience positive growth (2%); reflecting this, while global FDI fell in 2020, FDI in China grew, reflecting expectations of continued Chinese growth.

Chinese government policies will inevitably impact the degree to which overseas multinationals and other companies will participate in that growth. Directions announced at the Fifth Plenum in 2020 provide mixed signals. An emphasis on the domestic market under "dual circulation" suggests expanding market opportunities. The strengthening role of the state in economic decision-making also suggests, however, that much of that activity will be linked to state goals, further diluting the role of market forces. Likewise, the emphasis on technological self-reliance in the Fifth Plenum and the 14th Five Year Plan may cause overseas partners to question their long-term welcome and competitiveness in China.

Corporate views in the San Francisco/Silicon Valley Bay Area follow similar lines, but with a perspective linked to the region's status as the major United States and global technology center. Internet companies such as Google, Facebook and Twitter are not participating in China's market because they are unable to operate on the same open basis in China as they do in other global economies. While the reasons for this are well understood, current policies shield China's internet sector from competition, restrict consumer options, and by creating a protected domestic bubble, isolate Chinese companies from broader global markets.

Other movements point to a selective opening to foreign multinationals that will benefit Bay Area and Silicon Valley companies. The success in China's automotive market of Tesla, which produces vehicles in Shanghai as a 100% foreign-owned producer of electrical vehicles, suggests that where foreign investment aligns with government priorities, overseas companies can prosper. Tesla currently leads all producers of EVs in domestic sales, ahead of BYD, Guangzhou Auto, Beijing Auto and other major companies, and the company has announced that it will soon begin exporting China-produced vehicles to Europe. Likewise, after an extended delay, Visa has been given access to China's payments market, reflecting earlier announcements of financial market liberalization and commitments made in the US–China Phase One trade deal.

Several directional shifts in US policy would benefit US-China business and enable more investment and trade. One is that US government framework for reviewing trade in technology risks being overly broad. The uncertainty that results inhibits trade and investment but with questionable benefits to the US economy or security. While a strategic process of this kind is clearly necessary, a more transparent and selective approach to those controls would be welcomed by many US businesses. Likewise, unilateral controls on technology transfer, when layered on overly broad definitions, can be counterproductive. Where possible, those processes should be targeted and multilateral and allow non-impacted business activity to develop with less uncertainty.

China also has an opportunity to create new space for trade and investment. The term "opening up" is used often by officials, but without specificity regarding exact measures or their timing. More transparency is needed to inspire confidence. Here, the burden will be on China to open previously closed sectors in a clear and timely manner. The removal of equity caps and joint venture requirements in a broader range

of sectors is a particular area where more progress would be welcome and China's opening up would take on greater meaning.



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Growing UK-China Trade within the Multilateral Frameworks of the Asia-Pacific Region



Joseph Cash

Abstract The *global balance of power* is going through a period of recalibration and tilting from West to East. As a western market, the UK needs to implement a more calibrated approach to understanding this change to avoid being muscled out of global trade, financial markets, and by measure of geopolitical influence. China will be a key part of *post-Brexit strategy* as will regional trade agreements like *RCEP* and *CPTPP*. China and the UK also have the potential to shore up *free trade governance* both regionally and globally to their mutual benefit.

Keywords Global balance of power \cdot Post-Brexit strategy \cdot RCEP \cdot CPTPP \cdot Free trade governance

1 Introduction

This chapter explores the opportunities and challenges for the United Kingdom (UK) if it were to seek a closer economic relationship with China within the multilateral trade frameworks of the Asia–Pacific region.

Evidence will be presented to show that there is a significant opportunity for the UK and China to build on their current bilateral linkages through their plans to take up roles within the Comprehensive & Progressive Agreement for Trans-Pacific Partnership (CPTPP) and the Regional Comprehensive Economic Partnership (RCEP) agreements, respectively.

The analysis proceeds in three parts. The first section evaluates China's importance in the UK's plan to become more involved in Asia–Pacific trade post-Brexit—through signing a free trade agreement (FTA) with Japan, a roll-over deal with South Korea, and formally applying for membership of the CPTPP. The second section identifies ways that British and Chinese companies can use the terms of these agreements to structure their regional presence more efficiently in the interests of diversified supply chains and improved market access. The final section explores how the UK

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and China could work together across this network to develop new and improved rules governing free trade.

This chapter concludes that the UK and China can work together effectively within these frameworks and that there is merit in both countries moving towards a multilateral model in the interests of supply chain resilience and improved market access, considering that a UK-China FTA appears some way off.

2 Considering the UK's Strategic Partnership with China Post-Brexit

The global balance of power is going through a period of recalibration and tilting from West to East. As a western market, the UK needs to implement a more calibrated approach to understanding this change to avoid being muscled out of global trade, financial markets, and by measure of geopolitical influence. To that end, British politicians have placed much stock on the importance of Asian markets and FTAs in securing long-term economic prosperity for the UK outside of the European Union (EU). However, China remains the elephant in the room, for any foreign policy discussion on economic and security linkages in the Asia–Pacific region rests on a secondary conversation regarding how to engage China.

The UK has indicated that it wants to deepen its trade relationship with China, and while these indications remain unofficial to date, they come from the highest echelons of the political system.³ Looking more broadly, official steps that the UK has taken to improve its trade ties with the Asia–Pacific region have included agreeing to a comprehensive FTA with Japan, securing a roll-over deal with South Korea, and formally applying to become a member of the CPTPP. It is worth noting that while an official step towards deeper UK-China trade ties likely remains on the backburner for now, this does not mean that the British government and the country's businesses are not considering how they could leverage multilateralism to improve the bilateral economic relationship.

Given that China is the largest economy within the Asia–Pacific region, it is hard to see how the British government and business community could pursue a tilt to the East without increasing its engagement with the market. For instance, China's nominal GDP is worth almost three times that of Japan, the second-largest economy in

¹John Bew & Martin Jones, UK Strategy in Asia: *Some starting principles*. London: Policy Exchange, 2017. Accessed April 13, 2021. https://policyexchange.org.uk/wp-content/uploads/2017/09/UK-Strategy-in-Asia.pdf, p. 4.

²Ibid. 3.

³Paul Irwin Crookes & John Farnell, "The UK's Strategic Partnership with China beyond Brexit: Economic Opportunities Facing Political Constraints," *Journal of Current Chinese Affairs* 48, no.1 (April 2019): 108.

the region. ⁴ China looms so large that the value of its annual GDP growth equals that of the entire Australian economy. ⁵ As such, the market opportunity is too tempting and nigh impossible to ignore as the UK considers growing its economic engagement with the region at large.

It is worth reiterating that these two conversations are not happening in isolation and that there is widespread recognition of the importance of the China market to the UK.⁶ But there is also awareness amongst British businesses and policymakers that China is a vital trade partner to the other economies of the Asia–Pacific, too—that it is the lynchpin to the region's trade—and that as the UK looks to tie itself to deeper relationships with markets including Singapore, Japan and Australia, it would be wise to explore ways of ensuring that China appears in any future Venn diagram of UK-Asia–Pacific trade ties as well.

To that end, the British government has learned about the success of UK-China trade ties when promoting the merit of engaging with new emerging markets. In fact, the government's message towards business regarding the potential of the broader Asia–Pacific region echoes what it previously said about the China market, emphasizing that the Asia–Pacific region is home to some of the fastest-growing markets in the world.⁷

The statistics for trade with China are worth repeating when seeking to persuade the British business community that there is a significant opportunity to be found 6,000 miles away to the East. UK trade with China has grown quickly and from a low base. As a result, China is now the largest single-country market for many UK companies, which is reflected in the trade data for UK trade with China: UK exports to China increased by 138% between 2015 and 2019, while Chinese exports to the UK saw a 30% increase over the same period. And these trade volumes translate into tangible benefit at home, considering that links with China in trade, tourism and higher education alone support up to 130,000 UK jobs, according to a survey conducted by Cambridge Econometrics and commissioned by the China-Britain Business Council (CBBC).

⁴International Monetary Fund, *World Economic Outlook Database* (April 2021), distributed by the IMF, https://www.imf.org/en/Publications/WEO/weo-database/2021/April/download-ent ire-database.

⁵Zhou Xin, "China's GDP growth last year was worth more than Australia's whole economy," *SCMP*, March 3, 2019, https://www.scmp.com/economy/china-economy/article/2188404/china-says-last-years-gdp-growth-was-worth-more-australias.

⁶Joseph Cash, "How much does the UK need China post-Brexit?" *FOCUS Magazine*, July 20, 2021, https://focus.cbbc.org/how-much-uk-need-china-post-brexit/#.YR8PMi0RrBI.

⁷Liz Truss, "Britain is poised to become a Pacific player," *Telegraph*, January 31, 2021, https://www.telegraph.co.uk/news/2021/01/31/britain-poised-become-pacific-player/.

⁸Office for National Statistics, 'UK Balance of Payments: Pink Book', March 2021.

⁹Chris Thoung, China Britain Business Council: *UK jobs dependent on links to China*. Cambridge: 2020. Accessed April 13, 2021: https://www.cbbc.m-w.site/sites/default/files/2021-03/Cambridge-Econometrics-Impact-of-China-on-UK-Jobs-2nd-report.pdf, p. 5.

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Acknowledging both the success that they have had in China and the potential of the markets of the Asia–Pacific region more broadly, the British business community has indicated that it supports pursuing a two-track approach of growing trade with China and the Asia–Pacific region simultaneously. Last year UK companies welcomed China's ratification of the RCEP agreement, along with 15 other states, and Britain's leading business federations have already thrown their support behind the UK joining the CPTPP as well. While this will be further expanded on in the next section, UK companies are interested in China's position within the RCEP because it opens up new possibilities for UK traders with a presence in third markets in the region looking to utilize a 'Hub-Spoke' model that takes advantage of the ways that the RCEP, CPTPP and ASEAN Free Trade Zone (FTZ) intersect with one another.

Such an approach does not mean that UK companies plan on leaving the China market. Acknowledging the role that China plays in driving the economies of the other markets with which the UK has sought trade deals, businesses consider embracing multilateralism to be a way of improving the resilience of their China-focused supply chains. Indeed, when surveyed towards the beginning of 2020—and the impact of COVID-19 on global supply chains had become clear—only 3% of UK companies trading with China reported that they were considering shifting their long-term focus away from the market. Such sentiment only advances the argument that UK companies want to grow trade with China and across the Asia–Pacific region simultaneously, and that business understands that the extent to which they can engage with China will influence the extent that they can engage with the region as a whole.

3 The Opportunities the RCEP, CPTPP and the ASEAN FTZ Present for UK-China Trade Ties

The emergence of the RCEP, CPTPP and the ASEAN FTZ over the last decade has presented UK companies trading with China with a plethora of new options in terms of structuring their supply chains and regional economic activity. Collectively covering 34% of global trade, the intersection of these trade deals plays a key role

¹⁰Carolyn Fairbairn, "The UK cannot afford to self-isolate from China," *Financial Times*, July 21, 2020, https://www.ft.com/content/11e46189-2bf7-423c-8fb8-7c1fcb79462f.

¹¹UK Department for International Trade (DIT), "Press Release: UK applies to join huge Pacific free trade area CPTPP." January 30, 2021, accessed April 13, 2021: https://www.gov.uk/government/news/uk-applies-to-join-huge-pacific-free-trade-area-cptpp; Hemita Bhatti, "RCEP: what does this trade agreement mean for your business?" *CBI*, January 14, 2021, https://www.cbi.org.uk/articles/rcep-what-does-this-trade-agreement-mean-for-your-business/.

¹²Ibid.

¹³CBBC, "Impact of Covid-19 on British trade with China. London: CBBC, 2020. Accessed April 13, 2021. https://www.cbbc.m-w.site/sites/default/files/2021-03/CBBC%20COVID%20survey% 20report%209%20March.pdf, p. 2.

in determining that the Indo-Pacific region is the most important to the UK post-Brexit. ¹⁴ But one cannot overlook China's role in this trade nexus, which is why many British multinational companies are re-evaluating the scale and scope of their presence in Australia, New Zealand, Japan and South Korea, for these markets are members of both the RCEP and the CPTPP, and able to facilitate freer trade into China.

This overlap is not a coincidence: both the RCEP and the CPTPP emerged from the ASEAN FTZ; trade negotiators to the RCEP reportedly referred to the deal as 'the stapler' because it tied together the various FTAs that collectively facilitate the ASEAN FTZ. ¹⁵ While the jury remains out on whether the RCEP will deliver similar gains to the CPTPP—considering that the provisions of CPTPP are far more generous than the former—the RCEP does go a long way in addressing inadequacies in the various trade deals enabling the ASEAN FTZ. As a result, the only new market access arrangements introduced by the RCEP are between Japan and China and Japan and South Korea, for these were the only markets without some form of preferential trade arrangement already in place.

The China-Japan trade relationship afforded under the terms of the RCEP is of interest to UK companies because the UK recently concluded negotiations with Japan over an FTA. Given the generous Rules of Origin measures in both agreements, it is not inconceivable that UK firms could use the terms of the UK-Japan Closer Economic Partnership Agreement (CEPA) to move goods, services, and capital from the UK into Japan before making use of the terms of the RCEP—particularly measures relating to tariff re-heading—to move goods on again into the China market at preferential rates. ¹⁶

That said, UK companies still have other options available to them, should they wish to use the terms of the CPTPP or the RCEP to engage the China market. British multinational companies are well represented in Singapore and Malaysia, with many choosing to set up their Asia—Pacific regional headquarters in the former. The RCEP's promise of seamless supply chains within the region incentivizes companies to bolster their operations in these two markets, for a significant prize is up for grabs: preferential access to both the China market and the world's fastest-growing economic region. It is also worth mentioning that the ratification of the RCEP and the CPTPP came at a good time for UK multinational companies, for many were beginning to shift their non-China facing regional operations out of China over concerns that their

¹⁴Author's calculation, based on Dominic Walsh, "RCEP: what the new trade bloc means for the Indo-Pacific and the UK," *Policy Exchange*, December 4, 2020, accessed April 13, 2021. https://policyexchange.org.uk/rcep-what-the-new-trade-bloc-means-for-the-indo-pacific-and-the-uk/.
¹⁵Ibid.

¹⁶DIT, "UK-Japan: An agreement for a Comprehensive Economic Partnership: *Summary of chapters*." November 30, 2020, accessed April 13, 2021. https://www.gov.uk/government/publications/ukjapan-agreement-for-a-comprehensive-economic-partnership-cs-japan-no12020/ukjapan-agreement-for-a-comprehensive-economic-partnership-summary-of-chapters.

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business operations might suffer as a result of escalating trade tensions between the US and China. ¹⁷

British businesses would be wise to examine deepening their involvement with the broader Asia–Pacific region and not only because of factors such as high growth rates and US-China trade tensions. The existence of two competing trade blocs in the Asia–Pacific region demonstrates increasing regionalism in global trade and that there is a degree of disagreement between leading economies on how to facilitate it. This divergence is significant for two reasons, and businesses must be cognizant of the effects of both.

Firstly, Asia–Pacific regionalism under the terms of these two agreements holds the potential to challenge the multilateral consensus of the WTO. Secondly, it appears increasingly likely that China plans on using its membership in the RCEP and position as the proprietor of the Belt & Road Initiative (BRI) and driver of Asia–Pacific economic activity to take on a more proactive role in setting the rules for global trade. ¹⁸ Both of these factors hold the potential to negatively influence issues that affect exporters, including standard-setting for manufacturing and determining Rules of Origin frameworks, how tariffs are/are not applied, and how easily countries can dump goods on other markets in the near future. Business should remain ready to adapt to any changes in these areas and ensure that they are positioned to be able to influence any changes where required.

4 Governing Free Trade

China's membership of the RCEP and the UK's prospective membership of the CPTPP presents an interesting dynamic within the Asia–Pacific Region concerning setting global trade rules. Both countries have indicated that they wish to take on an enhanced role in trade governance. The UK has demonstrated this through the wording of its negotiating objectives for its FTAs with the US, Australia and Japan; China has signaled similar intent through initiatives such as 'China: Standards 2035'—an initiative aimed at ensuring China has a stronger voice in standard setting for the technologies likely to drive the markets of the future.

Against a backdrop of a WTO widely considered in need of reform, the case that China and the UK could play a role in herding the markets intersecting the various multilateral trade blocs within the Asia—Pacific region to secure uniform and enhanced provisions for trade governance is a strong one. Especially so, considering that China has indicated that it might look to join the CPTPP too.

¹⁷Joshua Kurlantzick, "The RCEP Signing and Its Implications." *Council on Foreign Relations*, November 16, 2020, accessed April 13, 2021. https://www.cfr.org/blog/rcep-signing-and-its-implications.

¹⁸Peter Petri & Michael Plummer, "RCEP: A new trade agreement that will shape global economics and politics," *Brookings Institute*, November 16, 2020, accessed April 13, 2020. https://www.brookings.edu/blog/order-from-chaos/2020/11/16/rcep-a-new-trade-agreement-that-will-shape-global-economics-and-politics/.

The UK has already taken steps to indicate that it hopes to be a leading force within the CPTPP regarding global governance. Moreover, it has received the tacit support of Japan, an influential presence within the bloc—and CPTPP chair at the time of writing; this support manifests itself in the way that Japan and the UK agreed to e-commerce and data transfer provisions within the UK-Japan CEPA that go beyond the terms of the CPTPP. ¹⁹ Considering that both countries framed the negotiations over CEPA as a 'steppingstone' to CPTPP admission, one can speculate that the two countries plan on using the enhanced provisions featured in CEPA to push the CPTPP member states to strengthen the agreement's provisions in these areas when negotiating the UK's accession. ²⁰

China has also taken steps to bolster its reputation as a highly competent actor in trade negotiation and rules setting. Not only does China now occupy one of the deputy-director general positions at the WTO—following the election of Yi Xiaozhun to that post in 2013—it has moved fast to negotiate a series of FTAs with a diverse set of economies, concluding negotiations on five separate deals over the last decade alone. As a result, it is clear that China's policymakers consider growing the country's capabilities in trade negotiation and governance to be of the utmost importance, and the launch of initiatives such as 'China: Standards, 2035' only reaffirms this.

By coincidence, the UK has moved in step with China on developing its capability in these areas, and this coincidence finds interesting application in developments in the Asia–Pacific region. On the one hand, is China; It is the engine of regional economic growth, a member of the RCEP, but is not a member of the CPTPP. On the other is the UK; It is a significantly smaller regional investor, but is able to offer high-quality investment into sectors that are currently immature but will play a key role in driving the development of the region's economy as a whole, such as the financial services sector. This would be a powerful combination indeed.

In short, the UK and China have the potential to be perfect partners. China has rapidly accumulated experience regulating the so-called 'technologies of the future,' such as digital finance and mobile payments. The UK has a pedigree in devising regulatory regimes to uphold the Rule of Law across the business environment, with particular expertise in antitrust and anti-competition legislation. A balance of both will be required to regulate the economy of the future effectively, and the industries that will drive it are emerging strongly across the Asia–Pacific region.

¹⁹Minako Morita Jaeger & Yohannes Ayle, "The UK-Japan Comprehensive Economic Partnership Agreement: Lessons for the UK's future trade agreements," *UK Trade Policy Observatory*, December 2020, accessed April 13, 2020. https://blogs.sussex.ac.uk/uktpo/files/2020/12/BP50Dec.pdf.

²⁰Liz Truss, 'Statement: UK's approach to negotiations with Japan,' issued May 13, 2020, accessed April 13, 2021, https://questions-statements.parliament.uk/written-statements/detail/2020-05-13/hcws231.

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5 Conclusion

The UK and China could form a powerful duo in global trade were their ambitions within the CPTPP and the RCEP to align. More by coincidence than design, there are signs that the trajectories both countries want to take their economies would deliver improved market access to the UK and Chinese companies across the Asia–Pacific region and promote improvement regarding both blocs' provisions for trade governance. With the UK indicating that it wants to become a key player in setting the rules for global trade, China stating that it seeks to set the standards for the industries of the future, and both courting the two blocs that constitute 35% of global trade, it appears almost inevitable that their trade teams will find themselves at a negotiating table of some sort at some point. While a bilateral trade deal looks some time away, there is a chance that the UK and China could find themselves well-positioned to advance their trade ties within the multilateral trade frameworks of the Asia–Pacific region.



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Continued Clear and Practical Reform Policies Will Create a Positive Environment for French Companies in China



Christophe Lauras

Abstract In recent years, all the conditions of access to the Chinese market by foreign companies have been continuously and greatly improved with *greater market openness* in industries including *transportation*, *finance* and *infrastructure*. The elimination special requirements for foreign companies and passage of the *Comprehensive Agreement on Investment* are also positive moves. Despite the impact of *COVID-19*, it is expected that there will be continued expansion across sectors in the future.

Keywords Greater market openness · Transportation · Finance · Infrastructure · Comprehensive agreement on investment · COVID-19

Since China's accession to the World Trade Organization in December 2001, the business environment in China has been increasingly favorable to the collaborations between Chinese and foreign companies as well as to foreign investments. On the other hand, with the clear government impetus to develop national technological sovereignty and its target to have industrial national champions in place within the next five to ten years, the competitive environment has intensified tremendously. The regulatory scrutiny has somewhat dulled some of the effects of the former red-carpet welcome policy for foreign enterprises that prevailed in the past. In this new paradigm, new challenges have appeared. In order to do business efficiently, foreign enterprises will need to demonstrate, on a constant basis, the undeniable proof of their unique value proposition if they expect to remain relevant and continue their sustainable growth in the country.

1 China—Increased Flexibility and Market Openness

In recent years, the conditions for foreign companies to access the Chinese market have been continuously and greatly improved. The recent release of another set of

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regulations on optimizing the business environment was of course greatly appreciated by the foreign community. These regulations aimed at providing equal protection to all market entities, ensuring that they could make equal use of all the factors of production and ensure that they enjoyed support policies in accordance with the law. They also clarified the rules regarding faster registration of enterprises, equal market access, solid implementation of tax and fee reduction policies, and the easing of financing difficulties. The regulations also detailed what we found were welcome efforts, at least on paper, in cutting red tape, streamlining administrative approvals, and improving supervision and the administrative law enforcement.

Interestingly, while we have observed a global trend in strengthening controls over foreign investment in many parts of the world. China decided at the end of June 2020 to make its regulations more flexible and widen the number of sectors eligible for this type of investment. This decision represents a great improvement for many companies and is particularly remarkable for some key sectors:

- In the **transportation** sector, where the regulations prohibiting foreign investment in air traffic control have been removed and the regulations on entry into civil airports have been adapted.
- In the financial sector, a foreign entity can now hold full capital shares in an
 insurance company and the restrictions on brokerage houses, rating agencies,
 wealth management companies and funds have been lowered.
- In the area of **infrastructure**, where the rule stipulating that water supply systems for cities over 500,000 inhabitants must be controlled by a Chinese entity is no longer mandatory.

We also noted that nuclear fuel processing, agricultural R&D and higher education were listed among the other eligible sectors for foreign investment.

In addition, on January 1, 2020, the Chinese government announced the termination of the Wholly Foreign-Owned Enterprises and Joint Venture system. After a transition period of five years, this system will be replaced by a single status for both Chinese and foreign companies, a move that demonstrates the strong will of the Chinese authorities to introduce more equitable treatment for companies operating in China.

In terms of multilateral relations, China and Europe are increasing exchanges and the recent signing of the EU-China comprehensive agreement sets an ambitious opening and level playing field for European investments.

In this agreement, as far as the terms of market access for EU businesses are concerned, China has made significant commitments in the field of manufacturing, the most important sector for EU investment in China. Manufacturing makes up more than half of all EU investment—including 28% for the automotive sector and 22% for basic materials. This includes the production of electric cars, chemicals, telecom equipment and health equipment, among others.

China is also making commitments that benefit EU investments in various service sectors, such as cloud services, financial services, private healthcare, environmental services, international maritime transport and air transport-related services.

In the sectors covered, and if the terms of the agreement are confirmed and applied, French and European businesses would benefit from increased certainty and predictability as their operations in China would no longer be subject to limited access or the introduction of new discriminatory practices.

Also pending confirmation, the agreement would help to level the playing field for EU investors by laying down very clear rules on Chinese state-owned enterprises, transparency of subsidies, and prohibiting forced technology transfers and other distortive practices. It also includes guarantees that would make it easier for European companies to obtain authorizations, complete administrative procedures and secure access to China's standard-setting bodies for European companies.

In a very unexpected and positive development, environmental issues were also addressed in the agreement, which should be considered great news. The China Comprehensive Agreement on Investment (CAI) will bind the parties into a values-based investment relationship underpinned by sustainable development principles. This is the first time that China has agreed to such ambitious provisions with a trade partner.

China is also undertaking commitments in the areas of labor and environment, promising not to lower the standards of protection in order to attract investment, to respect its international obligations, and to promote responsible business conduct by its companies. China has also agreed to effectively implement the Paris Agreement on climate change as well as to effectively implement the International Labour Organization Conventions, which has ratified. It has also agreed to make continued and sustained efforts to ratify the ILO fundamental conventions on forced labor.

These sustainable development issues will be subject to a solid enforcement mechanism by an independent panel of experts as in other trade agreements, which means a transparent resolution of disagreements with the involvement of civil society. This actually represents great news for French companies specializing in recycling, clean energy and eco-cities, as they often are leaders in their respective fields and have a lot to offer China's path to sustainability and compliance. Such an agreement was long expected and hopefully will be the first of many milestones in an ever-stronger cooperation partnership.

However, while we have observed that for established French enterprises in China, market access has become increasingly favorable, further improvement in the area of market openness and transparency is still required. While it is of course totally understandable that state-owned enterprises receive special attention, the French Chamber simply emphasizes that it is also important that the rules of equal bidding for opportunities prevail, a matter that we know will continue to evolve and progress positively in the months to come.

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2 A Comprehensive Strategy Moving Forward

In such a framework, what strategy should foreign enterprises adopt to adapt this new competitive environment and remain relevant in the fast-paced economic and technological growth of the next five years?

First, they will have to ensure that their value proposition remains undisputable and competitive. Be it the unique technological advantage of a product or the power of brand equity, the demonstration of these added values and unique selling points must remain strong and current. This means that the investments of most enterprises must be channeled toward research and development, initiatives fostering creativity as well as the recruitment of the best talent so that the end product presents an undeniable interest to China's new needs for its development.

Secondly, smart collaboration will be key to any business's long-term growth strategy. A viable and enlightened move in many sectors would be to ensure that its value proposition is intertwined in the canvas of the Chinese economy by ensuring that its product or its service becomes an essential moving part of the entire process of development. This implies finding the most compatible business partner, a move that could also help resolve the many issues linked to a regulatory environment that becomes harder to comply with by the day.

The first question that a corporation should always ask itself is: What sectors matter the most to industrial reformers and am I from one of those? Healthcare, food and chemicals are all famous for the amount of scrutiny and enforcement Chinese regulators load on them. However, this list keeps expanding.

To find the right partner, it may help to have a designated team, including onthe-ground professional advisers and agents, to seek out appropriate targets. The team's primary functions would include conducting a market analysis of players, meeting stakeholders and officials, and building the relationships necessary to begin discussions for any deal. Knowledge of Chinese business culture and etiquette is thus key to making the most of these opportunities.

When seeking partners in China, businesses need to think ahead to issues that may occur post-deal finalization such as local talent recruitment, management and retention, and building flexibility and adaptability into their business models. They should seek out partners that have enough experience in the local industry and familiarity with differences among local consumers and industry segments to see how to carry through with ideas. Above all, these partners should possess the resources and relationships that complement the company's. However, alliances come with their risks. The importance of trust and regular communication cannot be over-emphasized.

3 The Impact of COVID-19

One cannot write about optimizing the current business environment in China without mentioning the health crisis that started in winter of 2020. The COVID-19 crisis is

a historical challenge to countries and economies across the globe. It has of course greatly affected foreign companies present in China, especially in the areas of human resources and organizational practices.

A good business environment should always start with the guarantee of an absolute sense of safety for any entrepreneur, and to that effect, the French Chamber of Commerce in China found the management of the pandemic in China absolutely remarkable. The strength of the health control procedures, their application with resilience and humanity, and the long list of government support and relief measures that were released during the crisis were highly appreciated by the French business community and contributed to a fast and visible economic recovery in the country. This can only give a sense of trust to any entrepreneur and is a very encouraging signal sent toward investors everywhere. This health crisis will, of course, generate cyclical tensions in many sectors this year, but the effects of this will eventually dissipate.

4 Continued Development and Growth Across Sectors

We have observed that a large number of industries and sectors are experiencing, and will continue to experience, a significant development in China over the next few years, as the technological and digital transformation of the country continues to accelerate. We are thinking, for example, about the sectors of sustainable cities technologies, clean energies, intelligent urban transport and services, financial services, medical technologies, elder services, and many more. French companies, which are very advanced in these fields, are already strong partners in China and will definitely continue to take part in the growing needs of the development of the Chinese economy and society.

There are still many opportunities open to French and European companies, thanks to the pledge by Chinese authorities to create a business environment that is more favorable to foreign players, even if some questions remain on their modes of application.

While enough has been said about the COVID-19 crisis, and while the words "unprecedented" and "new normal" have been more than overused, it is still a huge large understatement to say that 2021 has been a crucial year for China and for the global economy in general.

5 Pride in Our Achievements and Looking Forward

Looking back, we can first be very proud of what was achieved under such dramatic circumstances. During these very testing times, our entrepreneurs in China have clearly shown their resilience, their creativity and their agility. We have seen that French companies in China have quickly evolved to adjust to the ever-changing

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market landscape and we are convinced that they will, without a doubt, continue to adapt to new economic paradigms while embracing China's transformation. In these matters, the French Chamber of Commerce and Industry in China has been, and remains, fully mobilized to provide the business community with the best platform of services that accompany the needs of French companies and facilitate their sustained development.

In fact, the arrival of the pandemic in 2020 emphasized the fact that foreign enterprises, more than ever, need the support of institutional platforms such as their relevant Chambers of Commerce. The role of the CCI France Chine during the pandemic was crucial to keeping all lines of communication open, helping companies and individuals resolve specific issues and serving as a much-needed hub of resources and solidarity during a difficult crisis.

The role of the Chamber was also key in driving the results during the recovery period as we conducted multiple sectoral activities very early on to help companies prepare future strategies and make the most of the economic reset following the lockdown.

The word "recovery" has been overused in 2021, but we are all grateful. This coming year will be, hopefully, a period where enterprises, countries and societies can heal and recover in the best possible manner.

The global economic recovery begins in China; we are already witnessing it. In a market that is more open to foreign investment, multinationals and SMEs present on this market will benefit from the rebound effect. Although a lot remains to be clarified and improved to facilitate the development of foreign enterprises in China, we are convinced that after this crisis is over, France and China will continue their strong partnership and take advantage of the new and very promising prospects opening up for the development of economic prosperity centered on multilateral equity.



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China's Growing Presence in Brazil and Latin America



Luiz Augusto de Castro Neves and Tulio Cariello

Abstract The 21st Century opened a new chapter for the relations between *China and Latin America*. As of 2020, Brazil has received more than half of all Chinese investment in Latin America—around USD 66 billion with three fourths of that investment dedicated to the *energy sector* and the rest going to agriculture, infrastructure and other areas. While *Chinese foreign investment* has declined in recent years due to the pandemic, China's recovery will likely also reach Brazil with new opportunities for investment and cooperation.

Keywords China and Latin America · Energy sector · Chinese foreign investment

The twenty-first century opened a new chapter for the relations between China and Latin America, characterized by an increasingly evident presence of Chinese investments in the region. Bilateral trade, which had been consistently expanding since the 1990s, already showed the complementarity between the two economies, with significant flows of commodities (minerals, oil and gas and agribusiness products) to China, in exchange for industrial products and inputs.

Following the outflow of Chinese business, which began in parallel with Beijing's entry to the WTO in 2001, Latin America was targeted by China as a potential destination for new ventures. The region received around USD 115 billion in investments between 2007 and 2018, with a large-scale concentration in sectors well established in the bilateral trade, such as the exploration of natural resources, energy and agriculture.

As of 2020, Brazil has received more than half of all Chinese investment in Latin America—around USD 66 billion, according to the Brazil-China Business Council (CEBC). Three-fourths of that investment was dedicated to the energy sector and dominated by central state-owned Chinese enterprises, such as State Grid, China Three Gorges, Sinopec, CNPC and CNOOC. Even with that substantial concentration in electricity and oil exploration, China also invested in other sectors, including mining, infrastructure, agriculture, industry and information technology, with major Chinese banks including the Industrial and Commercial Bank of China, the China Construction Bank and the Bank of China also setting up operations in Brazil.

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However, Brazilian investment in China is very limited by comparison. Despite the fact that China is the main destination for Brazilian exports (around 32% of the country's exports), Brazilian businesses have so far been very hesitant to take advantage of the numerous opportunities offered by the Chinese market. One can, therefore, observe a great asymmetry between the two partners as far as investments are concerned.

The promising scenario for Chinese investments in Brazil and the rest of Latin America is, however, facing a few obstacles, including several geopolitical challenges caused by a resurgence in nationalism, the China-US dispute and COVID-19. The pandemic crisis caused a dramatic fall in foreign direct investment (FDI) in 2020. Global FDI flows dropped by 35% to USD 1 trillion, from USD 1.5 trillion in 2019. This is almost 20% below the 2009 fall after the global financial crisis.

China has been very careful in terms of foreign investment, particularly after its record outflow of capital in 2016. It also suffered the consequences of this challenging global picture, with a series of drops in the value of its non-financial investment abroad since 2017. Like other relevant partners of China in the international system, Brazil was not immune to this crisis and faced a 74% fall in the value of its investments at home in 2020.

1 Chinese Investments in Latin America and the Caribbean

In 2015, during the China-CELAC Forum (Community of Latin American and Caribbean States), President Xi Jinping said China would invest approximately USD 250 billion in the region within the next decade. Indeed, between 2007 and 2018, China invested about USD 115 billion in Latin America and the Caribbean, according to the data from China Global Investment Tracker (CGIT).

However, despite this rhetoric, China's investments in Latin America and the Caribbean declined sharply between 2017 and 2018. Indeed, data compiled by Boston University's Global Development Policy Center (GDP Center)¹ show a 58% year-on-year decrease—the largest drop in investments since 2010—with special notice paid to the irregular intensity of the decrease in investments in the region during this period, as shown in the following chart (Fig. 1).

In this context, data from the GDP Center survey also shows that this decrease in investments from 2017 to 2018 was equally reflected in the main forms of Chinese investment in Latin America and the Caribbean. Greenfield investments decreased by 64%, from USD 4.4 billion to USD 1.6 billion while China's mergers and acquisitions in the region decreased 57%, from a record USD 17.5 billion in 2017 to USD 7.6 billion in 2018.

More recent data collected by CGIT referring specifically to South America confirm that Chinese investments have followed an irregular pattern since 2010,

¹Chinese investments compiled from sources mentioned include Hong Kong, Taiwan, and Macao.

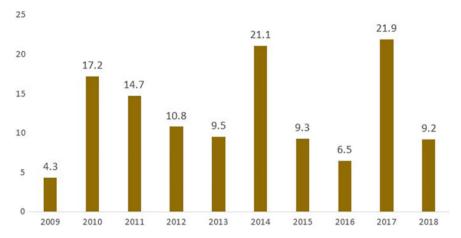


Fig. 1 Flow of Chinese Investments in Latin America and the Caribbean | 2010–2018 (USD billion). *Sources* DeaLogic and Financial Times, by the GDP Center—Boston University | Prepared by: CEBC

with an almost uninterrupted decline between 2016 and 2020 and growth verified only between 2017 and 2018.

Even as China reduces its appetite for investments overseas, independent sources indicate that Brazil continues to be the evident center of gravity for Chinese investments in Latin America and the Caribbean. According to the chart above, practically half of all Chinese investments in the region between 2007 and 2018 were directed towards Brazil, a considerably higher percentage than in Peru, which comes in second place with 19% of the total (Fig. 2).

Similarly, data compiled by the Latin America and the Caribbean Network on China (Red LAC-China) confirm that the largest recipients of Chinese investments in the region are still Brazil and Peru, with USD 48.5 billion and USD 15.7, respectively.

1.1 Sector Analysis of Chinese Investments in Latin America and the Caribbean

From a sectorial point of view, Chinese investments in Latin America and the Caribbean between 2007 and 2018 were mostly directed towards the energy sector (particularly hydroelectricity and oil), which accounted for 53% of investments in the region. Mining accounted for 30% of total investments, followed by agriculture (5%), transportation (4%), finance (3%), and chemicals (2%).

Brazil attracted seven of the ten largest energy investments in the region between 2007 and 2018, while Argentina attracted two projects and Peru one, as can be seen in Table 1.

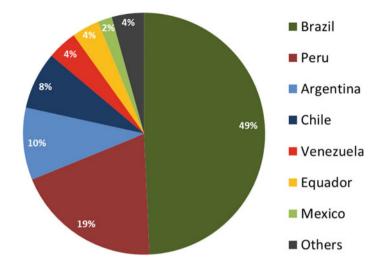


Fig. 2 Chinese Investment Stock in Latin America and the Caribbean, Selected Countries (By Value, USD) | 2007–2018. *Source* China Global Investment Tracker | Prepared by: CEBC

Table 1 Major Chinese Energy Investments in Latin America and the Caribbean | 2007–2018

Year	Investor	Investment partner/recipient	Recipient country	Investment value (US\$ billion)
2010	Sinopec	Repsol	Brazil	7.1
2016	State grid	CPFL	Brazil	4.91
2011	Sinopec	Galp energia	Brazil	4.8
2016	Three gorges	-	Brazil	3.66
2017	State grid	CPFL	Brazil	3.44
2010	CNOOC	Bridas	Argentina	3.1
2010	Sinochem	Statoil	Brazil	3.07
2013	CNPC	Petrobras	Peru	2.89
2010	Sinopec	Occidental petroleum	Argentina	2.47
2017	State power investment		Brazil	2.26

Source China Global. Investment Tracker | Prepared by: CEBC

However, given that Brazil received almost half of all Chinese investments in the region during that period, and considering that the energy sector strongly influences overall investments in the country, it is important to observe that the overall framework of Chinese investments in Latin America and the Caribbean would change significantly if we were to ignore the investments in Brazil.

When we ignore investments in Brazil, we see that the energy sector continues to be a relevant sector, accounting for 36% of total investments. However, the mining segment is clearly the sector that has attracted the most interest from Chinese investors in recent years. The mining industry accounted for 51% of the investments (in total value) between 2007 and 2018. There were particularly large investments made during this period, such as the purchase of the Las Bambas copper mine in Peru by a consortium including China Minmetals, Guoxin International, and CITIC together with Glencore. The total value of the transaction was approximately USD 10 billion, one of China's largest overseas acquisitions in the mining sector. The mining and energy sectors are followed by investments in agriculture (4%), transports (3%) and other industries (6%) with little relevance in terms of individual participation.

