

Fuel the Soft Power:

The Role of High Tech Companies in the Soft Power Rivalry between China and United States

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Seoul



Silicon Valley



Milan



Stanford

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Beijing's Unique Approach to Soft Power



Joseph Nye deserves praise both as a scholar, as well as for coining the terms soft, hard and smart power, concepts that have become staples of international relations and are now referred to by politicians around the world. There is no greater glory for an academic than to see his or her ideas put into practice.

We need look no further than France's President Emmanuel Macron, who wants to make Africa a priority of his second term but faces competition from China and Russia. Rather than relying on military might, he said during a visit to Congo in July 2022 that his approach would be based on soft power.⁽¹⁾

In the preface to his book, *Soft power*⁽²⁾, Nye recounts how, while at the Davos Forum in 2003, George Carey, the former Archbishop of Canterbury, asked Collin Powell, then US Secretary of State, why his country seemed to rely so much on its hard power rather than its soft power. Secretary Powell replied that the US had used hard power to win World War II, but he continued: «What followed immediately after hard power? Did the US ask for dominion over a single nation in Europe? No. Soft power came in the Marshall Plan. We did the same thing in Japan.»⁽³⁾

In the preface to his next book, *The Future of Power*⁽⁴⁾, Nye reconfirmed the practical relevance of his ideas about power, quoting Hilary Clinton when she was Secretary of State during Obama's first term. «America cannot solve the most pressing problems on our own, and the world cannot solve them without America. We must use what has been called "smart power", the

full range of tools at our disposal.»⁽⁵⁾ For Nye, «Smart power is the combination of the hard power of coercion and payment with the soft power of persuasion and attraction.»⁽⁶⁾

Soft power suffers from Americanism

However, these concepts suffer from a certain Americanism, as could not be otherwise, given that they were devised to respond to the problems of US foreign policy. Moreover, we should remember that Nye was both a professor and later dean at Harvard's Kennedy School, in addition to having held prominent public positions in the Clinton and Obama administrations.

But this Americanism did not prevent Chinese scholars from appropriating the concept and trying to import it into China, along with all kinds of Western, mainly US, technology. The first to do so was Wáng Hùníng, one of the most fascinating scholars and politicians in China today. Wáng collected his ideas in the article *Culture as national power: soft power*, published in 1993.⁽⁷⁾ In 1991, he had published *America vs. America*, which would bring him to prominence.⁽⁸⁾ In the 1990s, Wáng was hired by Jiāng Zémín as a presidential advisor, a role he continues to hold.

In the above-mentioned article, Wáng commented that «if a country has an admirable culture and ideological system, other countries will tend to follow it.... And it won't have to use its hard power, which is expensive and inefficient.» As early as 2007, the founder of Singapore, Lee Kuan

Yew, pointed out that although the Chinese did not coin the term soft power, they have exercised it masterfully.⁽⁸⁾

China has traditionally used soft power

In reality, the Chinese have been practicing soft power for millennia: Confucian virtuous idealism is based on moral leadership and mutual respect, which also allows states to exercise leadership over other states. His disciple, Mencius, developed these ideas further, arguing that righteous rulers can easily eliminate their competitors, turning them into allies.⁽⁹⁾

«If you don't achieve your goals, then look inside yourself. When you are at one with yourself, the whole world turns to you.» advises Mencius.⁽¹⁰⁾

The same could be said of the philosophy of non-action, the famous *wúwéi* (无为), which arguably falls within the scope of soft power, and that has been the law for Chinese Taoists since time immemorial. Also deeply rooted in Chinese political theory is Sun Zi's belief that it is better to win without fighting. «It is best to undermine the enemy's plans (上兵伐谋)» says Sun Zi. «Activate diplomacy, (其次伐交), and only go into battle (其下攻城), when there is no other choice».

In the more recent past, Chairman Máo and his eternal prime minister, Zhōu Ēnlái, supported the non-aligned countries and the anti-colonialist movements of the 1960s, which cannot be seen as anything but another form of soft power.

Headwinds

Despite these similar approaches, soft power as such was not adopted by the Chinese rulers who came after Máo. Dèng Xiàopíng made it clear he wanted to introduce the market economy, abandon the personality cult implemented by Máo,

and establish a collegial leadership for the country's government, far from the authority of a single leader.

Simultaneously, he believed that tight political control of the party was crucial to bring about the changes China needed, so he refused to buy into any other kind of Western ideology that could contaminate the masses. Soft power, among others, was one of them.

Contrary to popular belief, as political scientist Ang Yuen Yuen points out, China has introduced profound political reforms since 1978, although not those the West expected. For example, instead of multiparty elections or the right to free speech, successive Chinese governments have made behind-the-scenes changes to how local government works, as well as to its civil service, which have dynamized the country's governance.

In this way, the principles of accountability, limits on power, and efficiency have been introduced to assess the performance of government officials. This is what Ang Yuen Yuen has called, although it may seem a contradiction, "an autocracy with democratic characteristics".⁽¹¹⁾ The Chinese civil service is composed of 50 million officials, and putting it into operation, or introducing change, is akin to running a country. There is no need to explain what it means for a government to have a hostile civil service.

With the wind in its sails

The last decade of the 20th century produced two key events that created a favorable environment for the exercise of soft power. The first took place on December 26, 1991, with the dissolution of the Soviet Union, a nation that never understood the use of soft power. The event astonished China's rulers, who feared contagion and the destruction of a system that was still searching for its development model.

Second, there was a change of era. The architect of modern China, Dèng Xiàopíng was succeeded in 1993 by Jiāng Zémín. The charismatic leader left a powerful legacy. With him, the revolutionary past was closed when diplomatic relations with the United States were formally reestablished in 1979 during his historic visit to Washington, along with a commitment to reform and greater openness.

Before retiring, he wanted to see the southern Guāngdōng region reach the



(1) Cf. Macron cherche à réveiller l'influence française en Afrique, Challenges, July 26, 2022.

(2) Cf. Soft Power, The means to success in world politics. Joseph S. Nye. Public Affairs. New York. 2004. p. IX.

(3) Cf. Soft Power, The means to success in world politics. Joseph S. Nye. Public Affairs. New York. 2004. P. IX.

(4) Cf. The Future of Power. Joseph S. Nye. Public Affairs. New York. 2011. p. IX

(5) Cf. Transcript of Clinton's confirmation hearing, January 13, 2009, <https://www.npr.org/templates/story/story.php?storyId=99290981>, quoted in The Future of Power. Joseph S. Nye. Public Affairs. New York. 2011, preface, p. IX.

(6) Ibid. p. XIII.

(7) Cf. Culture as national power: soft power, Journal of Fudan University, March, 1993.

(8) Cf. Contest for influence in Asia-Pacific region, Forbes Magazine, June 2007.

(9) Cf. The dragon's silver tongue. Chinese power in the age of Xi Jinping. Copyright 2022 Taylor D. Beith. p. 18.

(10) Cf. The works of Mencius. James Legge. Book 4, Part 1. New York. Dover Publications, Inc. 2011.

(11) Cf. Autocracy with Chinese characteristics, Yuen Yuen Ang, Foreign Affairs Magazine, April 16, 2018.



economic development levels of the four Asian tigers of Hong Kong, Singapore, South Korea and Taiwan within 20 years. His expectations were surpassed.

This was the optimistic nineties, when Francis Fukuyama proclaimed *The End of History* (1992), and Boris Yeltsin and Bill Clinton announced that their two countries were finally going to resolve their bilateral disagreements and address the world's problems, their supposed friendship symbolized by an unprecedented fit of laughing.⁽¹²⁾ A calamitous 20th century was drawing to a close, and the world was looking forward to a more peaceful third millennium. But within a year, that optimism was curtailed with the attack on the Twin Towers in September 2001. Only months earlier, in April, Jiāng Zémín had visited Latin America, joining Venezuela's president, Hugo Chávez and Spanish singer Julio Iglesias in a rousing rendition of *Che bella cosa*. Stanley Kubrick was president. That year was nothing if not a space odyssey.

In the whirlwind of events that followed, it became clear to the Communist Party that China needed to improve its international image, and to conduct some kind of campaign in this regard.