When we look at investments in mining for all of the Latin American and Caribbean countries included in the China Global Investment Tracker, it is clear that Peru was the country that attracted the majority of China's investments in the region, having received 54% of all investments made in this sector. Chile comes next having received 18% of the investments, while Brazil received 12% and Ecuador 11%.

As the following table shows, Peru attracted five of the 10 largest investments in the region, while Chile and Brazil received investments for two projects each, and Ecuador one (Table 2).

Table 2 Major Chinese Investments in the Mining Industry in Latin America and the Caribbean | 2007–2018

Year	Investor	Investment partner/recipient	Recipient country	Investment value (USD billion)
2014	Minmetals, Suzhou Guoxin, and CITIC	Glencore	Peru	6.99
2018	Chengdu Tianqi	Sociedad quimica y minera	Chile	4.07
2010	Minmetals, Suzhou Guoxin, and CITIC	-	Peru	2.5
2018	Zhongrong Xinda	Pampa de pongo	Peru	2.36
2008	Chinalco	-	Peru	2.16
2014	China Railway construction and China nonferrous	Mirador	Wquador	2.04
2011	Taiyuan iron, CITIC, baosteel	СВММ	Brazil	1.95
2010	Shunde rixin and minmetals	-	Chile	Jan-00
2018	Chinalco	-	Peru	1.3
2010	Development bureau (Jiangsu)	Bernardo de mello itaminas	Brazil	1.2

Source China Global Investment Tracker | Prepared by: CEBC

2 Chinese Investments in Brazil

The international expansion of Chinese firms, already mentioned above, also takes into account a geopolitical variable, which, at least as far as South America is concerned, cannot be ignored. In this context, Brazil becomes a sort of focal point in the region. Recent history has been dominated by the overwhelming influence of the United States in the region, particularly during the Cold War. With the relative dilution of ideological tensions, new issues have appeared in American foreign policy, such as terrorism, immigration and the emergence of China and its multiple impacts on international relations. This has led, to a certain extent, to a relative reduction of the region's priority in American foreign policy. The relative distancing has facilitated the creation of space for China in the region, taking into account the fact that China was already engaged in expanding its presence in the world.

The first decade of the twenty-first century brought about a new trend to the relationship between China and Brazil. Their agenda became much more complex, with the explosion of bilateral trade and the growing relevance of Chinese investment within their bilateral relationship.

In the commercial sector the prevailing development model in China in the 2000s generated a big window of opportunity for Brazil and stressed the complementarity of both economies, which led to an almost uninterrupted period of growth in bilateral trade, very often driven by Brazilian exports of iron ore, soybeans and crude oil.

In 2009, China overtook the United States to become Brazil's main export destination, which has remained the case to the present day. The expansion of sales to China was very significant and reached USD 67.7 billion in 2020, making up a third of all Brazilian exports. Total trade between the two countries reached a record USD 101 billion, the first time Brazil's foreign trade reached a three-digit figure with a single country. (Fig. 3)

According to the Brazil-China Business Council (CEBC), between 2007 and 2020, 130 Chinese firms announced 242 projects in Brazil, which resulted in investments

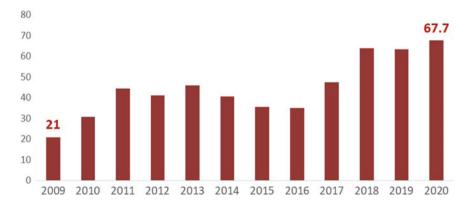


Fig. 3 Brazilian Exports to China (USD billion). Source Ministry of Economy | Prepared by: CEBC

potentially amounting to USD 110.7 billion. Of these, 177 projects were actually implemented, expanding the stock of Chinese investment in Brazil to USD 66.1 billion. The China Global Investment Tracker, which only measures investments over USD 100 million, estimates that stock to be USD 60.6 billion, not very different from the CEBC figure. Considering the global context, available data indicates that Brazil was the fifth-largest recipient of Chinese investment for the period between 2005 and 2020, immediately following the US, Australia, UK and Switzerland.

Between 2010 and 2019, according to the Ministry of the Economy of Brazil, China and the United States have traded places as the first and second-largest direct investors in the country. The cultural distance and problems related to the complexity of the Brazilian business environment, especially in the areas of taxation and regulation, have not, however, driven away Chinese investment. Over the past decade, China has invested more in Brazil than any other country historically, except the United States.

Due to their irregularity, those investment flows do not show a defined trend. The largest investment was in 2010 (USD 13 billion), which is considered by many the year Chinese business "discovered" Brazil, and China has continued to show interest in the Brazilian economy in several areas ever since.

After the initial euphoria, there was a downward trend until 2014, followed by a consistent increase between 2014 and 2017. Over the last three years, investment has varied as shown in the figure below. It should be noted that the year 2020 was a very atypical year due to the pandemic (Fig. 4).

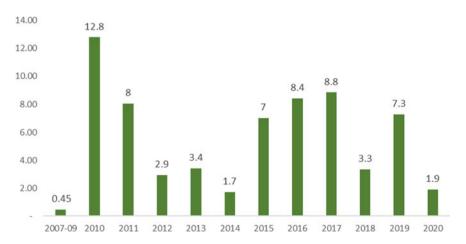


Fig. 4 Flow of Chinese Investments in Brazil (USD billion). Source CEBC

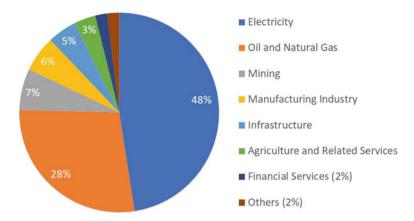


Fig. 5 Business Sector Distribution of Chinese Investments in Brazil (By Value, USD) | 2007–2020. Source CEBC

Figure 5 shows the distribution of the Chinese investment in Brazil by business sector. The electricity sector makes up almost half of it—State Grid and China Three Gorges are leading investors and most of their assets abroad are in Brazil. The oil and gas sector is the second most important and Sinopec, CNPC, CNOOC and Sinochem are already established in Brazil. The third most important sector is mining, represented by Wuhan Iron and Steel (WISCO) and the participation of a consortium of Chinese companies (CITIC Group, Anshan Iron & Steel, Shougang and Taiyuan Iron & Steel) which holds 15% of CBMM, a Brazilian firm that explores niobium, among other activities. More recently, China Molybdenum Company, acquired the assets of Anglo-Americans. In the industrial sector, it is also worth mentioning the increased influence of Chinese firms such as BYD, Gree, Midea, Chery, Sany, XCMG and Liugong.

The Chinese have also invested in important infrastructure projects, particularly the presence of China Merchants Port, China Communications Construction Company and China Railway 20 Bureau Group.

The fact that 3% of the Chinese initiatives are in the agricultural sector, a value relatively low considering the sector's great potential, is also of note. Naturally, the complementary nature of the two countries in this area attracts Chinese business as Brazilian exports to Asia are heavily concentrated in agricultural products. According to official Brazilian data, agricultural exports to China jumped from 35% of total Brazilian exports to China in 2010 to 50% in 2020. COFCO, Tide Group and Long Ping High Tech have invested substantially in the Brazilian agricultural sector.

The growing Chinese presence in the Brazilian economy has also awakened the interest of the Chinese financial sector, which has gradually expanded operations in Brazil. The Bank of China was the first Chinese bank to be established in the country, beginning in 1998 with a representative office and ultimately becoming a full bank in 2009.

From 2012 onwards other Chinese banks opened branches in Brazil, either directly or through the acquisition of local banks. It is worth mentioning the Industrial and Commercial Bank of China, the acquisition of Banco BBM by the Bank of Communications and of Bicbanco by the China Construction Bank. The acquisition of foreign banks with branches in Brazil also led to the presence of Chinese banks in Brazil, as was the case of Banco Espírito Santo de Investimento by Haitong.

The number of projects shows a diversified picture. Investment in the electricity sector remains the most relevant, corresponding to more than a third of the confirmed projects. Closely related is the increased participation in the industrial sector, which comes in second place making up 28% of all investments.

If expenditures are taken into consideration, instead of the number of projects, some sectors maintain their relevant positions in the overall picture of confirmed projects, as is the case with agriculture and oil extraction, each of which makes up 7%, and financial services with 6%. Also worth mentioning are the initiatives in the field of information technology, like the Didi Chuxing mobile transportation platform for urban mobility, which acquired the Brazilian ride-hailing firm 99, and Tencent, which invested in Nubank, the largest fintech company in Latin American.

3 Brazilian Investment in China

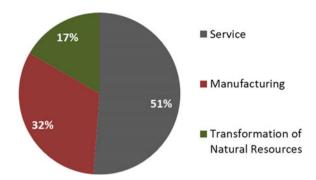
Brazilian investment in China is much more modest than Chinese investment in Brazil. This situation can be mainly explained by the difficulty among Brazilians to adapt to cultural and consumer factors in the Chinese market and the relative openness of Brazil to receive foreign brands. One should add the Chinese ability to adapt to foreign markets which is a result of their "going out" strategy, practiced by the Chinese government since 2000. It is a reality that most Brazilian firms do not have a strategic agenda for "going out" with the goal of establishing their brands in the global market.

The limited Brazilian presence in China has not changed in recent years. According to data from Brazil's Central Bank, between 2007 and 2015, Brazilian businesses invested USD 291 million in China, the equivalent of less than 1% of total foreign investment in China. However, Chinese official data (MOFCOM) indicates that over the same period cumulative Brazilian investment in China reached USD 508 million, but it should be noted that a portion of the investment between the two countries may not appear in official data due to distortions in the registration of inflows and outflows of capital, which are very often accounted as originating in third countries.

The modest numbers of Brazilian investment in China reveal that Brazilian business has been relatively indifferent vis- \dot{a} -vis the transformations that have made China one of the largest and dynamic consumer markets in the world, as well as an important innovator.

The Brazil-China Business Council has records of 84 Brazilian firms present in China in terms of, *inter alia*, production units, representative offices or branches.





These companies can be divided into three general areas in terms of their business activities: services providers, manufacturers and natural resources processors, as shown in Fig. 6.

Business activities carried out by Brazilian firms in China include consulting, sourcing, distribution and sales, trading, industrial production, financial services, representation, market research, natural resources extraction and marketing. Consulting services, trading, distribution and sales, and sourcing account for around 70% of total business volume, which is proof that the role of Brazilian business in China has been relatively limited.

3.1 Where Brazilian Firms Are Located in China

Most Brazilian companies are located in the country's coastal regions and nearby provinces, attracted by special economic zones, most of which are located in these areas and are the main centers of foreign investment. They also enjoy advantages in terms of infrastructure and qualified labor due to their proximity to main urban centers and business hubs.

4 The Evolution of Chinese Investments Abroad

From the beginning of the twenty-first century, China officially began promoting the global expansion of Chinese enterprises. In 2001, when China became a member of the WTO, the then Prime Minister Zhu Rongji declared that the Chinese government should implement a "going out" strategy, encouraging enterprises that had comparative advantages to invest abroad, focusing on exploring natural resources with local partners, participating in engineering projects and increasing the presence of Chinese labor internationally. The Chinese leadership was also seeking to create favorable

conditions for the establishment of Chinese firms abroad while recognizing the need to supervise these investments to avoid the loss of state assets.

Starting in 2003, with the government's blessing, Chinese investment abroad began a new process of stable growth. By 2015, the value of non-financial investments increased for 13 consecutive years, with an average growth of 33.6% year-on-year. The motivations for the capital outflow gradually diversified, searching for new consumer markets, which included the expansion of lines of production abroad, the acquisition of competitive brands and the acquiring of new technologies. Likewise, Chinese investments also experienced greater diversification in the way they entered other countries, which included greenfield projects, mergers and acquisitions, and joint ventures.

After years of fast growth, non-financial Chinese investments abroad set a record in 2016 of USD 170.11 billion, 44.1% more than the previous year, for projects with 7,961 enterprises in 164 countries and regions. It was the first time Chinese outbound investment flows surpassed foreign investments in China.

The euphoria that led to the Chinese capital outflow in 2016 generated concern among the country's authorities, who saw what they perceived to be a massive capital flight for risky investments abroad. In November 2016 the Chinese government strengthened its controls over investment abroad and, in August 2017, the National Development and Reform Commission set up regulations for the approval of those investments.

These measures led to a decrease in Chinese investment abroad for the first time in decades. In 2017, Chinese foreign investment fell 29.4% to USD 120.1 billion. Likewise, the number of foreign firms with Chinese participation decreased to 6,236, 22% fewer than in the previous year. Beijing also pressured Chinese companies to sell their assets abroad, diminishing their global presence. What's more, the government also reduced the liquidity in the financial system, which limited the availability of financing sources to invest abroad (Fig. 7).

In this context, mergers and acquisitions by Chinese firms abroad were particularly affected. In 2016, China participated in 724 projects, amounting to USD 107 billion. In the following year, the number of projects fell to 341 with a value of USD 96 billion, a decline of 53% in the number of projects and 10% in terms of value. There was also a decrease of 33% in the number of countries and regions where China had operations, dropping from 73 to 49. In 2018, China's MOFCOM declared that "irrational investments" had been effectively contained.

After 2017, Chinese investments abroad started to stagnate and fall. According to MOFCOM, non-financial investments were kept around USD 120 billion, with a marginal growth of 0.3%. In the following year, they fell 8.2%, to USD 110 billion, and maintained roughly the same value in 2020 with a small decrease of 0.4%. A study presented by UNCTAD in 2020 shows a similar trend.

The new restrictions imposed by the central government were indeed effective in the decline in Chinese investments abroad, but they were not the only factor. The geopolitical environment and the Covid-19 pandemic also played an important role. The "trade war" between the United States and China, initiated by then President Donald Trump in 2018, brought about a more comprehensive dispute between the

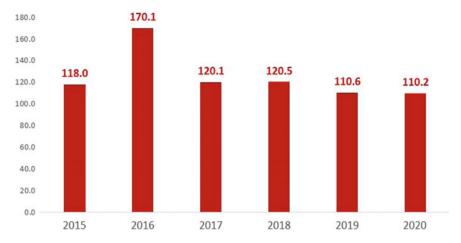


Fig. 7 Chinese non-Financial Investments Abroad (USD billion). Source MOFCOM

two powers, focusing on issues like new technologies and the battle for influence in the international system. In terms of investment, Washington also restricted access of Chinese firms to the US market, a move that has been followed by some of China's important economic partners, such as Australia and European countries.

4.1 The Pandemic and Changes in the Direction of Investment Flows

While we can say Chinese investment abroad has stagnated in recent years, we cannot say the same about foreign investment in China. In the midst of the pandemic and a reduction of 35% in global foreign investment in 2020, foreign investment in China increased 5.7% compared with 2019, totaling USD 149 billion, with notable increases in the pharmaceutical and information technology sectors. In 2020, China approached the United States, which maintained its leadership in attracting foreign investment with USD 156 billion in investment, also saw the value of these transactions decrease 40% in their territory (Fig. 8).

Part of this success can be attributed to the strategy adopted by the Chinese government, which gave priority to domestic growth in order to combat the economic pressure of the pandemic, which included strict sanitary controls and stimuli to attract foreign investment.

With the goal of attracting foreign businesses, MOFCOM and the NDRC have updated two lists—"negative lists"—in which foreign participation is either restricted or prohibited. The new lists, which came into effect in July 2020, have greatly reduced restrictions in sectors such as finance, infrastructure, transportation, agriculture, manufacturing, pharmaceuticals and R&D.

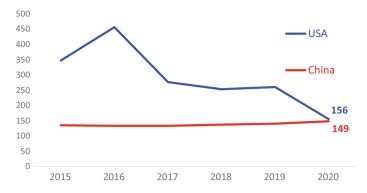


Fig. 8 FDI Inflows in China and the United States (USD billion). Source UNCTAD

The proposals for the 14th Five-Year Plan, published at the end of 2020, have shown the continuity of this trend. The "dual circulation" strategy announced by the Chinese government, in which internal and external markets support each other, includes objectives such as stimulating domestic demand, increasing productivity for export while at the same time improving the conditions for foreign investment in China, especially in innovative and high-tech sectors. This strategy, however, does not mean that China will become more introverted. As far as we can see, China's strategic goal is to make it less vulnerable to international economic shocks like the one provoked by the pandemic and restrictions imposed by the US in the technological sector.

5 Conclusion

A number of factors have created new challenges for China's globalization, which is reflected in the relative decline of Chinese investments in some parts of the world. Some of these factors include the Chinese government's increased control over capital outflows, China's commercial and technological dispute with the United States and the COVID-19 pandemic. Beijing's "dual circulation" strategy may also change the focus of Chinese investment abroad, focusing on quality over quantity and prioritizing the role of strategic sectors in China's development. It is also expected that further opening of the Chinese market to foreign investment in key areas like high-tech is not too far off.

Despite the recent decline of Chinese investment around the world, President Xi Jinping confirmed at the 2015 China–CELAC meeting that China would invest about USD 250 billion in Latin America and the Caribbean in the next decade, which indicates that the region will continue to attract Chinese interest. Brazil, having received about half of Chinese investment in Latin America and the Caribbean to

date, is an obvious center of gravity for investment in the region, and the country will continue to influence Beijing's foreign policy in Latin America.

This analysis of Chinese investment in Brazil demonstrates a long-term interest. Most of China's investments, particularly in infrastructure, take a long time to mature, which indicates that China plans on remaining in Brazil for several years and will establish a solid presence in the Brazilian economy. One consequence that is already being felt in Brazil is a palpable increase in the overall productivity of the Brazilian economy, which is vital for the expansion of the Brazilian exports, not only to China, but to the rest of the world. This expansion is a fundamental prerequisite for the Brazilian economy to resume growth. China's economy will also probably continue to grow far beyond the world average, which means that China could be a fundamental part of continued economic growth in Brazil.

In this sense, there is room for Brazil—and also Latin America—to attract Chinese investment in industries beyond traditional investment sectors such as energy, mining and agriculture, which are already well-explored and currently maturing. New investments in areas where China has relative capabilities, such as logistics and construction, could improve the region's relatively uncompetitive infrastructure. Furthermore, Chinese investment in the industrial sector could also stimulate economic activity, but possibly even more important are the opportunities for cooperation in technology, given China's rapid development in that sector.



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Analysis and Advice

Key Opportunities for China to Lead Globalization 3.0



James Chang

Abstract Globalization 3.0 has gradually arrived over the last couple of years, mainly focused on information, data, technology, and finance, characterized by a high-level of technological exchange based on data and information. With China forecasted to generate more data than any other nation in the world by 2025 and its strides in becoming a digital nation, China and its enterprises will likely play a proactive role in promoting this new era of globalization. China will also influence supply chains and sustainable development to combat climate change. Finally, China's efforts to create a balanced data asset ecosystem ultimately make it poised to play a part in shaping this exciting new era.

Keywords Globalization $3.0 \cdot$ Digital nation \cdot Supply Chains \cdot Sustainable development \cdot Climate change \cdot Data asset ecosystem

1 Introduction to Globalization 3.0

Many believe that due to US-China trade tensions and tech war, coupled with COVID-19 and its disruption to global trade and other economic activities, de-globalization is an inevitable trend. This depends on how globalization is defined. Our view is that there is sufficient reason to believe a new era of globalization has come. And China, along with Chinese enterprises, has a unique opportunity to be in the driver's seat to lead the world in bringing forth this new wave of globalization.

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The rate of change in the world has and will only continue to accelerate. Beginning only 30–40 years ago, with walls falling down, the warming of cold wars and declarations of a "new world order", we believe that Globalization 1.0 as we define it in the modern era, began around the turn of the new millennium and lasted about a decade. This era was mainly based on the trade of products and the exchange of goods. This chapter of globalization was expedited with China joining the World Trade Organization in 2001, and gradually establishing itself as the world's factory. Importing and exporting were based on the comparative advantage of each country, and countries involved all benefited from this exchange of products.

The era of Globalization 2.0 was mainly concerning the movement of people. We noticed three main reasons for people to go overseas. Some went to pursue an education, some traveled to access high-quality medical resources, and others went for tourism and cultural experiences. People exchanged their consumer power for educational, medical and cultural resources. This era of globalization also lasted for about 10 years until about 2020.

We believe Globalization 3.0 has gradually come into its own over the last couple of years. This wave of globalization is mainly focused on information, data, technology and finance, characterized by a high level of technological exchange based on data and information.

With the explosion of data in this digital age, we see the future in the hands of whoever controls data algorithms and the global exchange of information. Chinese technology companies such as Huawei. Despite being subject to sanctions by the US, companies like Huawei have made impressive progress internationally over the years, establishing themselves as world leaders in 5G technology, fiber-optic networks, equipment for cellular networks, and smartphones. Xiaomi products are present in more than 90 countries and regions around the world, as stated on its website, and have a leading position in many smartphone markets including India. Chinese tech companies have noticed and caught on to this trend and have been gaining traction in recent years.

Against the background of China's Dual Circulation Strategy announced in 2020, China is looking to actively promote domestic and foreign demand, import and export demand, coordinate between attracting foreign capital and making foreign investments, and attempt to balance international payments. Additionally, with China forecasted to generate more data than any other nation in the world by 2025, along with the strides it has been making to become a digital nation, this creates significant opportunities for China and its enterprises to play a proactive role in promoting this new era of globalization. We see three key themes developing in Globalization 3.0, namely the reshaping of global supply chains, promoting sustainable development and combating climate change, and building a balanced data asset ecosystem. This article will attempt to elaborate on these key themes and provide insights into the opportunities within.

2 Reshaping of Global Supply Chain

China is no longer just the world's provider of low-cost products, which is what it was known for during Globalization 1.0 after it joined the WTO in 2001. Diminishing of competitive advantage, including lower labor costs, a devalued RMB and lower export tax rates, means that China gradually lost its edge against other low-cost nations of the world. Since 2015, China has made ambitious plans to implement industrial upgrades by enhancing the quality of its products and equipment with a greater emphasis on technological innovation and R&D. In fact, China's goal is to spend 2.5% of its GDP in this sector by 2020, as spelled out in its 13th Five-Year Plan. In 2019, the National Bureau of Statistics reported that total spending in public and private science and technology rose 12.5% over the previous year to RMB 2.21 trillion (USD 322 billion), amounting to 2.23% of GDP. In the recently announced 14th Five-Year Plan, Chinese policymakers emphasized increasing R&D spending with the government leading the way as well as providing tax incentives for businesses that invest in basic R&D. For many years now, companies that spend over a certain amount in R&D have been classified as "high-tech", which could give them a 10–15% reduction in corporate income tax.

All these efforts have been part of China's attempt to move upstream over the years by manufacturing mid- to high-end products with relative technical advantages in the industrial chain. This has been accomplished through product upgrades, including in supply chains, in order to participate more deeply in higher margin and higher value-added sectors including technology hardware, hi-tech machinery, healthcare equipment and products, as well as automotive and auto parts. As a result, some relatively low value-added, labor-intensive industries such as the textile industry and furniture manufacturing industry have moved to countries with lower labor costs and more flexible, if not absent, environmental protection regulations. Any manufacturing sector that has lower barriers to entry, simpler operational requirements and is easier to replicate is ripe for similar transfers. Furthermore, local Chinese companies are taking over market shares from multinational companies in industries like home appliances, smart phones and construction machinery. This includes cases of divestment of business units to Chinese companies, contract manufacturing being dominated by Chinese companies and MNCs offshoring their ecosystems to other countries.

China has been helping facilitate this transition by actively involving ASEAN nations and other nations in supply chains, which was expedited by the signing of the Regional Comprehensive Economic Partnership (RCEP) agreement in November 2020. This will be the world's largest free trade agreement in terms of combined GDP (USD 26 trillion), population (2.27 billion) and total export value (USD 5.2 trillion). China's foreign direct investment (FDI) into ASEAN nations has been growing annually at 15% in recent years and ASEAN has surpassed the EU to become

¹PwC CN, November 2020. *RCEP successfully signed*. https://www.pwccn.com/en/tax/publications/rcep-news-alert-nov2020.pdf.

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China's largest investment region, receiving 42% of its FDI in 2018.² Furthermore, the Belt and Road Initiative launched in 2013 has been facilitating regional and global cooperation and is reshaping the global value chain. China has now become the biggest trading partner and the biggest destination for exports and FDI for 25 Belt and Road countries. China will be able to continually increase its ability to leverage its own industrial capacity, capabilities, ecosystem of quality resources and management know-how to create synergies with cutting-edge technologies from Europe and beyond. The pandemic acted as an accelerator for domestic and foreign manufacturers to rebalance their supply chains and manufacturing through a "China Plus One" strategy, which may be beneficial for China as more capacity has become available for higher value-added products in the value chain.

This industrial upgrade was not only a decision made so that China would depend less on exports, as was the case since Globalization 1.0, but also a decision that would increase average per capita income in China and reinforce consumption upgrades. China's measures to promote supply-side reform and urbanization in recent years have been strategic moves to continuously release the potential of its domestic demand. We believe China's domestic consumption market will soon overtake the United States to be the largest in the world, with huge upside potential. China's enormous domestic market and the increasing middle class has been attracting MNCs to adopt an "In China, For China" strategy, in which manufacturers are directing their focus towards primarily selling to the China market instead of exporting. This strategy is used predominantly for industries that are less prone to be affected by US-China decoupling, including consumer products, retail, consumer health, hospitality, entertainment and education. In fact, according to an AmCham Shanghai survey from November 2020, 82% of US companies operating in China surveyed showed no intention of relocating their manufacturing facilities out of China over the next three years. China's robust supply chain and huge domestic market make it a resilient hub to build a supply chain strategy around and is a difficult one to walk away from.

In recent years, China has digitalized significantly across industries. COVID-19 has accelerated the drive by manufacturers in China to digitalize and increase automation to build resilience and truly connected local supply chains that can withstand external shocks. This required more agile and efficient supply chain solutions and tools covering sales enablement, planning and forecasting, smart manufacturing and digitized warehousing and logistics networks. For example, there is increased investment in areas such as data-driven sales forecasting or AI-based algorithms that can now be applied to demand planning. With no immediate end to the global pandemic in sight, automation will be vital both in increasing supply chain and production efficiency, as well as helping to mitigate safety measures in factories—such as social distancing—through the use of robotics. Furthermore, to promote greater transparency across supply chains in China, more companies are looking to place the right data and analytical tools that provide visibility across the chain

²PwC CN, September 2020. *ASEAN Countries with Overseas Investment Opportunities*. https://www.pwccn.com/zh/research-and-insights/asean-countries-with-overseas-investment-opportunities-gba-sep2020.pdf.

for alerts, detecting issues, providing insights on availability, utilization as well as enabling integrated materials planning. Enterprises that were more advanced digitally and had greater operational flexibility, have constantly outperformed in China since the pandemic, especially those with strong business continuity plans. In addition to the digitization of the core supply chain, back-office shared services such as finance, HR, technology, procurement, and marketing are all experiencing a drive towards more automation, digitization and virtual technology.

In a sense, we see this trend of digitalization as an accretive opportunity for China to lead the world in an era of Globalization 3.0 as it reshapes the global supply chain. With the huge amount of data generated in China and by Chinese companies overseas every day, under an agreed-upon framework for data protection and cybersecurity, the fuel for globalization is available for nations involved to mutually benefit from this deeper level of exchange.

3 Sustainable Development and Climate Change

Sustainable development was first incorporated into the long-term strategy of China's economic and social development in 1992, following the Rio Declaration on Environment and Development with sustainable development as its core concept, raised by the United Nations the same year. Fast forward to 2015, the United Nations introduced 17 Sustainable Development Goals (SDGs) in "Transforming our world: the 2030 Agenda for Sustainable Development", including goals such as sustainable economic growth, combat climate change, quality education, ending poverty and so on. Sustainable development has become a key trend in globalization as it addresses a global issue that impacts every nation and every being.

China has been a pioneer in integrating sustainable development within its national development plans and government policies, helping accelerate the progress towards achieving the SDGs. Currently, China ranks 85th globally in terms of the human development index (HDI) and is the only country to have moved from low to high in the human development category.³ Over the last 40 years, China has lifted over 750 million people out of poverty and officially announced its victory over extreme poverty at the end of 2020.⁴

China has also made significant strides in improving education and health, with the average years of schooling increasing from 8.8 to 13.9 since 1990 and life expectancy increasing from 69 to 76 years over the same period. Furthermore, since 2016, SDG pilot zone cities have been designated by the government for sustainable innovation. The country has also grown into its role as a global development partner by helping

³PwC CN, July 2020. *Private Sector Awareness of the Sustainable Development Goals.* https://www.pwccn.com/en/services/consulting/publications/private-sector-awareness-of-the-sustainable-development-goals-jul2020.html.

⁴Same as above.

⁵Same as above.

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other countries in their pursuit of the SDGs through international cooperation and development assistance. In China's 14th Five-Year Plan, the absence of specific GDP targets has signaled that the nation is moving towards a focus on higher quality and more sustained economic growth.

In December 2015, the Paris Agreement was signed by about 200 nations with commitments to substantially reduce global greenhouse gas emissions and to limit the global temperature increase in this century to 2°C or even down to 1.5°C. In September 2020, the President of China, Xi Jinping, announced at the UN General Assembly the nation's commitment to reach peak carbon levels by 2030 and achieve carbon neutrality by 2060, upgrading China's independent contribution to the Paris Agreement. This is the greatest climate commitment by any country so far to reduce expected global warming, and the nation's leadership is confident that it will reach this goal. "Doing a good job in peaking carbon dioxide emissions and carbon neutrality" is part of the eight key tasks for the nation in 2021 as decided at the Central Economic Work Conference in December 2020. A month later, the People's Bank of China listed the execution of carbon peaking and carbon neutrality as one of its ten key tasks in 2021, emphasizing the enhancement of "the financial system's ability to manage climate change related risks".

According to research by Tsinghua University, China must adopt a 1.5°C emission reduction path to achieve its target of carbon neutrality by 2050, and steep emission reductions must start now. Practically speaking, China must speed up the adjustment and optimization of its industrial and energy structures, work to peak coal consumption as soon as possible, vigorously develop new energy and accelerate the establishment of national trading market for energy usage rights and carbon emissions rights. Additionally, continuous efforts in combating large-scale pollution, reducing carbon and other pollutants and expanding green land are required to enhance the ecosystem's ability to absorb carbon.

Beyond the environmental benefits, adopting green practices makes business sense. Making energy systems greener could boost global GDP by USD 98 trillion by 2050, delivering 2.4% more GDP growth than current plans. By boosting investments, the number of renewable energy jobs could quadruple to 42 million globally in the next 30 years, with healthcare savings eight times the cost of the investment and helping to prevent future crises. Six million jobs can be created by embracing the circular economy, where used goods are re-used, recycled and upcycled at a greater value. And 1.2 billion jobs—40% of all jobs on earth—depend on a healthy and stable environment.

It is estimated that by 2030, SDG-generated economic growth could reach USD 12 trillion, or 10% of the current global GDP, of which China could account for

 $^{^6}$ https://www.irena.org/newsroom/pressreleases/2020/Apr/Renewable-energy-can-support-resilient-and-equitable-recovery.

⁷https://www.ilo.org/weso-greening/documents/WESO_Greening_EN_web2.pdf.

USD 2.3 trillion.⁸ At the enterprise level, based on PwC's recent survey report on Business and Sustainability in China, Chinese enterprises have taken an active part in putting SDGs into practice with 71% stating they have pursued practical actions to do so.⁹ Many companies believe that implementing SDGs can increase their brand value and improve their competitive advantages. Corporate willingness to closely combine SDGs with strategy and business has increased noticeably in China, along with demand for pro-SDG programs.

Against the backdrop of Globalization 3.0, we believe that Chinese businesses should focus on building various partnerships to apply the SDGs. Partnerships include both stable business partners at home and abroad as well as cooperation between upstream and downstream industries. Globally, international cooperation in science, technology and innovation can raise the industrial threshold, thus pushing all sectors forward towards achieving SDGs. Leading market players can also bring enterprises together and advocate partnerships for the whole industry.

While awareness of the SDGs and related activities have improved, some challenges still remain in China's journey towards sustainable development. Our survey shows that nearly 42% of companies have no idea how to evaluate the SDGs. Chinese enterprises should reflect on how to evaluate the effectiveness of prioritized SDGs and how to leverage the influence of existing projects. Additionally, PwC's global surveys show that 72% of companies have mentioned the SDGs in their annual reports and sustainability reports. 50% of companies surveyed believe that the SDGs are critical to their business and should be prioritized. On the China side, the numbers have been rising with 55% of companies surveyed publicly disclosing their sustainable development practices, mainly driven by external regulatory requirements. As China's practice of sustainable development gains momentum, state-owned enterprises that are heavily influenced by government policies show a higher disclosure rate at 67%, while privately owned enterprises lag behind with only 45% disclosure. ¹⁰

As China marches towards its 2060 carbon neutral commitment, more and more companies across industries will disclose SDG practices and align their company's strategy with sustainable development. As the world's largest economy according to the IMF, based on purchasing power parity, and the world's largest developing nation, China's leadership role in Sustainable Development and Climate Change will no doubt impact the world and become a central theme in Globalization 3.0.

⁸PwC CN, July 2020. *Private Sector Awareness of the Sustainable Development Goals*. https://www.pwccn.com/en/services/consulting/publications/private-sector-awareness-of-the-sustainable-development-goals-jul2020.html.

⁹Same as above.

¹⁰Same as above.

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4 Data Asset Ecosystem

Over the past decade, the development of the mobile internet has led to an exponential accumulation of data, which is an essential resource in the digital era. As the value of data is evolving into a deeper level, data is becoming more like water and air which is indispensable in our daily life, as opposed to the general consensus that data is the "oil" of the digital era. Without the support of data, our daily life and productivity at work would not be able to function well in this modern world. Therefore, it is of global interest to unlock the value of data by creating a balanced data asset ecosystem.

Data as an asset is an emerging concept. Similar to commodities, data can be sold, transferred and applied. From an economic and legal perspective, all assets must have three core characteristics. First of all, an asset should have clear ownership. However, with the unique nature of data, there may be multiple owners of a data asset, which leads to ambiguity. Secondly, an asset should be able to generate expected economic benefits. There needs to be a reasonable pricing mechanism for data assets to generate economic benefits. However, the pricing of data assets depends on specific scenarios in which it is used, which leads to variations in pricing. Thirdly, an asset should be a scarce resource. Due to the fact that data assets are artificially created resources, they may have an inexhaustible supply.

China has the opportunity to lead the world in building a balanced data asset ecosystem by addressing the issues mentioned. In June 2019, the Data Asset Evaluation Index System for E-Commerce was officially released under the leadership of the China National Institute of Standardization. As the first official document related to data assets released by the state, the index system fills the standard gap in data assets in China and reflects the nation's great determination to promote data as an asset.

For data to be defined as an asset, data rights confirmation is key. A framework for data rights confirmation needs to be established at the national level or above and must be enforceable. We must learn from experiences and lessons in Europe, which found it difficult in practice to separate personal data and non-personal data in data sets under the GDPR framework, and the United States, which placed personal data under a traditional privacy framework supplemented by industry-specific laws to form a relatively flexible data rights confirmation system. In China, we recommend focusing on following the four "musts" in terms of data rights confirmation. 1) Full consideration of the different phases of digitization and particular national conditions. 2) Adherence to red-line concepts of personal privacy and sensitive data. 3) Make data flows and share the main purpose. 4) Empower data rights confirmation through digital technology such as Blockchain and Secure Multi-Party Computation (MPC). This data rights confirmation issue requires the government to provide regulatory guidance and enforcement. The Index System is a great first step in promoting the confirmation of data rights.

Similarly, government guidance is needed to form a pricing recommendation mechanism for data assets to have expected future benefits, which is the core link to releasing the value of data assets. The valuation of data assets includes four dimensions for consideration, including application, cost, quality and risk. The value of data lies in its integration with different application scenarios, which leads to different pricing. Costs affect the value of data as well as data application scenarios. The quality of data, including its accuracy, authenticity and completeness affects data application and valuation. The value of data is affected by compliance risk, geopolitical risk and cybersecurity risk. Currently, there are three publicly recognized pricing models for assets, including the cost method, income method and market method. They each have their own pros and cons, and relevant entities can choose one model based on their actual situation and demands. Additionally, the industry is also exploring new pricing methods, including the studying of the valuation model for intellectual property rights.

To address the issue of an inexhaustible supply of data assets, new business models are needed for personal data collection, management and usage, standardize valueadded services and transactions of personal data, and protect the privacy and security of user data. With the gradual clarification on data rights confirmation and data pricing methods in China, the economic value of data will be released through a series of business models including data platform transactions, data banks, data trusts and data intermediaries that connects government, businesses and consumers. Our view is that the data platform transaction model will continue to gain momentum and become a key business model for data flows. Government-led data exchange models have already emerged in cities with an active data ecosystem such as the Global Big Data Exchange in Guiyang and the Shanghai Data Exchange Center. This platform provides a transaction platform that bridges data supply and demand and is supported by professional third-party technologies and government supervision, to eventually promote transactions and flows of data. This model resolves the main issues of mutual trust of data, data protection, and data supply and demand, and is conducive to a large number of industries developing data labeling and products through platform accumulation.

Additionally, in the process of building a balanced data asset ecosystem, the Chinese government is tackling issues including data usage tolerance and data transparency, data discrimination, and data inclusion by issuing laws and regulations, and piloting initiatives to utilize the value of public data resources. This includes connecting 18 Shanghai based commercial banks with the government's open data platform to help reduce costs in the credit business and improve business efficiency.¹¹

Globalization 3.0 is fundamentally an exchange across national borders in data, information, technology and finance. A balanced data asset ecosystem can release the value of data and allow data to be the driving force behind Globalization 3.0. We believe that China has begun laying the groundwork for an improved ownership

¹¹PwC CN, November 2020. Data asset ecosystem white paper.

https://www.pwccn.com/en/services/consulting/publications/white-paper-on-data-asset-ecology-nov2020.html.

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rights system of data through policies and regulations, exploring business models of data assets through enterprise innovation, implementing data inclusion through social forces and establishing a management and application system for data assets based on technical specifications. This puts China in a leading position in establishing a balanced data asset ecosystem, which will become a key driver for this new chapter of globalization.

5 Conclusion

In recent decades, with the advancement of technology and the explosion of data, we've seen the world transition from Globalization 1.0 to 2.0, and now into Globalization 3.0. The exchange between nations globally has evolved from physical goods to more intangible products such as education, healthcare and culture, to now an exchange focused on data, information, technology and finance. We believe that China and Chinese enterprises, including more than just China's tech giants, have been given the opportunity to play a leading role in this era of globalization. These opportunities lie in the three key themes discussed.