A Charm Offensive

«From 1994-2000, the term soft power (ruànshí lì 软实力) appeared in the titles of only 11 journals and periodical articles, increasing in the 2001-2004 period to 58, followed by a large increase to 416 articles from 2005-2007.»⁽¹³⁾

The first time the term soft power appeared in Chinese official political discourse was in 2007, when the then president, Hú Jīntāo (胡锦涛, 2003-2013), told the 17th Party Congress about the importan-

ce of strengthening China's soft cultural power (Wénhua ruànshí lì 文化软实力).⁽¹⁴⁾

The country had in fact already begun exercising soft power with initiatives such as the 2004 launch of the Confucius Institutes. At the same time, China sent teachers and doctors abroad on educational and humanitarian missions. Financial aid packages were designed for projects in the third world, while scholarship programs were established to attract international talent to Chinese universities.

In addition, Beijing created international forums such as the Shanghai Cooperation Organization and the ANSA-China Free Trade Area. Today, China is the second largest contributor to the UN budget, after the United States, and is the country that maintains the most peacekeepers in UN missions, 2,200, reports *China Daily* proudly.⁽¹⁵⁾

In 2009, Hú Jīntāo launched the *Great External Broadcasting Strategy*,⁽¹⁶⁾ an € 8 billion campaign aimed at seizing opportunities, maintaining an active role while giving voice to China's positions in international public opinion and world televisions.⁽¹⁷⁾

But it has been President Xi Jinping who has pursued soft power furthest, boosting its role in Chinese domestic and international politics. Maria Repnikova,⁽¹⁸⁾ Associate Professor in International Communication at Georgia State University, notes that soft power has been increasingly mentioned in speeches at party congresses.

Journey to the West

Mankind has exchanged goods and ideas since time immemorial. The routes have been myriad and have changed our world; we need only think of the impact of the Silk Road and the opening up of the Americas. Perhaps one of the best

metaphors for this constant exchange between countries and cultures is the 16th century Chinese novel *Journey to the West* (Xīyóu Jì 西遊記).

The book recounts the pilgrimage of the Buddhist monk Xuánzàng (玄奘), who in 629 CE, during the Táng dynasty, left China for India, returning in 645 laden with sacred Buddhist texts.

Centuries earlier, Buddhism had spread throughout Central Asia and China from the Hindustan peninsula. Eager to know more about the Buddha, his origins, and the afterlife, the Chinese sought the original sources. Ultimately, Buddhism would mix very well with Taoism, along with local ancestor worship, giving rise to one of the most widespread variants of Buddhism in the world today: *Chán* Buddhism (禪). This Buddhism, like so much else, developed in China, but the version known to the world is Japanese, or Zen Buddhism: Japanese soft power has done its work.

In fact, the very word *China* is also the product of a journey. The Indians who came in contact with the first Chinese travelers called them *Chin*, in Hindi (चीन), at the time of the *Qín* dynasty (秦), which in Chinese is pronounced *Chin*. The term *Chin* was transcribed in China, as *Zhīnà* (支那), which to foreign ears sounds almost like *China*.

In the same way, the concept of soft power has traveled to China, and along the way it has undergone some transformations, either enriching the original idea with Chinese characteristics or distorting it, according to orthodox thinkers.

To begin with, Chinese policymakers understand that soft power can be applied at home as well as abroad; originally, Nye devised the concept to mitigate the decline of US influence in a post-cold war world. And so, the exercise of soft power was part of Washington's foreign policy.

In contrast, many leading Chinese political scientists are proponents of using culture as a form of soft power both outside and inside the country. They see culture as a kind of social glue, with the Chinese Communist Party the guarantor of Chinese culture and civilization. As long as it can maintain them it will also maintain stability, and with stability, the legitimacy of the party. Hand in hand with culture is the cultivation of a certain nationalism, which appeals to the pride of belonging to a millenary civilization, as if it were a privilege: culture and the homeland, the responsibility of the party.

Chinese political thinkers see no need for strict distinctions between soft and hard power. For this reason, they understand that economics, which Nye framed as a factor within hard power, is one of the main constituent factors of soft power. This is confirmed by the Indian political scientist, Sinha Palit:⁽¹⁹⁾ Chinese soft power has a strong economic content.

China's approach differs from the West's in that it invokes a soft power model characterized by priority to economic development and the maintenance of strong government leadership. Moreover, as Maria Repnikova⁽²⁰⁾ notes, even when it does not refer to a specific model, research on Chinese soft power invariably invokes the country's economic successes.

This model of soft power based on economic development, on loans to developing countries, fits in with the Chinese government's major infrastructure projects, such as the Belt and Road Initiative or the establishment of the Asian Infrastructure Investment Bank (AIIB). Asked what Chinese soft power is, even ChatGPT highlights this economic component, noting that Beijing has been using its economic power to increase its soft power of influence, particularly with the Belt and Road Initiative.

At the time of publishing, when ChatGPT's Chinese competitor, Ernie Bot (Wénxīn yīyán - 文心一言) was asked the same question, the response was that the request was on hold, and that a message will be sent when it has been successfully processed.⁽²¹⁾ The Chinese Wikipedia page notes that a Chinese mobile number is required to sign up for Ernie Bot, and that the app is restricted to business users.⁽²²⁾

But for Joseph Nye this is not soft power. It would be if the loans were at zero interest. He understands that lending money may initially improve relations between states, but if countries are unable to pay their debts, this puts them back to square one, since debt becomes a means of pressure, something he considers to be contrary to the nature of soft power.

Significant in this regard is the book *Are We Happy Now* (幸福了吗?), in which its popular author, Bái Yánsōng (白岩松) argues that we have to get used to the fact that some people simply don't like China, but it should be noted that an increasing number of people like Chinese people, and absolutely everyone likes the yuan.

The survey conducted in February 2023 by the Singapore-based think-tank the Yusof Ishak Institute argued that China remains the most influential economic power in the Asia-Pacific region, ahead of the United States, with two-thirds of respondents expressing concern about Chinese influence. It also noted that Japan remained the most reliable power.⁽²³⁾ In fact, China's reputation is already beginning to suffer as a result of its political, economic and military clout, just as has happened to the United States over the course of the last century. Both Washington and Beijing are desperately trying to improve their image as they pursue the exercise of their soft power.

This is the backdrop to the IE China Center's *Fuel the Soft Power: The Role of High Tech Companies in the Soft Power Rivalry between China and United States*, an analysis of the role played by both countries' leading technology companies within their respective soft power strategies. They are competing for influence in the world; after all, the more influence, the more products can be sold.

(12) Cf. Video of President Yeltsin and President Clinton's laughing fit during the former's official visit to the United States in October 1995: <https://www.youtube.com/watch?v=mv7M0xmQ6i0>.

(13) *Soft Power with Chinese Characteristics. China's campaign for Hearts and Minds*. Edited by Kingley Edney, Stanley Rosen and Ying Zhu. Routledge. London & New York. 2020. p.2.

(14) Cf. Chinese soft power. Maria Repnikova. Cambridge University Press. United Kingdom. 2022. p. 2.

(15) Cf. China pays all current UN peacekeeping assessments. China Daily. 24 November 2022.

(16) In Chinese it is Hóngá de duìwài xuānchuán géjú (宏大的对外宣传格局).

(17) Cf. China Times News 中共走出去政策 陆企并购海外传媒, October 9, 2016.

(18) Cf. Opus. cit. p. 2.

(19) Cf. *Analysing China's Soft Power Strategy and Comparative Indian Initiatives*. Parama Sinha Palit. SAGE Publications India Pvt Ltd. New Delhi. 2017, p. XVII.

(20) Chinese soft power. Maria Repnikova. Cambridge University Press. United Kingdom. 2022. p. 2

(21) Cf. 您已在等待体验中, 加入成功将短信通知。

(22) Cf. 目前已开放用户申请加入体验, 但现仅支持百度帐号绑定中国大陆电话号码的企业级用户。

(23) Cf. Yusof Ishak Institute report of February 9, 2023.

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► Understanding Soft Power

Soft power, the ability to influence and attract others through cultural, social, and political means⁽¹⁾, has become increasingly important in the world of international business and relations. Countries are vying for power and influence in the global arena, and soft power has emerged as a key tool in their arsenals. Two nations that have been at the forefront of this competition are China and the United States, both of which have been investing heavily in their soft power strategies in recent years.