Firstly, leveraging its leading position in the global supply chain, along with the RCEP and the Belt Road Initiative, China is poised to help reshape and digitize global supply chains, creating cost efficiencies and stronger interconnectivity between nations around the world. Secondly, with sustainable development and climate change already a global mandate, China's commitment to reach carbon neutrality by 2060 will have the greatest impact in reducing carbon emissions among all nations. Chinese companies are positioned to guide upstream and downstream companies in their supply chains as well as partner with companies on this journey to ensure the goal of limiting global temperature increases to 1.5 °C by 2100. China has already extended support to other nations to reach the UN's 17 SDGs and will continue to actively play a role in globalizing sustainable development. Thirdly, China is on its way to building a balanced data asset ecosystem that fully releases the value of data. And data is the essential resource that fuels Globalization 3.0.

As more and more Chinese enterprises recognize these themes, trends and opportunities, we believe that more of the benefits from globalization can be captured and shared worldwide. It's time for all enterprises with strategic thinking to embrace Globalization 3.0 and play a part in shaping this exciting new era.



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Five Reasons for Confidence in China's Economic Future



Samantha Zhu

Abstract Globalization and digital disruption have reshaped the world trade order and industrial landscape—a process that has put China at the center. The five reasons China will remain a *leader in the global economy* in the near future include its "dual circulation" strategy, domestic demand-driven growth, digital technologies, carbon neutrality, as well as entrepreneurship and innovation. While there are uncertainties in the world, China is well placed to continue to be a major leader in the world economy.

Keywords Leader in the global economy \cdot "dual circulation" strategy \cdot Domestic demand-driven growth \cdot Digital technologies \cdot Carbon neutrality \cdot Entrepreneurship

The first two decades of the twenty-first century have ushered in extraordinary, complicated changes that have left many astounded. Globalization and digital disruption have reshaped the world trade order and industrial landscape—a process that has put China at the center. However, future historians might say the twenty-first century actually started in the year 2021.

As a major global event, the coronavirus pandemic has profoundly changed the course of the global economy. The post-pandemic era is expected to hold great potential for China's development. The country is in the process of shifting its economic development model from one that emphasizes high volume growth, scale and across-the-board development to one that prioritizes quality growth, efficiency and structural optimization. Such changes are boosting the likelihood that China will emerge as the world's largest economy in the coming decade. Business leaders believe China will make significant near-term strides. According to the Accenture CXO Pulse Survey, 70% of Chinese executives are optimistic that there will be a V-shaped rebound in China's economy in the coming year, compared with 37% and 27% of North American and European executives, respectively. Additionally, over 40% of senior

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executives in the West view their region as less competitive than China was prior to the COVID-19 outbreak.¹

Of course, there are many unknowns ahead. And there are sure to be daunting challenges and difficulties. There always are. Yet, we are confident in China's future for the following five reasons.

1 The "Dual Circulation" Strategy: Opening More to the Outside World

History has taught us that an open society keeps developing while a closed one regresses. Under its "dual circulation" strategy—which is focused on both global and domestic markets and driven by the new round of technological innovation—China has the potential to evolve from a producer of quantity to a producer of quality.

China's development has reached a critical point where opening itself to the outside world and going global are equally important. According to the latest Investment Trends Monitor by UNCTAD, foreign direct investment (FDI) in China rose by 4% in 2020 to USD163 billion, making the country the world's largest FDI recipient.²

New agreements are helping to ensure that China will retain its global stature. The Regional Comprehensive Economic Partnership (RCEP), which was signed in 2020, is the largest and most important free trade agreement in the Asia–Pacific region, covering nearly half of the world's population and approximately a third of the world's trade volume. Its Asia–Pacific members will all benefit from being part of such a huge international trading bloc. For example, the RCEP will help significantly reduce transaction costs and improve efficiency. It will also serve as a new driver for job creation among member countries.

Additionally, negotiations for the EU-China Comprehensive Agreement on Investment (CAI) have been completed as scheduled. The CAI will bring greater market access for bilateral investments between China and the EU, as well as an enhanced business environment and stronger institutional support for these investments. As a result, prospects for cooperation between China and the EU are promising. Such agreements, which further open up China to the world, are key to the country's long-term prosperity and development.

Improving international trade relations is, however, just one element of China's growth strategy. Accenture research suggests that innovation will be even more critical. New technologies, for example, will unleash human potential, accelerate the implementation of innovation projects, and further facilitate international trade and cooperation. A forecast model developed by Accenture shows that by 2030, technological innovations have the potential to unlock USD 1.9 trillion worth of value above and beyond the anticipated USD 26.2 trillion of GDP expected in that year. In

 $^{^{1}}$ 1 Accenture CEO Survey, All respondents (N = 4050), North America (N = 1450), Europe (N = 1301), China (N = 320).

²https://unctad.org/system/files/official-document/diaeiainf2021d1_en.pdf.

other words, by 2030, technical innovations will be directly responsible for or 7.5% of China's GDP.³

2 Domestic Demand-Driven Growth: Focusing Reforms on Both Supply and Demand Sides Create a Healthy and Dynamic Balance

As China's economy keeps growing and technologies continue to evolve, some existing industries will gradually decline and new ones will emerge. It is imperative that structural reforms of the supply side be enacted. Now that China has industrialized its primary and intermediary sectors, the focus will turn to high-tech industries, including 5G, clean energy automobiles, intelligent manufacturing new materials, and other areas. These industries are poised to lead the revitalization of China's industrial value chain and supply chain.

While carrying out its industrial upgrades, China will also need to stimulate consumption, hence, its focus on domestic demand. Morgan Stanley predicts the country's private consumption is likely to reach USD 12.7 trillion by 2030. This means Chinese private consumption will likely grow by about 7.9% a year in the next decade, representing one of the highest growth rates in the world.⁴ Chinese consumers aren't just consuming more, they are starting to consume differently. Moving forward, China's domestic consumption will be driven more by quality than by quantity. That is, whereas people used to be more concerned about whether a product they desired was available in the market, they are now more concerned about whether a product they want meets their quality expectations. They are raising their expectations—a shift that will bring with it untold opportunities for innovation and also for the economy as a whole. Three consumer-related and demographic trends are poised to accelerate consumer demand in China.

First, income growth can lead to consumption growth. According to a 2019 report from the China Society of Macroeconomics (CSM), the annual per capita income in 2018 for 350 million people in China was about USD 25,000; annual income for the remaining 1,050 million Chinese people averaged about USD 4,000.⁵ The number of higher-income earners in China is almost as large as the United States' entire population. If China can maintain the current proportion of the high-income group and gradually increase the income of the low-income group, the country's consumption will have huge potential.

Second, urbanization is expanding domestic demand. China's urbanization rate will be 65% by 2025,6 compared to average rates in developed countries of over 80%. This suggests there are still a lot of opportunities for China to tap into a growing

³Accenture, Innovative China 2030: Break the limits.

⁴http://www.china.org.cn/business/2021-01/29/content_77166788.htm.

⁵http://www.macrochina.com.cn/zhtg/20190218115739.shtml.

⁶http://www.china.com.cn/lianghui/news/2021-03/05/content_77274844.shtml.

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urban consumer base. Thanks to digital technologies and advances in logistics, the enormous potential of the country's Tier-3 and Tier-4 markets is gradually being released, and a rapid growth rate is expected to be maintained.

Third, the Chinese consumer market exhibits marked generational characteristics that impact demand. Unlike their predecessors, Millennials and Generation Z consumers are more willing to buy new things. They also have a clearer understanding of what they need and want. As these two segments of the population are emerging as a strong force in the consumer market, their idiosyncratic preferences constitute a driving force for the development of new brands. New technologies will also play a role in building demand. While facilitating the development of innovative business models and changing the industrial landscape, digital technologies are also transforming consumer experiences.

3 Digital Technologies: Boosting Productivity and Innovation Across the Board

China maintains a competitive edge in the development of a digital economy. The digital technologies that enable consumers' online and mobile interactions have become one of the key drivers of the Chinese economy. According to "Digital Economy Development in China," a white paper prepared by the China Academy of Information and Communications Technology (CAICT), the digital economy accounts for over a third of China's GDP. In the next 30 years, digital technologies are expected to contribute significantly to corporate productivity, permeating industries that account for up to two-thirds or three-fourths of the national economy. Chinese companies recognize that virtually every industry has the potential to unlock significant value through intelligent manufacturing, digital twins, the industrial Internet, Artificial Intelligence (AI) or other digital technologies.

Digital transformation is steadily gaining steam. Since 2018, Accenture has published an annual digital transformation index⁸ that Chinese enterprises can use to understand and track the evolution of that transformation. This research shows that the proportion of leading enterprises seeing notable performance improvements because of digital transformation has increased from 7% in 2018 to 11% currently. These organizations differ from other leaders not only in their digital capabilities but also in the ways they approach digital transformation. They emphasize using digital technologies to break through internal barriers and enabling connections across a whole range of business processes. At the same time, they create additional value by using digital technologies to strengthen end-to-end value chain integration, including with external ecosystem partners.

The State-Owned Assets Supervision and Administration Commission of the State Council (SASAC) is promoting digital transformation in state-owned enterprises, as

⁷http://www.caict.ac.cn/kxyj/qwfb/bps/202007/P020200703318256637020.pdf.

 $^{^{8}} https://www.accenture.com/cn-zh/insights/consulting/china-digital-maturity-index.$

well. SASAC helps them accurately recognize and effectively respond to changes in the digital economy and also encourages them to carry out successful digital transformations in their own organizations.⁹

We are optimistic that digital transformations will continue to accelerate across Chinese enterprises, pushing productivity and innovation to new heights. Technological innovation is already quickly becoming a core competitive advantage and a critical enabler of future industrial performance improvements.

4 Carbon Neutrality and the Circular Economy: Becoming a More Responsible Environmental Steward

In 2020, five years after signing the Paris Agreement, Chinese leaders pledged that China would experience peak CO₂ emissions before 2030 and reach carbon neutrality before 2060. To achieve these ambitious goals, the country is looking to scale up its share of non-fossil fuel sources in the energy mix to 25% by 2030 and also create an installed capacity of wind and solar power totaling 1.2 billion kilowatts. In its 14th Five-Year Program, published in March 2021, China has vowed to decrease its energy consumption per unit of GDP by 13.5% and carbon emissions by 18%. 12

A recent Accenture white paper, ¹³ drafted in conjunction with World Economic Forum, points out that China has reached a critical juncture in its energy transformation. Specifically, China is using digital technologies—including automation, platforms, security, mobility, robotics, data analytics and more—to carry forth is structural upgrades and drive innovations that are enabling the transition of renewable resources to complex, comprehensive energy systems.

China is accelerating the development of an industrial system for a green economy and advocating low-carbon, green ways of living and consuming. At the same time, the country is focusing on digital transformation as an engine for technological innovation and the upgrading of modern manufacturing and service industries. Its emphasis on the production of quality goods means pivoting to production models that are green and sustainable. These are wise moves.

⁹http://news.idcquan.com/news/184483.shtml.

¹⁰http://news.youth.cn/sz/202009/t20200923_12505595.htm.

¹¹http://www.qstheory.cn/yaowen/2020-12/13/c_1126854050.htm.

¹²https://www.bjnews.com.cn/detail/161491575015289.html.

¹³https://www.accenture.com/cn-zh/insights/consulting/wef-system-value-china-market-analysis-2020.

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5 Entrepreneurship and Innovation: Driving High-Quality Development

Innovation has consistently been a central priority for Chinese enterprises, which are continuously enhancing their technological innovation capabilities, and also unlocking the innovation potential of their people. These actions will help ensure sustained momentum for long-term economic growth.

Among the global top 10 companies in terms of market capitalization, seven are technology companies, including China's Alibaba and Tencent. As technological innovation becomes an increasingly important enabler of economic growth, the number of entrepreneurial enterprises is rising. China is home to 22% of the world's unicorns. According to a recent Accenture study, more than half of the unicorn firms represent AI, information technology and other innovation-driven sectors, and 10% of them have each generated revenue of RMB 10 billion or more. Most (80%) of China's unicorn companies consider technology and innovation as the core capabilities of success and will continue to strengthen their competitiveness in this regard. If

Additionally, China ranks 14th in the 2020 Global Innovation Index (GII) Report published by the World Intellectual Property Organization. The country is home to 17 world-class high-tech clusters. Of these, the Shenzhen-Hong Kong-Guangzhou cluster ranks second among those of its kind, surpassed only by the Tokyo-Yokohama cluster. The Beijing cluster ranks fourth. ¹⁷

Clearly, China is taking its commitment to innovation very seriously. And for good reason: Innovation is a critical priority for structural economic growth in the new era. Technological self-reliance features prominently in China's modernization program and will provide the strategic foundation for the country's long-term socioeconomic development. In the 14th Five-Year Program, China estimates its annual R&D investments will grow by 7% annually. 18

China has made tremendous progress in embracing technological innovation, yet there is much left to do. Without a doubt, digital technologies will play an increasingly important role in facilitating international trade and cooperation, stimulating consumption, improving productivity, achieving sustainable growth and unlocking innovation. With a presence in Greater China dating back more than 30 years, Accenture has become a partner of choice for many Chinese enterprises looking to pursue digital transformation. We provide our clients with a suite of services that encompass strategy and consulting, interactive, technology and intelligent operations. We suggest that enterprise leaders seize all possible opportunities for growth in the period of the coronavirus and thereafter.

¹⁴https://www.statista.com/statistics/263264/top-companies-in-the-world-by-market-capitalization/

¹⁵Accenture: China Unicorns Survey.

¹⁶Accenture: China Unicorns Survey.

¹⁷https://www.wipo.int/edocs/pubdocs/en/wipo_pub_gii_2020/cn.pdf.

¹⁸http://www.china.com.cn/lianghui/news/2021-03/05/content_77274615.shtml.

The future, of course, is fraught with uncertainties. Other black swan events are likely to occur. At present, however, China has the opportunity to forge ahead and join the ranks of high-income countries. Opportunities can, in fact, emerge from crises, and a more certain future can materialize after a period of uncertainty. We believe there are many reasons to be confident in China's future.



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Transition and Opportunity: Investing in and Benefiting from China's New Development Paradigm



Vaughn Barber

Abstract China is frequently ranked as one of the most important markets for multinational companies (*MNCs*), having passed the US as the top destination for new foreign investment in 2020. There are five factors that have contributed to this, including *market size*, *innovation*, the *role of foreign investment*, *supportive policies* and access to markets beyond China. Other opportunities created by China include the *Belt and Road Initiative*, *digital transformation* and its *low-carbon economy*. We are at an inflexion point in China's transition and integration in the world economy with both new opportunities and challenges.

Keywords MNCs · Market size · Innovation · Role of foreign investment · Supportive policies · Belt and road initiative · Digital transformation · Low-carbon economy

In surveys by foreign chambers of commerce in China, China is frequently ranked as one of the most important markets for multinational companies (MNCs). This is also consistent with China being one of the world's major FDI recipients having passed the US as the top destination for new foreign investment in 2020. The following five factors mean that China will continue to offer significant opportunities for foreign companies as it works to achieve the objectives laid out in The Outline of the 14th Five-Year Plan (2021–2025) for National Economic and Social Development and the Long-Range Objectives Through the Year 2035 (the Plan), which was approved at the annual session of China's top legislature in March 2021.

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1 Market Size

Global trade with China has grown significantly over the past two decades, particularly in emerging markets. China has also become a top recipient of foreign direct investment globally. These developments have been driven by the growth of China's economy. Looking forward, steady growth and expectations that China's economy will double in size by 2035; mean trade and investment will continue to grow.

China already has 400 million middle-class consumers, with this number forecast to double by 2030, and China is on track to become the world's largest consumer market. As per capita, disposable incomes increase, household spending is shifting from focusing solely on satisfying basic needs to discretionary items. This brings significant opportunities in the sectors that cater to the needs and preferences of China's "new consumer class".

China also has the world's largest elderly population. According to the recently released results of China's seventh national population census, there are 264 million people aged 60 and over and 191 million aged 65 and over, representing 18.7 and 13.5% of the total population, respectively. These figures are forecast to increase to nearly 500 million and 370 million by 2050, representing approximately 38 and 30% of the total population. By any measure, the size of the market opportunity this represents is significant. By 2050, the purchasing power of China's elderly will be more than USD 16 trillion¹ which would make China one of the world's largest elder care markets. Over the next decade, the elder care sector itself is forecast to grow to almost USD 2 trillion.² This portends significant growth in demand for health and elderly care services, medical equipment and products for the elderly and associated infrastructure, driven by the needs of an aging demographic and rising middle-class expectations and supported by government policies.

For many sectors, the size of the market in China means that MNCs cannot be "leaders" without being successful in China. Business sentiment surveys undertaken by foreign chambers of commerce in China reflect the importance of China for MNCs in terms of contribution to global sales and global profit. This trend will continue and increase as growth and innovation continue at pace in China, supported by continued reforms and market opening.

The emergence of the "dual circulation" strategy has prompted questions about the extent to which these market opportunities will continue to be available to foreign companies. "Dual circulation" refers to a new development paradigm with domestic circulation as the mainstay and domestic and international markets reinforcing each other. Against the backdrop of an increasingly challenging external environment due to the disruptions brought by COVID-19 and geopolitical tensions, it is only natural that China is looking to "fully bring out the advantage of China's super-large market

¹ "China Report of the Development on Silver Industry (2014)", Social Sciences Academic Press, September 2014.

²"China 2016 White Paper on the Development of Senior Care Industry", Chinese Academy of Social Sciences.

scale and the potential of domestic demand" and make the domestic market the main driver of its overall growth.

But this does not mean that China is shutting its door. On the occasion of the China International Import Expo in November 2020, President Xi said: "our aim is to turn the China market into a market for the world, a market shared by all, and a market accessible to all...What we envision is not a development loop behind closed doors, but more open domestic and international circulation." This has been emphasized often since the "dual circulation" strategy was first announced and is embedded into the Plan.

2 Innovation

Innovation is at the center of efforts to modernize China's industrial system and boost scientific and technological self-reliance. Innovation is critical for China to improve productivity and achieve its economic growth targets.

The size of the consumer market, industrial base and availability of lower cost R&D talent provide cost and speed advantages for China to become a leader in global innovation.

By way of example, China's potential for technology innovation can be seen in the results of KPMG's annual survey of global technology leaders undertaken in 2020 where four major cities in China—Shanghai, Beijing, Hong Kong SAR and Shenzhen—were ranked among the top 20 leading technology innovation hubs outside Silicon Valley/San Francisco over the next four years.⁴ The US and China have been ranked first and second, respectively, for the past several years in terms of countries which show the most promise for developing globally impactful disruptive technologies.

China is taking comprehensive actions to develop its own domestic innovation ecosystem and encourage companies to increase their R&D spending and pursue innovation-driven development. China is developing Beijing, Shanghai and the Guangdong-Hong Kong-Macao Greater Bay Area into global science and technology innovation hubs. It is expected that science and technology innovation will be a feature of regional development plans and other national initiatives, to increase the global competitiveness of Chinese industry.

Technological disruption has become the new normal, with most China CEOs seeing technological disruption as more of an opportunity than a threat. In KPMG's 2019 Global CEO Survey, seven in 10 China CEOs said their companies' ability to grow relies on their ability to challenge and disrupt business norms, while more than

³Keynote Speech by H.E. Xi Jinping President of the People's Republic of China At the Opening Ceremony of The Third China International Import Expo, Beijing, 4 November 2020.

⁴https://home.kpmg/content/dam/kpmg/us/pdf/2020/03/tech-innovation-hubs-2020.pdf.

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half of the China CEOs said their companies are actively disrupting the sectors in which they operate, rather than waiting to be disrupted.⁵

Given these trends and underlying drivers, participating in innovative development in China will be increasingly important for MNCs to maintain their competitiveness in China and other markets around the world, with China offering scale, cost and speed advantages for developing and commercializing new technologies and business models.

MNCs may consider partnering strategies such as "setting up accelerator or incubator programs for start-up firms", "joining industry consortia focused on development of innovative technologies" and "collaborating with innovative start-ups (e.g., Fintech, InsurTech, HealthTech firms)". These were selected by more than half the China CEOs in KPMG's 2019 Global CEO Survey as actions they planned to undertake over the 2019–2022 time period to help pursue their organization's growth objectives.

3 Role of Foreign Investment

Foreign investment will continue to play an important role in China's new development paradigm. With an emphasis on achieving high-quality development that is "more efficient, equitable, sustainable and secure", there will be opportunities for foreign investment: (1) to support industrial upgrading including through the supply of capital, advanced technologies, management and operating experience; (2) to satisfy the demand of Chinese consumers; and (3) to support China's transition into an innovation-intensive, consumption-led economy. At the same time, it is important that investors understand how the advantages which China offers as an investment destination have changed. These changes and the practical implications for foreign companies investing in China are discussed further in KPMG's *China Outlook 2018*.

4 Supportive Policies

China will continue to open-up its economy, particularly in relation to the services sector, launch more comprehensive trials and formulate a negative list for cross-border trade in services. In addition to reducing the negative list, China will encourage foreign companies to invest in advanced manufacturing, in new and high technologies, in the energy conservation and environmental protection industries, and in the central and western regions. Free Trade Zones will be used to pilot new ways of

⁵https://assets.kpmg/content/dam/kpmg/cn/pdf/en/2019/06/2019-china-ceo-outlook.pdf.

⁶https://assets.kpmg/content/dam/kpmg/cn/pdf/en/2019/06/2019-china-ceo-outlook.pdf, pp. 50–56.

opening-up, with high-quality opening-up being necessary to promote high-quality development.

China continues to prioritize fostering a world-class, market-oriented business environment governed by a sound legal framework. An important element of this is supporting fair competition on a level playing field, including equal treatment of all companies and equal protection of property rights, particularly protection of intellectual property rights for all market participants.

Efforts by China to modernize its domestic economy and governance systems including to benchmark and align with international rules, standards and practices will be conducive to foreign companies carrying on business in China. At the same time, it will also mean that Chinese companies will be able to operate more effectively in overseas markets.

Data is a key factor of production in the digital economy. China is working on a data governance framework the objective of which is to fully realize the value of data in the economy. Measures will include establishing rules for determining ownership, transferring, using and protecting data, as well as strengthening personal data protections; measures to promote healthy competition, prevent monopolies and strengthen regulatory supervision; and creating mechanisms for more sharing of public data from government authorities including pilot programs where third parties are authorized to operate government data, which will encourage greater mining and use of public data.

5 Access to Markets Beyond China

Efforts to facilitate and reduce the cost of cross-border transactions increase the attractiveness of using China as a headquarter from which to access and serve markets across Asia and countries along the Belt and Road. Implementation of the China-EU Comprehensive Agreement on Investment will also be conducive to EU companies investing in China and being able to access these benefits.

Last year, 10 ASEAN countries, China, Japan, the Republic of Korea, Australia and New Zealand concluded the Regional Comprehensive Economic Partnership (RCEP). RCEP is the world's largest free trade agreement, representing approximately 30% of the world economy and 30% of the world's population. In 2020, China's exports to RCEP15 accounted for 27% of China's total exports and 37.8% of the country's total imports. As the first and only trade agreement between China, Japan and the Republic of Korea (ROK), the agreement will support supply chain stability in South East Asia where economies are highly dependent on trade. The rules of origin, which are based on total value add in the region (under the so-called regional accumulation rule), will encourage expanding and deepening supply chains in the region. After the agreement enters into force, an expected increase in trade in goods will lead to a growth of trade in services related to goods trade, for example

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warehousing, transportation, financial settlement, financing, insurance, etc. Crossborder trade in services, particularly internet-enabled services will also see further growth due to the implementation of commitments under the RCEP.

After the RCEP comes into force, about 35% of China's trade will be with Free Trade Agreement partners. China has said that it will accelerate the negotiation of the China-Japan-ROK Free Trade Agreement and will progress negotiations with The Gulf Cooperation Council, Norway and Israel. China is also actively considering joining the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP).

The actions that will be taken around promoting "high quality" BRI development will also make China an ideal location from which to export to and invest in BRI countries.

6 Opportunities for Foreign Companies

Foreign companies should study the contents of the Plan as well as relevant provincial, municipal and sectoral plans that have been and will be released describing the targets in more detail as well as the actions which will be taken to achieve them. Here are some of the areas where there are or will be significant opportunities for foreign companies.

6.1 Belt and Road Initiative

The Plan sets a clear direction for the promotion of "high quality" development under the Belt and Road Initiative (BRI). The ongoing "marketization" of these projects including through partnering with international private capital, following international practices and debt sustainability principles, and increased focus on risk management and legal and contractual protections, will all support the objective of increasing and diversifying funding sources including from multilateral and global financial institutions. This will also increase opportunities for MNCs to invest in and supply goods and services to these projects. The Plan also talks about promoting e-commerce and international co-operation in industrial projects in BRI markets, with priority being given to co-operation in digital, green and health-related projects.

Chinese companies will increasingly adopt applicable environmental, social and governance (ESG) standards and best practices in delivering and financing "sustainable" BRI projects. In the post-pandemic era, with less financial capacity to invest in new infrastructure projects we expect host country governments will increasingly look to tap private capital to provide infrastructure project financing. At the same time, if companies want to borrow money from international financial institutions or raise investment from international investors, compliance with ESG principles is mandatory. That is to say that providers of public and private capital will require

project developers to comply with ESG laws and adopt ESG standards in the planning, construction and operation phases of infrastructure projects. This will give rise to new opportunities for collaboration between Chinese and foreign companies. This new development paradigm in China will encourage synergistic development of inward investment to China and outward investment from China. This means that inward investments should also be considered in terms of their ability to create or enhance outward trade and investment opportunities. In this regard, opportunities for experience gained partnering and working with Chinese companies on "high quality" projects in China can be applied and replicated in other international markets in multiple sectors. Some MNCs and international investors have already shown that successful collaboration on projects in China can be replicated in other countries. More instances of successful international collaboration on projects in China will be conducive to these business partnerships being "exported" to and applied on projects in third country markets.

Consistent with this, foreign investors should monitor the progress of reforms to mobilize private investment in projects, the development of PPPs in China and the use of Real Estate Investment Trusts to hold infrastructure assets to identify suitable opportunities to participate through equity investment and/or loan financing including green bonds.

6.2 Digital China

Digital development is a key focus of the Plan with digital transformation set to drive changes in production, lifestyle and governance in China.

Traditional infrastructure has supported China's emergence as a global manufacturing powerhouse. Now China is working to tap the significant potential for digitalization and technological innovation to create demand, drive productivity gains and improve resilience and environmental sustainability across all industries and sectors in China with "new infrastructure" being the backbone to deliver these economic, social and environmental benefits. We see this across three main dimensions.

First, digitalization has become a key driver and enabler of transformation, helping companies boost productivity, unlock new demand and improve their capacity to provide high quality, environmentally friendly and value-for-money goods and services to customers at home and abroad. These efforts will also be an important way to deal with impacts of a shrinking labor force. Second, digitalization is driving the innovation and disruption of industries. Third, there is great potential for data and digital technologies to deliver better liveability, sustainability and economic outcomes in "smarter" cities, where "technology" and "applications and data analytics" connect the physical infrastructure with users, to improve quality of life across different areas.

Digital technologies will be highly integrated with the real economy, helping traditional industries to upgrade and fostering the emergence of new industries, new types of business and new business models. The Plan highlights cloud computing,

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big data, IoT (particularly for automobiles, medical devices and home appliances), industrial internet (particularly for intelligent manufacturing), blockchain, artificial intelligence, and virtual reality or augmented reality as seven key sectors. On the demand side, more public services will incorporate digital delivery to improve accessibility and convenience including education, medical and elder care. All aspects of daily life will become more digital including consumer spending, home life, tourism and leisure, transport etc. As in other sectors, there is great potential for China's experience in digitalization and business model innovation to be exported to and applied in other countries, particularly in emerging markets.

6.3 Green, Low Carbon Economy

President Xi's pledge that China will be carbon neutral by 2060 was welcomed by and has already attracted considerable attention from the international community. The transition to a green economy will bring significant opportunities for companies and institutions that move quickly to establish leading capabilities in providing solutions compatible with low-carbon growth.

Goldman Sachs estimates a total "green" infrastructure investment opportunity of USD 16 trillion by 2060 across power generation, transport infrastructure for electric vehicles, carbon sequestration and hydrogen infrastructure for transport, industry and heating, of which they estimate that at least 75% should come from the private sector.⁷

Efforts to develop the green economy in China will also see demand for "green" equipment, technology, services and investment grow at a fast pace. There will be opportunities in areas such as environmental protection, renewable energy, green materials, advanced composites, new energy vehicles, recyclables and green financing.

These are all areas where foreign companies can share their experience of developing and implementing new approaches and technologies to reduce the climate impact of economic and social activity. For foreign suppliers, the China market offers scale to develop and commercialize new technologies and innovative solutions. And successful project experience in China can be applied and replicated in other countries.

Consulting firms and NGOs will have significant opportunities to help companies in China to develop and implement responsible and sustainable strategies, business models, operations and investments; to develop business models, products and services that address climate change and help companies reduce carbon emissions; to design governance frameworks, processes, methods, tools and metrics to better track, measure, manage and report on ESG performance; and to provide assurance around ESG disclosures including environmental benefits disclosures.

There is growing optimism that ecological interdependence will give rise to international cooperation in climate change. Much has been said about the potential for and

⁷ "Carbonomics: China net zero: The clean tech revolution", Goldman Sachs, 21 January 2021.

necessity of collaboration between China and the US to combat climate change. The "China-US Joint Statement Addressing the Climate Crisis" provides an initial indication of the areas where the two countries have said they "are committed to cooperating with each other and with other countries to tackle the climate crisis". There will also be considerable synergies from cooperation between China and the UK. Indeed, it is hard to imagine the UK could achieve the ambitious goals which the government outlined in its plan for a "Green Industrial Revolution" without cooperating with Chinese companies to unlock the capital, technology, R&D and scale advantages they bring to the table. Likewise, for UK companies, Chinese demand for leading technology, solutions and experience could support the creation of more high-skilled jobs, narrow the "chasm between invention and application" and provide the capital necessary to fund continued innovation. Similar synergies as these will exist with other advanced economies, including to partner in helping developing economies to tackle climate change.

Development, deployment and use of clean technologies in both developed and developing countries will be key to addressing climate change. It is important that efforts are taken to guard against balkanization of these technologies and ecosystems. This is because, *ceteris paribus*, access to a greater market demand which globalization of climate technologies and solutions would provide, would be expected to support more and earlier private investment in innovation. At the same time, however, the way in which these technologies are developed, deployed and used will also need to be responsive to host country expectations about building local industries and creating local employment, rather than only striving to deliver low-cost production. As with policy announcements in the UK, President Biden's address to a joint session of congress on 28 April 2021 talked about the importance of creating local employment:

For too long, we have failed to use the most important word when it comes to meeting the climate crisis. Jobs. Jobs. Jobs. For me, when I think about climate change, I think jobs...

There's no reason the blades for wind turbines can't be built in Pittsburgh instead of Beijing. No reason why American worker's can't lead the world in the production of electric vehicles and batteries.

Multilateral coordination will be needed to ensure the benefits of the economic activity undertaken to develop, deploy and use climate-friendly technologies are shared between and within countries in an equitable manner to avoid exacerbating the imbalances that have fueled the backlash against economic globalization and rising populism and protectionism.

⁸Speech by Prime Minister The Rt Hon Boris Johnson MP delivered on 30 June 2020 in Dudley.

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6.4 Development of Regional Economies

Efforts to promote coordinated development between urban and rural areas and between different regions within China will enable foreign companies to tap into new demand and reduce costs by investing and locating operations in these regions.

Foreign companies should closely follow the development of the Hainan Free Trade Port, as well as of the other pilot free trade zones across China; and the implementation of Major National Strategies for Regional Development such as "The Guangdong-Hong Kong-Macao Greater Bay Area", "Beijing-Tianjin-Hebei Integration", "The Yangtze Economic Belt" and the "Chengdu-Chongqing Economic Rim".

These initiatives will become increasingly important in catalyzing foreign investment to those sectors and geographies that need it most and encouraging foreign companies to further localize their value chains.

6.5 Inclusiveness and Public Services

China is also looking to improve the quality of and accessibility to public services, including education, medical services, and—very importantly, given the country's demographic trends—elderly care. This will drive continued demand for high-quality foreign expertise and international best practices in the management and operation of facilities, training of personnel and provision of care services.

6.6 Financial Services

Over the past couple of years, the opening of China's financial sector has created many opportunities for foreign investors. For example, removing foreign ownership caps on banks, financial asset management companies (AMCs), securities, fund management, futures companies and life insurers; abolishing quota restrictions of QFII and RQFII; and implementation of stock and bond connect schemes.

The Plan talks about the continued opening of the banking, securities, insurance, fund and futures sectors, and taking steps to increase the connectivity between domestic and foreign capital markets.

Greater market access offers new opportunities for leading international financial institutions to provide a range of financial services including in the wealth management and retirement sectors which are expected to experience fast growth. Foreign players need to be clear about the advantages they offer relative to large and well-capitalized domestic financial institutions. Recently announced transactions show that leading international financial institutions have been quick to take advantage of changes to further open China's financial service sectors.

Green finance will play an important role in supporting China's transition to a low-carbon growth model and managing climate-related risks. On 1 March 2021, China's first local green finance regulations came into effect in Shenzhen, requiring the disclosure of information on the environmental impact of beneficiary enterprises, projects or assets invested. They are the second green finance regulations to be implemented in the world after the European Union. With targets now having been agreed upon for peak carbon dioxide emissions and carbon neutrality, the green finance market in China will develop quickly from what is already a comparatively large base. In the future, in addition to providing ESG-compliant options for global investors to support decarbonization by Chinese issuers, China is set to emerge as a leader in the regulation of green finance.

7 Keys to Success

For the first time in recent memory, a bigger challenge faced by MNCs is not the lack of opportunities in China, but rather the surge in misunderstanding and negative sentiment towards China as seen in many countries. Exploring the underlying reasons for this change is beyond the scope of this article. However, it is important to recognize that this phenomenon will continue to have an impact on the appetite for and pace with which some MNCs approach new opportunities. Business leaders have an important role to play in providing information about and advocating for the benefits of trade and investment with China in their home markets. This may include supporting efforts by reputable third parties to produce timely, fact-based analysis. It is important for economic consequences to be properly considered as the boundaries between collaboration, competition and rivalry are redrawn. Companies owe an obligation not only to their current shareholders but also to future generations to be an active participant in that debate.

At the same time, multilateral organizations, universities and think tanks will and need to play an increasingly important role in providing fact-based data and narrative which can be used to guide and support decision-making by MNCs on new opportunities which may not be well-understood by some stakeholders, particularly in developed markets.

Turning to success factors for MNCs in the China market, about which much has been written over the years. MNCs need to operate at "China speed" to be successful in the China market. This means being agile and responsive in what is a fast-changing and highly competitive market. In KPMG's 2019 Global CEO Survey, 58% of China CEOs agreed with the statement that "acting with agility is the new currency of business", while 63 percent said that increasing the use of partnerships with third-party firms is "the only way for our organization to achieve the agility it needs". More than ever, it is important to build trust and understanding about

⁹For example, see Pew Research Center, "American views of China", February 2021; Korber-Stiftung, "The Berlin Pulse", November 2020.

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your company with relevant government departments and industry organizations, as well as with customers, suppliers, employees and the community. Delivering high-quality products and services which have a clear link to China's economic and social development objectives must be a fundamental element of any company's value proposition in China.

Change in China is breath-taking: it is happening constantly; it is happening across all facets of the economy and society; with different priorities in different regions. To follow, interpret and respond appropriately to changes in the external environment for their business operations, foreign companies need to build effective and empowered teams in market, work with reputable external consultants who have China experience and subject matter expertise, and become integrated in China's business ecosystem. This includes having constructive relationships with relevant government departments, regulators and industry bodies. These relationships can be conducive to MNCs influencing the development of new policies, laws, regulations, standards and industry development plans, as well as better understanding and adapting to institutional, policy and regulatory changes.

To be successful in China it will often make sense for foreign companies to partner with reputable local companies. Such collaborations may also be formed at the headquarters level, for example, through a Chinese strategic investor acquiring an equity interest in the foreign company and agreeing to help the foreign company enter the Chinese market.

Earlier in this article we talked about the advantages and necessity of undertaking R&D and product and business model innovation in China. This will increasingly involve collaboration with local technology companies. In addition to looking at opportunities in the China market, MNCs should consider the business case for using their China operations to serve regional and BRI markets. Succeeding is no longer about making "in China" or "for China", but about making "with China" including in and for export to third-country markets. A heightened awareness of the importance of resilience will be an added driver of localization and regionalization of supply chains in the post-COVID era.

8 Concluding Remarks

International news media reporting about China when this article was written (March–April 2021) did not feature a substantive discussion about the business opportunities arising from the important transformation which is ongoing in China. In contrast, foreign holdings of onshore Chinese equities increased by RMB 12,978.61 trillion in 2020 representing a 61% year-on-year growth.

Institutional investors increasing their investments in onshore Chinese equities (and the growth in the value of those portfolios), reflects optimism about the earnings outlooks for issuers in different sectors. To what extent and how can foreign companies also benefit from opportunities arising from the development trends in China? These are the questions I have tried to address in this article.

A lot of attention is paid to the importance of providing a level playing field for foreign companies. Foreign companies' experience of the progress which has been made addressing it is reflected in regular business sentiment surveys by foreign chambers of commerce in China. At the same time, we need to guard against conflating issues. China is not an "easy" market to be successful in, not least because it is highly competitive and dynamic. Just because a company is highly successful in its home market by no means guarantees success in China. As in any market, companies must work to establish, maintain and defend a unique and sustainable competitive advantage.

As a result of the success of its epidemic prevention and containment efforts, the Chinese economy has resumed an encouraging growth trajectory and momentum. Increasing the resilience of supply and its adaptiveness to domestic demand are cited in the "strategic direction" section of the Plan. At the same time, resumption of business travel to and from China is particularly important for foreign companies due to the higher reliance on expatriate staff, typically in management and technical roles where needs cannot be fully met from the local market. This will also be an important step in helping to bridge the information gap with head office decision-makers about new investment areas and project opportunities.

China's economic growth has contributed around 30% of global growth in recent years. As a result, China's influence on the global economy has also become more pronounced, with the spillover effect of its economy and policies having an increasingly larger impact across countries. Based on forecasts, this situation is set to continue. Reflecting this and the factors discussed in this article, China will maintain and increase its importance to leading companies from around the world.

We are at an inflexion point in China's transition and integration in the world economy. On the one hand, there are new opportunities for foreign companies to seize in China's new development paradigm. On the other, there are new challenges for companies to face balancing the expectations of national governments and communities towards national security, economic growth, competitiveness and resilience and sustainable development. As was the case with the foreign companies that invested early in China's reform and opening-up, an opportunity will reward early movers who are able to adapt and align their value proposition and business strategies with China's economic and social development priorities and goals in the Plan. It is hoped that international co-operation in tackling climate change will usher a new wave of foreign investment in China and more "green" partnerships with Chinese companies in China and in developed and developing economies around the world.

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Continued Acceleration of the Reform of China's Capital Markets Still Needed



Mark Austen

Abstract China's *capital and financial markets*, among the largest in the world, play a key role not only in the raising and efficient allocation and management of capital, but also in attracting *foreign capital* and *institutional investment* expertise and knowledge. Markets including *equities*, *fixed income* and *foreign exchange* are growing, and regulation has also improved, improving the environment for investment in China.

Keywords Capital and financial markets · Foreign capital · Institutional investment · Equities · Fixed income · Foreign exchange

With over 140 members comprising a diverse range of leading financial institutions, including banks, asset managers, accounting, tax and law firms, trading platforms and market makers, clearing and settlement entities, credit rating agencies, index providers, and other market infrastructure service providers, ASIFMA is pleased to share with this audience the areas where our members see opportunities to make China's capital markets even more efficient and even more attractive to domestic and foreign institutional investors. Set out in this paper are proposed improvements to China's capital markets that our members would urge China to consider in making the most of China's future.

China's capital and financial markets, among the largest in the world, play a key role not only in the raising and efficient allocation and management of capital for both state-owned and private enterprises in Mainland China but also in attracting much desired foreign capital and institutional investment expertise and knowledge to the Mainland. Although there has been an acceleration of financial market reform in the last couple of years despite tensions with the United States and the COVID-19 pandemic in 2020, there is still more to be done in the equities, fixed income, foreign exchange, and derivatives markets. As China's domestic economy deepens and matures, it is also experiencing a slowdown compared with the frantic pace of growth of the last two decades and a build-up of debt, which is being exacerbated by needed fiscal expenditure in response to the pandemic. As growth slows, efficient, stable, and well-designed capital markets become more critical than ever to China's

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national objectives of sustainable growth. They support the transition from an exportdriven to a consumption-driven innovative domestic economy, which is the main driver of the "dual circulation" policy articulated in the 14th Five-Year Plan.

There have been significant reforms in recent years that are too numerous to detail here in their entirety. One such reform was the establishment of the Financial Stability and Development Committee in June 2017 for further collaboration and alignment among the various regulatory bodies. Another was the liberalization of interest rates in 2019 by introducing a new benchmark lending rate for banks. However, some of the key reforms have been related to the further opening of Chinese financial markets to foreign institutional investors (FIIs) and foreign-owned financial institutions, which has brought in additional capital and expertise to accelerate the development of the domestic markets. These have included additional enhancements of Stock Connect (quadrupling the daily quota and increasing CNH supply via an HKMA swap line with PBOC), and QFI (unifying the QFII/RQFII schemes and removal of quotas and lock-up periods) market access channels, which will be detailed later in this paper and which make it much easier for FIIs to invest in a capital controlled economy. This resulted in the incorporation of Chinese securities into the various global equity indices such as MSCI and FTSE and the equivalent bond indices such as Bloomberg Barclays and JPMorgan. This brings substantial foreign investment, as any asset managers tracking those indices globally will now have Chinese investments by default.

Also, the cumulative reforms of 2017 and 2018 have allowed securities investments companies, fund management companies, and futures companies to increase their holdings in joint ventures with Chinese partners to 51% and then 100%. This has resulted in a flurry of activity of foreign-owned financial institutions establishing or reshaping their onshore entities. Finally, there has also been a series of significant technical reforms, such as reduced trading suspensions and improved closing auction in equities and the gradual consideration of the enforceability of close-out netting in the derivatives space.

In the past, China has relied heavily on a highly successful approach involving limited experiments and pilot programs as test cases for reform, only expanding them after careful and deep assessment. In recent years, this cautious approach has been emboldened by more significant reforms to encourage faster development in capital and financial markets. We believe that the focus on the Greater Bay Area, between Guangdong province, Hong Kong, and Macau, will provide considerable opportunity for further innovation and serve as an incubator for deeper financial market reform that, if successful, could ultimately be expanded throughout the Mainland.

It bears repeating that a broad reform agendum that encourages the development of deeper, more liquid capital markets with greater choice of investment products is critical to sustaining China's growth as traditional drivers weaken, whether in terms of external trade or domestic infrastructure investment. At the end of the day, what is paramount is domestic capital market reform primarily for the benefit of the Chinese economy and its citizens and consumers. This includes enhancing corporate governance, minimizing market misconduct, transitioning from over-reliance on retail

participation to more professional or institutional investors, and proper supervision of financial market participants, including technology firms.

While we expect China to continue to pursue a reform agenda for capital and financial markets as part of its 14th Five-Year Plan, geo-political tensions with the USA are not likely to subside under the new Biden administration and have recently started to spill over from trade into financial services. While we do not expect further escalation of measures targeting financial services from either side, we do expect further digital or technology decoupling between the two countries. This would significantly impact the use of data and technology across borders, which will make it more challenging for global firms to operate within China.

1 Equities

The equity market is the most developed of the capital markets in China. Nevertheless, solving the many practical barriers to the development of both listing and trading is essential if China is to balance liquid, transparent markets with less volatility in its equity market. This is in the interest of all investors (domestic and foreign) and for China's economy. Utilizing advances in technology, in which China is already a leader, to make its markets more efficient, along with proper supervision, further integration, and alignment with global markets, is paramount to growing China's role as a world leader.

A good example of this is the Shanghai Stock Exchange's launch of a registration-based STAR Board listings regime for innovative technology companies, coupled with more market-friendly trading rules including stock borrowing and lending. The Shenzhen Stock Exchange followed suit by revamping its own renovated Chinext listings regime in line with Shanghai's. Both are good examples of reforms taken to support more efficient capital raising for the most dynamic companies in China, fueling the growth generators of the economy. The registration-based listing regime should be further extended to the broader market on both exchanges to replace the long regulatory approval process for new listings, which slows down companies' ability to raise capital and would hamper the economy.

China equities now account for 40% of MSCI's Emerging Markets index series, 5% from A shares, and the other 35% from Chinese securities listed on other exchanges (HK, US). On the A share front, the current 5% represents a 20% MSCI Inclusion Factor (accounting for only 20% of China's overall market capitalization); as China continues with market reforms to facilitate easier access for global investors, there is potential for the A share component to increase five-fold to 100%.

To facilitate greater QFII/RQFII participation in China's equity markets through Stock Connect, QFII, and index inclusion increases, it would be helpful to align with global standards in areas including the following:

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1.1 QFII/RQFII

• Allow delivery versus payment on T + 1 or T + 2 in the QFI channel so FIIs can better integrate their settlement processes globally. Asset safety is a key concern of global investors.

- Allow FIIs the ability to sell through multiple brokers to ensure the best execution, as well as the use of DMA / Program Trading in the QFII channel.
- Expand the block trading window, which would encourage larger and longer-term investments by FIIs in Chinese companies.

1.2 Stock Connect

- Allow for trading between the Mainland and Hong Kong on holidays so FIIs are not disadvantaged
- Expand SBL to not just Exchange participants (i.e. brokers) in Hong Kong, but affiliates of Exchange participants or asset managers/owners who have securities to lend
- Apply the short-swing profit rule at the fund level and not fund manager level, which is a particularly big problem for passive fund managers that merely track an index and do not make investment decisions or for large asset managers that manage multiple funds and client mandates.

The industry welcomes recent reforms to the QFII channel on the trading side, which includes (1) foreign investor access to securities lending; as well as (2) foreign investor access to listed derivatives as hedging instruments. Both of the above allow market participants to better manage their risk and will help the market improve in terms of liquidity and price discovery. The expanded portfolio of instruments has also attracted the interest of active fund managers to explore growing their investments in China.

Secondary market investment flows had become heavily skewed towards the Stock Connect channel in 2018–19 but have since rebalanced toward QFI thanks to the above-mentioned reforms. These are still at an early stage, and the industry will need to work with exchanges and regulators on enhancing the framework, including relaxing hedging quotas and providing greater tax clarity. FII inflows had been initially dominated more by passive fund managers, but per earlier mentioned, the QFII reforms are now attracting active fund managers to invest more in China.

2 Fixed Income

China's fixed income market, which is now at USD 18 trillion and the second largest in the world behind the USA (USD 40trn), has seen an almost 50% increase over

the past two years. China has become a world leader in the 'green bond' market as issuance has soared to about USD 190 billion as of the end of 2020 from less than USD 1.0 billion at the end of 2014. With 56% of the market instruments issued by government-related entities, the corporate bond market is much smaller than in major competing economies, mainly due to its high reliance on loans—proportionally 50% more than in the USA. Moreover, while the bond market is large, the liquidity in the secondary market is rather poor for its size. To better allocate capital to dynamic and healthy companies that will contribute to economic growth, China needs to continue to move away from the opacity of the loan market—where funding may be allocated based more on relationships or other factors such as a firm being a large local employer- and incentivize corporate issuances where investors can properly assess the credit risk of issuers. To achieve this, a number of steps need to be taken. The most important is establishing and allowing an independent credit rating system with an appropriate scale of differentiation between high- and low-quality corporates. This can hardly be possible today when 89% of the Chinese corporate and enterprise bonds are rated AAA and AA (compared with 7% of the US corporate market). When companies get into trouble, particularly state-owned enterprises, they should be allowed to default and not have the government intervene. Since 2018, there has been an increase in defaults, which is a sign of a maturing market and will lead to re-basing of credit risk.

To improve credit risk analysis, foreign rating agencies need to be recognized and allowed to rate all bonds and ensure a level playing field with their local competitors. The regulators should encourage further alignment of domestic ratings, together with information disclosure and due diligence processes, to international standards and best practices.

Improving the secondary market liquidity is another important factor for investors so that they can confidently and easily enter and exit the debt capital market without having to hold every instrument to maturity.

The derivatives market also needs to be further developed to allow market makers and investors to appropriately hedge their risks against interest rate, market, and credit risks, which ultimately benefits price discovery and lowers funding costs while optimizing resources allocation.

Bond futures are the most important listed derivative product, but lack liquidity. The big five domestic banks sit on the bulk of the underlying government bonds, but to date have not been accessing the futures market directly even though it has been legally permitted since early 2020.

To further develop liquidity and provide hedging instruments to a broadened participant base on a level playing field with their peers, direct access to more domestic institutions and international investors through QFI and China interbank bond market (CIBM) Direct channels must be permitted.

Interest rate swaps are relatively liquid, but floating reference rates are not aligned with corporate financing reference rates. There is limited recognition of ISDA documentation versus NAFMII documentation, which bifurcates the foreign and domestic derivatives markets and thereby undermines liquidity.

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The other cornerstone in the fixed income markets is a well-functioning repo market where sellers can lend securities to buyers, who can, in turn, trade them in the market, providing liquidity to investors. Contrary to global standards, the securities are pledged in China and do not have their ownership transferred which prevents rehypothecation—hence reducing liquidity—and creates risks in case of counterparty default or bankruptcy. There is also no tri-party repo, an important feature needed to encourage bondholders like insurance companies, pension funds, etc. to finance or lend those securities, although we know the CCDC is working on a solution. With respect to foreigners, who are more familiar with repo, it would make sense to allow them to access this market via any channel and not just QFI, as it stands now, and to use the globally recognized GMRA master agreement rather than the local NAFMII documentation.

For both derivatives and repo to work well, close out netting needs to be officially recognized in China preferably through a legislative change at the State Council level; otherwise, these capital-intensive instruments will bear significantly increased costs.

Finally, as global fixed income markets are dominated by institutional investors, the size of their participation—both domestic and foreign—needs to increase dramatically. One big regulatory change would be to lower the statutory liquidity requirement on banks to hold government bonds so that insurers, pension funds, asset managers, etc. can be lured into the market. Regulators should also consider broadening the range of fixed income products for retail investors through bond ETFs or funds, which could partially unlock the large retail bank deposits (USD 32trn) as a potential source for future development.

Currently, limited FII participation (3.2%) is mainly focused on government bonds and is very small compared with other large bond markets. There has been growing interest around bond index inclusion following the FTSE Russell announcement. To encourage further FII participation, the various access channels can be further streamlined (see below under market access). There is also a need for an overall tax exemption reform or clarification (e.g. extension of the tax exemption for FIIs expiring in November 2021 from VAT and withholding tax on interest and widening of the scope of eligible debt securities to asset-backed notes, asset-backed securities, and certificates of deposits, FX capital gains on repatriation) to bring China in line with other markets. Finally, there is very limited use of RMB as an international currency (1.16%/1.88% according to SWIFT). USD remains the key currency for international trade and financing, including for BRI projects. Accelerating capital account and foreign exchange reforms would support the adoption of the currency for both financing and investment. This is a good segue into our next topic.

3 Foreign Exchange

The FX market is the world's largest financial market. Effective and efficient exchange of currencies underpins the world's entire financial system. The FX market

is also the basis of the global payments system. The volume of transactions is, therefore, very high, and these transactions are often executed by market participants across geographical borders.

China first indicated its intention to internationalize the RMB and decouple its dependency on the USD in the early 2000s. This accelerated in the period after the financial crisis as China started to recognize the risks inherent to their reliance on the USD. As part of this effort, the PBOC announced in 2005 that it would adopt a managed floating exchange rate system in which the daily fix for the exchange rate was to be determined by referencing a basket of currencies, instead of only the USD, and allow the currency to float within strict bands.

In December 2015, CFETS unveiled the CFETS RMB Index to be used to assess exchange rate movements. This was an attempt to shift the market's focus from the RMB against the USD exchange rate to the RMB's performance against the basket of currencies used by its trading partners, reflecting the perspective that the exchange rate should capture the international trade flows of China. The original Index consisted of 13 currencies with weightings based mainly on a trade-weighted average, as such the USD had the largest weighting at 26.4%. In December 2016, 11 more currencies were added to the CFETS Index, resulting in a reduced weighting for the USD.

More recently, the CFETS announced that it would adjust weightings in its currency basket from January 1st, further reducing the USD weighting from 22.40% to 21.59%.

Year-on-year growth in the global trading of RMB has been the highest of any currency. Average daily volumes have increased from USD 119bn in 2013 to USD 285bn in 2019. Domestically, FX is the largest asset class, making FX swaps, at 48% of volume, the most widely traded product as market participants have become more sophisticated in trading FX instruments as tools to hedge risk and as a means of funding.

Despite the growth in the domestic FX market, it is still very small relative to GDP and its economic links with the rest of the world even when compared to other emerging market economies. It is expected that demand for more complex FX products will grow as banks look to offer more complex structured products to their clients and as investment managers seek alternative investment solutions in response to changes in regulation. The FX market should be encouraged to grow by enabling firms to structure yield-enhancing products and zero-cost hedging strategies using exotic options. The product offering could also extend to an exchange-traded market in FX futures and options that would provide end-users with alternative hedging tools as well as additional liquidity and transparency in the market.

Despite the growing domestic demand, the FX market—except for spot and FX swaps, which are highly liquid—is inefficient and costly, thus making it less attractive. A contributing factor is regulations restricting access to non-bank participants that trade both sides of the market. Hedging in the FX market is currently very directional, resulting in a build-up of risk by the banks, who act as liquidity providers. This incurs costs that need to be recovered through wider spreads, which dampens the demand from end-users. In order to further attract international capital and grow the domestic

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market through increased liquidity and transparency—as well as reducing the costs of trading—the restrictions over access to the market should be removed.

For participants transacting onshore, FX trades are governed by NAFMII master agreements. This practice restricts the ability of international market participants to trade with domestic commercial banks as they would normally use international master agreements to assist in the management of credit risk. The use of separate agreements between onshore and offshore trades creates basis risk because of the different treatment of collateral, settlement, and close-out netting. Consideration should be given to the introduction of international master agreements.

As China looks into removing its dependency on the USD, it will need to increase the use of the RMB as a settlement currency used to settle current account transactions. In 2018, the RMB was the eighth most active currency for domestic and international payments. In terms of international payments, the RMB ranked eighth in November 2018 with a share of 1.16%; in December 2020 neither its rank nor share had changed.

As noted, increased use of the RMB outside of China will result in increased familiarity among investors, which will result in much greater FII participation directly in China markets. China has set up USD 500 billion equivalent in CNY currency swap agreements with more than 30 countries. However, there need to be adequate offshore CNY deposits in order to ensure that there is adequate liquidity, and to do this China would need to run either a current or capital account deficit. Without a significant increase in RMB usage outside of China, projects such as the Belt and Road Initiative will continue to be funded in USD or local currency.

4 Regulation

As we have noted above, there has been a great deal of financial market reform in China and we also recognize that, for reform to work, technical cooperation across multiple agencies is required, which can be challenging. However, from a practical standpoint, the implementation of these measures has not been as smooth as one would like. Some of these regulatory changes, although welcome, have given market practitioners insufficient time to respond. Providing ample notification of new rules as well as allowing enough time for public comment and implementation will significantly improve the regulatory rule-making process. More advance coordination would help to ensure sufficient industry buy-in and minimize implementation risks, which benefits everyone. Abandoning the practice of implementing regulations immediately after a consultation closes would go a long way to building trust in the process as clearly the responses could not have been given adequate consideration within such a short time period.

Conversely, other policy changes, once introduced, have been implemented more slowly than some market practitioners would like. It was a year before regulatory authorities approved the first majority stake in a domestic financial firm by an international bank, and licenses for some international rating agencies, underwriting licenses

for fixed income participants, clearing licenses for bank and bank card payment firms take a significant amount of time—sometimes years—before being approved and seem to be quite often linked to the state of the political relationship with that firm's country. Often, the update of tax legislation is even slower than other regulatory changes. For example, so far there are no tax regulations addressing the tax treatment of the new investments introduced by the new QFII regulation, which was released in September 2020. We believe that by opening foreign firm participation in the domestic market, China has an incredible opportunity to build on the experience of developed markets, avoid their past mistakes, and leapfrog their successes.

5 Operating in China

With 100% foreign ownership of Chinese private fund management companies ("PFMs") being permitted since 2016, of Chinese banks since August 2018, and of Chinese securities companies, fund management companies (FMCs), and futures companies from April 2020, we have seen at least 32 wholly foreign-owned PFMs established (mostly in Shanghai, one in Shenzhen, two in Tianjin and two in Zhuhai) and at least six applications for a wholly foreign-owned FMC submitted to the CSRC for approval as of the end of 2020. We have neither seen any applications for wholly foreign-owned banks nor majority foreign-owned banks in China, but at least eight CSRC approved majority foreign-owned securities companies have been approved in China as of the end of 2020. The option for foreign interests to establish a wholly or majority foreign-owned entity in the Mainland is clearly present, but as we have observed, one cannot rely on the fact that one structure was approved and followed the same precedent. This is a high-risk strategy in China. Greater clarity by regulators as to the types of acceptable structures would provide much greater certainty to firms looking to set up or expand their business in China, which would make things more efficient for all sides.

5.1 Simplification of the Complicated Regulatory Structure

A clear and simple regulatory structure in any country obviously has its benefits as it would reduce bureaucracy and facilitate the doing of business. It would also take a lot of determination and effort to achieve this in a country like China where there are many regulators with overlapping jurisdictions which means firms in the same sector may require different licenses depending on their legal structure. For example, banks, insurance companies, securities companies, and fund management companies are all able to conduct asset management services, but the CBIRC regulates banks and insurance companies, while the CSRC regulates securities companies and fund management companies.

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While there is an attempt to standardize the asset management services provided by financial institutions and unify the regulatory standards for similar asset management products in the Guiding Opinions regulating Financial Institutions' Asset Management Business issued by the PBOC, CSRC, CBIRC, and SAFE on 27 April 2018, the Guiding Opinions have yet to be implemented and we do not know how effective they will be in achieving their stated goal as there are still different regulators and different regulations for similar types of services, which is confusing not only for market participants but also the investing public.

It is not surprising that within the investment or asset management business, there would be different regulations for public and private funds, insurance and pensionfocused products, investment management and advisory services, as well as inbound and outbound investments. However, what is particularly inefficient is the need to set up separate entities (e.g. fund management company (FMC) for retail funds, private fund management company (PFM) for private funds, QDLP for outbound investment funds) in China to be able to provide each of these services. Unlike other financial hubs (including Hong Kong), firms in the Mainland are not able to set up a single entity with different licenses that can carry on multiple lines of essentially the same business. This is highly inefficient, increasing operating costs and reducing profitability for firms operating in China, particularly firms (foreign or domesticowned) that have plans to diversify and expand their business lines. For the sake of not only foreign-owned firms but also domestic firms and the investing public, China should move toward further simplifying its regulatory structure and allow single entities to conduct multiple lines of essentially the same business, particularly in the asset management business. Any potential conflicts of interest can be addressed by requiring Chinese walls to be established separating the various business lines, as is commonplace in other major jurisdictions, instead of requiring such business lines to be in separate operating entities.

Another challenge is the opacity of abiding by the regulations once you have the approvals and licenses to operate. The reality is that it is often difficult to interpret Chinese regulations (often deliberately), and they are often overlapping or duplicative, so implementation is challenging, and many rules are not designed with foreign-owned firms and operating models in mind (see next section). The Personal Information Protection Law and Cybersecurity Law are two very good examples of this reality. Requirements for extreme transparency to regulators on all of a firm's activities, such as regulatory reporting, often mean hundreds of required reports to be provided per month per entity. Finally, and as noted throughout, the massive volume of regulatory change that is coming down the pike all at once as China catches up with other global regulatory frameworks—at China speed and often with limited consultation—as noted above—means these approval schemes and regulatory rules even if understood make operating in China challenging.

5.2 Cross-border Sharing of Information, Cybersecurity, and Operation of Global Practices

Among the benefits that China recognizes in having more foreign-owned or controlled financial institutions operating in the Mainland is the opportunity to bring established and global best practices to China to raise the standard of domestic players so that they are able to compete more effectively on the global stage. However, when setting up wholly or majority foreign-owned entities in the Mainland, foreign institutions encounter several operational challenges, which, if addressed, would not only be helpful to foreign-owned financial institutions but also the development of China's capital markets.

For example, one of the biggest challenges for global financial institutions are Chinese regulations that restrict the sharing of information, knowledge, and technology between onshore entities and their offshore affiliates, which disproportionately affects international financial institutions operating in China and facilitating capital inflows to support the growth of the broader economy.

While the Chinese government's concern with data privacy and protection—especially personal data—for its citizens is legitimate and no different from that of other major jurisdictions—we believe that policymaking should be reasonable and proportionate. Personal information is pivotal to the financial industry and is already highly regulated, and concomitant protections on the collection and processing of such information are essential to the integrity of financial markets and, more broadly, the confidence of customers and businesses. While it is also important for governments to set cyber security standards, this should not be detrimental to financial service providers' abilities to provide legitimate services, conduct legitimate business in China and/or comply with international anti-money laundering regulations and KYC requirements. The current laws make the business climate in China unpredictable for both foreign and domestic-owned firms in terms of cross-border data flow and the use of technology in line with global best practices.

This translates to localizing more of a firm's people, processes, systems, and data than in many other markets in APAC and in EM globally, which often lend to using fragmented technology and divergence from efficient global operating models. This is a particular problem for global financial institutions that ordinarily deploy global systems of internal controls to ensure compliance with both local regulations and global requirements, including compliance with anti-money laundering and counter-financing of terrorism laws through global service centers. Localization does not improve data protection. On the contrary, burdensome localization requirements introduce technical complexities and additional administrative layering into corporate operations, both of which ultimately compromise cybersecurity and risk management. They also undermine the ability of firms to leverage the use of cloud technology globally, which offers best-in-class cybersecurity and technology.

As a consequence of China's unique approach to data and privacy, foreignowned firms need to spend significant amounts of internal stakeholder management explaining why, for example, policies and operating models need to be localized for 136 M. Austen

China, or exemptions carved out, which makes operating in China extremely inefficient. Finally, the complexity of navigating the Chinese regulatory environment, combined with the required knowledge of operating in an international environment existing within foreign-owned firms, means a need for a strong local management team that can operate and make decisions to a firm's culture and principles and with the trust of management. The talent pool for such a unique skill set on the mainland is very small. This makes it challenging to find, train, and retrain staff when competitors are all trying to establish and expand their businesses.

It is also important to recognize that the sharing of data across borders is not only good for bringing into China the best technology and practices for managing internal controls, and compliance for large companies, particularly global firms, but also for the overall development of China's own financial industry and its personnel. We suggest that some of the regulations that prohibit the cross-border sharing of information be relaxed or clarified to allow for information sharing across borders for legitimate reasons and with proper safeguards.

The cross-border sharing of research between onshore and offshore entities, particularly for global financial institutions, is especially important to the ultimate integration of China's capital markets with that of the world. Regulators in financial hubs such as New York, London, Hong Kong, and Singapore vie to attract investment professionals such as portfolio managers and research analysts to their jurisdictions, and it would be in China's interest to do the same. Clarifying that the management of offshore funds sold outside China by onshore managers would not create a permanent establishment issue for these offshore funds in China would further encourage the relocation of investment professionals to China, which is beneficial not only to the development of the investment management business within China but also for the valuable exposure for China-based investment personnel to the offshore fund management business.

5.3 Level Playing Field

China's removal of foreign ownership limits on most of its financial institutions over the past two years is most welcomed, but the application of certain policies and unwritten rules to only foreign-owned entities means that the playing field remains unlevel for foreign-owned entities in China in certain areas. For example, we understand that with the "One Control and One Participation" policy (i.e. a shareholder of an FMC is limited to having control over one FMC and minority interest in another FMC) the CSRC will not, in practice, allow a foreign shareholder to have an equity interest in more than one FMC. This is not beneficial or helpful as China has made a lot of progress in trying to level the playing field for foreign-owned firms over the past few years. The "One Control and One Participation" also applies to banks, but many foreign-owned banks have a banking business, a securities brokerage business and even an asset/wealth management business, all under the same group. If such a policy was to apply at the group level, it would disadvantage foreign-owned banks

more than domestic-owned banks, so it may be helpful for China to clarify that this policy applies separately by institution type rather than at a group level.

6 Investing in China

Finally, China clearly wants to attract more foreign capital, as frequently noted, while FIIs clearly are interested in investing in China's capital markets.

6.1 Alignment of Access Channels

However, the multitude of investment access channels and their different requirements and investment scopes are very confusing to FIIs and make it difficult for them to easily invest in China's equities and debt markets.

After almost 20 years, China finally simplified its first investment access scheme for FIIs, the onshore QFI scheme, by merging it and the subsequent RQFII scheme into one QFI scheme last September. In the meantime, China also launched in 2010 an onshore access scheme for FIIs to invest in the CIBM, followed by an offshore Stock Connect scheme between the Shanghai and Hong Kong stock exchanges in 2014 and between the Shenzhen and Hong Kong stock exchanges in 2016, and an offshore Bond Connect scheme for FIIs to invest in the CIBM in 2017.

Due to the different investment scopes (with the onshore ones having a broader investment scope and permitting more activities) and operating requirements (such as capital controls when investing from onshore) of these schemes, FIIs often have to choose between one access channel over another or incur the time and monetary costs of investing through multiple access channels, which often require different infrastructure or system supports. Like the issue of financial institutions having to operate in China through many different entities, it is highly inefficient for FII investments in China to go through multiple access channels. Alignment of the access channels to the same markets, such as CIBM Direct and Bond Connect to the CIBM, would greatly reduce the complications involved, make investing in China easier for FIIs, who would like to be able to consolidate their positions in one scheme for ease of management and to reduce duplication, minimize operational risks, achieve cost efficiencies, and optimize returns for their end investors.

Further Reading For a more in-depth analysis of capital and financial markets in China, please see the following papers:

ASIFMA's "China's Capital Markets: The Pace of Change Accelerates", June 2019.

ASIFMA's "Accessing China's Capital Markets", January 2021. ICMA's "The Internationalisation of the China Corporate Bond Market", January 2021.

ISDA's "Developing Safe, Robust and Efficient Derivatives Markets in China", Upcoming 2021. EuroCham's "Decoupling: Severed Ties and Patchwork Globalisation", January 2021 WEF's "Data Free Flow with Trust (DFFT): Paths towards Free and Trusted Data Flows", June 2020.

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ASIFMA's "Technology-Neutral Principles for Virtual Data Storage", June 2019.



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China, Deglobalization, and the Multinational: What Does the Next Decade Hold for Multinational Companies from the East and West?



Weiwen Han and James Root

Abstract The Great Divergence has given way to the *Great Convergence*, starting with Japan's boom in the 1970s and 1980s, while soon after China's Open Door Policy became the coveted *frontier of future growth*. While some industries have been unable to catch the wave, industries like *private equity*, *healthcare*, *consumer products* and *manufacturing* have enjoyed success. Meanwhile, Chinese firms like Lenovo and Huawei are looking to expand globally, but have yet to see major success. While overall momentum is slowing, *China will remain a key battleground for multinationals*.

Keywords Great convergence • Frontier of future growth • Private equity • Healthcare • Consumer products • Manufacturing • China will remain a key battleground for multinationals

For centuries, Western multinationals were the apex predators of global business.

The earliest examples, the British East India Company and the Dutch East India Company, acted as quasi-governments: They controlled entire regions, issued currency, sold shares and bonds to public investors, and maintained private armies. Operating with state approval, they combined wealth creation from trade with the advancement of imperial ambition. With Japan and China largely cut off from trade under isolationist policies, European companies dominated the playing field.

These seventeenth-century pioneers and their successors rode the wave of what political scientist Samuel P. Huntington calls the "Great Divergence," a period of rapid growth in Europe that accelerated through the eighteenth century, sharply shifting the balance of global economic activity from East to West.

But more recently, the Great Divergence has given way to the Great Convergence. It started with Japan's boom in the 1970s and 1980s. Rapid domestic market growth coincided with winning innovation in industries like automotive and consumer electronics, catapulting Japanese firms to leadership beyond their home market.

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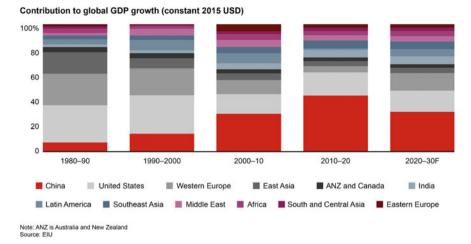


Fig. 1 China's share of global growth could decline in the next decade

Around the same time, China's Open Door Policy allowed foreign firms to operate in the country for the first time since the mid-twentieth century. Soon enough, China had become the coveted frontier of future growth.

It's no surprise that so many multinationals have wanted to participate. Over the past decade, China accounted for nearly 45% of all growth in the world economy. But China's booming growth may be losing steam: Its share of global GDP growth could drop to about 30% over the next decade (see Fig. 1).

Simultaneously, Chinese firms have become increasingly ambitious overseas, doubling their share of all multinational sales, from 5% in 2005 to 10% in 2018. Firms such as Lenovo, Haier, WH Group, and China State Construction have become major international competitors.

We're now moving into another phase in the evolution of global trade. Geopolitical tensions are escalating. Some companies are reshoring production in the wake of COVID-19 supply chain disruption. Regional champions from emerging markets are gaining momentum. Non-Chinese multinationals may find that China does not hold the promise it once did, and Chinese multinationals may rediscover what they already knew: Their greatest growth opportunities lie right in front of them.

1 Can Multinationals Still Win in China?

China's breathtaking scale and sustained 40-year expansion helped multinational firms across industries grow their businesses, learn new skills, and create new partnerships.

But the China hypergrowth years are now well behind these firms. The market share of multinationals in China has started to reverse its long upward trajectory, falling from an aggregate 16% of the Chinese economy in 2005 to 10% in 2018.

Many leading multinationals have had limited to no opportunity to catch the China wave—at least not yet. Cutting their losses, some marquee companies such as Auchan, Amazon, and Uber have withdrawn or scaled back. In several industries, almost no multinationals have attractive businesses in China:

- Tech. The partial list of companies struggling to compete in China includes Facebook, Google, Twitter, and Snapchat. Even those hardware companies that have fared far better—Qualcomm, for example—will soon face an uphill battle. With the US and Chinese economies and technology ecosystems likely to be moving toward a decoupling, sustaining profitable growth in China will be even more challenging.
- **Retail.** China has been a graveyard for the ambitions of many international retailers. They have often been unable to keep up with local rivals, failing to match their cost position or meet their speed of decision-making on assortment, pricing, and other aspects of category management. Most critically, they have often struggled to replicate local firms' swift pivot to digital and online-to-offline commerce over the last 5–10 years.
- Media. The top 10 media companies in China are all local. Because of restrictions
 on foreign companies, most of the world's largest media companies have no
 presence in the country.
- **Telecommunications**. China's telecom industry also remains almost entirely protected from foreign competition.

However, there are also some sectors where multinationals enjoy great success:

- **Private equity (PE)**. Despite tough competition from local funds for LPs, deals, and talent, a number of international PE firms have built superb businesses in China. These winners have benefited from their global networks for deal flow, as well as decades of experience in due diligence, value-creation planning, and post-acquisition operational improvement.
- **Healthcare**. Multinationals have seized opportunities across primary care, elder care, healthcare professional training, oncology, fertility, orthopedics, dental treatment, ophthalmology, and diagnostic imaging. Although private local providers have emerged in these areas, there is plenty of room for foreign players with expertise and new technologies.
- **Consumer products**. For several decades, China has been a primary growth market for consumer goods. While Chinese brands have gained share across food and beverage, home care, and personal care categories over the last five years, multinational brands remain formidable competitors.
- Manufacturing. In low value-added manufacturing, multinationals have historically found it difficult to compete with lower-cost Chinese producers. However,

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as value-add increases—for example, in automotive, elevator systems, chemicals, or aerospace—multinationals enjoy more success. In fact, China is their key battleground.

There's also the shifting landscape of financial services. The regulatory exclusions on foreign participants are starting to ease across sectors. While Chinese firms still dominate in banking and insurance, increasingly, multinationals such as PayPal, BlackRock, and Allianz are able to revisit their China strategies with greater ambition.

Although results vary by industry, one conclusion is clear: It is possible to thrive as a multinational without a big business in China, or even any business there at all. Lack of a strong China business may be a source of regret—and certainly, a reason to stay alert to change—but it is not an existential threat.

While China will remain uniquely influential in the coming years, growth markets will diversify. Other countries will take a greater share of the growth pool in aggregate. At the same time, as we move into a multipolar world order, geopolitics will increasingly inhibit non-Chinese multinationals' strategies in two ways.

First, geopolitical tensions between the US and China are mounting, as evidenced by tariffs from the Trump administration, bans on Chinese network equipment, foreign ownership constraints, and more. The fallout is reversing years of open, global trade. Technology companies are already feeling the impact acutely, as both nations race for leadership in new digital technologies.

Second, multinationals dependent on both China and their domestic markets will find the balancing act increasingly difficult. Governments have their proprietary agenda—in data privacy, environmental responsibility, labor rights, accounting standards, and more—often creating conflicting demands.

Navigating the geopolitical conflicts may overwhelm some firms, causing them to fold their hand or dial back in China. For others, new governance models or capital structures for their China business will help to manage the tensions.

2 Can Chinese Multinationals Gain Ground?

At first glance, the numbers suggest a gathering crowd of Chinese firms eyeing international expansion. Since 2005, the foreign sales of Chinese multinationals have grown at a compound annual rate of 10%, more than double the rate of US, Japanese, and European firms. There are now 3,400 Chinese multinationals, almost as many as those from the US and Western Europe combined.

Just as the Industrial Revolution triggered Europe's booming growth during the Great Divergence, the digital revolution accelerated China's reemergence as an economic powerhouse. Chinese firms are now among the global pacesetters in areas of digital innovation, from e-commerce, to gaming, to payments, to artificial intelligence.

Early pioneers like Lenovo, Haier, and Huawei paved the first paths of global growth. Their efforts were bolstered by China's admission to the World Trade Organization in 2001, and, often, by skillful acquisitions of Western brands.

The scale infrastructure projects, mostly in emerging markets, that came with the launch of the Belt and Road Initiative in 2013 enabled rapid overseas growth for firms involved, including China State Construction and COSCO Shipping. These projects also helped to pry open market access for Chinese firms in other sectors.

Over the past decade, the group of firms sustaining the international growth momentum has expanded: Think of Vivo in smartphones, Tencent in gaming and messaging, Geely in automotive, Wanhua in chemicals, and LONGi Green Energy in solar wafers. More recently, a new wave of mold-breaking firms in sectors such as payments, healthcare, and delivery have made it clear that international growth is a high priority—just consider Mindray or SF Holdings.

It's no wonder that the list of Chinese multinationals appears to be growing. But in reality, the early leaders are starting to look more like a group of exceptional pioneers than an advance guard blazing a trail for the rest. The ranks of scale global Chinese multinationals are, in some ways, surprisingly thin. While a sector-by-sector view reveals many Chinese firms that value international growth, these firms differ from other multinationals.

For one, foreign sales are a much smaller portion of their business (see Fig. 2). They also remain primarily focused on smaller and emerging markets over the larger profit pools of Western Europe and North America. In addition, these firms keep the majority of their manufacturing in China, rather than end markets.

What's more, three challenges will check the future international growth of Chinese multinationals.

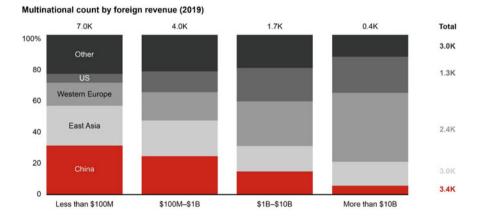


Fig. 2 While China leads in multinational firms, most of them have only a small presence abroad

Notes: Listed companies only; multinational defined as a firm with sales from foreign operations; China includes Hong Kong

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First, there are once again geopolitical tensions at play. Consider how the USA placed Huawei and ZTE on the Entity List, or how the Trump administration pressured TikTok to become part of a US-based company. If relations between China and the West continue to deteriorate, restrictions on Chinese firms may extend beyond sensitive technology. While Chinese multinationals may continue to find access to emerging economies from Belt and Road programs, they are likely to face increased resistance in their Western expansion efforts. Despite slower growth, Western markets still make up more than half of the global economy.

Second, Chinese brands have struggled to resonate with foreign consumers. Of Forbes' list of the 100 most valuable global brands, just one is Chinese. Western brands possess cultural soft power, while Japanese and Korean firms have patiently built exemplary brands over the last 50 years.

Nothing is stopping Chinese firms from replicating their success, but it hasn't happened yet. So far, Chinese brands have primarily won in their domestic markets. Yet their innovation investments and R&D focus in the last decade have paid dividends—it is now a soft-minded anachronism to dismiss Chinese firms as mere copiers and fast followers.

Finally, firms in China are facing a shift in policy environment. Over the past decade, their margins have deteriorated in the face of weakening global demand and increased competition from alternative manufacturing locations. The aggregate return on capital for listed Chinese firms has dropped well below their cost of capital (see Fig. 3). To fund continued expansion amid falling profitability, Chinese firms have relied increasingly on debt—an approach that threatens the sustainability of their growth trajectory.

The government is now applying pressure to rein back leverage-fueled international growth. Announcing a "dual circulation" economic strategy, it plans to

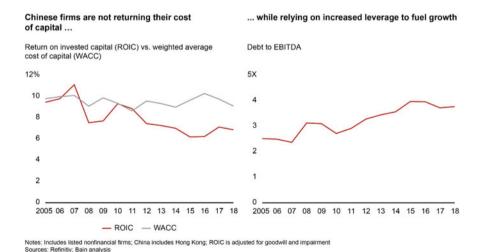


Fig. 3 Chinese firms are increasingly relying on debt to fuel growth amid falling profitability

increase dependence on "internal circulation," or domestic production, distribution, and consumption, rather than looking overseas.