Understanding the soft power of these two nations is crucial, as it has significant implications for the international community. From their ability to shape public opinion and attitudes towards their respective nations, to their influence on global norms and values, soft power has the potential to shape the global economy and international trade and relations in ways that hard power cannot.

Soft power refers to a country's ability to influence others through its cultural, social, and political values and institutions. Soft power is the opposite of hard power, which refers to the use of military force and economic coercion to achieve a country's goals. According to Joseph Nye (2004), there are several aspects of a country that are typically considered sources of its soft power. These include:

- Culture and value: a country's arts, literature, music, and other forms of cultural ex-

pression. A country's culture can be a powerful tool for influencing others, as it can shape how people perceive that country and its people.

- Education and knowledge creation: a country's education system, including its universities and schools. A country that has a strong education system may be seen as a leader in innovation and knowledge, which can contribute to its soft power.

- Business and economy: a country's economic power and influence. A country that is seen as economically prosperous and stable may be more likely to be admired and respected by others.

- Policies and institutions: a country's political system and its domestic policies. A country that is perceived as having a fair and just political system, for example, may be more likely to be respected and admired by others.

- Foreign policy: a country's approach to international relations, including its alliances and relationships with other nations. A country that is seen as working towards peace and cooperation may be more likely to be admired and respected by others.

Overall, soft power is a complex and multifaceted concept that draws on a wide range of factors. By cultivating these sources of soft power, countries can work to shape global perceptions of themselves and influence others without resorting to hard power tactics.

While all five aspects of soft power - culture, education, economy, domestic and foreign policies - are important, culture, education, and economy are often consi-

dered the “softest” aspects of soft power, as they are more difficult to measure and observe compared to the other aspects. For example, a country’s culture is shaped by a wide range of factors, including its history, language, religion, and social norms. These factors are often deeply ingrained and difficult to quantify, making it challenging to study the impact of culture on a country’s soft power.

Similarly, a country’s education system is complex and multifaceted, and encompasses a wide range of institutions, including universities, schools, and vocational training centers. Measuring the impact of education on a country’s soft power requires a nuanced understanding of the education system and its role in shaping national values and priorities.

Finally, a country’s economic strength is influenced by a wide range of factors, including its natural resources, labor force, and government policies. Measuring the impact of economic strength on a country’s soft power requires a deep understanding of these factors and their interplay, as well as the ways in which economic strength can shape a country’s global influence.

As a result, culture, education and economy are the aspects that require more attention and research in order to better understand their role in shaping a country’s soft power. Thus, the first goal of this report is to focus on these three aspects and provide a comparison of the soft power between China and the United States based on data collected from 10 countries, including Canada, Mexico, Australia, Japan, Israel, France, Germany, Spain, the United Kingdom, and South Africa, with the aim of exploring the ways China and the United States use to shape the world around them.

(1) Nye, Joseph S. *Soft Power: The Means to Success in World Politics*. Public Affairs, 2004.



► High Tech Companies and Soft Power

High tech companies and their consumer products can play an important role in shaping people’s perceptions of a country’s soft power. For example, Apple’s iPhone has become a global symbol of American innovation and design, and it has contributed significantly to the perception of the United States as a technologically advanced and creative nation. Similarly, smartphones and other products of Huawei, Xiaomi, etc. have helped to establish China as a major player in the global tech industry, contributing to the perception of China as a rising power in the world.

The popularity and reputation of these companies can have a significant impact on people’s perceptions of their respective countries. For example, a person who uses an iPhone may associate it with American innovation and quality, and may view the United States more positively as a result. Similarly, a person who uses a Huawei

smartphone may perceive China as a technologically advanced and innovative country, which could positively impact their perception of Chinese soft power

Furthermore, high tech companies are often closely associated with a country’s culture and values, which can also contribute to their soft power. For example, Apple’s reputation for innovation, creativity, and individualism reflects many of the values that are often associated with American culture. Similarly, Huawei’s emphasis on teamwork, collaboration, and harmony reflects many of the values that are often associated with Chinese culture. As such, these companies and their products can serve as a powerful tool for promoting a country’s soft power and shaping global perceptions of that country. Thus, the second goal of this report is to explore the role of high tech companies and their consumer products in shaping people’s perception of the soft power of China and the US.

► South Korea as a Reference Country in the Study

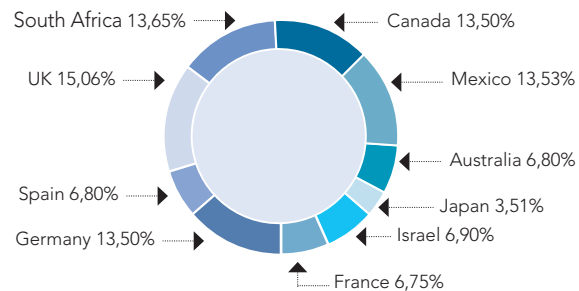
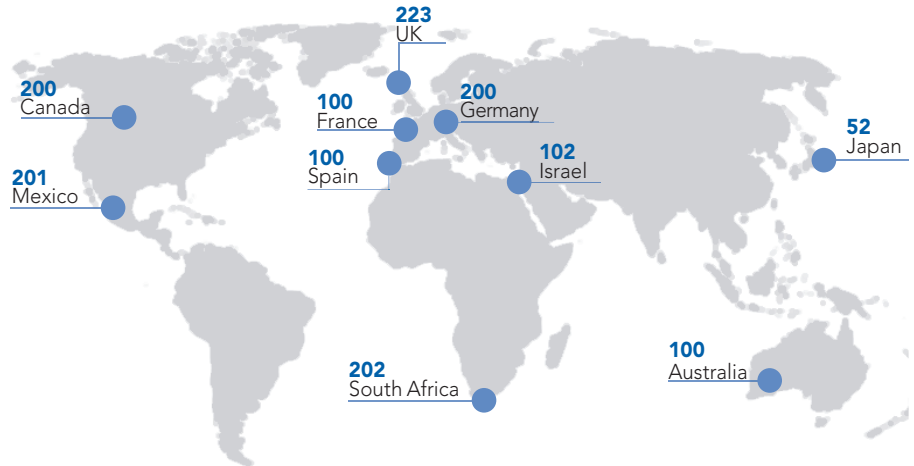
Having a reference country can be helpful when studying soft power, as it provides a baseline for comparison and helps to highlight the unique strengths and weaknesses of each nation's soft power. In the case of the United States and China, South Korea is an excellent benchmark for several reasons. Firstly, like the United States and China, it is a major global economic power. It is home to several large corporations, including Samsung and Hyundai, and is a leader in industries such as electronics, automobiles, and shipbuilding. This economic strength gives South Korea a significant amount of soft power, as other countries may look to it as a model for economic development and innovation.

Secondly, South Korea is known for its cultural heritage, including its traditional music, dance, and art. In recent years, South Korean popular culture, including K-Pop music and Korean dramas, has become a global phenomenon, further increasing the country's soft power. Furthermore, South Korea's unique blend of Confucian, Buddhist and modern Western influences has resulted in a culture that shares similarities with both China and the United States. Like China, South Korea places a high value on filial piety, respect for authority, and social harmony, while also embracing the entrepreneurial spirit and individualism of US culture.

Thirdly, South Korea has a highly developed education system, with a high percentage of its population holding tertiary education degrees. This educational achievement has helped to drive South Korea's economic success and

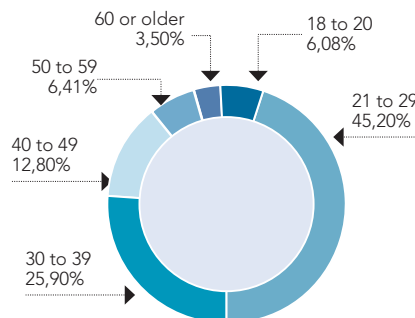
■ COUNTRY DISTRIBUTION

(Figure 1)



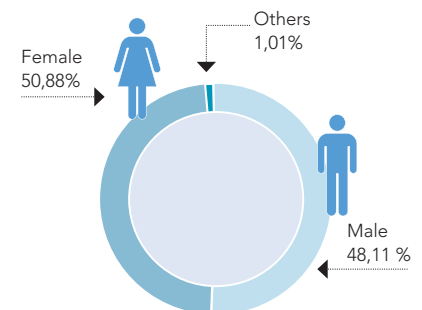
■ AGE DISTRIBUTION

(Figure 2)



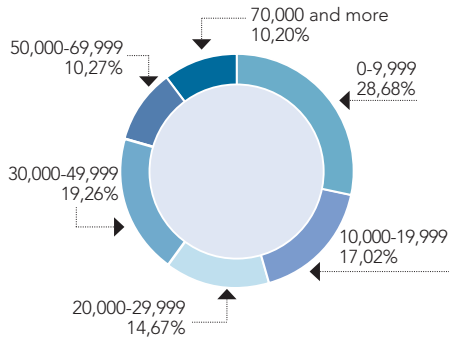
■ GENDER DISTRIBUTION

(Figure 3)



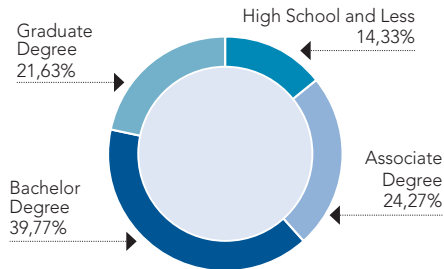
■ ANNUAL INCOME DISTRIBUTION (USD)

(Figure 4)



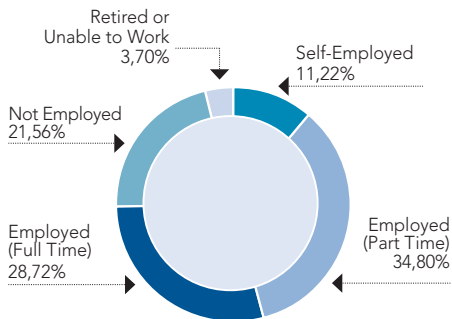
■ EDUCATION

(Figure 5)



■ EMPLOYMENT STATUS

(Figure 6)



“South Korea’s unique blend of Confucian, Buddhist and modern Western influences has resulted in a culture that shares similarities with both China and the United States”

has made it a leader in research and development.

By using South Korea as a reference, researchers can gain insights into the ways in which a country’s cultural, economic, and educational strengths can contribute to its soft power. Additionally, by comparing South Korea to the United States and China, we can identify the unique strengths and weaknesses of each country’s soft power and develop strategies for enhancing their global influence.

► Data Collection and Descriptives











We collected survey data from 10 countries, including Canada, Mexico, Australia, Japan, Israel, France, Germany, Spain, the United Kingdom, and South Africa, resulting in a sample size of 1,480 individuals, as shown in Figure 1. This sample provides broad coverage across North America, Asia, the Middle East, Europe, and Africa.

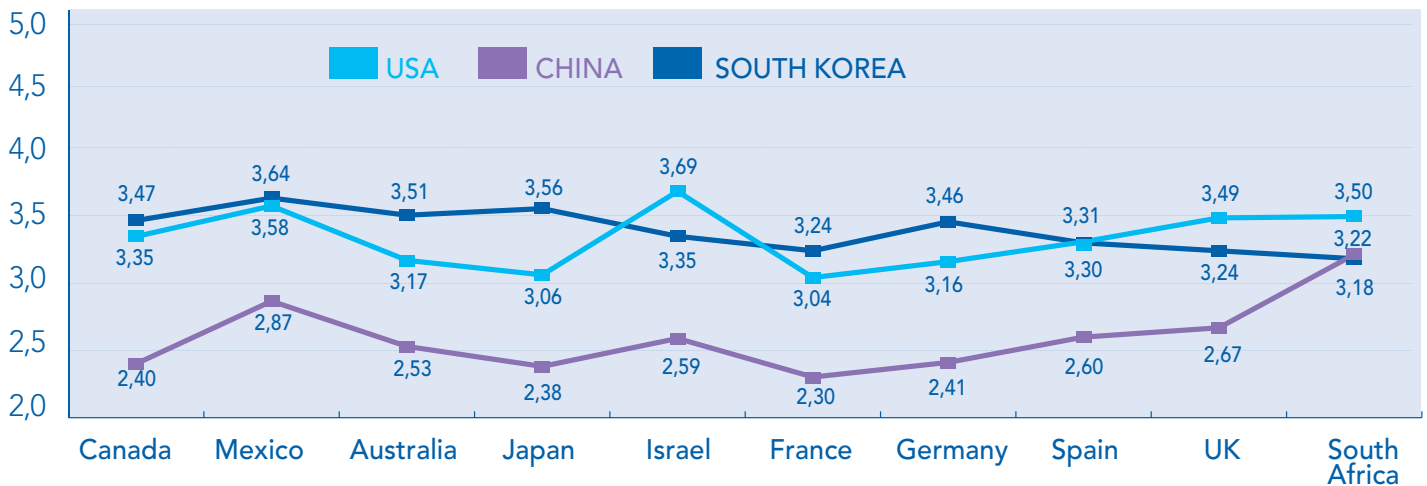
The majority of our sample (Figure 2) falls within the 20 to 40-year-old age range, with a relatively even distribution of genders (Figure 3). Additionally, the income distribution (Figure 4) indicates a wide range of economic backgrounds. Finally, most of our participants are with a college-level education (Figure 5), employed (Figure 6), and work in various occupations at different levels, including professional, technician, clerical, service, and agricultural workers, among others.

This sample provides a diverse representation of individuals across multiple countries, ages, incomes, and occupations. As such, it can be considered a suitable sample for studying the perception of soft power of China and the United States, as it represents a broad range of opinions and experiences. By collecting data from countries across different continents, we can gain a more comprehensive understanding of how different regions perceive the soft power of China and the United States. Additionally, by including individuals with varying levels of education and income, we can gain a collective insight into how soft power is perceived. Therefore, this sample has the potential to yield valuable insights into the role of culture, education, and economy in shaping the soft power of China and the United States.

■ LIKEABILITY (1-5)

(Figure 7)

COUNTRY	 Canada	 Mexico	 Australia	 Japan	 Israel	 France	 Germany	 Spain	 UK	 South Africa
USA	3,35	3,58	3,17	3,06	3,69	3,04	3,16	3,31	3,49	3,50
China	2,40	2,87	2,53	2,38	2,59	2,30	2,41	2,60	2,67	3,22
South Korea	3,47	3,64	3,51	3,56	3,35	3,24	3,46	3,30	3,24	3,18



► The Soft Power of China and the United States

We first focused on the general perception of China and the United States in terms of likability, familiarity, global influence, and positive reputation.

In terms of likability (Figure 7), both the United States and South Korea (used as the reference point) received higher ratings overall. However, emerging economies such as











Mexico and South Africa demonstrated a relatively high likability towards China. One possible reason is that China has increased its presence in these regions through investment and economic partnerships. For instance, China has significantly increased its economic activities in Africa in recent years, including infrastructure development pro-

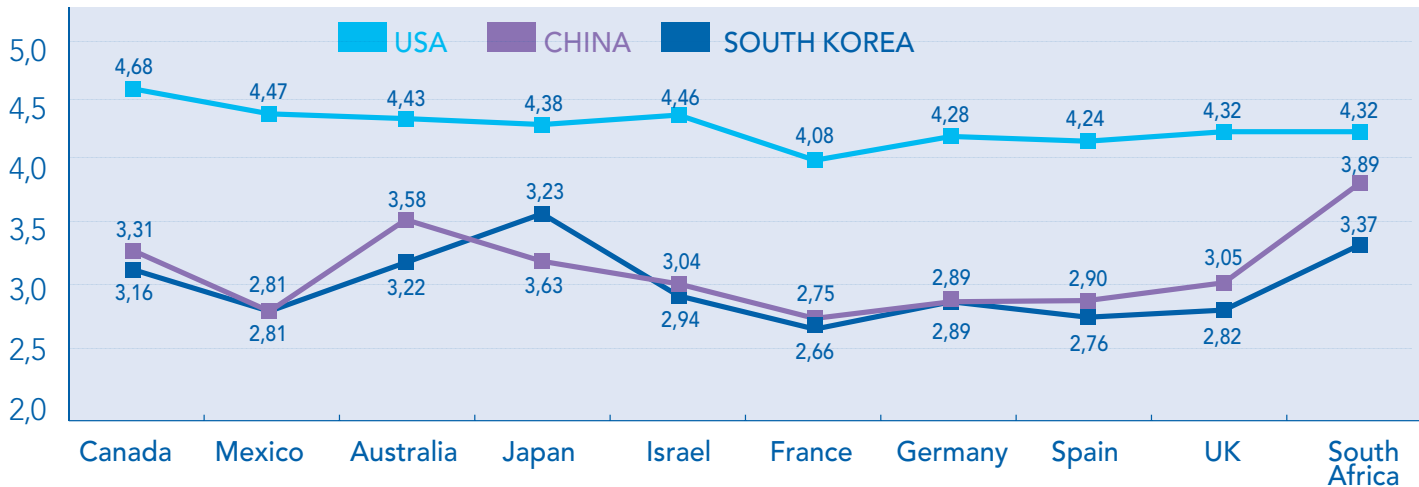
jects, trade, and investment. People in these regions may view China's economic growth and development as a positive example of how a developing country can succeed.