The recent successes of firms like Wanhua, Mindray, Tencent, and Vivo are impressive. But overall, we should not expect a widespread push toward international growth at scale from Chinese multinationals in the next decade.

Globalization, primarily bolstered by multinationals, has been one of the tailwinds propelling a golden age of corporate profitability over the last 40 years. The current geopolitical state is certainly reducing the speed of that tailwind and maybe even pushing it into reverse.

Notwithstanding, China will continue to be an attractive growth market—especially if yours is a Chinese or localized firm.

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Can Chinese Giants Become Multinational Companies?



Denis Depoux

Abstract Being *strong* in revenue yet *weak* in *globalization* is a paradox for Chinese companies. Having benefited from a large domestic market and sparkling business innovation, Chinese companies are gigantic in size and entrepreneurial by nature. However, given the political polarization accelerated by the *Coronavirus pandemic*, Chinese companies are increasingly challenged by the global business community. Unfamiliarity with *local customs*, *lack of communication*, *cultural differences* and misperception are major issues that confront Chinese companies. Training and *promotion of local employees* and to increase the number of local managers, which will enable Chinese companies to navigate cultural barriers and build trust with potential foreign partners, helping them to become true MNCs.

Keywords Strong in revenue · Weak in globalization · Coronavirus · Local customs · Lack of communication · Cultural differences · Promotion of local employees

Last year, during a long assignment to review the strategy of a major player in China's technology industry, I addressed the Board of Management of the company and at one point said "You are not a multinational company, you remain a Chinese company". Forty percent of the revenues of this company were generated last year outside of China, so my remark was welcomed by a long silence in the room, followed by some chatter, until a key executive acknowledged that I was probably right...

What is a multinational company? Wikipedia tells us that "A multinational company (MNC) is a corporate organization that owns or controls the production of goods or services in at least one country other than its home country." Black's Law Dictionary suggests that a company or group should be considered a multinational corporation if it "derives 25% or more of its revenue from out-of-home-country operations." Therefore, our client would qualify, yet was still perceived as a Chinese company, due to the lack of a global production footprint, the very Chinese governance, management, and commercial practices, the shallow engagement with most

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local communities beyond commercial activities, the minimal impact on employment and its very Chinese brand recognition.

Being strong in revenue yet weak in globalization is a paradox for Chinese companies. Having benefited from a large domestic market and sparkling business innovation, Chinese companies are gigantic in size and entrepreneurial by nature. 133 Chinese companies are listed in the Fortune Global 500, surpassing the presence of American companies. However, only 29 of them scored over 20 in the Transnationality Index, while the top 100 western companies score over 50 on average. They certainly do not lack of the motivation to go abroad—they are actively expanding in global markets, dedicated to asset purchases to climb up the value chain, as Japanese companies did in the 1980s. Moreover, the best practices of western multinationals (MNCs) are in the playbooks of Chinese top executives. They believe that acquiring the global management know-how is simply a matter of time as China integrates into the world.

However, time will not stand still—the global market won't just wait for Chinese companies. Given the political polarization accelerated by the coronavirus pandemic, Chinese companies are increasingly challenged by the global business community. Under such circumstances, winning over global partners is a top priority. Amid the deteriorating global environment, Roland Berger is helping Chinese companies to transform by re-assessing their strategy, organization, and culture. We are more than aware that the conventional mindset of maximizing the efficiency of Chinese supply chains and increasing global sales revenue through a mono-culture organization does not fit today's value-driven world. It's not the time for Chinese companies to stop expanding their global footprint, but to leverage Chinese characteristics to be more globalized.

1 With Political, Technological, and Regulatory Uncertainties, Traditional Management in Chinese MNCs won't Work on the Current Global Platform

Unlike western MNCs that globalized in late twentieth century, Chinese MNCs nowadays face a deteriorating political environment. With the trend toward neo-liberalism in the 1980s, MNCs entered their heyday as they relocated industries to reduce cost and construct multilateral norms for global trade. However, after the 2008 financial crisis, the good old times were over. The side effects of the globalization, including accelerated unemployment and income inequality, created challenges for the political systems of western countries. On the one hand, misalignment between China and US lingers, manifested in the depreciation of US treasury bonds due to Quantitative Easing and the execution of the Pivot to Asia strategy. On the other hand, Mr. Trump's trade war, tech bans, and delisting have posed new challenges for Chinese companies. Although Mr. Biden is back on track with allies-friendly institutionalism, his value-driven diplomacy does not make business easier for Chinese MNCs, and

most prior measures remain in place, while China is increasingly pointed out as an economic, technological, and political rival, threatening the long dominance of the USA.

With technological progress and novel regulatory frameworks, a disruptive global value chain creates new uncertainties for Chinese MNCs. After decades of growth in the semi-conductor and internet industries, the Silicon Valley model has challenged established industries, such as the European Auto Industry, in product definition, R&D processes, corporate culture, and market competition. Naturally, digitization has triggered new regulatory frameworks, such as GDPR and digital sovereignty in the EU, the Data Security Law, anti-trust, and data security globally. Yet regulation extends beyond that. Fighting against climate change, regulators are promoting carbon pricing and more compulsory Environment Sustainability Governance (ESG) rules on trade and carbon border adjustment mechanisms in Europe, the USA and Japan, which will reshuffle global competitiveness. Yet it will take some time for the competition paradigm shift to reshape the global value chain. Chinese MNCs must rethink the fundamental logic of how to run truly global operations.

The old way of running MNCs does not fit Chinese companies. In an industrial economy, internationally business-friendly environments contribute to organizational path dependence. Such a context nourished a centralized, headquarter-dominated culture, as MNCs could simply duplicate their production process, business models, and corporate management to thrive overseas. However, as the digital economy and political polarization decentralize the global market, maintaining the traditional central periphery has become increasingly futile. As a result, companies must adapt to a localized eco-system in strategy-making. Headquarters can still develop the overall strategies for each office, but the decision-making process must involve local office as well.

In previous decades, western MNCs had been trained in how to localize strategies in a cross-cultural organization and how to carefully manage government relations through lobbying or compliance. Nevertheless, such uncertainties appear to be unexpected and overwhelming even for them—let alone Chinese MNCs, which are facing an even more polarized political agenda globally.

2 Despite All These Uncertainties, Chinese Companies Are Strongly Motivated to Globalize

First, firms need to increase size and growth potential. Despite the tremendous demand in the domestic market, competition is intense. Due to information transparency and a culture of fast-adoption in China, once a novel business model works out, new market entrants tend to quickly imitate or simply duplicate such models, driving down profits and resulting in overcapacity. Facing the stagnation of sales and declining profits, companies must expand overseas in order to scale up their business. Expansion abroad can also help to achieve economies of scale, hence lowering costs.

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Second, multinationals can leverage their operations across multiple countries to exploit the most favorable economic conditions. With the presence in multiple locations across the world, companies can access more resources. While foreign MNCs used to set up their factories in China to take advantage of lower labor costs since China opened its market, many companies now choose to locate their supply chains in other emerging economies like Vietnam, Indonesia, and Cambodia, in search of labor productivity as well as innovation and technological capabilities (and circumventing tariffs). On the other hand, a flexible operating location makes outsourcing practices more convenient, as such practices can optimize operations and hence effectively cut costs. The adoption of the RCEP treaty will increase the regionalization of supply chains, driven by Chinese companies.

Third, Chinese companies need to promote their brands and corporate influence, transforming their image from "Cheap China" to "Brand China." Chinese businesses are becoming more aware of the power of branding in capturing consumers and securing larger profits, and are looking to increase returns by investing in their brands. Becoming an MNC would help transform their image abroad as well as domestically, thereby cultivating a new perception of China's brands. This will also be served by shifting from "Made in China" to "Designed and Engineered in China, Manufactured Elsewhere" a journey that Western companies have long accomplished—Why would it be different? Doing so, having more local impact outside of China, would also entail more respect by local governments, and make skepticism with Chinese investments a lot less relevant than today in a polarized world.

Fourth, Chinese and other multinationals can tap into vast resources of technological expertise by drawing upon the knowledge of a global workforce. When doing business overseas, a lack of knowledge of local business practices could be detrimental to a company's development, as previous experiences cannot be simply duplicated in a new region with different consumer practices and business environments. Hence, companies need to acquire local expertise. An MNC would have easier access to local labor markets and first-hand information of the local talent they need. Such information superiority is essential to industries that require specific technical expertise, such as infrastructure, fintech, engineering, etc. By becoming MNCs, Chinese companies can also acquire foreign talent that can help them reinforce their technological and management competencies.

Furthermore, geography and portfolio diversification can contribute to different markets and compound benefits. Creative portfolio development strategies that have led some traditional companies to venture into consumer markets would bring about higher growth, such as financial services, entertainment, hospitality, tourism, or other non-core activities. These companies could eventually develop into conglomerates, where their legacy business could either be one pillar, with restructured domestic and international capacities, or gradually phased out, while other businesses are acquired and built up, nationally and internationally. The first phase of this development has been awkward with large Chinese conglomerates randomly investing in scattered activities with limited capital mobilization or operational synergies and leveraging always heavier balance sheet. This would be a better alternative to utilizing state as well as private capital and loans to build resilient conglomerates. This is somewhat

comparable to the trade- and finance-driven development of Korean and Japanese trading houses in the previous century.

3 Chinese Companies Are in the Fortune 500, but Only a Few Are Seen as MNCs

Despite being some of the world's largest companies, most Chinese companies haven't become true MNCs yet. Many leading Chinese companies with considerable income overseas are still perceived as Chinese companies rather than global corporations. Some giants do not even bother to develop significant activities overseas, as the domestic market so far has always been more attractive and easier to grow. We call this phenomenon the "black hole" of a domestic market, attracting all human and financial resources. Even for those with a global presence, brand recognition overseas is hardly comparable to global champions such as Coca-Cola, GE, Disney, Toyota, Sony, and Google. For instance, Lenovo now generates 72% of its revenues outside of China and has six nationalities in its top management committee and 17 nationalities in its top 100 executive circles. Yet such achievement attributed to foreign acquisition of IBM, while Lenovo's technological innovation and brand awareness remain weak in global markets, hence falling short of achieving true MNC status. It seems that generating revenue from abroad is not enough to become an MNC, but then what defines a multinational?

MNCs are defined not only by their scale of sales or market shares overseas but also by their global influence. First and foremost is branding. Very few large Chinese companies have well-known brands outside of China. Many of China's biggest companies have been focused on building a strong brand identity at home rather than internationally. Among the 133 Chinese companies listed in the Fortune 500, only a few have scaled up thanks to their global presence. China is the largest source of imports to the USA, but two 2013 surveys showed that only 6% of respondents could name at least one Chinese brand.

Second, an integrated and unique development plan is necessary. Just as the stability of a country's development requires a clear plan, so does that of a corporation. A clear plan not only has the ability to effectively guide the development of a company but also consolidate a corporate spirit in terms of its core values, strategies, and potential impacts on the future business landscape worldwide. For instance, one of the major reasons why people have so much faith in Tesla today is that its CEO, Elon Musk, has had followed his business plans for decades, making the story of Tesla not only an example but also a legend, adding tremendous value to the corporation.

An integrated organizational structure is also crucial in terms of international management. When carrying out international projects, MNCs usually feature a localized operational team that is fully integrated into corporate decisions. Meanwhile, many MNCs conduct international projects that nurture new talent and create

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a pool of international ready executives who can provide intuitive guides for corporate development. Most MNCs also feature foreigners in management structures internationally as well as domestically.

The final point lies in the influence of global technology. MNCs have played a major role in stimulating technological development across multiple industries. Transformational technology necessarily contributes to the long-standing influence of a corporation. Take one of the most classic examples—the streamlined production model of Ford transformed not only the automotive industry but also the manufacturing industry. Another example is Apple's unique iOS operating system, which transformed the way people use their phones.

In looking back at the process of globalization, Chinese companies often proactively buy foreign firms to achieve economies of scale, technology upgrades, and expansion in new markets, but still fall short of becoming true MNCs

The globalization of Chinese enterprises has gone through several stages. Early on, globalization was led by trade and trade-related finance, particularly driven by the government mandate to "go abroad" in 1990s. Chinese State-Owned Enterprises (SOEs) invested heavily abroad (particularly in developing countries) with the primary purpose of securing natural resources. The following decade witnessed a significantly greater spread of overseas Chinese affiliates. CNOOC, State Grid, Southern Grid, Petrochina, Sinopec, Huaneng, and Guodian leveraged newly listed companies to engage in international activities, mostly through minority stakes in peer companies or projects. However, only a few of those companies had clear intentions of competing in international markets, and problems often arose due to the limited scale and fragmentation of many of the projects, and lack of experience in coordinating operations overseas.

In the second phase, Chinese companies started to engage in international M&A to acquire key technologies and assets to support domestic development. China's investment in mature markets such as the USA and Europe reflected its pursuit of advanced technologies. Chinese companies invested a record USD 45.6 billion in the US economy through 142 transactions. Major transactions included AnBang Insurance's investment in Strategic Hotels & Resorts, and Haier's acquisition of GE's consumer appliance subsidiary. Europe continues to be a favorite destination of Chinese investors, with a more focused technology and know-how approach, with almost USD 80 billion invested in 2016. Top deals include ChemChina's bid for Syngenta, Tencent's investment in Supercell, and Midea's acquisition of the German company Kuka.

However, when investing abroad, Chinese businesses are usually very proactive, sometimes taking on excessive risk. In particular, there are more and more unsolicited bids from Chinese companies looking to expand overseas that are facing protracted and costly takeover battles. Other issues are related to culture, management, legal affairs, compliance, and human resources. The majority of Chinese buyers do not have a solid post-merger integration plan. More often than not, they simply pump financial liquidity to the target company and let the existing managers operate the business. Gradually, some Chinese companies have realized that it's extremely difficult to

integrate R&D from a target company into the mother group, let alone to maximize the synergy between the global markets and Chinese production.

4 What is the Chinese Way of Becoming Multinational?

Despite the challenges of becoming true MNCs, many well-known Chinese groups have managed to achieve some degree of success in fields across the industrial, commercial, and services sectors. These include companies like Huawei, Fosun, Haier, TCL, and ChemChina. But what unique features and successful experiences of Chinese companies can be leveraged to help them become true MNCs?

Perhaps most importantly, the Belt and Road Initiative (BRI) has created a friendly environment for Chinese companies to expand internationally. China enjoys a strong policy framework that not only ensures domestic certainty but also serves as a backbone for Chinese companies' global integration. China has launched a series of policy initiatives to enhance trade and political relations between China and other countries, allowing China to boost its growth by exporting its capital, technology, and capacity globally. For instance, the BRI announced by President Xi Jinping in 2013 promotes economic cooperation amongst countries along the "Belt" and "Road" routes in Afro-Eurasian regions, which also stimulating business opportunities from infrastructure to manufacturing and finance. Moreover, the recently signed Regional Comprehensive Economic Partnership (RCEP) creates a stable and predictable business environment for regional trade and investment.

At the same time, the Chinese entrepreneurial spirit, which emphasizes hard work, provides effective labor resources that help corporations thrive. China's spirit of working hard is based on the belief that hard work today will bring about prosperity tomorrow, which is firmly rooted in the culture. Such a hardworking spirit and the will to make a difference originated in the 1980s, when China's government encouraged the construction of infrastructure to promote the economy. Alibaba's founder Jack Ma has a famous line: "Yesterday is hard, today is hard, but tomorrow—tomorrow will be beautiful." Many of China's legendary entrepreneurs such as Jack Ma come from humble beginnings, which means they often value high asset turnover and good timing over perfection, expecting to sustain high rates of growth and comfortable with a heady pace. As a result, many large Chinese companies share a stringent management style (i.e. a 996 work schedule), especially in technology (Huawei, Alibaba, Tencent, etc.). Despite controversies over such management styles, this hardworking spirit, shared by managing directors and employees alike, has resulted in high productivity and rapid development of these giant companies.

Growing innovation leadership has facilitated the internationalization of Chinese companies. China has competitive advantages in the transport equipment industry, especially railway equipment, due to its advanced technology, lower costs, and expanding networks. In the energy sector, total Chinese investment in power generation and power transmission has surged since 2011, mainly driven by large acquisitions in Europe, South America, and Australia by China State Grid, as well as the

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"Big 5" Chinese power generators and greenfield investment in renewable energy. In the machinery industry, China is pushing its companies to upgrade and automate by increasing research budgets and making more higher-value products. It has also encouraged companies to acquire European and US rivals with advanced technology. Technology companies such as Lenovo and Huawei are paving the way for Chinese brands to globalize, in spite of increasing political and regulatory challenges, across the planet.

As video apps like TikTok and other social media giants bring innovative internet business models that threaten existing global platform giants, Chinese MNCs are perceived as potential disrupters, not just as followers. China has become an innovation giant that defines novel business models, notably in the field of consumer markets, characterized by customer-centric innovations. The country has nourished leading tech companies such as Alibaba, Tencent, and Baidu, which have invested heavily in tech innovations.

In addition, burgeoning PEs and PVc have been facilitating the innovation drive. A sign of increasingly mature capital markets in China, financing activities by PEs and VCs are becoming more popular, driving the growth of promising start-ups or growth firms that could become the future MNCs. According to data from the China Foundation Association, PE funds invested RMB 739.2 billion in domestic companies in 2019. As of 2019, 86,254 investment projects have been conducted, with an investment amount of RMB 6.24 trillion, an increase of 17.77% relative to 2018. The most heavily involved industries include computer applications, capital goods, medical devices and services, medical biology, and raw materials.

Innovations in the domestic market can be efficiently leveraged when expanding overseas. TikTok's mother company ByteDance was established in 2012 and has publicly acquired more than USD 72 million in financing in less than 10 years, which effectively supported its rapid development. Building on the experience in other apps like Toutiao, TikTok managed to renovate on a global scale the notion of "new media" like short videos, which has transformed digital marketing from relational marketing to interactive marketing with a larger range of influence and higher level of stickiness. By the end of 2020, TikTok had been downloaded 1.9 billion times worldwide, with a DAU over 3.3 million.

5 Hurdles to Overcome and Solutions

To sum up, increasing global trade, the constant deepening of globalization and technological advances have offered more opportunities for Chinese enterprises to go global. Even in 2020 and the first half of 2021, the incredible resilience of Chinese supply chains has confirmed that Chinese MNCs will keep playing a major role as manufacturing power houses. 2021 will be a crucial year for Chinese companies that have the ambition to go global. Both national and international priorities highlight global cooperation and have opened up unprecedented opportunities for Chinese enterprises to invest abroad. However, volatile political and economic conditions

also require Chinese companies to become more strategic, efficient, competitive, and sustainable to achieve these goals. Adjusting business models will be critical to become true multinationals, therefore circumventing some of the political and economic hurdles of solely being "Chinese companies."

Some of Roland Berger's Chinese clients have achieved growth and better business results through successful globalization and international development strategies with clear geographic and/or industry focuses. Companies need to first establish clear strategic plans and goals then implement international expansion according to actual external and internal circumstances with a clear focus on regions in order to achieve the optimal allocation of global resources. For instance, Chinese investment in strategic natural resources such as oil and gas by large SOEs has long focused on securing raw materials in emerging markets like South Asia, Central Asia, Africa, and South America, which turned out to be successful. However, such a strategy is not enough to ensure a well-received global brand image. To consolidate their global position, it is imperative to establish a clear and focused development roadmap. One possible measure would be to actively engage other global giants in their respective fields to co-develop resources, as is the case in the nuclear sector.

Governance of international development and operations. Chinese companies should improve corporate governance structures and establish an institutional system in line with international markets, local government, and business communities, while at the same time integrating international standards into their development strategies. This is particularly true in the execution stage, where overseas management could be strengthened by either grooming their own managers or recruiting global talent. A much higher and visible proportion of non-Chinese leaders and managers is indispensable if they are to be regarded as true MNCs.

Team China: cooperation across different companies. Companies that have been operating overseas for a longer period of time have more experience, which enables them to run their businesses better than those who have only ventured overseas recently. After years of exploration and experimentation, some large Chinese companies with more experience have formulated a set of models and practices. Their philosophies, policies, and management practices could potentially set standards for other Chinese companies, and their local market resources can be shared among small-sized companies and newly globalized companies. We suggest that companies unfamiliar with foreign markets learn from their industry peers and select an appropriate role model, perhaps even partnering with them to find the most effective way to become more international.

Partnership strategies with foreign companies to enter third-party countries. Some Chinese companies lack specialized partners with local influence to assist in their international expansion process. Typical local partnerships include, but are not limited to, local business partners, professional service firms, and some non-government organizations (NGOs). By seeking joint venture opportunities and strategic alliances with local partners, Chinese companies can both become stronger and reduce risk. This is not so innovative and compares well with the experience of Western companies developing in China through joint-ventures, even if most were initially mandated by equity caps and restricted market access. Such cooperation

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provides a learning curve and a de-facto mutual interest, until interests can diverge, or scale demands another model. By leveraging professional firms with overseas experience, Chinese companies can also reduce information asymmetry and enhance decision-making capabilities. Chinese companies should also increase cooperation with international organizations, NGOs, and other local stakeholders. Due to their third-party status, NGOs command credibility across the world and are thus more readily accepted by stakeholders in host countries. Forming close ties with these organizations can attract public attention to Chinese companies and expand their community influence.

Integration strategies and implementation after large overseas acquisitions. One major gap that Chinese companies face when considering and conducting overseas acquisitions is post-acquisition integration. As mentioned earlier, this too often boils down to a simple take-over and a "business as usual" approach. While a lack of focus and strategy in international acquisitions might lead to overly proactive and blind capital investment, strategic investment can, on the contrary, effectively help construct a global image for corporations. For example, ChemChina followed a systematic "reverse take-over" process by initially acquiring divested, sometimes non-core assets of other chemical companies, which helped them obtain resources and access to broader markets, using these newly acquired companies to create internal organizational and managerial pillars.

Post-acquisition integration should start well before the transaction itself. Integration of each acquired company is different and depends on multiple factors:

- Financial, operational, and industrial objectives pursued in realizing the transaction;
- Level of integration can range from keeping it "as is" as a new subsidiary, financially or strategically steered, to a full merger and integration into the parent company; intermediate integration levels include the integration of specific functions, business segments, or geographies;
- Development of the underlying consumer market and competitive positioning of the acquired/merged company;
- Original intention of the parent and the acquired companies from a financial, strategic and cultural standpoint and level of transformation expected after the transaction (e.g., restructuring, performance improvement, or accretive acquisitions creating the opportunity for enhanced performance due to improved synergy);
- Cooperation between management and operational teams of the parent and acquired companies, cultural differences between the two companies (history, performance, management styles and processes, decision-making, etc.).

Moreover, an acquisition or a merger does not stop when the transaction is signed. Instead, integration needs to be carefully planned and executed over time in order to achieve sustainable returns. In a regular Roland Berger survey of 130 international executives, across 15 industries, that were involved in acquisitions and mergers, 80% of failed post-acquisition integration was due to incomplete integration and lack of synergy management, and 50% was due to insufficient management of the

differences in corporate culture. This is particularly the case for cross-border integration, including Chinese–Overseas transactions. Integration activities are not "rocket science," but they do rely on preparation, process management, speed of execution, and experience. This is what our Roland Berger consultants usually bring to our clients.

The success of an acquisition or merger is usually measured only after a few months/years, depending on the size of the transaction, and on other criteria (such as the realization of top and bottom line synergies that were expected during the preparation stage, and/or actual integration of the two companies and the creation of a seamless and single organization and culture). This is why we recommend that Chinese companies consider international acquisitions that have a more professional and proactive approach toward integration. The following is a checklist of post-acquisition integration building blocks.

- 1. Execute transaction-related activities without disrupting on-going business and integration processes;
- 2. Define an underlying vision and strategy for the acquisition and specific integration objectives and approaches;
- 3. Secure key people and manage corporate culture differences proactively;
- 4. Identify key challenges for integration and for NewCo;
- 5. Design an integration structure;
- 6. Define NewCo governance and organization;
- 7. Ascertain and activate synergies;
- 8. Communicate proactively and clearly with all stakeholders.

Beyond the practicalities of developing international assets within their portfolio of activities, Chinese companies should also use soft power to increase cultural integration and influence, following the examples of Haier or Huawei.

Unfamiliarity with local customs, lack of communication, cultural differences, and misperceptions are major issues that confront Chinese companies. Cultural differences are the most prominent issue facing overseas labor relations, and some Chinese companies have yet to build effective communication mechanisms to exchange ideas with stakeholders in host countries. One way to resolve this is to give higher priority to the training and promotion of local employees and to increase the number of local managers. For example, Haier and Huawei adopted an expert-driven approach when expanding overseas, with a proven ability to integrate with local markets through the acquisition of local talent, development of local products, and staffing of R&D in overseas centers. By doing so, Chinese companies can better navigate cultural barriers and build trust with potential foreign partners. More importantly, instead of solely focusing on profits, Chinese companies should keep an eye on local communities by organizing cultural exchanges, participating in local infrastructure projects, providing vocational trainings, and running public welfare programs for underprivileged groups.

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Ultimately, if Chinese enterprises hope to succeed in their drive to expand overseas, they need to focus on formulating international development strategies, improving communication mechanisms with local stakeholders, establishing international corporate governance, promoting partnerships, and strengthening integration/implementation capabilities.



Denis Depoux is Member of the Management Board and the Global Managing Director of Roland Berger. He has a master's degree and a post-graduate research degree in organization sociology from Sciences Po Paris. He began his career in China in 1993 with French energy giant EDF. He joined Roland Berger in 2001, focusing on the energy and environmental sectors, and sharing his strong consulting expertise and rich industry experience in the USA, Europe, and Asia. Depoux has been actively supporting the firm's Greater China operations since 2007. Since moving to Shanghai in 2015, he has contributed greatly to the transformation of Roland Berger in Asia. Since 2020, Denis Depoux has been one of the three Global Managing Directors of Roland Berger.

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On the Ground

Airbus—A Solid, Reliable and Trustworthy Long-Term Partner for China



Gang Xu

Abstract Since it first entered the Chinese market in 1967, Airbus has been actively participating in China's process of reform and opening-up. Airbus thrives on the *competition and innovation* in the Chinese market and is using a *holistic development strategy* when it comes to future growth in China. Integration in terms of manufacturing with our *completion and delivery center in Tianjin*, cooperation in technology areas like *big data*, *AI* and *new energy* as well as China's efforts toward *carbon neutrality* create even more opportunities for Airbus to play a role in China's development strategies.

Keywords Competition and innovation · Holistic development strategy · Tianjin completion and delivery center · Big data · AI · New energy · Carbon neutrality

1 Airbus China's Past and Present

Airbus saw the potential of the Chinese market long ago, entering the Chinese market back in 1967, which gave it a rare strategic opportunity. In addition to commercial aircraft, Airbus is also the world's leading helicopter manufacturer as well as a European leader providing tanker, combat and military transport aircraft. It has also become one of the world's leading space companies.

In 1967, the Airbus Helicopter (formerly known as Eurocopter) was the first to enter the Chinese market. In 1985, with the delivery of an Airbus A310 to the CAAC East China Regional Administration, the predecessor of China Eastern Airlines, Airbus' commercial aircraft officially entered the Chinese market. In 1998, Airbus Defence and Space jointly established Beijing Spot Image Co. Ltd. with the Aerospace Information Research Institute and the Chinese Academy of Sciences, resulting in the first commercial company to provide earth observation satellite image products and services in the Chinese market.

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2 The Chinese Market is a Huge Indispensable Strategic Market

The Chinese market has been a rare strategic opportunity for Airbus. Since it first entered the Chinese market in 1967, Airbus has been actively participating in China's process of reform and opening-up, witnessing firsthand the vigorous development of the aviation industry. Over the past decade, Airbus has delivered about 20% of its global production to Chinese customers annually and as of today some 2,000 Airbus aircraft are operated by Chinese customers, which means that China has the largest number of Airbus aircraft in service of any country in the world.

In 2020, despite the impact of the pandemic, Airbus delivered 99 commercial aircraft to the Chinese market, accounting for 17.5% of its total global output. While this is less than 20%, there has been an obvious trend toward increase sales. In the first quarter of 2020, the effect of the pandemic resulted in the number of aircraft delivered by Airbus to Chinese customers accounting for only 6% of its total global delivery that quarter. This rose slowly to 9% in the second quarter, 20% in the third quarter and 24% in the fourth quarter. This clearly shows that China's market experienced a sharp recovery and has a strong resilience. In October last year, the Airbus A320 final assembly line in Tianjin successfully delivered its 500th aircraft.

Looking forward to the future, Airbus is confident that it will continue to grow in China. With a population of 1.4 billion, China is the second-largest aviation market in the world, but the number of flights taken per capita is only 0.5 per year. In other words, only one in two people travel by air once a year, which is a far cry from the United States, the world's largest aviation market, where the number of flights per capita is 2.8 per year. We believe that China can maintain an annual growth rate higher than the world's average in the global aviation market. A market forecast by Airbus also predicts that in the next decade, China will surpass the United States to become the world's largest aviation market. In this sense, there is huge room for development and China's market will provide even more opportunities in the future.

3 Globalization is Our Philosophy

China is not only a huge market for Airbus, it is also an important partner. The Airbus final assembly line in Tianjin has attracted many other leading enterprises in the aviation industry to Tianjin. It has also enabled many Chinese enterprises to enter the international market through the Airbus project.

With the outbreak of COVID-19, there has been talk of decoupling from China and moving toward de-globalization, which we believe is very dangerous and unrealistic. As a natural promoter, practitioner and beneficiary of globalization, the aviation industry would naturally be a direct victim of "anti-globalization". The aviation industry has a global supply chain, and its airworthiness standards and markets are also international and globalized. We have seen that during the pandemic, with

extensive restrictions on people-to-people and international exchanges, the aviation industry was the first industry to feel the impact. It is for this reason that aviation has always been rooted in the concept of globalization, practicing it, promoting it and ultimately benefiting from it. The aviation industry has been and will continue to be a rapid and effective communication platform that promotes connections between people, places, cultures, philosophies and economies. Globalization is our philosophy.

Globalization is also the nature of Airbus, because from the moment it was founded, Airbus has been a consortium composed of diverse countries. One of the core beliefs of Airbus is inclusiveness, which shares similar elements with globalization. After all, Europe only accounts for 30% of Airbus's global market, while 70% of its market is outside Europe. This has led us to go beyond our own market. At the same time, markets like China are not only important and strategic, they are also the force that has helped Airbus to become more competitive on a global scale. China also has a number of emerging science and technology industries, while it continues to grow in the area of finance. We believe that a partnership with China can result in a win—win situation.

I am the first Chinese CEO of Airbus China, which is a proof of Airbus's unwavering localization strategy ("localization" here means that local people lead in the local market). From the perspective of Airbus HQ, "localization" outside of the home countries is a key part of the company's globalization strategy. At present, Airbus has about 2,000 employees in China, with a localization rate of 94%. When the Tianjin final assembly line was put into operation in 2008, we had a total of 450 employees in the factory, 150 of which were expatriates, accounting for one-third of all employees. At that time, the company developed its localization roadmap and five years later the number of foreign employees dropped from 150 to 18. Airbus now has an outstanding group of talented Chinese employees who have an excellent level of competitiveness in terms of operational efficiency and quality. This decision shows that Airbus is determined to be inclusive, multi-cultural and fully localized in major strategic markets, which also reflects its determination to become more international.

4 Competition is an Important Guarantee for the Healthy Development of the Aviation Industry

The potential of China's market is huge, but there is also no lack of cost-effective locally branded civil aircraft, such as the C919. As a global aircraft manufacturing giant, how does Airbus view the fierce competition in the Chinese market?

First, Airbus would like to express its heartfelt congratulations on the introduction of the C919 to the Chinese market and the launch of the CR929 project. Competition is important for the healthy development of the aviation industry. Airbus is not the first aircraft manufacturer to enter the aviation market. Airbus was born from competition,

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and its continued success also comes from competition. Competition urges Airbus to invest more in R&D and listen to the market and its customers. We hope the result will be more efficient, more cost-competitive and more sustainable aircraft, all of which comes from the driving force brought by competition.

In the future, there will be still many development opportunities in China and the global aviation market, and we encourage fair and healthy competition. As important participants, Commercial Aircraft Corporation of China, Ltd. (COMAC), AVIC and many emerging private enterprises have stepped into the aviation industry—a "crown jewel" of the high-end manufacturing industry. Airbus has been cooperating with some of these companies for a long time, and look forward to exploring future opportunities together.

5 Airbus's Vision for China is Long Term, Diversified and Strategic

Cooperation between Airbus and China is multifaceted and comprehensive. Airbus and AVIC jointly established the Airbus (Beijing) Engineering Center Co., Ltd in 2005. This joint venture is responsible for 5% of the design of Airbus' A350XWB, the latest generation wide-body aircraft. Airbus set up its first aircraft final assembly line outside Europe in Tianjin in 2008. Airbus has also worked to provide Chinese airlines with greater benefits in the services and technical support areas. These moves include the founding of the AIRTAC China, the first aircraft emergency response center outside Europe, established in April last year amid the COVID-19 outbreak.

Airbus's China model must be viewed in a holistic way from multiple dimensions and perspectives. This model has proved to be successful, and we will continue along this path as we still will have a lot of room for development. In 1995, our market share in China was less than 9%, but in 2013, it reached 50%. We hope this model will also serve to inspire the global aviation industry through its success, enabling other companies to develop and grow in China, which is a massive and uniquely strategic market.

With the outbreak of COVID-19, China was the first and the only major economy in the world to register positive growth in 2020. China's GDP grew 2.3% in 2020, which was remarkable in the face of the unprecedented challenge of the pandemic. From the middle of last year, China was able to effectively control the spread of the virus, which was reflected in the aviation industry, often used as a "barometer" to reflect the state of the pandemic. By the second half of last year, especially in the fourth quarter, China's domestic passenger traffic returned to pre-pandemic levels, speaking to China's remarkable achievements in prevention and control. Airbus is confident that China's economy and market will make the right moves going forward.

What will the future look like? In the short run, the future is unpredictable and fragile. With new variants emerging all over the world, the question of whether current vaccines will be effective, and the issue of mutual vaccine recognition in

various countries will create uncertainty. The state of recovery is precarious—with sporadic outbreaks in some Chinese cities, air passenger trips during the Spring Festival were only 60% of what they were pre-pandemic.

However, we remain optimistic on the long-term development of the global aviation industry, especially in China. China's large population provides a huge untapped potential market for the aviation industry and will produce an even greater demand for air travel. Furthermore, increased urbanization, new infrastructure projects and better public services will also create new demand.

6 Broad Prospects for Future Cooperation Between Airbus and China

It has been 36 years since Airbus delivered its first aircraft to China in 1985. Today, all Airbus commercial aircraft have parts made in China. Airbus's strategy in China is unswerving, and Airbus will continue working to become a solid, reliable and trustworthy long-term partner and a core member in the "closed loop" of China's aviation industry. There is great potential for expanded cooperation in the future.

First, we need to deepen the existing cooperation and expand to the latest generation of wide-body aircraft following the opening of the completion and delivery center in Tianjin. We delivered the first A350 in Tianjin in early 2021. We have also started a fuselage equipping project in Tianjin for the A320 family aircraft. These are all further extensions of our existing cooperation projects.

We are also considering increased integrated cooperation with China in new technology areas like big data, artificial intelligence and new energy. This is why we chose Shenzhen to set up the world's second Airbus innovation center, the only one outside the United States. This is also the reason why we also established an engineering center with our Chinese partners in Beijing.

Third, China promises to reach its peak carbon dioxide emissions around 2030 and achieve carbon neutrality by 2060, which is an enormous goal that demonstrates China's commitment to acting as a major player in global governance.

Airbus is an aviation leader. The reason for this is that we not only aim to produce economically competitive aircraft that are reliable and safe, but as the aviation industry accounts for 2.5% of global carbon emissions, we also feel duty-bound to promote efforts to reduce emissions throughout the industry. Airbus has announced that it expects to launch its first zero-emission aircraft powered by hydrogen in 2035.

I am constantly thinking about what role Airbus can play in China's key development strategies. I believe that the dual circulation model, in which domestic and overseas markets reinforce each other, is very good news for the aviation industry. To ensure sustainable and strong development in the aviation industry, air travel must be a product that most people can afford, rather than a privilege for a small circle of "elites". China has 400 million people that are "middle class" and releasing their consumer potential will be the key to the success of domestic circulation.

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As growth in domestic circulation will be the mainstay in China, urbanization, equal access to infrastructure and improved public service will also see further development, which will undoubtedly create great potential for both commercial and general aviation. From the supply side, China needs to upgrade domestic industries to better meet the market demand. As the "crown jewel" of the high-end manufacturing industry, aviation is the next key industry in China.

We have achieved a win-win result in our partnerships with AVIC and other partners throughout the industry chain, including airlines that have cooperated with us for many years. We will stick to this path of win-win cooperation and mutual benefit, striving to contribute to China's transition to become an aviation powerhouse, which will also help Airbus maintain its leading position in the aviation market.



Gang Xu was appointed CEO of Airbus China on January 8, 2018. As country head of Airbus China, he is responsible for all Airbus Commercial Aircraft business activities and leading the company's Helicopters and Defence and Space businesses in China. In 2005, Gang Xu started to actively participate in the Airbus A320 Family Final Assembly Line project when he was director of the Investment Promotion Bureau of Tianjin Free Trade Zone. From 2008 to 2011, Gang Xu was Deputy GM of the Airbus Tianjin A320 Family Final Assembly Line (FAL), and in 2011, he was appointed Chairman of Board of the FAL. In 2014, Gang Xu was nominated and worked full time as a Standing Committee Member of 17th Communist Youth League of China's Central Committee and Party Secretary of the Tianjin Youth League until 2017.

Background: Having been a part of Airbus China since 2005, Gang Xu rose to become the company's CEO in 2018. When he first worked with Airbus, the company was preparing to set up its first aircraft assembly line outside of Europe. Four Chinese cities bid during the site selection process—Tianjin, Shanghai, Xi'an and Zhuhai. Gang Xu worked in the Tianjin Binhai New Area and participated in the entire bidding process. Ultimately, Tianjin was chosen as the location for the final assembly line project. Representing the local government, the Tianjin Free Trade Zone and the Aviation Industry Corporation of China, Ltd. (AVIC) established a joint venture with Airbus. Gang Xu was appointed as the Vice General Manager of the joint venture company, jointly managing the assembly line together with the General Manager, who was nominated by Airbus. The assembly line has been operating successfully for 13 years and delivered its 500th A320 series plane in Tianjin in 2020.

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The Remarkable Rise of Premium Automobiles in China



Hubertus Troska

Abstract China has evolved at a breathtaking speed to become one of the most important players of the global economy. It's is no surprise that the growth in Chinese car sales goes hand in hand with the rapid growth of wealth in Chinese society and China is now also the world's most important market for *premium car brands*. Mercedes-Benz is growing "in China, with China" to understand Chinese requirements and pave the way for a *future of mobility* that is *carbon neutral* and meets the desires of consumers.

Keywords Premium car brands · In China · With China · Future of mobility · Carbon neutral

At the time of writing this article, I did not know the thoughts and stories other contributors will share in this book. However, given the extremely positive way in which many industries have developed in China in recent decades, I expect many success stories. Indeed, China has evolved at a breathtaking speed to become one of the most important players in the global economy. The story I would like to share in this context is how this development has played out for the business I work in—the automotive industry. Personally, I have been fortunate enough to be present for the latest chapter of this particular success story.

The importance of China has become especially evident in its resilience during the last global economic crises. In the economic and financial crisis of 2008 and 2009, it was China leading the world's recovery. And during the recent COVID-19 pandemic, China bounced back faster than any other economy, providing stability for multinational companies around the globe. It has been impressive for me to see the vigor and speed with which China's economy found its footing again during this period.

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1 China—The Engine of the Global Car Industry

This holds especially true for the automotive industry. You can easily imagine this during a commute in any of China's big cities nowadays. Car sales have evolved at a staggering pace in this country. Back in 2000, only about one million passenger cars were sold in China every year. Just 10 years later, that figure reached about 15 million vehicles. It was also about this time, China surpassed the USA as the world's biggest automobile market. In 2020, one in every three cars sold worldwide was sold to a customer in China. Given the attractiveness of the Chinese market, almost every international car brand is also present in China, and Chinese consumers can choose from a wider variety of brands nowadays than customers in any other market in the world, and from both local and foreign manufacturers.

However, sheer numbers only begin to describe the impact that China has had on global car manufacturing. Cars hold a special place in consumer behavior. They tend to be among the most valuable goods we own, other than real estate, and more than most other commodities, they reflect our values and position in life. Thus, it is no surprise that the growth in Chinese car sales goes hand in hand with the rapid growth of wealth in Chinese society. As a result, China is now also the most important market for premium car brands in the world. During the pandemic in 2020, the premium auto market grew by almost 10% and the premium segment, as we define it, has outperformed the overall car market for the last 10 years. This is all the more impressive when you consider that just 15 years ago, the premium automobile market of the world's most populous nation was smaller than in some European countries. Premium brands are leading the transformation of the automobile through their extensive efforts in research and development. Today, they all have a strong focus on the requirements of their customers in China.

I have lived in Beijing for more than eight years now, which has allowed me to experience firsthand the dynamics of this country and its market, and if there is anything I find even more fascinating than the sheer speed of market development here, it is the incredible potential for innovation. There is no doubt in my mind that China will play an important role in the future of our industry.

2 Making China Our Second Home

While Mercedes-Benz has a long history of success in many countries around the world, back in 2013, our market position in China was significantly behind our expectations. Our main competitors were selling significantly more, some even twice as many cars as we did. In terms of sales, the USA was the number one market for Mercedes-Benz passenger cars worldwide, followed by Germany. China only ranked third in our sales at the time. I remember intense discussions on our China strategy within the company. There was a strong conviction already at that time that China would play a major role in our global growth ambitions and success.

As a multinational company, there are different ways to be successful in a market. You can export to China from other countries or build plants and develop your local footprint in China.

3 Our Mindset: Grow in China, with China

I believe building a strong local footprint is an important factor for successfully doing business in China. Working closely together with Chinese partners, we have been expanding local production over the years, increasing R&D in China, developing good Chinese leaders and learning as a group every day how to better understand consumer preferences and their ambitions. It has been a long journey.

This approach has allowed Mercedes-Benz to make China our most important market worldwide. In 2020 alone, we set a new record with sales of almost 780,000 cars in China, making it by far the most important market in the world for Mercedes-Benz and one that is larger than our second and third largest markets combined. This corresponds to over a third of our worldwide car sales. Today, over three quarters of the Mercedes-Benz passenger cars we sell in this country are also produced here.

Getting to this point required developing an understanding of the distinct differences that exist between doing business in China and operating in other countries. Personally, I have learned a lot through this process and I know there is much more to learn. The measures we took were substantial. We worked with our partner to change our organizational structure, and we massively expanded our sales network. We adapted our brand positioning, and we also adjusted the way we develop our cars. Let me share a closer look into some of these aspects.

The particular characteristics of the Chinese car market start with the specific regulatory environment. For example, until recently, foreign enterprises were required to operate in joint ventures with Chinese companies. This is not common in most of our other country operations. However, from my own experience, I would say that it is a great advantage for a foreign company to have strong local partners in China. Not only on the production side but also on the retail side. The trusting relationship with our partners has helped us to understand the local market and the regulatory environment. This was the key to continuously increasing our local footprint and at the same time seizing mutually beneficial business opportunities together.

We started local production back in 2005 with our business sedan, the Mercedes-Benz E-Class. Original plans foresaw building about 25,000 cars annually in China. Today, that figure is almost 25 times higher, making our Beijing plant the biggest Mercedes-Benz plant in the world. And of course, the commitment to quality and the pursuit of excellence by our local team lives up to any comparison. As a result, as of today, more than three million vehicles have rolled off our assembly lines in Beijing. Production has expanded to include eight different passenger cars, including four long-wheelbase models exclusively designed for China and we intend to expand localization even further.

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4 Creating a Deep Understanding of Chinese Requirements

Another unique aspect of operating in China is the specific technical regulations. This includes the quotas for cars with electrified drivetrains—so-called New Energy Vehicles (NEVs)—we have seen in recent years. Such measures have accelerated our general efforts to electrify our cars. Much sooner than in many other regions, customers in China have been able to enjoy favorable purchasing conditions and the necessary infrastructure for driving electric vehicles. This has led to significant growth rates for NEV sales.

There are many other ways in which we have seen specific product preferences in this market. For example, Chinese consumers are more likely to choose a sedan, SUV or coupé than in other markets where we see stronger preferences for hatchbacks, station wagons, pick-ups or cabriolets. At the same time, the customer base in China is distinctly younger than anywhere else around the globe. Readers from other parts of the world might be surprised to learn that the average Mercedes-Benz buyer in China is only 36 years old. In the USA, the average age of our customers is 52 years old. In our home market of Germany, it is 56. So there is almost an entire generation separating our customers in Germany and China. This, of course, strongly reflects their lifestyles and their preferences, particularly when it comes to digitalization and connectivity. Another interesting factor is that one third of our customers in China are first-time car buyers. This means that their Mercedes is the very first car they will ever own. This even applies to some of our top of the line S-class buyers.

We have been continuously working on adapting to these very specific circumstances. Take our brand perception, for example. Chinese customers have extremely high expectations of premium brands, especially with regard to quality, technological innovation, connectivity and design. This is very much in line with our aspirations for Mercedes-Benz. This is summarized in our global brand claim "the best or nothing". However, we have found that the positive connotations this brand claim holds in other parts of the world did not translate well into Chinese. It sounded somewhat detached and arrogant. So, we adapted the essence of the claim to the Chinese cultural context and adjusted it to read in English "an untiring spirit in pursuit of the best".

In order to live up to this message, we have to create the most desirable cars, the most innovative technologies and the best customer services. One way of doing this is through our collaboration with local industry leaders, tech players and startups. We have created partnerships with several universities as well. At the same time, we have consistently expanded our local R&D footprint. Today, Daimler's R&D hub in China is the most comprehensive outside Germany. Over 1,000 talented and mostly local people, are working on advanced design, electric mobility, intelligent connectivity or whole vehicle testing. Given our strong presence in terms of production and R&D, you could say that China has indeed become a second home for Mercedes-Benz. This also means that our future global product development is increasingly impacted by what we learn here.

5 Paving the Way to the Future of Mobility

As mentioned before, I believe that China will play an important role in the transformation of the global car industry. Connectivity and digitalization are excellent examples. Digital services have become an integral part of everyday life here much faster and to a much greater extent than in many other parts of the world. We can see an incredible amount of creativity and innovation in the development of Chinese consumer behavior, especially in the digital realm. This is why, for example, we have created dedicated teams in our R&D and marketing departments to create digital solutions in and around cars tailored to Chinese requirements.

It is evident that China will also play an important role in one of the most significant transformations our industry is undergoing right now—the shift to electric driving. China is already the world's largest NEV market. And some of the world's biggest suppliers for electric components are developing in China. I believe this development will gain momentum thanks to China's aim to achieve carbon neutrality by 2060.

6 Shifting Gears Towards a Carbon-neutral Future

There is no doubt in my mind that we all have to contribute to drastically reduce CO_2 emissions. Mercedes-Benz has announced that we will make our fleet CO_2 -neutral by 2039, which we call "Ambition 2039". As a result, our vehicles will have no more relevant impact on inner-city air quality, improving the livability of cities around the world. By 2025, we will have about a dozen all-electric Mercedes Benz vehicles in our portfolio. We believe that the best way to make electric driving a commonplace reality is by giving our customers the world's most desirable electric cars. Obviously, China will be crucial to our plans. By the time you read this article, we will have made substantial progress in electrifying our fleet. As of the end of 2021 alone, we have offered four all-electric vehicles in the market, three of which are built in China where we have also established local battery production. By 2030, every second Mercedes-Benz sold worldwide will be a plug-in hybrid or all-electric vehicle, potentially even more.

However, our so-called "Ambition 2039" plan does not only cover our vehicles. We follow a holistic approach, which means we aim for sustainable processes along all stages of the automotive value chain—from technical development to the extraction of raw materials, to production, service life and recycling. Our Chinese plants are prime examples. Thanks to an in-house photovoltaic system, our Shunyi plant in the north of Beijing has reduced CO_2 emissions by 21,000 tons annually. Meanwhile, our BDA plant in the south of Beijing recycles more than one million liters of reclaimed water every day. Together with our Chinese suppliers, we are striving for battery cell production that is carbon neutral and uses certified raw materials.

All of this goes to show that the remarkable rise of premium automobiles in China is far from over. On the one hand, there is strong evidence that much of the growth

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we will see in global premium markets will continue to stem from China. On the other hand, we also expect to see an entirely new breed of premium cars that are fully autonomous, connected, fully electrified and strongly influenced by Chinese customers. I believe this to be a very positive outlook.

I have lived in several countries around the world since I was a child, but China holds a special place for me. It has truly become a second home for me personally and has changed my perspective on different aspects of life and business in many positive ways.

At the same time, my core understanding of business has remained the same. My personal conclusion, after working and living in China for many years, is that the central business principle in China is no different from that in the rest of the world. In the end, it all comes down to truly understanding and respecting your customers' desires and aspirations. This is the starting point for forming an organization that is devoted to delighting customers with exciting products and services and proving to them that you are worthy of their trust—each and every day.



Hubertus Troska has been a member of the Board of Management (BoM) of Daimler AG since December 13, 2012. In this function, he is responsible for all Daimler's business activities in Greater China (including Hong Kong, Macau and Taiwan) covering Passenger Cars, Vans, Trucks, New Energy Vehicles and Financial Services. As the highest level of management in Greater China, Mr. Troska has been appointed as chairman or board member of Daimler-owned subsidiaries or joint ventures in Greater China. Mr. Troska joined Daimler over 30 years ago. Through these years, he has served Daimler AG in various national and international management positions. Prior to his appointment in China, he was the Head of Mercedes-Benz Truck, President for Mercedes-AMG GmbH, and before that Head of Product Marketing Passenger Car Sales. He had also worked for Daimler in management positions in Turkey, the USA and Mexico.

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Being Chinese in China to Ensure a Win-Win Solution: Michelin's Goals for Development in China



Kamran Vossoughi

Abstract Michelin's success in globalization comes in part from being "French in France, Brazilian in Brazil and *Chinese in China*", taking advantage of *multi-party participation* to achieve *win-win solutions*. Michelin is focusing on three areas in its expansion in China—*sustainability* in all areas, *innovation-driven development*, and expansion of *domestic demand*. Michelin's core criteria—the well-being and development of people, the continuous growth of profits, and a positive contribution to the planet—are also in line with China's goals.

Keywords Chinese in China · Multi-party participation · Win–win solutions · Sustainability · Innovation-driven development · Domestic demand

Édouard Michelin, one of Michelin's founders, boldly promoted Marius Mignol, an ordinary worker, who later invented the radial tire, triggering a revolution in the automobile tire industry. Édouard firmly believed that tapping the potential of the individual was the best way to increase the value of the group, which he likened to breaking through rocks to find the diamonds hidden inside. These unique practices and philosophical wisdom have continually guided Michelin through its 130-year history, resulting in continuous victories. Another Michelin saying, "We are French in France, Brazilian in Brazil and Chinese in China", is also one of the factors that has contributed to the Michelin Group's success in "globalization". This idea aptly addresses the following question: How do you perceive the development of multinational companies in China today? A natural response would be that by getting to know and understand well China, you will be able to find the best fit that can benefit your company.

For more than 30 years, Michelin has witnessed China's economic boom during the Reform and Opening-up period that began in 1978. The release of the *14th Five-Year Plan* (2021–2025) for National Economic and Social Development and the Long-Range Objectives Through the Year 2035 by the Chinese government is very exciting for multinational companies seeking longer-term growth in China.

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Only by seizing the opportunities and promoting multi-party participation can these companies work with China and the world to achieve win–win solutions.

1 Green China: Sustainability in All Areas

As the world's second-largest economy, it is important to note that China has begun promoting a comprehensive green revolution both in its economy and society in order to achieve carbon neutrality by 2060. According to the recently released 14th Five-Year Plan, China will implement a series of ambitious and proactive low-carbon development plans. The core strategy behind China's goal to make green transformation a national policy is sustainable development. As the world watches with admiration China's efforts to contain the COVID-19 pandemic and restore economic growth, I believe China's leadership in green transformation will only grow more significant. At the same time, I also believe that global multinational companies will be key players in achieving this green transformation. With their talent pools, financial resources, R&D capabilities, and global influence, multinational companies' efforts in enhancing China's green transformation and promoting China's sustainable development will also benefit them by creating a larger stage for their own development.

For instance, Michelin firmly believes that sustainability is the future and considers the balance between People, Profit, and the Planet to be a central criterion for all decisions. This strategic vision fits perfectly with the idea of sustainable development in China's 14th Five-Year Plan, which provides an opportunity for Michelin China. The question then becomes, how can we leverage China's sustainable development to synergize the company's own development? We decided to use the idea of sustainable, high-quality development as the foundation of Michelin's China business, with the goal of fully participating in and deeply integrating with China's green transformation.

For conventional services, such as our well-known automobile tire business, Michelin is committed to decarbonization and environmental protection throughout the product life cycle (PLC). In product development, Michelin is committed to the research and development of environmentally-friendly materials and will achieve 100% sustainably sourced tire materials by 2050 through the utilization of renewable, recyclable, and ecological materials. In their application, Michelin tires are already uniquely formulated to reduce vehicular energy consumption. As for waste disposal, Michelin continues to promote used tire recycling projects around the world. Finally, another popular example of our commitment to sustainability is the popular Michelin Travel Partner Green Star award, which was awarded in China for the first time in 2020 in order to recognize restaurants that promote sustainable dining.

In developing new business, Michelin has also shown its commitment to investing in new and renewable energy projects. For example, Michelin has been committed to hydrogen energy transportation for more than 15 years. We are accelerating our research and development process as well as our investment in Chinese businesses

that are engaged in promoting zero-emission mobility. The idea of sustainable development is deeply rooted in all areas of our businesses. Michelin has pledged to reduce carbon dioxide emissions at all its production facilities by 50% by 2030 compared with 2010 and to achieve carbon neutrality by 2050.

The importance of green transformation and sustainable development goals for both China and the world is indisputable. Michelin has been following this trend and has been actively promoting the realization of these goals in China by making mobility safer, cleaner, more efficient, and more convenient in order to create a greener China and a greener world.

2 Innovation-Driven Win-Win Cooperation

In its 14th Five-Year Plan, the Chinese government put forward the concept of "being committed to innovation-driven development and creating new advantages for development in a well-rounded way". Breaking through the "rocks" of this idea, we can see that the fundamental purpose of "innovation" is to enhance national competitiveness. China is leaping ahead in terms of technological progress and GDP growth, something even the COVID-19 pandemic has not been able to prevent. China was the only major economy in the world to achieve positive economic growth in 2020, and the world's only large economy to achieve growth without huge fiscal stimulus programs.

Innovation in science and technology is indispensable in sustainably driving high-quality development. As a multinational company that has innovation in its DNA and has been continuously innovating for 132 years, Michelin deeply recognizes that innovation is at the core of corporate and social development. In China today, how can multinational companies find the "diamonds of innovation" and build fast track channels to high-quality growth within China, thereby contributing to high-quality development?

Innovation should be mission-driven, taking into account both depth and breadth, and Michelin is a mission-driven company. Through the electric age and into the smart age, even as our business has expanded and our goals have grown, our mission has remained the same—to lead the way toward progress. Over the years, Michelin has remained committed to exploration and innovation in the field of sustainable mobility. From the invention of radial tire, to the first energy-saving and environmentally-friendly tire, to the innovative 3D-printed tire, and to the Michelin Guide to new materials and later to connected services and solutions. These examples demonstrate that Michelin has always been dedicated to offering better products and services through technical innovation, breaking through the traditional barriers of the industry with innovative management ideas, and expanding its business to provide people a better travel experience. Today's Michelin has extended that spirit of innovation beyond tires.

Innovation requires talent if it is to be sustainable. Talent is the "diamond" that was discovered by our founder, and that is an indispensable part of innovation and

development. In the Chinese market, the competition for talent is fierce, and Michelin has a unique way of locating and employing people. In Michelin, there is no "human resources" department, instead, we have a "Personnel Service" department. Machines are a resource, property is a resource, but people have lives. Michelin does not consider people to be resources, which is something we are very proud of. People are the cornerstone of Michelin's sustainable development goals, and Michelin's management activities have always been based on the principle of putting people first. Michelin believes that every person is unique, and the company's job is to discover the "diamond-like" talents of each employee by inspiring them, empowering them, and establishing a productive feedback mechanism, which allows the team to grow and shine together. At the same time, the strategy of talent development goes beyond the company itself: Michelin China also actively seeks strategic partnerships with Chinese institutions of higher education to provide a foundation for the company's talent development. At the beginning of 2021, Michelin China won a "Top Employers China 2021" certification for the first time, awarded by the Top Employers Institute. This official recognition of Michelin's sustainable talent strategy is a great honor.

Innovation also requires collaboration to achieve win-win results. No innovative idea can be realized by just one person, one company, or one government; we must act together and utilize our collective wisdom to achieve win-win solutions. The Movin'On Summit by Michelin has been held for more than 20 years (before 2017 this was known as the Michelin Challenge Bibendum) and has become an authoritative space for collaboration in the field of global sustainable transportation. The Summit gathers, drives, and inspires the stakeholders in the field of mobility to take action and explore solutions that promote mobility while reducing negative environmental impacts. The Michelin Startup Acceleration Program (MSAP) was also officially launched in early 2019, aiming to provide Chinese startups with a wealth of industry knowledge and skills, problem-solving scenarios for experiences in creating relevant solutions, and for promoting the implementation of innovative solutions for sustainable mobility. Adhering to the concepts of collaboration and win-win solutions, Michelin China will vigorously promote the establishment of an ecosystem conducive to sustainable development. Together with the Chinese government and an increasing number of companies, Michelin will combine its sustainable development and innovation goals together to build a sustainable ecosystem.

3 Expanding Domestic Demand, Upgrading Experience

2021 is the first year of China's 14th Five-Year Plan. The Chinese government plans to build a new development pattern, focusing on the domestic sector while ensuring that the domestic and international sectors promote each other. Expanding domestic demand will become a strategic goal of the Chinese government. While "domestic demand" technically means China's domestic demand, I prefer to interpret this as "internal demand". As the world's second-largest economy, Chinese consumer demand will not only be felt at the level of products and services, but will

increasingly focus on life experiences. "Upgrading experiences" is the "diamond" in Chinese consumer demand that we need to unearth, and as such Michelin is committed to meeting the growing domestic demand through "quality experiences". Through digital transformation and innovation in the field of mobility, Michelin offers a unique and enjoyable lifestyle option for Chinese consumers.

Digitalization is the focus of this experience upgrade. China is experiencing a period of rapid development in its internet and digital technologies; and "accelerating digital development and building a digital China" is also a focus of the 14th Five-Year Plan. Compared with the rest of the world, China has created a unique digital environment that is truly pioneering. From internet engines to social media and payment methods, China has a more localized digital configuration, with deeper and wider application and market penetration. In this context, digitally transforming global companies in China is a forward-looking strategy. Michelin China is actively promoting digital services and solutions step-by-step. We are driven to deeply understand the needs of our partners, customers, and consumers, and we respond quickly at the business level. At the latest China International Import Expo (CIIE), we showcased connected services and solutions including Track Connect, MEMS 4, Metro Connect, Michelin I-Selfseal, Smart Connected Tire, and so on. These digitally-driven products and services, which are designed to address users' needs, have succeeded in improving the experience of customers in multiple dimensions. Internally, we have built digital workshops and launched InTouch, a dedicated digital platform for information sharing and interaction among managers, employees, and the service department, and set up a young and dynamic Michelin Digital Acceleration Team to equip Michelin's digital transformation with a customer focus. Digitalization enables companies to break down barriers, build an agile organizational structure, enhance employees' work experience, and work with them to build an efficient and resilient business.

Upgrading consumer experiences is the cornerstone of deepening our cultivation of the Chinese market. Michelin is constantly breaking boundaries and has evolved from a leader in the tire industry to a pioneer in providing people with mobility experiences, smart services, and solutions. From the world-famous *Michelin Guide*, to the reservation platform for boutique hotels *Tablet*, and *Wine Advocate*, one of the world's most authoritative guides for wine, to public transportation and car maintenance services to help people with daily mobility, Michelin has always focused on people's experiences and feelings in every aspect of life. China is developing rapidly, and the lifestyles in China are undergoing tremendous changes. We need to better understand the behavior and lifestyles of Chinese consumers. Bringing them a better experience is the topic of the future, and it is also the cornerstone for multinational companies hoping to deepen their roots in the Chinese market.

China is also in a stage of rapid development, and the Chinese market is becoming increasingly open to foreign investment. In recent years, but especially from the annual NPC and CPPCC sessions this year, we have seen that the reform and opening policies are being constantly updated and upgraded. As a foreign company in China, we are embracing a broader market and new growth opportunities, but we must

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be sincere in incorporating a Chinese way of thinking and philosophy in order to understand China, and fully participate in its beautiful culture.

Everything Michelin does must meet three indispensable criteria: the well-being and development of people, the continuous growth of profits, and a positive contribution to the planet. From the perspective of a desire to be innovation-driven, to engage with China's green transformation, enhance digital transformation, and more, we share the same goals and direction as the Chinese government. As President Xi stated in a recent speech, "There is nothing that cannot be accomplished when people pool their strength and put heads together". As long as we work together to fulfill our responsibilities, we will surely build a win—win situation and, most importantly, a better life for everyone.



Kamran Vossoughi is the President and CEO of Michelin China and is based in Shanghai. He spearheads the company's strategic and operation direction in Mainland China, Hong Kong, Macao, Taiwan, Mongolia, leading nearly 7,000 employees in growing businesses including Tires, Services and Solutions, Mobility Experience, and High-tech Materials. Kamran Vossoughi was honored the winner of the 1st Hongqiao Friendship Award in 2020. Mr. Vossoughi was also appointed as Chairman of Hongqiao Friendship Alliance by Shanghai Changning District Government. In September 2021, Mr. Vossoughi won the Magnolia Silver Award awarded by the Shanghai Municipal Government. Since joining Michelin in 2002, Mr. Vossoughi has served a wide range of executive positions in France, Poland, and Russia, he held roles spanning Motor Sport, Manufacturing, Progress, etc. Prior to relocating to the China zone, he was the President and CEO.

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A Look at the Digital Economy in Terms of Talent Using the LinkedIn Economic Graph



Yanping Wang

Abstract Digital talent provides a unique perspective to study the global *digital transformation* and gain insights into the global digital economy. Trends like *talent migration*, *hiring rates*, *and in-demand skills* by region are focuses for LinkedIn and we are partnering with governments and non-governmental organizations around the world to share these insights and recommend policy solutions. In examining regional migration, we have found that China faces several challenges - an imbalance in the *distribution of digital talent*, lack of focus in *digital talent cultivation* and *gender gaps* in digital talent when hiring.

Keywords Digital talent \cdot Digital transformation \cdot Talent migration \cdot Hiring rates \cdot In-demand skills \cdot Distribution of digital talent \cdot Digital talent cultivation \cdot Gender gaps

1 Digital Talent, a Unique Perspective on the Global Digital Economy

Breakthroughs in artificial intelligence, big data, and other new-generation information technologies have given the digital economy an increasingly important role in global economic growth. Countries everywhere around the world are using the digital economy to form the bedrock of their economic development.

In recent years, China's digital economy has witnessed accelerated development. The *White Paper on China's Digital Economy Development* (2020) released by the China Academy of Information and Communications Technology shows that in 2019, China's digital economy added value reached RMB 35.8 trillion, accounting for 36.2% of GDP. The digital economy has become a major engine that is prompting high-quality development in China's economy. Moreover, accelerating digital development and building a digital China have become top-priority national strategies outlined in the 14th Five-Year Plan and the 2035 Long-term Goal Outline released during China's Two Sessions.

Y. Wang (⊠)

Digital talent has become a key driving force behind the digital transformation of industries. As this transformation pushes forward, demand for digital talent is soaring. However, the supply gap for professional digital talent is still considerable. As a global talent platform, LinkedIn has over 740 million members, 55 million employers, 24 million open jobs, 36,000 skills, and 11,000 educational institutions. By mapping every member, company, job, and school, LinkedIn's data can uncover trends like talent migration, hiring rates, and in-demand skills by region. Partnering with governments and non-governmental organizations around the world to share these insights and recommend policy solutions, LinkedIn connects people to economic opportunities. Digital talent provides a unique perspective to study the global digital transformation and gain insights into the global digital economy.

2 Millstones and Key Findings of Economic Graph Projects in China

Since 2017, the LinkedIn China Economic Graph team has cooperated with the Center of Internet Development and Governance (CIDG) at Tsinghua University and has analyzed the development status of global digital talent and trends in the digital economy. Based on LinkedIn data, researchers looked at trends from perspectives including industry distribution, skill features, and mobility of talent. A total of seven reports on this topic were published over four consecutive years and have won attention and support from various sectors of society.

2.1 Phase One (2017–2018)—"Digital Talent" First Defined Under the LinkedIn Economic Graph

The China Digital Economy Talent Report.

With more than 52 million members in China, LinkedIn has unique insights into the dynamics of China's digital talent landscape. In 2017, LinkedIn's Economic Graph team coordinated with Tsinghua University to launch the first-ever Economic Graph report on the digital talent landscape in China: *The China Digital Economy Talent Report*. In this report, the concept of "digital talent" was first defined as China's digital economy was just emerging.

The report identified the geographic distribution of digital talent in China, as represented by professionals with specific job titles that reflect "digital" functions. The functions were classified into six categories: digital strategy management, in-depth analytics, product R&D, advanced manufacturing, digital operations, and digital marketing. These digital functions were found not just at companies in the tech industry, but increasingly in the manufacturing, finance, and consumer goods industries, too. Through this prism of "digital functions", we can assess the supply and

demand of specific digital skills held by these professionals across industries and cities.

The flow of digital talent remains concentrated in first-tier cities, but the report found that China is in the midst of a digital transformation. The cities with the largest pools of digital talent were Shanghai, Beijing, Shenzhen, Guangzhou, and Hangzhou, while the cities of Chengdu, Suzhou, Nanjing, Wuhan, and Xi'an were close behind. With the exception of Guangzhou, several other first-tier cities showed a trend of gathering talent pools. Hangzhou and Suzhou have also become cities with a net influx of digital talent.

In terms of demand for digital talent, the most in-demand positions are concentrated in product R&D and operations. Skill demand no longer focuses on programming, but more on comprehensive skills in technology, management, and leadership.

3 The Understanding Migration Report

With the Chinese economy becoming increasingly open through policies such as "the Belt and Road Initiative," China is transitioning from a talent exporter to a talent importer. Fifteen Chinese mainland cities—including Beijing, Shanghai, Guangzhou and Shenzhen—saw significant international talent migration between January 2017 and February 2018. To better understand cross-regional talent migration patterns across industries, titles and skills, LinkedIn dove deeper into these trends and released its *Understanding Migration Report* in April 2018.

The most attractive cities are the most economically developed. This report found that despite the impact of factors such as geography and talent attraction policies, the majority of cross-regional talent migration is by professionals moving from the United States and the United Kingdom to Shanghai, Beijing, Shenzhen and Guangzhou. Emerging tier-one Chinese cities closely follow in terms of talent attraction from other regions.

By industry, cross-regional talent migration tends to align with regional economic strengths. In Hangzhou, for example, software and IT services attract most cross-regional professionals, while professionals moving to Qingdao and Dongguan tend to relocate to work in manufacturing.

3.1 Phase Two (2018–2019)—Regional Research on China's Digital Economy and Talent Development

<u>Digital Economy and Talent Development Report for China's Yangtze River Delta Region.</u>

The rapid growth of China's digital economy across industries is driving socioeconomic mobility and is playing a critical role in regional economic development.

To map the impact of digital transformation on China's regional economies, the LinkedIn Economic Graph team worked together with Tsinghua University and the Shanghai Institute of Science and Technology Policy to launch the *Digital Economy and Talent Development Report for China's Yangtze River Delta Region* in October 2018.

The report calculates the concentration of digital talent in 10 industries for major cities in the Yangtze River Delta Region, finding that ICT and manufacturing have the highest degree of digitization, and advantages vary in different cities (Fig. 1).

Five cities (Beijing, Shenzhen, Guangzhou, Wuhan, and Chengdu) are the top sources for domestic talent migration both into and out of the region. The report found that Hangzhou tops the list of most attractive cities for domestic digital talent, followed by Shanghai and Suzhou, while other cities are experiencing a net outflow of digital talent.

Shanghai plays an important role in developing talent to support other regions. It attracts more junior-level talent and exports more senior-level talent compared with other regions in China. This indicates that the city plays an important role in training

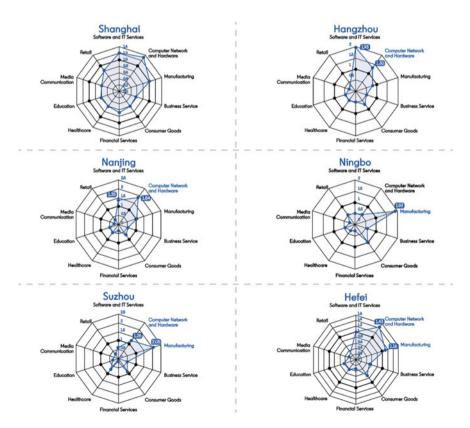


Fig. 1 Comparison of Digital Talent in Six Cities

and developing talent, and it helps create a pipeline of digital talent for other regions (Fig. 2).

Digital Economy and Talent Development Report for Guangdong-Hong Kong-Macao Greater Bay Area.

As another of China's most economically developed regions with the highest level of reform and opening-up, the Guangdong-Hong Kong-Macao Greater Bay Area (also known as "the Greater Bay Area") has become a key player as China strives to build world-class city clusters and participates in global competition. With the progress of industrialization and IT application, the digital economy figures prominently in the GDP of the Greater Bay Area. In Feb 2019, the Digital Economy and Talent Development Report for Guangdong-Hong Kong-Macao Greater Bay Area was released in cooperation between the LinkedIn Economic Graph team and Tsinghua University.

Cities in the Greater Bay Area show distinctive characteristics in terms of industrial development. The report shows that Guangzhou features the most balanced talent distribution among industries; Shenzhen has outstanding talent advantages in ICT; Hong Kong boasts remarkable advantages in financial and educational talent;



Fig. 2 Movement of Talent to and from the Yangtze River Delta Region

and Macao has a very high concentration of digital talents in tourism and vacation services. The majority of talent in the other four cities in Guangdong province are concentrated mostly in manufacturing and consumer goods (Fig. 3).

It was also found that talent is concentrated more in the eastern part of the Greater Bay Area rather than the west, with the Pearl River as the dividing line. Top talent (BA and above) and digital talent were mainly found in Shenzhen, Hong Kong, and Guangzhou, while Shenzhen proved to be a top hub.

Moreover, the Greater Bay Area has an overall net inflow of talent. It is one of the most attractive hubs for digital talent in China with cities showing greater appeal than Beijing and Wuhan. It is also on par with Shanghai and Chengdu, but lag behind Hangzhou. From a global perspective, the Greater Bay Area holds some attraction for global talent, but this attraction can still be strengthened (Fig. 4).

These two well-developed regions in China have their own distinctive features. In the Yangtze River Delta Region, the driving roles of Shanghai and Hangzhou are prominent, while in the Greater Bay Area, cities complement each other with varied, distinctive features.

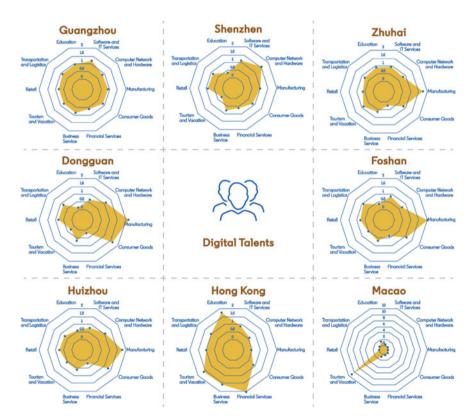


Fig. 3 Analysis of Cities in the Greater Bay Region

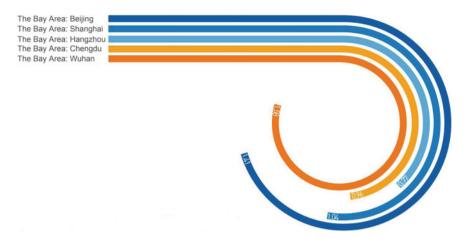


Fig. 4 Comparison of the Greater Bay Area to Other Cities in China

3.2 Phase Three (2019–2020)—Deep Dive in Industry Concentrations of Global Digital Talent

As the digital economy rapidly develops on a global scale, digitalization is affecting every aspect of the social economy and becoming a driving force for urbanization. Driving collaboration and innovation of traditional industries with digital technology and establishing regional and global innovation centers and world-class city clusters constitutes a new battlefield in global competitiveness.

Innovative Cities and City Clusters in the Era of Digital Economy: A Talent Perspective.

In searching for ways to unleash the potential of digital economy through talent strategies and drive the development of innovative cities and city clusters, LinkedIn China and Tsinghua SEM CIDG jointly released a collaborative report entitled *Innovative Cities and City Clusters in the Era of Digital Economy: A Talent Perspective* in November 2019. This report offered a global perspective with a comprehensive analysis of the digital talent status quo through an examination of employment, skill sets and the flow of digital talent across 11 city clusters world-wide.

The report showed that global digital talent frequently moves between cities, while Shanghai and Shenzhen were listed among the global top five in terms of talent attraction. Generally, the most frequent digital talent migration was between the Boston-Washington city cluster and the SF Bay Area, followed by migration between the Yangtze River Delta City Cluster, the Greater Bay Area City Cluster and the Triple J (Jing-Jin-Ji) City Cluster in China.

The SF Bay Area has a strong competitive edge in tech skills, while the Triple J (Jing-Jin-Ji) city cluster and YRD city cluster strong in disruptive tech skills. Based on LinkedIn's Skills Genome, this research calculated the relative penetration rate of tech skills and disruptive tech skills across 26 cities and observed that city

clusters that have competitive advantages in both tech skills and disruptive tech skills include: Boston-Washington city cluster, SF Bay Area, UK-Ireland city cluster, Sydney Bay Area and Bangalore. City clusters that are competitive in disruptive tech skills include: the Germany city cluster, the Triple J (Jing-Jin-Ji) city cluster, the YRD city cluster, and Singapore (Fig. 5).

The proportion of digital talent in non-ICT industries is higher than in ICT industries overall. Among non-ICT industries, those with the highest proportion of digital talent are the manufacturing, finance, and consumer goods sectors.

2020 Global Digital Talent Index Report.

To provide further insight into the migration of digital talent in major cities and regions around the globe, the LinkedIn Economic Graph broadened its scope to include 32 major cities around the world and published *the 2020 Global Digital Talent Index Report* under cooperation with Tsinghua SEM CIDG in October 2020.

The report further defines digital talent as individuals with skill sets relevant to the industry and excludes people with only simple digital literacy. Digital talent in the report includes strategy managers, high-end analysts, researchers, and developers. The report also incorporates talent with multiple digital skills, such as research and development, operations, smart manufacturing, and marketing.

The global proportion of digital talent in non-ICT industries is high, and the digital transformation of traditional industries continues to advance. The proportion of digital talent in non-ICT industries is higher than in the ICT industry, as digital transformation has integrated into all walks of life. Digital talent is concentrated in four major non-ICT industries: manufacturing, finance, consumer goods, and corporate services. Los Angeles, New York, Hong Kong, the United Arab Emirates, and London are the top five global markets with the highest proportion of digital talent in non-ICT industries (Fig. 6).

Digital skills are the most representative in emerging economies such as China and India. Beijing's representative skills are development tools, computer hardware, animation, digital marketing, and computer networking, while Shanghai's top-five skills are computer hardware, manufacturing operation, electronics, digital marketing, and foreign languages, as shown in this report.

Disruptive digital skills (e.g., AI, data science, robotics, etc.) are core to driving deeper digital transformation. Disruptive digital skills in North America, Europe, and the Asia–Pacific Region show differentiated development. North America leads the world in the penetration rate of disruptive skills; Europe's overall ranking is also high, with Munich taking the lead in aerospace and Paris in both aerospace and material science. In the Asia–Pacific Region, Bangalore, the UAE, and Singapore rank higher, while Chinese cities lag behind (Fig. 7).



Fig. 5 Representative Digital Skills of Core Cities in the World

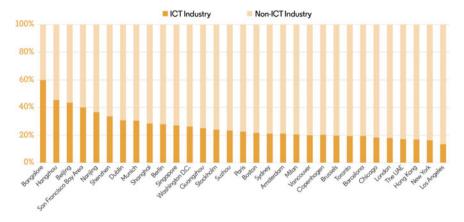


Fig. 6 Comparison of ITC/Non-ICT Industry Talent in Various Cities

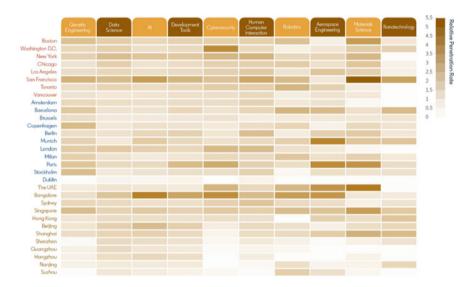


Fig. 7 Relative Penetration of Disruptive Digital Skills in Various Cities

4 Observations and Policy Suggestions on Digital Talent

4.1 Distribution of Digital Talent is Unbalanced in China

Digital talent is the main driving force behind the digital transformation of industries. As digital transformation pushes forward, the demand for digital talent is soaring, especially in the post-pandemic era when online industries are booming. However,

China is facing a shortage of digital talent and a huge talent distribution gap exists between regions.