In terms of familiarity (Figure 8), our data shows that China and South Korea received lower ratings compared to the United States. One possible explanation for this trend could

■ FAMILIARITY (1-5)

(Figure 8)

COUNTRY	 Canada	 Mexico	 Australia	 Japan	 Israel	 France	 Germany	 Spain	 UK	 South Africa
USA	4,68	4,47	4,43	4,38	4,46	4,08	4,28	4,24	4,32	4,32
China	3,32	2,81	3,58	3,23	3,04	2,75	2,89	2,90	3,05	3,89
South Korea	3,16	2,81	3,22	3,63	2,94	2,66	2,89	2,76	2,82	3,37



be the lack of knowledge and exposure to East Asian cultures in general, particularly in the sampled countries. The United States has long been a dominant cultural force in the world, with Hollywood movies, music, and television shows being widely distributed and popularized across the globe. On the other hand, Chinese cultural products have only recently begun to make inroads in the international market. Furthermore, the

Chinese language and writing system may be perceived as more difficult to learn and understand for those who are not familiar with it, which could contribute to lower ratings of familiarity.











The data collected on global influence ratings (Figure 9) indicates high ratings of China, which reveals China's steady increase on its global influence over the past decade. While the United States still holds a higher

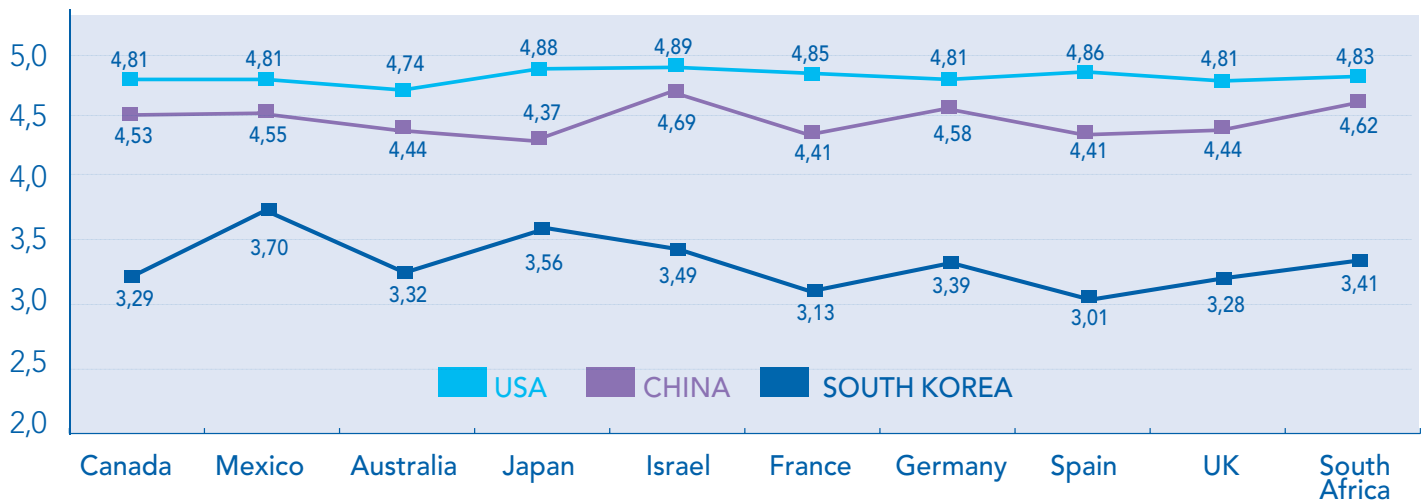
rating overall, the difference between the two countries is relatively small. This suggests that China is gaining ground in terms of its international influence and may pose a challenge to US dominance in the future. The reasons behind China's increasing global influence may be attributed to factors such as its growing economic power, increasing



GLOBAL INFLUENCE (1-5)

(Figure 9)

COUNTRY	 Canada	 Mexico	 Australia	 Japan	 Israel	 France	 Germany	 Spain	 UK	 South Africa
USA	4,81	4,81	4,74	4,88	4,89	4,85	4,81	4,86	4,8	4,83
China	4,53	4,55	4,44	4,37	4,69	4,41	4,58	4,41	4,44	4,62
South Korea	3,29	3,70	3,32	3,56	3,49	3,13	3,39	3,01	3,28	3,41



investments in foreign countries, and its growing leadership in global initiatives such as the Belt and Road Initiative. Despite the current gap in global influence between China and the United States, China may soon become a more prominent global player.

In terms of positive reputation (Figure 10), our data shows that both China and the Uni-











ted States received relatively low scores, with China scoring slightly lower than the United States. The reasons for these low scores can be multifaceted and context-dependent, such as media coverage, which usually strongly influence the perceptions of a country.

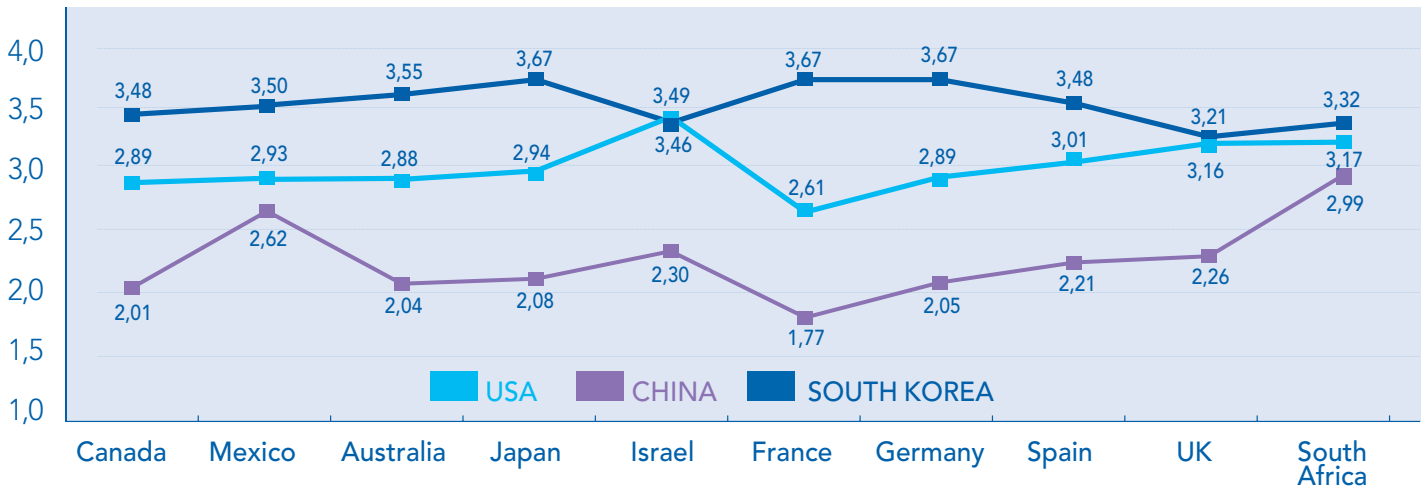
Furthermore, in order to measure soft power more comprehensively, our study devised a questionnaire that incorporates

the three key aspects mentioned previously: culture, education and knowledge creation, and business and economy. The cultural dimension encompasses aspects such as art, cuisine, travel preferences, lifestyle, and sports. The education and knowledge creation dimension assesses elements such as scientific achievements, educational system efficiency, and technological innovation. Finally, the business and economy dimen-

■ POSITIVE REPUTATION (1-5)

(Figure 10)

COUNTRY	 Canada	 Mexico	 Australia	 Japan	 Israel	 France	 Germany	 Spain	 UK	 South Africa
USA	2,89	2,93	2,88	2,94	3,49	2,61	2,89	3,01	3,16	3,17
China	2,01	2,62	2,04	2,08	2,30	1,77	2,05	2,21	2,26	2,99
South Korea	3,48	3,50	3,55	3,67	3,46	3,67	3,67	3,48	3,21	3,32



sion covers topics such as the business environment, economic stability and strength, global market presence, and future economic growth prospects. Our questionnaire integrates both newly created questions and previously conducted research on soft power, such as Global Soft Power Index⁽²⁾.