The cultivation of digital talent should keep up with the development of the digital economy. Therefore, the application of the "Dual Circulation Strategy" in the cultivation of digital talent could be a way out. On the one hand, it could strengthen the cultivation of domestic digital talent, while on the other hand, it could also make China more attractive to international digital talent. Attracting and retaining digital talent requires the consideration of various factors such as industrial foundations and innovative environments. Individual regions should attract digital talent by developing competitive industries, improving innovation ecosystems, and providing multi-faceted guarantee conditions like low taxes, high housing allowances, and open education/medical resources. These could attract talent and high-tech enterprises to these regions and balance the geographic gap in digital talent.

4.2 Digital Talent Cultivation in the Post-Pandemic Era

COVID-19 has posed both challenges as well as opportunities for the development and transformation of industries in China. Traditional industries such as manufacturing and consumer goods have witnessed a substantial negative shock, while industries such as online education, streaming media, and health care have seen more opportunities for further development due to their unique characteristics and growing market demand for their services. In the post-pandemic era, online professions like network anchors, online teachers, and We Media practitioners are emerging as online industries boom. Meanwhile, the app-oriented digital economy (e.g., Ali and Tencent apps) is making life more convenient and reshaping lifestyles. This has also been a good opportunity for traditional industries to start their own digital transformation. Therefore, a key issue that must be addressed is how to educate and train digital talent in traditional and emerging online industries.

Digital talent cultivation in the post-pandemic era should be more targeted, and an effective talent introduction and training mechanism should be established based on demand. Governments could give necessary guidance and training resources on practical demand of industrial digital transformation, and level a playing field for talent with different backgrounds.

4.3 Skill is Becoming a New Currency in the Labor Market

In July 2019, LinkedIn Economic Graph published a report titled *Data Science in the New Economy: A New Race for Talent in the Fourth Industrial Revolution*. In this report, the Skills Genome was revealed for the first time. It was found that skills can sensitively reflect tiny imbalances between supply and demand in the labor market and skill is becoming a new currency.

Disruptive digital skills (e.g., AI, data science, robotics, etc.) are key to driving deeper digital transformation. Except for Shanghai, which has outstanding talent advantages in a few disruptive skill fields (materials science, nanotechnology and robotics), most cities in China still have huge potential for growth in terms of the penetration rate of disruptive skills, which also means great growth potential for China. We suggest learning from countries advanced in disruptive skills and strengthening skill cultivation in China.

At the China Development Forum held in March 2021, Chen Yubo, Associate Dean of the School of Economics and Management, Tsinghua University, said, "At present, the structural problems in China's digital talent pool are of clear. 95% digital talent is concentrated in the R&D and operation chains, and digital talents are flowing from traditional industries to the Internet and software industries." To further develop China's digital economy, we must optimize the demand structure of digital talent in China. Professor Chen suggests that we should strengthen the cultivation of disruptive skills and improve the cross-integration of digital skills and technologies such as biology, materials, and energy.

4.4 Gender Gaps in Digital Transformation

As the labor market recovers from the effects of the pandemic, the *Global Gender Gap Report* recently published by LinkedIn Economic Graph shows that women are being hired at a slower rate in multiple industries. It said that there has been a significant decline in women hired into leadership roles, effectively wiping out years of progress. Sectors with historically low representation of women are also those with fast-growing digital industries, such as cloud computing, where women make up 14% of the workforce, and engineering where it is only 20%.

Sue Duke, Vice President, Head of Public Policy and Economic Graph at LinkedIn, said that "Women aren't well represented in the majority of fast-growing roles, which means we are storing up even bigger gender representation problems as we emerge from the pandemic. These roles play a significant part in shaping all aspects of technology and how it is deployed in the world. We simply have to have women's voices and perspectives represented at this foundational stage, especially as digitization is accelerating."

The report shed light on the growing gender gap in the global labor market under digital transformation. As one of the major parts of the global labor market, China would face the same challenges. Therefore, digital industries, especially future-shaping sectors like AI, cloud computing, big data, etc. should welcome more women. How to reduce gender gaps in these industries under the accelerating digital transformation is an issue that needs to be considered in China's future policymaking.

5 Afterword

As the Chinese economy shifts from a stage of rapid growth to a stage of highquality development, data plays a huge role as a key factor of production. At present, China's Internet penetration rate exceeds the global average. With the largest number of Internet users in the world, China has become the world's largest Internet market and data resource. Thanks to this massive user bonus and rich application scenario, China's digital economy has seen rapid development over the past 20 years. China is now entering a new era and a developing digital economy. With the fields like electronic commerce, financial technology, and 5G communications leading the world, the international influence of China's digital economy is increasingly significant. There are multiple dimensions to study within China's digital economy, and the LinkedIn Economic Graph provides a unique talent perspective in the analysis of China's digital transformation. The insights offered in the reports can help employers, governments, and professionals understand the dynamics of their local, regional, or global labor markets, so as to create more economic opportunities for everyone. In the future, we will keep diving deep into research on China's digital economy and share more valuable information.

For more EG insights, please visit https://economicgraph.linkedin.com/resources.



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Why Are Adaptive Learning Organizations Better Placed to Succeed in the Future? Insights from Research on Adaptive Learning Organization by NIIT and John Bersin Academy



Kamal Dhuper

Abstract Three decades of *Chinese educational reforms* have created a workforce oriented towards an industrial economy. Now the challenge is to transform *China's talent-development model* to develop the skills needed in an innovative, digitized, postindustrial economy. NIIT has embraced the idea of "Running Training Like a Business", which means companies have to be agile and elastic. *Learning and Development (L&D)* has become more complex and increased pressure on organizations, while *Adaptive Learning Organizations (ALOs)* have three characteristics of adaptivity that enable a proactive and fluid learning ecosystem. This gives them an advantage.

Keywords Chinese educational reforms · China's talent-development model · Running training like a business · Learning and Development (L&D) · Adaptive Learning Organizations (AOLs)

The economic shock of the coronavirus pandemic has accelerated several pre-existing trends while also giving rise to entirely new ones. In the face of such rapid change, executives are piecing together the future landscape of value and the new rules of competitive advantage for their organizations. New value shifts are being driven by shifting customer needs and behaviors on the demand side, increased value chain uncertainty on the supply side, and a reversal of many of the trends that have defined pre-pandemic globalization.

Competitive positions are more vulnerable during such shifts, spelling both promise and perils for executives. Referred to as "the new normal" or "the big reset" the emerging landscape will be characterized by the emergence of new value pools and erosion or existing ones, among individuals, corporates, and nations.

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McKinsey's recent report published in January 2021 titled "Reskilling China" provides valuable insights both on challenges and opportunities that exist in transforming the world's largest workforce into lifelong learners. Three decades of Chinese educational reforms have created a workforce oriented towards an industrial economy. Now the challenge is to transform China's talent-development model to develop the skills needed in an innovative, digitized, postindustrial economy. Key findings include the following:

- 1. A talent revolution in China can enable continuous improvement in living standards for all. For China to achieve 70% of the average per capita GDP of high-income economies by 2050, a long-term goal as interpreted by Chinese think tanks, necessary per capita GDP growth of 4.7% and wage growth of 4.9% is required. This requires a skills revolution in China's workforce.
- 2. **Up to one-third of global occupational and skills transitions may occur in China.** By 2030, up to 220 million workers, or 30% of the workforce, may need to transition between occupations due to automation. That's about 36% of all global transitions as per MGI's future of work model. China needs to support the adaptation of migrant workers, who have listed resources and access to training and, often, low skills, given that 22–40% of their work is susceptible to automation.
- 3. These transitions will require transforming China's education and skills development system. First, learning will need to be extended beyond schools to cover China's adults; this requires tripling the scope of skills development. Second, content needs to evolve from basic to a broad range of skills. The high cognitive, social and emotional, and technical skills that will be in demand could account for an average of 40 days per worker by 2030. Third, education and skills development should be available to all throughout their lives to support all workers who need to become lifelong learners.

The research recommends pilot projects based on four levers to kick-start the transformation. They include:

- 1. **Adoption of digital technologies.** China's economy is already significantly digitized, with increasing investments in education technologies. More than 900 million internet users can benefit from digital technologies and enjoy enhanced quality through hybrid online-offline learning.
- 2. Collaborative ecosystem. Expanded use of public-private partnerships, like NIIT's partnerships with universities and industry in China to design joint programs and drive innovation and research on digital technologies, can help plug the gap between skills developed and what the market needs. Such partnerships help address talent shortages in key sectors identified by the government.
- 3. **Enhanced vocational tracks**. China can make vocational tracks attractive to students by expanding flexible pathways such as a "3 + 4" secondary-undergraduate model that enables them to go directly to application-oriented universities. NIIT partners with multiple universities in China for jointly operating IT colleges where we embed our global curricula, faculty, and educational

methodologies across a four-year bachelor degree program, to produce day one job-ready IT professionals when students graduate. This also improves the quality of educational resources and teaching staff for universities and colleges.

4. Mindsets and incentives. Individuals can share their lifelong journey by using information platforms and acquiring required skills through micro-credential programs. Employers can enhance competitiveness by strengthening their provisions of training. The government can provide incentives to further investments in human capital.

The report rightly advocates an integrated delivery unit approach between government, employers, educators, and social institutions to drive implementation. Deeper participation by private-sector players as talent development and investments in training and skills development is greatly needed.

For many years, we, at NIIT, have embraced and implemented the idea of "Running Training Like a Business", first detailed by Edward Trolley in a book of the same title which became a seminal piece of work in our industry. To run training like a business, companies have to be agile and elastic. Organizations that are able to respond nimbly to sudden disruptions display what we call the 4Cs of Agility—Capabilities, Capacity, Customer-centricity, and Cost-control.

Learning and Development (L&D) is becoming ever more complex, and the need for specialized capability sets required to take advantage of the latest technologies and methodologies is exploding and putting an enormous amount of pressure on L&D organizations to keep up with various challenges.

In a world where profound changes are occurring rapidly, a deep understanding of customer needs and commitment to delivering a world-class customer experience seamlessly is vital. Disruptions cause surges in demand, and the reality to flex organizational capacity up and down in response to rapid changes in demand becomes critical.

Massive learning organizations often carry huge, fixed costs that go back as allocations to businesses struggling to manage volatility. It's never been more important to not just reduce costs but also move fixed costs to variable and implement "pay-for-what-you-use".

In recent times, we started to hear forward-looking learning and business leaders talk about a learning function that was more proactive, which could use data to predict the learning needs of a business or team, much before the business saw it as a capability requirement. Many such conversations shaped the notion of a learning organization that is highly adaptive.

NIIT got excited about this idea and decided to research this further.

We commissioned this research in early 2020 with the US-based Josh Bersin Academy, a little before the pandemic, which totally changed the magnitude of adaptivity required for any business to survive in this very fluid environment. Earlier in the year, when we started discussions with learning leaders, we thought we were getting best practices that would be more widely implemented in the future. But as we continued our discussions through the year, we found numerous examples of best practices that learning organizations had already successfully implemented to future proof themselves and to continue to deliver value to their business stakeholders. **Becoming adaptive represents a transformative stage in L&D**.

Our initial research on Adaptive Learning Organizations (ALOs) indicates that those companies outperform other organizations in both business and talent outcomes. We also found that ALOs share a common set of learning practices. They are far ahead of their peers in digital design and delivery strategies, learning in the flow of work, highly targeted programs, learner experience, collaboration, personalization, and understanding the future of work. These firms have the capability to sense market changes and fix learning structures, operating models, planning, and resources to serve the learning needs of the business quickly, efficiently, and effectively.

The external world will continually change and disrupt businesses and employee capabilities that are required to perform in the new environment. The current pandemic is obvious in its disruptiveness and impact on learning, however, change is always occurring, whether its economic recession, technology upheaval, or climate change, the ability to adapt is now a key requirement for businesses and the learning function.

Resiliency has become a key human skill across HR departments as businesses and employees are forced to adapt to new environments.

1 What is the Adaptive Learning Organization Model?

ALOs have three characteristics of adaptivity, which enable a proactive and fluid learning ecosystem. They SENSE, DECIDE, and EVOLVE better than their peer organizations.

- SENSE—the ability to harvest, measure, analyze, and draw actionable insights from multiple information and data sources to create forward-looking internal and external views.
- DECIDE—the ability to make accurate short-term and transformational decisions based on known information, collaboration, and built-in pivot points that allow for quick and efficient course correction.
- EVOLVE—the ability to implement changes and transform both for the immediate and sustainable future.

"Sensing" requires a whole new way of thinking and tools and practices that are looking forward at the beginning and not backward as we have traditionally thought in measuring learning.

The ability to sense allows L&D to forecast future needs more quantitatively and in a way that makes it easier to build a business case and align stakeholders.

For example, analyzing Salesforce activities and output provides real-time performance data on strengths and challenges client-facing staff have. A "Sensing" model where L&D is harnessing this Salesforce data would allow L&D to start at the actual performance need and build capability based on real talent and business data. This real-time data can also be used for workforce planning and forecasting longer term talent needs.

The depth of data and the ability to continually assess, learn, and act changes the game for how learning departments will operate and make investment decisions. Real-time data flows are now available from the LMS, LXP, LRS, HRMS, financial, sales, and operation platforms, to name a few, to build a picture of how learning can, and does, create value for the business and enhance the performance of learners. This type of data collection and analysis is seamless, unobtrusive to the business, and can be in real time. The adoption of data and analytics, AI, and machine learning are proving to be key components in ALOs. It allows the learning organization to make faster, better, and more effective decisions.

The second characteristic of an Adaptive Learning Organization is its ability to make highly relevant decisions quickly and plan, accordingly, knowing that the initial plans will change over time.

Having a continual flow of meaningful and insightful data at hand allows the learning organization to make proactive decisions and escape being reactive.

In other words, when things happen, it is prepared to make quick sense of the changing world and leverage the resources already in place (capabilities, processes, skillsets, technologies, budgets, etc.) to adapt to the new conditions.

ALOs were noticeably more prepared to adjust to the drastic changes required for learning during the initial phase of the COVID-19 pandemic. They were better able to analyze data and make realistic, viable, and difficult decisions faster. These organizations have been continuously learning and adapting and have the infrastructure and communication channels to adjust more easily. The organizations also relied heavily on their vendor/partners to bring thought leadership, augment capability, and efficiently pivot learning solutions to meet learners in their new working environments.

In contrast to these ALOs, many learning teams within the USA were simply caught off guard, even while they watched their Asian and European offices closing under the onslaught of COVID-19. They were slow to make decisions needed to implement new formats of learning and struggled to respond as they scrambled to

put forth band-aid remote learning solutions. The next characteristic of ALOs is their ability to evolve and sustainably transform their existing ecosystems.

Learning organizations that are adaptive are continually seeking innovation and testing new technologies and practices.

In other words, they are continually advancing their capabilities and practices. To do this well, ALOs build highly efficient, agile, and scalable operating models that anticipate and enable shifts in priorities and learning needs.

ALOs take a business-centric vs. L&D-centric view of the world, which allows them to better understand and support the business. Their service delivery model leverages design thinking, agile practices, and leading technologies to craft, test, deploy, and adjust solutions based on feedback data. Their operating models and processes are well thought out, documented, communicated, and integrated with the business. That doesn't mean that ALO systems are rigid, in practice, it is just the opposite. Flexibility, the ability to pivot, is built into the operating processes, resources, and structure to allow for dynamic and changing environments, giving L&D the ability to act with velocity.

For example, we found that ALOs have adapted to how employees work today. Most employees of large, global organizations work in highly connected and digitally enabled environments. The learning ecosystem of these organizations replicates the work environment. It is multi-modal, blended and anytime, everywhere. We rely heavily on digital tools regardless of our roles. Our social platforms, mobile devices, and online tools play a vital role in our daily jobs. Every production platform (Microsoft Teams, Salesforce, Google, Workday, SAP) is becoming more contentrich, so we must adapt our company-specific learning programs to embrace these new platforms. Having an agile service delivery model enables ALOs to anticipate and transition more easily to these new ways of delivering learning.

2 What Are the Benefits of Being an Adaptive Learning Organization?

As we started this research, we knew that adaptability, sensing, and flexibility were important. We put together a methodology that would specifically identify the practices that matter and then correlate these against various outcomes. There are 15 key practices to ALOs, and we looked at them all in detail.



2.1 The Adaptive Learning Organization Model—Dimensions, Practice, and ALO Insights

The accelerated changes of the twenty-first century in life, business, and L&D, such as big data, digital transformation, crowdsourcing, collaboration, agile, and design thinking, have nurtured a new model that has flexibility, transparency, and speed at its core. Organizations began building practices that fell into three dimensions, Sense, Decide, and Evolve.

2.2 The Adaptive Learning Organization Maturity Model



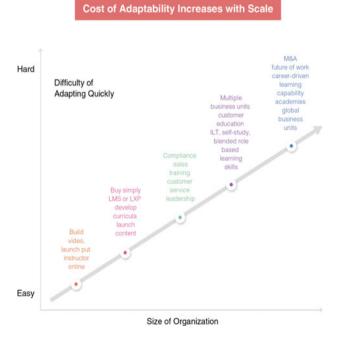
We found that L&D organizations in the Reactive or Fragmented states typically were either highly decentralized, entrenched in outdated learning models, or lacked a viable governance structure to communicate across the enterprise, to learn from each other, and to adjust to broader and scalable changes in unison. They had disjointed technology ecosystems, a high degree of duplicative resources, traditional structures, and learning solutions, and despite being well aligned with the businesses that they served, had a general lack of leadership culture to enable enterprise L&D transformation when it was needed. They tended to be risk adverse or played a "wait and see" game with the future. Often when enterprise transformation is attempted in these types of organizations, it loses momentum and falls flat, as the disparate groups continue their own practices and leadership cultures.

As L&D moves up the ALO maturity model, good things happen. L&D organizations within the Cohesive and Adaptive levels gain technology and analytical prowess, and an openness to explore, share, and communicate across L&D groups and with the business. They are increasingly seen as a "trusted advisor" to business leaders and HR, as they bring insights and solutions that map directly to changing talent and capability development requirements.

We found that more mature learning organizations have both the digital capability and the ability to personalize learning to the learner's needs through intelligent recommendations. This asset enables more of a consumer-grade experience, presenting highly relevant micro and macro learning opportunities at the point of need. Mature learning organizations also rely heavily on external partners to help guide, shape, and do the heavy lifting during transformational times, as well as provide scalable day-to-day solutions and forward-thinking market insights.

2.3 The Cost of Adaptability

Enhancing the adaptability quotient of your learning organization requires implementing a combination of learning transformations. Throughout discussions with ALOs, we found that building adaptability is a journey, and the time and investment required to enhance adaptability increase with the size of the business organization.



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SENSE	Trend Analysis	Learning Impact	Discovering Learning Needs	Digital Strategy	Personalization
DECIDE	Leadership Culture	Roles & Capabilties/Talent	Future of Work	Flexible Capacity	Capabilities Academy
EVOLVE	Emerging L&D Technology	Design Thinking	Learning in the Flow of Work	Agile Practices	Learning Journeys

2.4.1 SENSE

Trend Analysis

Today's world is forward-thinking, agile, and continually "listening" to what is happening to determine trends that could impact learning. Opportunities to engage with peers outside their organizations help broaden perspectives on trends, gather best practices, and test thinking and practices.

Adaptive Learning Organizations have a commitment to participate in external learning and business events to gather and share best practices. They believe that while learning is a strategic differentiator, there are common challenges and best practices that are relevant across industries and are best solved together by sharing experiences.

Learning Impact

Learning professionals have spent a considerable amount of time and resources implementing measurement models such as Kirkpatrick and Brinkerhoff to determine the impact and behavioral change outcomes from learning solutions. In many ways, these models perpetuate a L&D centric view of the world vs. a modern business or capability-driven approach. Also, implementing any of these models is a significant task for L&D.

We found that ALOs relied more on real-time measurement models. Starting with the question "What business challenges are we trying to solve?" They then identify specific metrics to target and utilize a wide range of data collection and analytics to determine impact, leveraging a digital analytics infrastructure already in place. For example, they measure level-1 metrics not through learner satisfaction surveys, but through content ratings, downloads, and follows, or other platform access data metrics that are already being captured and require no additional intervention.

ALOs are designed as open systems that transform to changing conditions in a fast, capable, and efficient manner. Therefore, the purpose of measurement is not to prove the effectiveness but gather insights for increased impact. Therefore, they adopt a dynamic measurement model that integrates learning's impact on leading and lagging performance indicators.

Discovering Learning Needs

Traditional need analysis has remained constant and often includes annual executive-level stakeholder discussions, HRBP feedback, reviewing annual engagement survey data, competency assessments, collecting data from performance development conversations and manager requests. ALOs focus on defined skills and capabilities and leverage analytics, crowdsourcing, data sensing from collaboration and productivity tools, search term analysis, workforce planning insights, etc. to analyze in real time what the organization or key roles are searching on, the content they are viewing and topics they are discussing, and the emerging organizational capability requirements. This creates a living, dynamic taxonomy of skills and capabilities created by the learners and the market.

ALOs focus on analyzing current business, social, and learning data against a set of key skills and capabilities to address learning needs. It includes using unobtrusive data collection that pulls data from multiple internal and external sources.

Digital Strategy

Overall, digital adoption is still emerging in HR, learning, and talent management. For all the focus on digital transformation from a business and consumer perspective, there is still an opportunity in the HR space to drive deeper digital strategies and ecosystems. The learning and talent vendor space is still fragmented with more modern digital capabilities often available in smaller, non-enterprise solutions. While platforms such as Workplace, Microsoft, and Workday are expanding their capabilities, we found that ALOs are not waiting. They are actively pursuing their plans to leverage technology for enriching learning experiences and creating higher impact.

While some ALOs are leveraging what's available and integrating those into their learning ecosystem (e.g. solutions such as VR, AR, Chatbots, and conversation analysis), others are building band-aid extensions of their core platforms to enable additional functionality that can help them deliver more value.

Virtual Reality immerses employees into "real-life" situations that heighten their senses and makes them experience a close to real environment. VR learning provides a unique and memorable learning experience unlike a classroom or online program.

Personalization

Workplace learning is about developing a set of capabilities, whether those capabilities solve immediate work challenges, strengthen skills for a current role, future roles, or help enable an employee's career aspirations. In a traditional, hierarchical organization, roles are more clearly defined and role-based training solutions work well. However, in a modern, more network-driven organization, employees work in more fluid roles and in a more project-based structure. Each project might require a different capability mix. A broad sweep of role-based training is not as effective in a network-driven organization. A significantly higher level of personalization is required to make learning effective, contextual, relevant, and just in time for the learners.

ALOs recognize the need for ultra-personalization of learning. They also recognize that ultra-personalization is only possible by leveraging technology. They have set up or are in the process of setting up learning ecosystems that leverage learner

persona and AI algorithms to create personalized learning journeys. They are using tools that allow for dynamic needs analysis and dynamic allocation of learning resources and scheduling of synchronous learning initiatives.

2.4.2 DECIDE

Leadership Culture

To adapt is to change, and change requires leadership. The four common themes that we found across ALOs are:

They have a strong learning culture driven by a focus on continuous learning at its core. The leaders of these organizations unquestionably understand the value of learning in meeting their business objectives. They openly and often share their commitment to learning.

The leaders have a connected vision that percolates from the CEO to the CHRO and the CLO. They also have a robust learning strategy that is led by the CLO, but very actively and openly supported by the CHRO and the CEO.

The learning leaders are strongly connected with the key business and crossfunctional leaders within their organizations. Their strategic learning initiatives include strong participation from the business, HR, and other leaders.

Their leaders are cautious but certainly not risk adverse. They have ambitious goals for the value they want to create for their organizations and are willing to be the first to try out new tools and approaches to learning. They are not afraid of failing, but they also have robust mechanisms to control the impact of failure.

Executive leaders of ALOs empower and value learning and make room for it and invest in it as part of their business strategies. A strong leadership culture makes learning a priority, enabling, and encouraging learning to support both in-role and career development.

Roles and Capabilities | Talent Mobility

Heavily hierarchical organizations are slow to adjust their practices and resource structures, making them much less adaptable. It is far more of a command and control model that tends not to share resources widely across the organization or to pursue talent mobility as a strategic business driver. As more organizations adopt a flatter, flexible, and agile team-based operating model, the need to access a wide net of resources quickly becomes increasingly important. Likewise, as employees continually develop their skills, they need to have opportunities to utilize their capability and provide value back into the business. This need for internal talent mobility applies to the learning organization as well. We found that ALOs practice talent mobility for their learning teams as well and carry a mix of generic and specialized capabilities.

Future of Work

The Future of Work presents unique opportunities and challenges for each organization. Augmentation and automation will significantly impact the configuration of job roles and the human capabilities required to work alongside bots and robots. L&D organizations need to balance addressing the here and now learning needs while also building capabilities that will help their businesses succeed in the future. We found that ALOs are well out in front of their peers in having a Future of Work strategy that is aligned with the business. These ALOs have mechanisms to determine the impact of technologies on their job roles, determine the skills that will be needed in the future, have a mechanism to track current skills and capabilities, and learning ecosystems to enable mass re-skilling and up-skilling environments. We also found that ALOs have tighter integration with workforce planning vis-à-vis their peers and are actively collaborating with their workforce planning colleagues to make "build/buy/bend/bot" workforce decisions.

Flexible Capacity

Modern learning operating models utilize agile thinking and practices to adapt quickly to changing environments. ALOs build intentional pivot points into their short and long-term plans that mandate consideration of new or updated plan variables. ALOs also have fewer boundaries and collaborate across the organization around goals and outcomes. They employ an enterprise learning governance strategy that improves the decision-making process and gives a voice to all impacted stakeholders. ALOs leverage centers of expertise (e.g. capabilities), design and development centers, and vendor–partner relationships that significantly increase flexibility and scalability.

Learning organizations that have access to multi-disciplinary capabilities through partnerships have more elasticity in their resources, capacity, and capabilities. As the pandemic impacted the volume and type of learning activity, organizations that had flex pools of resources via learning partners found it much easier to alter the capability mix of their learning teams by, for example, replacing some of the facilitation activity with digital asset creation.

Capability Academies

Capability Academies are L&D vehicles that help build competitively differentiating strategic capabilities that an organization considers critical to its success. Most effective academies are holistic, business-driven, and sponsored by a senior business leader. In many cases, the academy is owned and managed by the business itself, with L&D playing an enabling role.

Our research shows that ALOs use the vehicle of Capability Academies to focus on skills that are strategically important for the organization. Their view of an academy is a mechanism to bring concerted effort toward building the targeted capability. For example, a large Canada-based retail organization shared how they were thinking of setting up a "pop-up" academy to build digital skills. They identified that digital skills would be a key focus area for them in the coming two years and setting it up as an Academy would enable them to align resources in a much more targeted way.

Characteristics of an Effective Capability Academy Provide a place where learners and the business can:

- Build common knowledge, skills, and experiences for a strategic topic
- Learn through multiple ways including structured learning, experts, white-papers, online content, and from each other
- Have a strong sense of community and purpose
- Continually advance the topic and identify new capabilities that create strategic advantage
- Share best practices, experiences, and insights

By developing Capability Academies, organizations focus development growth in highly strategic areas, create a common language and direction, and build momentum within the organization.

2.4.3 EVOLVE

Emerging L&D Technology

L&D technology is traditionally centered on the LMS and a few development and delivery tools. This is changing with increased digitization. Cloud computing and interoperable systems are replacing the need to implement massive technology infrastructures that are in and of themselves rigid, highly integrated, customized, and slow to change. In the last decade, there has been an explosion of learning platforms, tools, and apps. Taking advantage of these new tools and platforms to optimize learning operations, create a connected learner experience, and strengthen alignment with business and other HR functions requires an appetite for considerable experimentation.

We found that ALOs continually monitor, test, pilot, and utilize new technology as a core capability. They have mechanisms to stay informed of the latest learning technologies, have an appetite to conduct proofs of concepts, along with a strong governance to maximize utilization of their existing learning investments instead of cluttering their technology landscape.

Design Thinking

Corporate learning was traditionally designed to deliver "essential" learning to employees. It was a "push" system where the corporate determined what it thought was needed by the learners and the L&D function delivered on the ask. One of the biggest changes, besides learning technologies, that has impacted L&D is changing employee expectations. Consumer experience has driven employees' expectations as learners. If banking can be anytime, anywhere, why not learning? Design thinking emerged from the product design world and has increasingly made its way into L&D as an approach that enables learner-centric thinking. This is further being driven by the need for highly personalized, relevant, and efficient learning delivered in ways that resonate with the learner persona. ALOs understand the value of learner centricity and have adopted design thinking practices as their core design approach.

Our research showed that ALOs have ditched the traditional ISD models and adopted agile, learner persona-based design thinking models that enable them to create rich learning experiences versus courses or curricula.

Learning in the Flow of Work

Organizations are gravitating to "Learning in the Flow of Work" (LFW) and are currently building broad-based solutions and ecosystems that enable learning where learners often need it most, within their day-to-day work lives. Some key drivers for LFW include digital transformation, where access to a vast amount of learning resources (people, blogs, video, etc.) is immediately at our fingertips. The ability to obtain credible information on any topic within seconds is extraordinary. Content consumption habits brought on by the digital age also drive our personal need to search and find needed information.

The future of work also drives our need to learn rapidly as tasks and roles change continuously, forcing us to unlearn, re-skill, and up-skill quickly as needed. Real or perceived, the lack of time to learn is a compelling factor in the changing approach to learning and bringing learning seamlessly to the work environment only makes sense.

The Agile methodology provides L&D with the greatest opportunity to transform its existing thinking, practices, and processes to become more elastic. Speed, consumer-driven focus, business-centricity, and the digital revolution are all pushing L&D to adopt some form of agile into its daily practices. The concept of deploying a minimally viable product (MVP) to learning solutions is revolutionary. L&D has often been saddled with having to launch near perfect and complex solutions that take a long time to design, develop, and deliver. Today's consumer needs the learning today, to fulfill either a short-term need or their long-term development. Even compliance training is being rethought and enabling shorter, bite-sized micro-learning solutions that both teach and reinforce learning.

Leveraging "sprints" versus a traditional "waterfall" transformation approach allows L&D to move much faster and build out MVPs that the organization can start using faster, gain feedback, and then continuously build from there. Daily huddles, prototypes, and alpha and beta testing are other examples of how Agile is permeating L&D in its solution development. ALOs tend to think about learning solutions as products and employees as consumers. The role of the Learning Business Partner in many ways is shifting to that of a Product Manager.

Structured Learning

Despite the drive toward "learning in the flow of work" and digital content being everywhere, structured solutions are still being used by ALOs, and that's because they work. The real difference is around the use of learning journeys vs. traditional curricula. Utilizing the power of design thinking has enabled L&D to craft highly relevant, less time and location-constrained, and persona-driven learning journeys around key capability development areas. There is also an emphasis in modern learning programs on the entire learning experience, which a learning journey accommodates well. This often includes not only the content but also coaching, collaboration with peers and experts, simulations, and the actual work itself. As a "journey", it may

involve the application of that skill in the workplace and reporting back on progress. For example, if the goal is for sales to do better account planning, the program could include building and managing a plan in the CRM over a specified period. Learners could come back and share their experience and progress with others, while learning analytics could correlate actual sales activity based on data in the CRM related to that plan.

3 Conclusion

Business leaders globally are increasingly focusing on building a strong learning culture and building strong L&D teams who are more proactive and are well aligned to business objectives. L&D functions are increasingly becoming active partners with other business units where they **Collaborate**, **Co-operate** to build learning needs to enhance the **Capabilities** of its workforce as the ability to adapt is now a key requirement for businesses and the learning functions.

Following the **Sense, Decide, and Evolve** methodology, companies can transform themselves into an Adaptive Learning Organization that enables a proactive and fluid learning ecosystem. All these will require organizations to build a new way of thinking, tools and practices that are forward-looking.

Technologies are changing rapidly, which is contributing to changing customer behaviors and expectations. To respond to these changes, companies need to re-skill and up-skill their workforce for the future where there will be new challenges, opportunities in a connected world. Developing deep skills through immersive learning programs in new-age technologies and at the same time developing soft skills will be very crucial. Learning and Development departments are not seen as a cost center; rather they are now seen as a profit center where they are contributing equally through smart initiatives by **Running Training Like a Business**.

Bibliography

- Visit us at https://info.niit.com/alo for more information regarding this research and to download additional resources related to Adaptive Learning Organizations.
- 2. "Running Training Like a Business" by Edward A Trolley & David Van Adelsburg
- Reskilling in China https://www.mckinsey.com/featured-insights/china/reskilling-china-transf orming-the-worlds-largest-workforce-into-lifelong-learners



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International Educational Testing Development in a Post-COVID China Context: Five Trends for the Future of Educational Testing



Mengyan Wang

Abstract The implementation of China's14th Five-Year Plan will accelerate the *modernization of the educational system* and increase the quality of education and push the *educational examination industry* to reform and create a more effective and modern examination system suited to China. There are five major trends in educational testing—*growth in international education, Sino-foreign university cooperation, remote testing technology, artificial intelligence* and *incremental business*.

Keywords Modernization of the educational system • Educational examination industry • Growth in international education • Sino-foreign university cooperation • Remote testing technology • Artificial intelligence • Incremental business

Education is a fundamental and universal topic for all communities and all age groups. In all regions, we are witnessing education undergoing tremendous changes and development, with both opportunities and challenges. Since 2020, the COVID-19 crisis has crudely forced us to think about the possible impacts it may cause. As an important link in the development of education, the testing industry is also continuously adjusting its approach, value and design concept. Educational assessments involve a variety of factors and different themes, and a slight change may affect the overall situation. Educators are also actively exploring ways in which testing can help students grow and conform to national and social training goals.

The 14th Five-Year Plan period is an important stage for China to accelerate its modernization of the educational system and increase the quality of education. It will also be a critical period for the educational examination industry to deepen reforms of educational assessments in this new era, to create a modern examination system suited to China, and to modernize the national governance of this system and make it more effective. As the world's largest institution engaged in testing development, Educational Testing Service (ETS) has seen how educational testing in the USA, and global educational assessments have changed over the past 70 years. Our assessments,

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learning solutions and pioneering research help students, educators and employers clearly see the next step on their path to new possibilities.

As the first international testing institution to enter China, ETS enjoys an outstanding reputation in the field of testing both in China and around the world. In 1981, ETS launched its TOEFL iBT and GRE tests in China, marking the beginning of a 40-year strategic partnership with the National Education Examinations Authority (NEEA), which has made great contributions to helping Chinese students study abroad and to promote international cultural exchanges. Every year, hundreds of thousands of Chinese students take either the TOEFL iBT or the GRE in order to fulfill their dreams of overseas study. In terms of the test volume, China contributes the largest number of TOEFL candidates and this number continues to grow. The increase in the number of candidates also reflects the continuous affluence of Chinese students studying abroad. TOEFL is by far the most widely recognized English proficiency test, with more than 11,000 institutions worldwide accepting and accrediting TOEFL scores.

As an international testing service provider with extensive interactions in China's education industry, ETS has witnessed the growth of international education in China over the past four decades. Looking ahead, we believe there are several emerging trends that should be taken into consideration for foreign testing companies when developing business strategies for the China market.

1 Trend One: Growth in International Education Creates More Opportunities for Tests and Learning Products

China has been the largest country of origin for international students in the world for many years. With the growing demand among Chinese students for a more diverse educational experience, schools that provide international curricula have gradually become a new choice for middle-class families in China. For the past five years, there has been a reaction against the rapid increase in the number of private schools in China. The Chinese government has taken steps to tighten regulations and closely scrutinize schools to ensure regulations are met. However, the actual demand for international education has not been affected. Recent data show that the number of students applying to study abroad has not decreased due to the COVID-19 outbreak. Schools offering international programs remain popular with parents, with dozens of new international schools opening every year. In terms of geographical distribution, international schools have expanded from first- and second-tier cities and coastal cities to third-tier and inland cities, confirming the preference among Chinese parents for international education. With the increasing demand for international education, international programs and international educational testing systems will receive more attention from schools. As a professional testing developer, the opportunities for ETS in China are obvious. Over the past two years, ETS has partnered with a number of international schools to help them provide convenient testing services and

professional teacher training, as well as testing tools and academic support for their development of international curriculum.

2 Trend Two: Sino-Foreign University Cooperation is Seeing New Growth Due to the COVID-19 Crisis

Sino-foreign cooperative joint venture—a flexible legal partnership between Chinese universities and international universities—has proven to be an effective way to engage in Chinese higher education. Depending on the scope of the partnership, joint ventures can operate on multiple levels, e.g., universities, institutes and degrees. In the fall of 2004, the University of Nottingham, a British university, opened a Chinese campus in Ningbo, establishing the University of Nottingham Ningbo China, the first Sino-foreign cooperative university in China. As of 2020, there were a total of 10 Sino-foreign cooperative universities, and over 2,332 Sino-foreign programs, which recruited a total of over 300,000 Chinese students, forging a special interest group in Chinese higher education.

Sino-foreign cooperative universities in China are embracing fresh opportunities as Chinese students are likely to pursue this kind of higher education in China rather than going abroad mainly due to coronavirus concerns and geopolitical uncertainties. China's Ministry of Education began to allow Sino-foreign cooperative universities and programs with the goal of providing Chinese students with a foreign education experience right in their home country.

In light of the rapid development of Sino-foreign universities and programs, international assessments such as TOEFL iBt and GRE play a key role in evaluating applicants before they join an English-language curriculum. In China, the majority of cooperative programs require students to submit TOEFL scores to assess their English language proficiency. For example, Duke Kunshan University listed TOEFL scores as part of their required admission materials. Admission officers claimed that they welcome applicants with TOEFL scores to apply as they believe good TOEFL scores, the gold standard of academic English-language testing, can guarantee that students are qualified to learn in an English-language academic environment. Though the number of students going for direct study abroad may decrease in the future, I am optimistic that the number of students choosing to study at Sino-foreign cooperative university will increase, which brings new business opportunities for assessment testing.

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3 Trend Three: Remote Testing is Here and Technology is Constantly Innovating

After COVID-19, ways of learning have become more flexible. Students do not need to be taught face-to-face, nor do they need to receive the same teaching content at the same time and space. A single teaching method cannot meet the needs of schools. During the worst periods of COVID-19, with improvements in and extensive use of remote proctoring techniques offline programs went online due to campus closures, while testing methods also changed. In March 2020, ETS launched its TOEFL iBT and GRE Special Home Edition test to help students and administrators whose plans were disrupted because of the pandemic. The Home Edition of the TOEFL test is identical to the traditional test center version in content, format, on-screen experience and scoring. It uses live, online human proctors supported by state-of-the-art AI technology to ensure security. Unlike other at-home tests, the TOEFL iBT Home Edition has actual human beings proctoring the test taker at every step of the process, in addition to a variety of AI measures. This combination of human proctoring and AI ensures that institutions can trust the scores they receive as valid, reliable and accurate.