Specifically, regarding culture (Figure 11), the findings of our study revealed that the United States received significantly higher











ratings compared to China. This could be attributed to several factors. Firstly, the United States has a long-standing status as a cultural powerhouse with a rich history of artistic and cultural contributions that have had a significant impact on global culture. This includes its contributions to cinema, music, literature and art, among others.

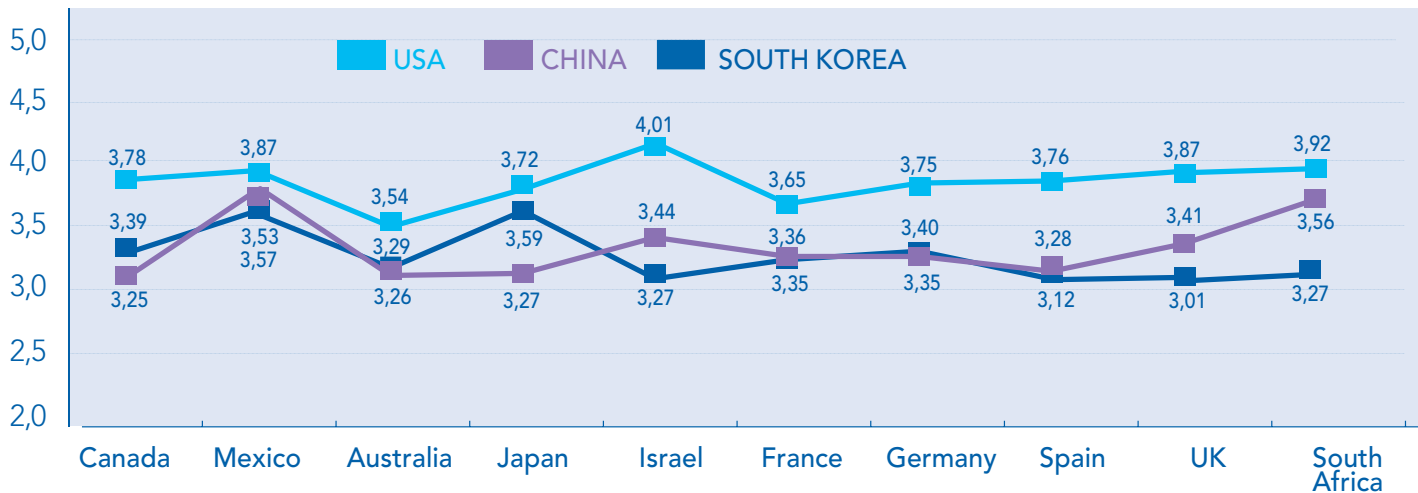


“The United States has a long-standing status as a cultural powerhouse”

■ CULTURE (1-5)

(Figure 11)

COUNTRY	 Canada	 Mexico	 Australia	 Japan	 Israel	 France	 Germany	 Spain	 UK	 South Africa
USA	3,78	3,87	3,54	3,72	4,01	3,65	3,75	3,76	3,87	3,92
China	3,25	3,57	3,26	3,27	3,44	3,35	3,35	3,28	3,41	3,56
South Korea	3,39	3,53	3,29	3,59	3,27	3,36	3,40	3,12	3,01	3,27













Secondly, the global popularity of American culture-related products, such as movies, music, and TV shows, has contributed to the positive perception of American culture among people from different countries. These products have become a significant part of global culture and have contributed

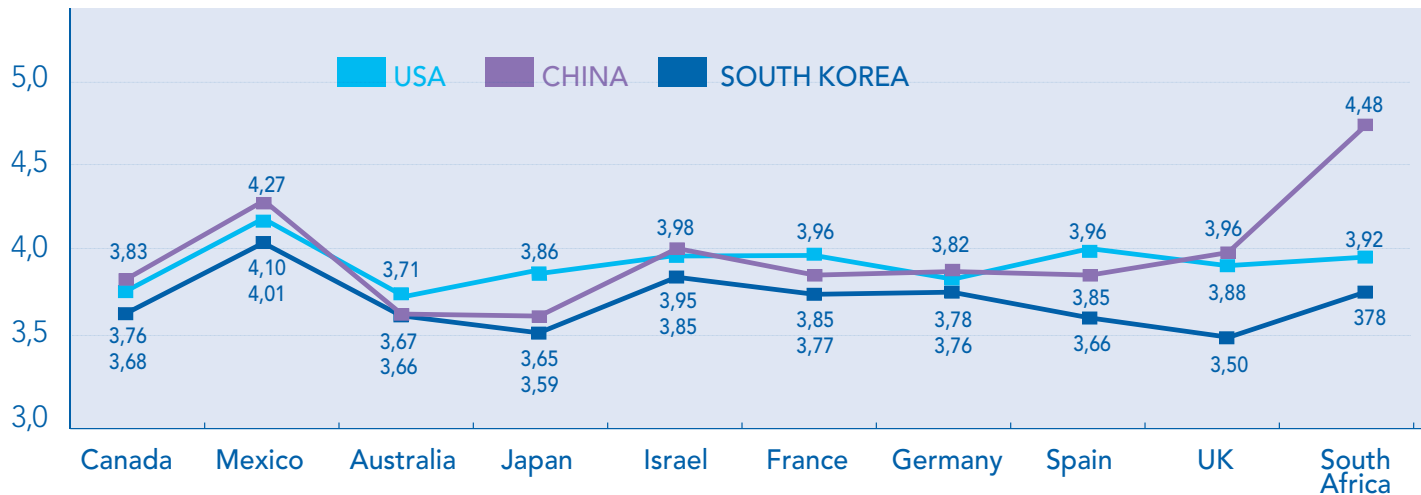
to shaping cultural trends and preferences. Additionally, the cultural diversity within the United States, which encompasses various ethnic groups and subcultures, has also contributed to the richness and appeal of American culture. Overall, these factors may have contributed to the higher ratings of the United States in terms of culture compared to China.

In terms of education and knowledge creation (Figure 12), most surveyed countries, including Canada, Mexico, Israel, Germany, the United Kingdom, and South Africa, rated China higher compared to the United States. This trend suggests that China's significant investment in education and scientific innovation is paying off and gaining recognition globally. For example,

■ EDUCATION & SCIENCE (1-5)

(Figure 12)

COUNTRY	 Canada	 Mexico	 Australia	 Japan	 Israel	 France	 Germany	 Spain	 UK	 South Africa
USA	3,76	4,10	3,71	3,86	3,95	3,96	3,76	3,96	3,88	3,92
China	3,83	4,27	3,66	3,65	3,98	3,85	3,82	3,85	3,96	4,48
South Korea	3,68	4,01	3,67	3,59	3,85	3,77	3,78	3,66	3,50	3,78



The Guardian recently reported that, based on a project conducted by the Australian Strategic Policy Institute, China leads in 37 of 44 technology areas this thinktank tracked over the course of a year. In addition, for some technologies, all of the world's top 10 leading research institutions are based in China, which collectively generate nine times more high-impact research papers than the











second-ranked country, usually the United States⁽³⁾. On the contrary, criticism towards the United States' lack of government funding for public education and science may have contributed to its lower rating. These results demonstrate the potential for China to become a leader in science and innovation

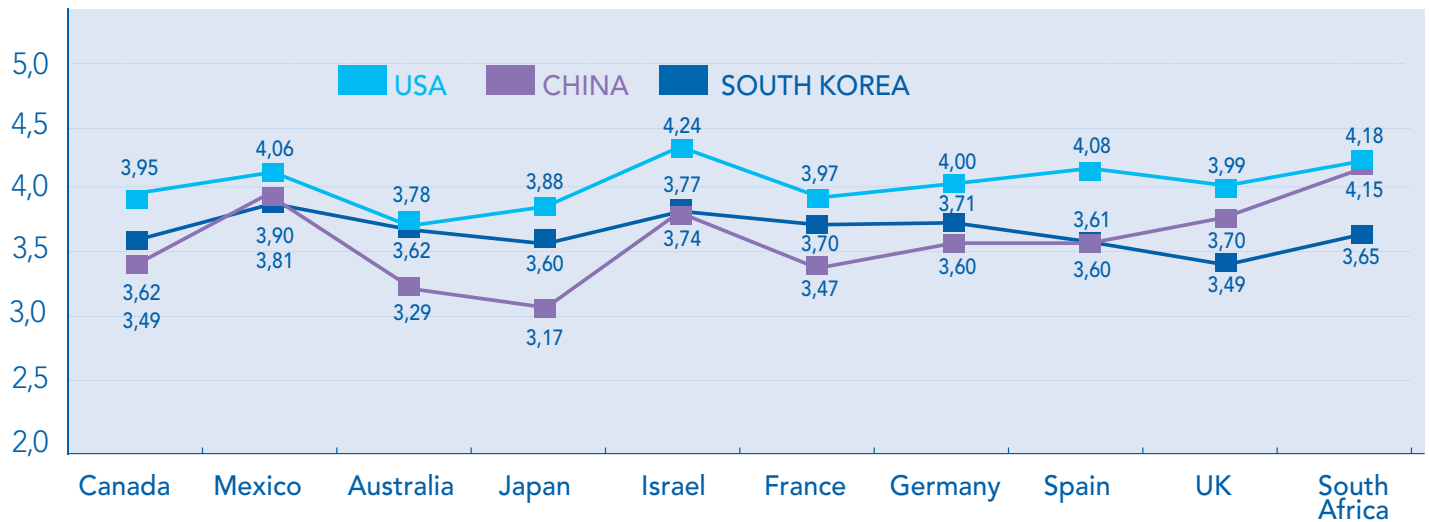
“China has a potential to become a global leader in science and Innovation in the near future”



■ BUSINESS & ECONOMY (1-5)

(Figure 13)

COUNTRY	 Canada	 Mexico	 Australia	 Japan	 Israel	 France	 Germany	 Spain	 UK	 South Africa
USA	3,95	4,06	3,78	3,88	4,24	3,97	4,00	4,08	3,99	4,18
China	3,49	3,90	3,29	3,17	3,74	3,47	3,60	3,60	3,70	4,15
South Korea	3,62	3,81	3,62	3,60	3,77	3,70	3,71	3,61	3,49	3,65



in the near future, as it continues to prioritize and invest in education and research.

Lastly, regarding business and economy (Figure 13), the United States still maintains a leading position globally, with a relatively small gap with China. However, it is worth noting that emerging economies, such as Mexico and South Africa, rated China very close to the United States, which may re-

fect the increasing influence Beijing has been able to gain through investment and collaboration with these countries. China's Belt and Road Initiative, for example, has been successful in expanding its economic reach and influence, particularly in developing countries. Furthermore, China's impressive economic growth in recent years, combined with its large population and vast

market potential, has made it an increasingly attractive destination for foreign investment. As a result, China is poised to become an even more important player in the global economy in the years to come.

(2) Global Soft Power Index. <https://brandirectory.com/softpower/>

(3) Hurst, Daniel. China leading US in technology race in all but a few fields, thinktank finds. *The Guardian*. 2023.

► The Role of High Tech Companies and Products

This section emphasizes the significant impact of high-tech companies in projecting their respective countries' image and values to the global audience, which, we hypothesize that, can significantly contribute to their soft power. The consumption of high-tech consumer products from a particular nation can enhance global customers' familiarity with it. As depicted in Figure 14,











US products continue to dominate various markets, with Chinese goods not far behind. This presents an opportunity for high-tech companies to contribute to their country's soft power by positively representing its technological advancement, values, and cultural identity through their products.

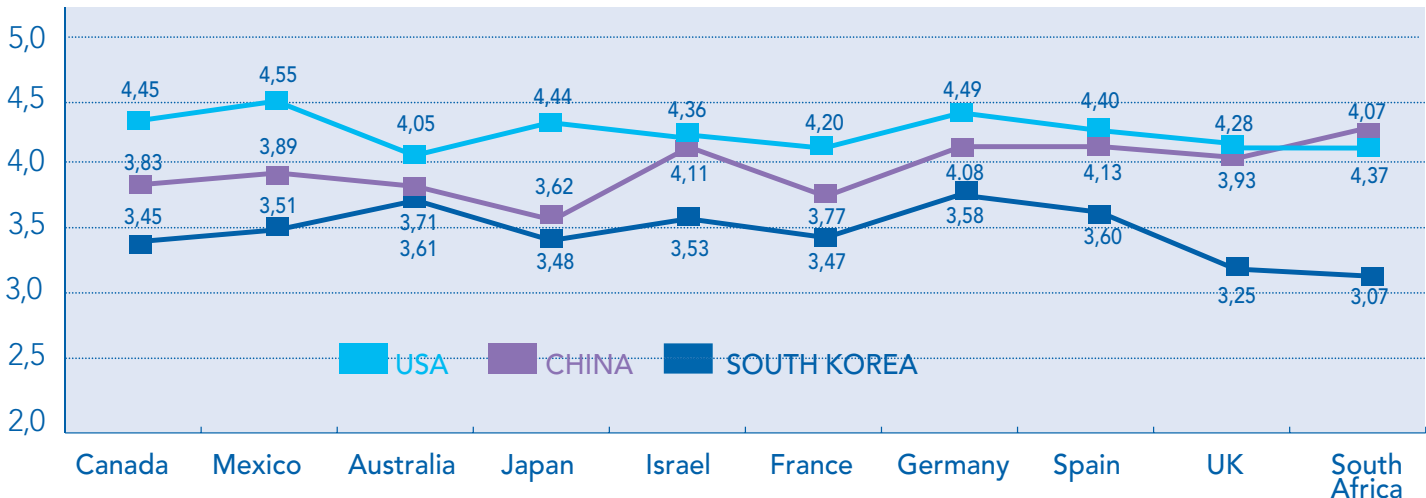
For instance, Apple is often associated with the United States, while Samsung is

widely recognized as a symbol of South Korea's technological prowess. In the case of China, there are several companies, such as Huawei, Xiaomi, Tencent, and ByteDance (the company that created TikTok), which have gained a significant presence in the global market and hence are essential in projecting China's image to the world. Specifically, Huawei and Xiaomi are known

■ HIGH-TECH PRODUCTS COMSUPTION (1-5)











(Figure 14)