Meanwhile, the use of the remote test has also led to continuous innovations in proctoring techniques to deal with potential cheating. In the future, remote testing will become more mainstream because of its convenience and will also create more opportunities for related industries. Of course, at the same time, security issues that remote testing has to deal with will also pose additional challenges for test developers.

4 Trend Four: Artificial Intelligence (AI) Will Bring New Opportunities and Challenges to Educational Testing

As artificial intelligence technology (AIT) continues to develop, the content development and scoring of test questions will eliminate the complete dependence on human beings, and ultimately shift to a combination of AI and human scoring. For example, in TOEFL, the listening and writing sections of the test are scored using a combination of E-rater, an intelligent scoring system developed by ETS over many years, and a human rater. The combination of the human and AIT elements can effectively avoid potential unfairness in the scoring process, reduce operating costs, and improve test operating efficiency.

The development of individualized education has placed new requirements on educational testing. A single test cannot determine a student's fate. Instead, schools and admissions departments are more likely to assess and predict a student's academic ability and development potential using a more complete picture of the student's academic achievements. In the field of educational testing, the test data from different test times and groups can be correlated and analyzed using scientific assessment

methods. Test-related big data mining can be used to develop testing and assessment services for different subjects as well as different regions, schools, candidates, etc., and establish test data rules, thereby providing a basis for education reform, improvements in teaching, management optimization and scientific decision-making.

5 Trend Five: Keep Creating New Incremental Businesses

The past year has forced all educational institutions to consider how to move forward, responding agilely to the world around us and the needs of our key stakeholders. The historical changes we are experiencing have exposed the fact that innovation and creativity are broadly distributed by various organizations and individuals. We have to learn from and support teachers, students and academic institutions, as they are the ones leading the transformation in education during and after the present crisis. While the TOEFL iBT test has cemented its place as the gold standard in the international admissions space, ETS continues to expand its portfolio with innovation in testing and a dedication to meet the changing needs of universities and testtakers. In May of 2021, ETS announced the introduction of a brand-new Englishlanguage proficiency assessment, TOEFL® Essentials TM. The TOEFL Essentials test has become the second high-stakes English-language proficiency test within the TOEFL® Family of Assessments—joining the TOEFL iBT ® test, which was launched more than 15 years ago. TOEFL Essentials is also the first English-language test that offers the ideal combination of the convenient, affordable access students want and the quality institutions trust. The TOEFL Essentials test is a versatile fourskill (listening, reading, speaking and writing) English-language test designed for university admissions and other high-stakes decisions. It measures a combination of academic and general English skills—those that are needed for the classroom setting and beyond (e.g., internships and interviews). In addition, the test provides institutions with expanded insights through writing and speaking samples from the test, additional measurements of foundational skills and a unique Personal Video Statement—a short, unscored, video recording that provides an opportunity for applicants to showcase their unique personalities.

With regard to the development of education in China, as well as the Ministry of Education's 14th Five-Year Plan for educational testing, we are of the opinion that there are still many spaces and opportunities for the development of ETS in China. Since the development of international testing institutions in China is of course dependent on government guidelines, an important task for the development of educational examinations in China during the 14th Five-Year Plan period is to establish a more scientific-educational assessment system, deepen the reform of examination and enrollment systems and modernize the system of educational governance to make it more effective. As for as business development is concerned, ETS hopes to be deeply involved in the Chinese market, to support English-language education in China, and to coordinate with China's "internal circulation" development plan.

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Because of its world-class reliability and reputation, as well as its global recognition, more and more higher education and international exchange companies and government agencies in China are using TOEFL as one of the selection tools for English-language testing, and applications for TOEFL have expanded from traditional language testing for studying abroad, to serve as a broader English proficiency test. In December 2019, ETS and NEEA jointly announced the completion of work to match TOEFL scores to Chinese English proficiency and other metrics. In the future, TOEFL will take on more responsibilities in the area of English-language education.

In terms of product development, we also attach great importance to China's domestic market, especially in the fields of international education and English education for teenagers. ETS has established an R&D center in China and cooperates with provincial educational testing authorities such as the Beijing Education Examinations Authority and the Shanghai Education Examinations Authority. In the future, we hope to link domestic demand in China with global trends in the field of testing research and product development, developing tests for Chinese education and making concerted efforts to meet the testing needs of China's 14th Five-Year Plan for educational development using American testing technology. Large-scale educational examinations in China are basically designed, developed and implemented by institutions under the Ministry of Education and local education examinations authorities. There are high barriers between China's official examinations and international tests, with very little exchange and cooperation between the two. China's official examinations are more tailored to its own educational needs, while internationally renowned testing institutions are often equipped with a large number of testing R&D professionals. Increased cooperation between the two will not only help China create a global testing brand but also make use of the resources and talent in international testing institutions to fill the need for testing professionals in China, making testing in China more professional and global, while also promoting the Chinese experience globally to serve more students.

In terms of the business environment, we hope that, in addition to concentrating resources on the development and operations businesses focusing on educational assessment and selection in China (e.g., senior high school entrance examinations and national college entrance examinations), Chinese government-led examination institutions will encourage private schools and non-governmental educational institutions to use third-party examinations and encourage international examination institutions to compete domestically to promote overall development. We also hope that increased participation by international examination institutions in open tenders will improve efficiency and ensure the quality of examinations.

I would like to close this article with words of hope and trust. The macro educational policy in China places a priority on a shift in testing methods. Based on our pioneering efforts in testing development and our 40 years of experience in the Chinese market, ETS will continue to promote international cooperation in education and actively adapt to the new dual-circulation development model. Education in China today faces many problems, such as how to use testing to promote teaching, how to evaluate talent in a diversified way, how to guarantee educational fairness,

and access whether standardized tests will continue to work, which are also problems that will continue to drive the progress and development of ETS. In addition, the COVID-19 crisis has exposed the fact that innovation and creativity are broadly distributed throughout all segments of the industry. We have to learn from and support the responses coming from local markets, teachers, students and communities, transform education systems during and after and present crisis, and, identify more opportunities for growth from this crisis. The world is changing dramatically, and ETS and other similar international educational institutions should actively take on responsibilities, redefine their purposes and drive innovation in international education testing.



Mengyan Wang is the country manager of ETS Assessment (Beijing) Ltd. Mengyan Wang is responsible for ETS products marketing and business strategy in Greater China Region, building solid partnership with local stakeholders including government, universities, language training institutions, international schools etc. Mengyan Wang's career goal is to integrate vision, insights, and management skills to bring in-depth communication between ETS and local stakeholders to advance the quality of education and reach mutual sustainable growth under the context of globalization. Prior to ETS, Mengyan Wang spent 10 years in management and teaching in the education industry, working to bring world-class teaching and learning resources to Chinese students. Mengyan Wang holds a Master's degree from the University of Cambridge with a major in second language education.

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DSM Brings Brighter Lives to China, Shaping China's Future Together



Joe Zhou

Abstract Royal DSM is a science company, which started as a mining company but became a global science-based company committed to *health and sustainability* covering nutrition and health, medical devices, solar technology and biofuels, sustainable materials to the world's strongest fibers. In China we cut across almost all markets in both *life sciences* and *materials sciences*. DSM also participates in China's development, particularly in *nutritional health* and *green development*, as well as the fight against poverty and Covid-19.

Keywords Health and sustainability · Life sciences · Materials sciences · Nutritional Health · Green development

Royal DSM is a global, purpose-led, science-based company active in Nutrition, Health, and Sustainable Living. DSM's purpose is to create brighter lives for all. Our products and solutions address some of the world's biggest challenges while simultaneously creating economic, environmental, and societal value for all its stakeholders—customers, employees, shareholders, and society at large.

We offer a family of solutions that benefit our customers and make millions of lives brighter. But what sets us apart is our unique scientific approach—our commercially viable solutions to the greatest challenges facing our world; how to feed everyone and keep them healthy and happy, tackling climate change and enabling a bio-based, circular economy.

DSM was established in 1902 by the Dutch government to mine coal reserves in the southern province of Limburg, the Netherlands. To this day, we still use the English translation (Dutch State Mines) of the company's original name, De Nederlandse Staatsmijnen. For our people, however, DSM has a more relevant (albeit less formal) significance: *Doing Something Meaningful*.

At DSM, innovation is in our blood—we are a science company after all. From the depths of the Dutch State Mines over a century ago, we have continued to transform ourselves over the years into something *truly bright*: a global science-based company committed to ensuring the world is healthier, more sustainable, and safer.

J. Zhou (🖂)

From animal and human nutrition and health, medical devices, solar technology, and biofuels, sustainable materials to the world's strongest fibers, DSM's solutions deliver value for companies and society at large. DSM's business footprint in China cuts across almost all markets in both life sciences and materials sciences, including food and dietary additives, personal care, feed, pharmaceuticals, automotive, electrical and electronics, life protection, renewable energy, and bio-based materials.

DSM began trading in China as early as 1963 and set up our first sales representative office and first manufacturing plant in China in the early 1990s. At present, the company has 48 branches in China, including 26 manufacturing sites, with nearly 5,300 employees. DSM's regional headquarters and R&D center in China are located in Shanghai. DSM's business in China has recorded healthy growth, with a revenue of RMB 9.22 billion in 2020.

When DSM first entered China several decades ago, China was experiencing a period of rapid economic development, where reform and opening up of the market, and attractive foreign investment policies benefited many businesses. Since then, DSM has had great success in building plants across China and operating in this market.

1 Sustainability as a Business Driver

In recent years, DSM's focus on sustainability has opened a new chapter for the company. Our growth strategy aims to address and provide scientific solutions to global challenges including climate change, the energy crisis, and the nutritional and health needs of the world's aging population. In essence, sustainability has become the driving force of DSM's business.

DSM believes that achieving sustainable development means pursuing a balanced development of economic benefits, environmental quality, and social responsibility that creates value for people, the planet, and profits at the same time.

People: As one of the world's leading manufacturers of vitamins, nutritional solutions, and food science, DSM has a keen interest in nutritional advocacy programs. We have worked with humanitarian organizations, food companies, and social enterprises to share knowledge on nutritional science and brought nutrition to enhance the quality of lives of malnourished populations. With our innovative ingredients, DSM customers are able to produce a variety of healthier food and beverages—with less sugar, salt, and fat—and ensure important nutritional ingredients are incorporated. Thus, protecting the health of millions of people in developing countries around the world.

Planet: At DSM, we closely manage our absolute greenhouse gas (GHG) emissions and energy efficiency. Our global goal is to reduce direct GHG emissions and procurement of energy emissions by 50% in absolute terms by 2030, and we have committed to sourcing is 75% of our electricity from renewable sources by 2030 at

the latest and 100% at the earliest possible opportunity. We have also set an internal carbon price—which means taking into account the cost of all GHG emissions-based decisions that require significant capital expenditure. The current price is EUR100 per ton of CO_2 equivalent.

In China, we actively pursue opportunities for renewable electricity across our sites in China. Our plant in Laiwu, Shandong for DSM Protective Materials is the first DSM site in China to achieve 100% purchased electricity through a Power Purchase Agreement, which helped reduce 3,700 tons of standard coal per year. Our Jiangshan nutrition plant has also replaced 15% of its annual electricity consumption with renewable sources. DSM is exploring opportunities for the broader use of renewable energy sources, such as recovering waste streams for the production of renewable energy.

Under the "We Make it Possible" strategic initiative, DSM Animal Nutrition and Health is leading a robust transformation worldwide in sustainable animal protein production. We are working tirelessly on combating key challenges facing the industry such as reducing GHG emissions, limiting nitrogen and phosphorous emissions while keeping the highest nutritional standards and ensuring quality livelihoods. With livestock and fish production contributing to 14.5% of the world's GHG emissions, it is essential that we take action now—especially when the world's growing population will demand an additional 40 million tons of meat and 25 million tons of fish each day by 2026. Reducing GHGs—particularly methane emissions—is an urgent priority for the world. At DSM, our methane-reducing feed additive for cows, Bovaer®, is helping to reduce methane emissions in cows by up to 30%.

Profit: Conventional wisdom dictates that one can't have it all. As a company, it's either prioritizing profits or protecting the environment. Over the years, DSM has proved time and again that the two can co-exist. We cannot be successful in a society that fails. For the same reason, a company cannot grow sustainably without success in the business it operates. We have a sustainable business because our products are made from high-quality ingredients and that has helped our customers derive profitability. We remain steadfast in our commitment to reduce carbon emissions in our manufacturing processes, optimize energy and resource costs, and improve efficiency. Ultimately, our customers benefit when we improve earnings growth.

2 Openness and Continuous Innovation Driving China's Development

In 2017, DSM ranked No. 2 on Fortune magazine's "Companies that Changed the World" list. As a leading company in life science and materials science, DSM is not only renowned for our commitment to sustainable development, we are also recognized for our contribution to breakthrough innovations.

DSM derives 21% of its sales from its innovative business, with R&D spending accounting for 5% of its sales. We have more than 30 laboratories and 1,900 scientists

worldwide. Not only is China DSM's most important international growth market, innovation from China also plays a critical role in supporting global business growth. Since our foray into China, DSM has experienced three stages of development: strategic expansion, elevating social impact, purpose-led growth and performance-driven growth. Each of these stages have evolved along with the changes in the Chinese market. Over the years, DSM has learned the importance of localization and being customer-oriented. We advocate for "Innovation for China"—from establishing the DSM China R&D Center, the introduction of local solutions, and creation of a business model suitable for the Chinese market, to continuous investment and expansion in China. In fact, China is the only market today where all of DSM's global business units are fully established. Chinese consumers benefit from having access to a comprehensive selection of DSM's innovative solutions.

Nutritional health and green development are key development areas for DSM China, both of which are prime focus directives under China's 14th Five-Year Plan. These two key pillars are also reflective of the current global trends and support the United Nations Sustainable Development Goals. To maintain and enhance our competitiveness in these two areas, DSM has strategic plans in place to strengthen innovation capability and investment in our core businesses.

3 Collaboration with Stakeholders

3.1 Global CEO Council

Since 2013, DSM has been a member of the Global CEO Council initiated by the Chinese People's Association for Friendship with Foreign Countries, which is made up of CEOs from multinational companies. Through roundtable dialogues and discussions with Chinese leaders, the Global CEO Council works as a platform connecting business leaders and helping to deepen their understanding of China, while enhancing friendships and creating win—win cooperation to advance development. At every annual roundtable summit, DSM's Global CEO actively contributes his observations and suggestions on China's economic development. The Chinese leaders, in turn, recognize global CEOs for their confidence in China's peaceful and open development, their commitment to China, and their constructive suggestions on China's economic development.

3.2 World Economic Forum Annual Meeting of the New Champions

Since 2012, DSM's global executives and DSM China President have participated in the World Economic Forum Annual Meeting of the New Champions held in

Dalian and Tianjin. This is a high-level, thought leadership platform for "global growth companies" (GGC) to discuss the future of business and industry, and to engage in dialogues with public and private enterprises, as well as national and regional governments around the world. The annual event features different themes and keynote topics, attracting political and business leaders, experts and academics from more than 100 countries and regions to exchange ideas on the development and roadmap of the global economy.

3.3 Sustainability Organizations and Industry Associations

DSM is a member of the board of directors of the China Business Council for Sustainable Development (CBCSD) and a close partner in communication and cooperation with the board. DSM actively participates in many CBCSD activities and programs every year, including the CBCSD annual meeting and the seminar on sustainable development, its sustainability index report release conference, the China Top 500 Enterprises Summit Forum, World First-class Enterprise Best Practices Roundtable, China Council for International Cooperation on Environment and Development 2019 Global Environmental Governance and Industry Best Practices Forum.

Additionally, DSM is also an active member of the international exchange and foreign enterprise committee of the China Petroleum and Chemical Industry Federation. We participate in the annual China International Petrochemical Conference CEO roundtable summit and readily put forth our recommendations on standards for industry regulation, including input on the sustainable development of the petrochemicals industry and pivoting the industry in a dynamic environment.

3.4 Working with NGOs to Fulfill Corporate Social Responsibility

After the 2008 Wenchuan earthquake in China, DSM made donations in support of the China Youth Development Foundation to build two schools affected by the earthquake in Sichuan and Gansu provinces. Every June, DSM employees volunteer at the DSM Hope Primary School to celebrate Children's Day with students and teachers. Volunteers visit underprivileged students' homes with supplies for school and daily life such as backpacks, stationery, books, eye-protection lamps, and sports shoes. Employees have also been contributing proactively to creating scholarships for students from underprivileged families who perform well academically. In addition, DSM has donated electronic equipment, books, outdoor sports fitness equipment, water dispensers and water heaters to the school. During each visit, employee volunteers also organize various activities including giving lessons in English, arts and

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crafts, nutritional and urban rail transit knowledge, as well as playing badminton, archery, and table tennis with students.

Since 2007, DSM has been a global partner of the World Food Programme (WFP), through which DSM adds key vitamins, minerals, and other micronutrients to WFP food baskets. In China, DSM holds the annual "Bright Experience" charity event—in partnership with the United Nations World Food Programme (WFP) and the China Foundation for Poverty Allowance (CFPA)—to raise public awareness of child hunger and malnutrition. The event is supported by over 2,000 DSM employees and families in China. All funds raised are donated to the WFP's nutritious meals for preschool children in poverty-stricken areas in China, and the CFPA's "Nutrition Meals" program to improve the quantity of children's nutrition.

As a science-based, purpose-led company that aims to create a positive societal impact, DSM supports the UN's Sustainable Development Goals (SDGs) and vision for a zero-hunger future. By working closely with partners across the value chain, including WFP and HarvestPlus, we put a particular emphasis on improving Nutrition & Health (SDG 2 and 3), Resources & Circularity (SDG 12) and Climate & Energy (SDG 7 and 13). Vital to achieving these goals is DSM's food nutrition and feed solutions, which support healthier diets and reduce food loss and waste, while maintaining the highest sustainable standards.

3.5 Fight Against COVID-19

The COVID-19 global pandemic presented unprecedented challenges, impacting the economy and every aspect of people's lives. As a corporate citizen, DSM actively supports the frontline fight against the epidemic and adheres to DSM's commitment to health and safety. In order to ensure the undisrupted supply of daily necessities, DSM's factories in Liaocheng, Hengyang, Changchun, and Chengdu received approval from local governments to resume work ahead of schedule after the outbreak. Concurrently, DSM supported 50 tons of vitamin C raw materials supply to the Hubei provincial government for the production of health care relief aids, in addition to 1.1 million bottles of vitamin C products for frontline workers in Hubei and other provinces and cities to improve immunity. DSM China also provided RMB 1 million in relief funding to the Red Cross Foundation of China to support epidemic prevention and control work in Wuhan. Since the onset of the pandemic, DSM China has established various crisis response mechanisms and measures, such as split teamwork arrangement, office/workplace safety and health protection protocols, and travel restrictions. All of which provided best practice benchmarks for DSM operations globally.

At DSM, the safety and well-being of our employees is our top priority. We have conducted numerous and regular employee care programs since COVID-19 hit. As part of our #Optimize YourImmunity initiative, DSM distributed vitamin products to 23,000 employees around the globe. In February 2020, we provided our employees

and their family members with access to confidential and professional psychological counseling as support for their mental and emotional well-being through the Employees Assistance Program (EAP).

4 A New Chapter: Healthy Planet, Healthy People

Since 2020, we have observed a shift in mindsets and behaviors in people to focus proactively on what they can do to improve their health. Global demand for immunity-optimizing products—such as dietary supplements—continues to grow. At DSM, we believe in taking a proactive, precautionary approach to improving one's health with quality nutrition. In 2021, DSM introduced the "Health through Nutrition" concept to advocate better general health for people through our nutritional expertise and innovation, as well as protecting the health of our planet through sustainably produced foods along with circular and bio-based materials.

Moving forward, we will continue to build on our successful "global products" and "local solutions" model to support growth in nutrition by leveraging on big data, digital and bioscience capabilities to deliver precision and personalization.

In our materials business, DSM has demonstrated strong growth and is well positioned in the strategic area of Sustainable Living. We aim to further grow into a resilient, higher-growth, high-margin specialty business, and focus on three sustainable living growth platforms—improved health and living, green products and applications, and new mobility and connectivity.

Led by our Purpose, DSM is committed to achieving positive change through more sustainable ways of working. From protecting health and providing sustainable proteins, to improving nutrition in vulnerable communities, DSM is helping to make people and the planet healthier. As the global population inches toward 10 billion by 2050, the importance of providing sustainable products with high nutritional value will only continue to grow. We will continue to work alongside our customers to develop solutions and products with a positive impact to support the health of our growing global population.

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Joe Zhou joined Royal DSM in 2020. As the President of DSM (China) Limited, he is responsible for overseeing DSM's business in China in the areas of Health, Nutrition, Sustainable Living, and building the reputation of DSM in China. Joe worked for Alcatel Lucent in Australia and China for 19 years where he gained extensive experience in commercial, operations, strategic, and general management roles. Joe was a key leader for the establishment of a major joint venture, Alcatel Shanghai Bell, before running its successful international unit as part of the top management. In 2008, Joe joined Eaton as its China President before taking leadership responsibility as Asia Pacific President for its Aerospace Group and once again became its China President following Eaton's acquisition of Cooper Industries. He was the China President at Arconic before joining DSM. Joe holds a degree in Business Administration from the Queensland University of Technology in Australia, and a bachelor's degree in Engineering from the Beijing University of Aerospace in China.

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Opportunities and Challenges in the Health and Nutrition Industry with the Rise of Younger Consumers



Qunyi Zheng

Abstract Health awareness was becoming a social priority even before the COVID-19 pandemic, especially among younger people in China. This is due to factors like *better living standards*, *improved health awareness* and *greater emphasis on nutrition and health*. But the nutrition and health market in China is also undergoing profound changes. Snacks are replacing lunch and dinner, *e-commerce* is a major driver of change and *sports nutrition* is becoming increasingly important. Herbalife is working to meet this changes head on and ensure a healthier China.

Keywords Improved health awareness \cdot Better living standards \cdot Greater emphasis on nutrition and health \cdot e-Commerce \cdot Sports nutrition

HEALTH became a keyword and the hottest topic during COVID-19, which has greatly enhanced people's awareness of the importance of health. There is a trend among Chinese people to attach more significance to personal nutrition and health, and choose to live healthy, balanced lives, which, in the long-term, will create huge opportunities for the health and nutrition industry.

Health awareness was becoming a social priority even before the COVID-19 pandemic, especially among younger people in China. This article focuses on the opportunities and challenges that China's health and nutrition industry faces as the influence of young consumers increases.

1 Youth Demographics—An Important Driving Force of China's Health and Nutrition Industry

The "Youth Demographic" is usually categorized into two groups of people: Millennials (born between 1980 and 1994) and Generation Z (born between 1995 and 2009).

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Many people imagine the majority of consumers interested in nutrition and health products to be middle-aged and elderly people—i.e. "Baby Boomers" and "Gen Xers", but increasing evidence shows that today's young people are realizing the importance of health much earlier in life than their parents. They have become an important driving force in health and nutrition and will create great opportunities for the industry.

According to a CCTV Finance report from October 2020,¹ 25% of those who purchased nutrition and health products were born after 1990. Data from the *2019 Report on Interest in the Health Products Industry* show that more than 60% of individuals who expressed interest in health products were born after 1990.² Analysis from Herbalife Nutrition's sales figure also proves this—in China, more than 80% of Herbalife Nutrition's target customers were millennials, while 25% were from Generation Z.

Younger generations are increasingly incorporating nutrition products into their health regimens and they are becoming important powerhouses for market growth. The main reasons behind this include the following:

- (1) Economic development and better living standards inspired consumption. GDP growth and increases in per-capita income have resulted in increased purchasing power among the general population. In addition to education, young people also tend to spend more money on sports, entertainment and health, and nutrition. On the macroeconomic level, the Chinese government has also taken measures to promote consumption in this area.
- (2) *Improved health awareness and literacy among Chinese citizens*. According to statistics from China' National Health Commission, health awareness and literacy among Chinese people has increased from 10.25% to 19.17% over the past five years.³

The convenience of communication brought about by the Internet and smartphones has enabled younger generations to easily access abundant information on health and nutrition and build a deeper understanding of nutrition compared to previous generations.

In a survey jointly conducted by Herbalife Nutrition and the NGO Feed the Children in early 2021 in China, more than 90% of people aged between 18 and 40 were familiar with the term "balanced/unbalanced nutrition". Meanwhile, 63% of Gen Zers and 80% of millennials were familiar with the "National Nutrition Guidelines", while this percentage among the 57+ group was only 50%.

A wealth of nutrition and health knowledge as well as a deeper understanding of the scientific nature of supplements has caused more young people to consider using nutritional supplements to improve their health.

¹Post-90 s become the main purchaser of supplements, bringing a steady growth in its market size, https://tv.cctv.com/2020/10/20/VIDEEunFLBUmJNpB7RWGcXNr201020.shtml.

²Annual Website Visibility Analysis Report of Health Care Industry 2019, https://xw.qq.com/cmsid/20200407A086XK00.

³National Health Commission: China's health literacy rate has risen from 10.25% to 19.17%, https://baijiahao.baidu.com/s?id=1685754124375725801&wfr=spider&for=pc.

(3) Young people's unique lifestyles lead to attach greater importance to nutrition and health. Chinese young people are generally faced with a fast-paced, high-intensity work environment. Many people experience chronic stress and their daily routines are irregular. This has caused extensive "health anxiety", and the "National Health Insight Report 2020" shows that of all groups surveyed young people were the most anxious about their health.

When asked about what their "Top New Year's Wish" was, most Chinese young people said that they wanted to "live a healthier life/stay in good shape", which ranked far higher than "more travel during holidays" and "making more money".⁵

As the pressure of life conflicts with their ideal lifestyle, more and more young people have started to seek help, turning to nutritional products. The consensus among younger demographics is to "have a healthy life as early as possible".

2 Meeting the Needs of Young People

With younger demographics becoming a driving force, the nutrition and health market in China is also undergoing profound changes.

(1) **Snacks as lunch or dinner**: With a faster work pace, many people, especially white-collar youth, find that they sometimes don't have enough time to enjoy lunch or dinner. Travel, tight schedules, and unplanned circumstances can make it almost impossible to ensure a well-balanced diet. To a certain extent, snacks have gradually replaced the function of lunch or dinner.

This has resulted in the idea of "meal replacement". Meal replacement was originally the result of necessity in clinical settings for patients who could not ingest regular food due to physical impairments or additional calorie demands.

However, the convenience of meal replacements like calorie-controlled, prepackaged food, such as bars and beverages, can offer an alternative to regular meals. This allows consumers to enjoy nutritious and quick meals, and is experiencing rapid growth in the Chinese market. It is possible that healthy snacks and meal replacements may become a "rigid demand" among young people in the future and an important part of daily life.

Focusing on the huge demand for "nutritious and convenient meals", many health product companies have already begun to come up with solutions. Today, there are numerous meal replacement products on the market, available just about everywhere from supermarkets to online stores.

⁴Dingxiang Yisheng (an online medical service platform run by the medical website of www. DXY.cn) releases the National Health Insight Report 2020, with psychological problems becoming the focus of attention, https://www.chinanews.com/business/2020/01-15/9060347.shtml.

⁵Young people have emerged as a force of healthy consumption? The era of universal nutrition has arrived, https://www.sohu.com/a/453231243_121012870.

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According to the CBN Data Report "2020 Meal Replacement and Light Dinner Consumption Insight", the number of Chinese meal replacement brands in 2019 was 2.837, and increased to as many as 3,540 in 2020.⁶

As a leading brand in the nutrition industry since 1980, Herbalife Nutrition has been on a mission to improve nutritional habits around the world with great-tasting, science-backed nutrition products that help people get the right balance of healthy nutrition. As many as 4.86 million Herbalife Nutrition protein shakes are consumed daily worldwide.

Herbalife is focusing on improving its protein shakes so that they are more convenient and able to meet new market demands. In 2020, we launched a new protein drink mix with portable and easy-to-use packaging and localized flavors like red bean and coix seed for China. This was developed by the Herbalife China Product Innovation Center (CPIC), which is a key source for new products designed to serve China's changing nutrition needs.

Another replacement option is our healthy snack, "Protein Bites", which is popular among young consumers. Launched just last year, this product is a healthy option that people can eat at home, at work or on the go.

Dietary habits are constantly changing in today's China and Herbalife hopes to make our products more convenient and shareable to keep young people healthy.

(2) *E-commerce*: E-commerce has profoundly changed people's shopping habits. Each industry is exploring options to upgrade business models in conjunction with digitalization.

On November 11, 2020, also known as Singles' Day in China, the e-commerce platform T-mall exceeded RMB 498.2 billion in sales, up 26 percent year on year. The online retail sales of physical goods in China reached RMB 9.8 trillion Yuan (about USD1.52 trillion) in 2020, making the country the world's largest online retail market for eight consecutive years. 8

Today's young people, especially the "Gen Z" group, is a generation that has grown up living with rapid economic development and the Internet. For health and nutrition companies, young consumers are very different from previous generations and we need to adapt to emerging needs by integrating both online and offline channels.

Digital transformation has been one of Herbalife Nutrition's most important strategies in China. In 2019, we partnered with Tencent to launch our digital transformation initiatives. In our industry, we are working to empower service providers to establish better connections with customers and adapt to their shopping habits. Integrated online and offline channels can better serve customers and optimize their shopping experiences, one of which is our personalized "Nutrition Store" which was launched on WeChat at the end of 2019.

⁶Young people who want to achieve the goal of weight loss by eating "healthy food" have boosted the meal replacement market with a turnover of 100 billion, https://baijiahao.baidu.com/s?id=168 8015022322601375&wfr=spider&for=pc.

⁷Tmall's turnover exceeded 498.2 billion yuan during the "Double 11" of 2020, https://baijiahao.baidu.com/s?id=1683127359801704277&wfr=spider&for=pc.

⁸China has been the world's largest online retail market for 8 consecutive years, http://www.gov.cn/xinwen/2021-01/19/content_5581163.htm.

Our digital transformation initiative was one of the most important moves we took to ensure business operations remained stable during the COVID-19 epidemic in 2020. Early in the year, COVID-19 prevention and control requirements meant that Herbalife service providers couldn't meet face-to-face with customers, which affected the consumer experience. To address this issue, we trained distributors on how to efficiently interact and serve customers using the "Nutrition Store" platform. We also encouraged them to organize live broadcasts to provide customer service and online training.

(3) *Sports Nutrition*: Sports nutrition products have also become increasingly popular in recent years. Our target Chinese consumers, mainly in younger demographics, have gradually expanded from professional athletes to the general public.

This trend has been growing for a number of years. In October 2016, the Chinese government announced its "Healthy China" initiative, which made public health a focus for future economic and social development. In September 2019, the government also created national guidelines titled "An Outline for Building a Leading Sports Nation", which targeted wider public participation in sports, a stronger sports industry, and a more vibrant sporting culture.

We are seeing an increase in the number of Chinese people working to develop healthier lifestyles and getting involved in regular exercise. They are becoming healthier and more conscious about personal fitness. They are also making sports nutrition products a part of their daily diet because of the health benefits they bring.

China's sports nutrition market is driven by an increasing demand for sports nutrition supplements, not only among professional athletes but also fitness buffs and ordinary people. According to statistics from Euromonitor, China's sports nutrition market is expected to reach USD 859 million in 2023, with an annual increase of 24% from 2019 to 2023.

Herbalife entered the sports nutrition market in China with the goal of meeting the needs of younger, fit and active consumers. Our main offering is the Herbalife24 series of products, which began production in Nanjing in 2020. Herbalife24 is a comprehensive performance nutrition series empowering athletes 24 hours a day. We have surpassed industry standards for pre-, during- and post-workout nutrition products to help athletes train, recover, and perform with all the nutritional support they need.

The overwhelming amount of scientific evidence on the positive effects of sport and physical activity as part of a healthy lifestyle has inspired Herbalife to focus on promoting sport as an integral part of life that everyone should be participating in.

Globally, we have sponsored over 200 world-class athletes, teams, and events. We have been honored to sponsor the soccer player Cristiano Ronaldo since 2013 to fuel his quest for greatness.

Herbalife China has also donated RMB 9.05 million to the Beijing Sport University Education Foundation in 2019 to establish the Herbalife Nutrition Ice & Snow

⁹Market analysis of the sports nutrition industry in China 2019: the explosive growth of the number of those doing sports is the core driver, http://www.leadingir.com/trend/view/3484.html.

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Development Fund, part of which is being used to establish a Herbalife Nutrition Winter Sports Nutrition Research Center. These research results will benefit not only professional athletes, but also help provide experimental data and sports nutrition data for fit and active groups in the general public.

In the future, Herbalife will continue to leverage its global experience and expertise in sports nutrition and provide Chinese customers with products that give them the nutrition they need and support them in living an active, healthy lifestyle.

3 Supporting the Sustainable Development of the Nutrition Industry

The continued improvement in Chinese people's living standards and increased demand for health related products has ushered in a sustained period of growth in the nutrition and health products market.

The health of individual members of society is closely related to their basic understanding of health. This has become an issue that affects China's development in a broad and comprehensive way, which means that it must be examined in the context of overall economic and social development as well as public policy. The "Healthy China" strategy is a key government program to promote healthy living in China and resolve some of the issues facing China's health sector. It also aims to provide practical means to achieve high-quality economic development and coordinated and sustainable economic and social development. In recent years, the Chinese government has implemented a number of policies in this area and by 2030, China's health industry is expected to exceed RMB 16 trillion.

I believe that in China, a fully activated market of 1.4 billion people with health needs is a huge market that will produce many experimental and innovative brands. Herbalife is undoubtedly committed to becoming one of them.

The COVID-19 pandemic has caused consumers to place greater emphasis on nutrition and health, with a growing demand for health products. Herbalife's net sales in 2020 were approximately USD 5.5 billion and increased by 13.6% year-on-year, marking the best annual sales record in our history. Meanwhile, three of our six global regions—Asia Pacific, EMEA (Europe, Middle East, and Africa), and North America—also set new annual sales records. In 2020, Herbalife's net sales in China reached about RMB 5.217 billion with a year-on-year increase of 7.7%, accounting for 14% of global sales.

China's late entry into the health industry means that efforts in innovation and R&D remain behind other countries. Compared with the global environment, industry supply chains remain immature and development lacks synergy. China also lacks mature products and high-quality management systems. Its emerging meal replacement industry also urgently needs to develop corresponding regulations to standardize definitions, quality requirements, and labels for meal replacement products.

The industry as a whole needs to work together to drive technological innovation, regulate the market, and drive the sustainable development.

In 2019, the China Nutrition Society issued its "Meal Replacement Group Standard" (T/CNSS 002–2018) in response to industry growth and as an important step toward establishing regulations and standards on meal replacement products.

In 2020, Herbalife Nutrition participated in the compilation of a book titled *International Meal Replacement Policies and Regulations* to help drive the standardization and healthy development in the meal replacement industry. We hope that this will help to bridge the gap between standards on nutrition and meal replacements across markets.

4 Quality is at the Heart of Everything We Do

Data from the China Nutrition and Health Food Association show that there were over 5,000 kinds of health foods claiming to enhance immunity as of 2019. With such fierce market competition, quality is essential and efforts to improve and maintain quality are how we maintain our core competitiveness and is the cornerstone of our survival and sustainable development.

One of our core quality assurance programs is our Seed to Feed quality management program. The Seed to Feed process encompasses everything from sourcing only the finest ingredients to meeting or exceeding good manufacturing practices. It is a 14-step quality control system through which we continuously test our products, putting them through an arduous protocol to ensure they comply with the highest quality standards.

Three of Herbalife Nutrition's five manufacturing facilities are based in China. Our two factories in Suzhou and Nanjing, which produce powders and tablets, and our botanical extraction facility in Changsha, are all integral to our Seed to Feed strategy. Herbalife also leads the industry in the area of botanical identification as we expand and improve our program to include new advances in areas like DNA technology.

Herbalife Nutrition is also working toward coming up with new products and remains committed to continuously expanding its product portfolio in China. In 2020, we launched 18 new products, the largest number since entering into the Chinese market. Moving forward, we will continue to focus on improving the convenience of product use, diversification of flavors as well as healthy snacks.

5 Working Together for a Healthier China

Regardless of the industry or country of origin, any company in China should be committed to providing quality products or services that benefit the consumers here. As a nutrition company, this is what we are working to do, both in terms of the

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products that we provide and sell, as well as our participation in programs that promote health and nutrition throughout China's diverse society.

At the national level, in March 2021, the 14th Five-Year Plan (2021–2025) for National Economic and Social Development and Long-Range Objectives Through the Year 2035 were officially announced. An important objective of the 14th Five-Year Plan is to build a "Healthy China", which proposes that China "accelerate the development of the health industry" and "support Chinese people in developing a healthy lifestyle".

This is the spirit with which we have approached our 20 years in China and the blending of national policy, the well-being of our end consumers, and the development of our business here are something that we take great pride in.

Development comes with both challenges and opportunity. Overall improvements in the standard of living among Chinese people come with certain risks including increased stress and less-than-healthy lifestyles. We serve the needs of a wide cross-section of society, from China's growing elderly population to the needs of young consumers, who are becoming increasingly health aware. All of these factors contribute to a promising future for China's health and nutrition industry.

As a global nutrition company providing health and wellness products to millions of people in 94 countries around the world, Herbalife Nutrition, with our global experience and expertise, is in a unique position to help Chinese people reach their health goals and contribute to the "Healthy China" initiative.



Ounvi Zheng is Senior Vice President/Chairman of Herbalife China. Dr. Zheng joined Herbalife Nutrition in 2010 as Vice President in Natural Product Manufacturing. In 2015, Dr. Zheng assumed responsibility of Vice President for Worldwide natural products Research, Development and Scientific Affairs. In 2017 Dr. Zheng was appointed as the Acting MD of China until January 2018 and currently is the Senior Vice President/Chairman of Herbalife China. Before joining Herbalife Nutrition, Dr. Zheng was the Founder of NatSource Chemicals Corporation, with which Herbalife Nutrition formed a joint venture to build its extraction facility in Changsha. Prior to this, Dr. Zheng was President of Kent Financial Services, Inc (NASDQ: KET) and President of Pure World, Inc (NASDQ: PURW). Dr. Zheng holds a Bachelor of Science degree in chemical engineering from Hunan University of China. He received a doctoral degree in chemistry from the University of Colorado and conducted post-doctoral research at Cornell University. Dr. Zheng is a leading expert in the supplements industry and he has led innovation and research of natural product extraction and developments for use in food, supplements, and pharmaceuticals. He has over 20 patents and 40 scientific publications.

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