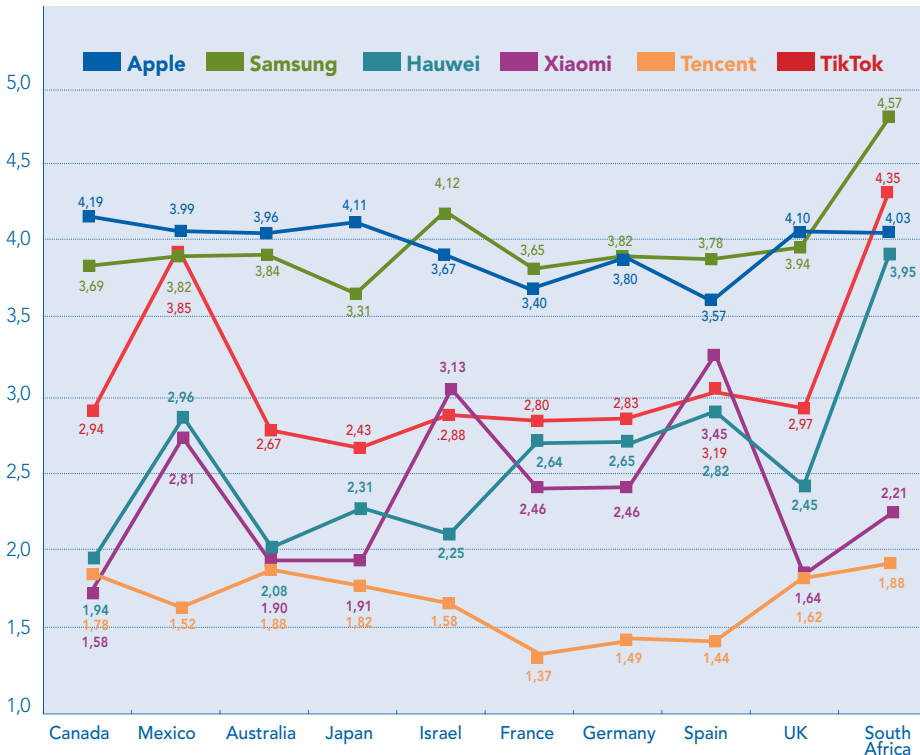
COUNTRY	 Canada	 Mexico	 Australia	 Japan	 Israel	 France	 Germany	 Spain	 UK	 South Africa
USA	4,45	4,55	4,05	4,44	4,36	4,20	4,49	4,40	4,28	4,07
China	3,83	3,89	3,71	3,62	4,11	3,77	4,08	4,13	3,93	4,37
South Korea	3,45	3,51	3,61	3,48	3,53	3,47	3,58	3,60	3,25	3,07



■ BRAND FAMILIARITY (1-5)

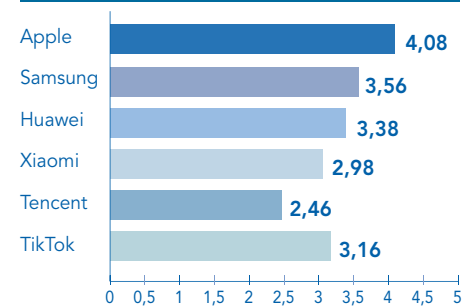
(Figure 15)

BRAND	 Canada	 Mexico	 Australia	 Japan	 Israel	 France	 Germany	 Spain	 UK	 South Africa
Apple	4,19	3,99	3,96	4,11	3,67	3,40	3,80	3,57	4,10	4,03
Samsung	3,69	3,82	3,84	3,31	4,12	3,65	3,82	3,78	3,94	4,57
Huawei	1,94	2,96	2,08	2,31	2,25	2,64	2,64	2,82	2,45	3,95
Xiaomi	1,58	2,81	1,90	1,91	3,13	2,46	2,46	3,45	1,64	2,21
Tencent	1,78	1,52	1,88	1,82	1,58	1,37	1,49	1,44	1,62	1,88
TikTok	2,94	3,85	2,67	2,43	2,88	2,80	2,83	3,19	2,97	4,35



■ BRAND-COUNTRY REPRESENTATION (1-5)

(Figure 16)



for its technological position in the telecommunications industry and has become a major player in the global market (Figure 15), especially in Europe and Africa. Similarly, Tencent and ByteDance are among the world's largest social media companies and have contributed significantly to China's global outreach. In short, the influence and success of these high-tech companies can significantly shape their respective countries' soft power, which is an important consideration for policymakers and businesses alike.

The findings from our survey indicate that these brands above have a significant impact on shaping a global audience's perception of their nation's image. These brands, which are often associated with the country of origin, act as ambassadors and play a crucial role in shaping people's perception of the country's values, culture, and innovation. As such, these brands have the potential to influence the perception of a country's soft power, both positively and negatively. This highlights the importance of high-tech companies in contributing to the overall soft power of their countries. The results from Figure 16 provide further evidence of the significant impact that these brands have in representing their home countries and shaping global perceptions.

CONCLUSIONS

1 Soft power consists of five aspects: culture, education, economy, domestic and foreign policies. However, culture, education, and economy are usually considered the “softest” aspects, which suggests their importance in shaping a country’s soft power.

2 The United States still holds a dominant position of overall soft power (with a score of 3.90 out of 5) compared to China (3.15 out of 5). The United States has a long-established soft power dominance with a global reach. However, emerging economies such as Mexico and South Africa showed a higher level of favorability towards China than other countries (Figure 7 & Figure 10). This could be attributed to China’s increasing investment and economic collaborations in these regions. As China continues to expand its presence in these areas, it is likely that its soft power will also increase.

3 While the United States still has a higher rating on global influence (Figure 9), the difference between China and the US is relatively small (China scored 4.50 out of 5, compared to 4.83 of the US). China’s growing economic power, increasing investments in foreign countries, and leadership in global initiatives such as the Belt and Road Initiative are factors contributing to its increasing global influence. This suggests that China may become a more prominent global player in the future.

4 The majority of surveyed countries, including Canada, Mexico, Israel, Germany, the UK, and South Africa, rated China higher than the US in education and knowledge creation (Figure 12). This trend sug-

gests that China’s investment in education and scientific innovation is gaining recognition globally. These results indicate China’s potential to become a leading country in science and innovation.

5 High tech companies and their products play a significant role in shaping people’s perceptions of a country’s soft power (Figure 16). For instance, Apple’s iPhone has contributed to the perception of the US as a technologically advanced and creative nation, while Huawei, Xiaomi, and other Chinese tech companies have helped establish China as a major player in the global tech industry (Figure 14 & Figure 15). These companies and their products serve as a powerful tool for promoting a country’s soft power and shaping global perceptions of that country.

These findings shed new light on the soft power strategies that can be employed by China and other developing countries, emphasizing the previously overlooked role of high-tech companies in promoting the soft power of their country of origin. With the increasing globalization and interconnectedness of the world, high-tech companies have become important ambassadors of a country’s soft power by promoting their brands and products globally and shaping people’s perceptions of their respective countries. Additionally, China’s investment in education and scientific innovation, as well as collaborations in regions of emerging economies, has been enhancing the country’s soft power, suggesting that China will become a more prominent global player in the near future.

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China's Soft Power: Nurturing High-Tech Companies in a Competitive Landscape

The escalating tension between China and the United States has been marked by a series of events, including the trade war initiated by Donald Trump, the detainment of Huawei's CFO, Meng Wanzhou, the banning of Huawei's 5G technology, and the challenges faced by TikTok in its U.S. operations. In this context, a report by IE and CKGSB on the role of high-tech companies in the soft power rivalry between the two nations offers a timely understanding of the current landscape.

What was initially perceived as soft power rivalry between China and the U.S. has evolved into a contest featuring hard power tactics from the U.S. against prominent Chinese high-tech companies. While the U.S. does have legitimate concerns regarding trade with China, such as the relocation of U.S. manufacturing and subsequent job losses, the solution lies not in halting trade but in making it beneficial for all parties involved. This requires targeted redistribution of wealth to address the challenges faced by those adversely affected by globalization, with high-tech companies playing a crucial role in assuming social responsibility.

Unfortunately, the coverage of manufacturing job losses and associated problems in the United States, combined with media bias against China, has made it difficult to measure soft power accurately through opinion polls. Moreover, the loss of manufacturing jobs due to U.S. imports from China has led to a more protectionist stance against China among elected U.S. government officials. This protectionist approach has mani-



festated itself in the form of trade wars and other hard power tactics. To truly understand the dynamics between China and the United States, it is essential to address media bias and misinformation that hinder a fair assessment of the situation.

For example, Western media have largely overlooked the true story behind Huawei's rise. Research conducted by Wenwei Xu, a long-time Huawei employee, reveals that Huawei capitalized on the collective shift of European firms, including Ericsson and Nokia, from the American standard to the European standard for telecommunications. This shift, triggered by Qualcomm's monopoly over American patents, resulted in the demise of the American standard. Huawei, as a private Chinese enterprise, was initially not favored in China's domestic market, and so instead focused on the European market, where it eventually established a domi-

nant position. Huawei attributes its success in 5G technology to the demise of the American standard caused by the European firms' exodus. However, Huawei now faces challenges similar to those encountered by Qualcomm in the past, with the United States hesitant to engage with a perceived monopoly. One solution to this problem is for Huawei to license its technologies at a fair rate to whichever company is interested in expanding and localizing its 5G technology. Along with licensing deals, Huawei needs to collaborate with other major players to devise policy around data privacy.

In dealing with monopolies, the Chinese government has favored a regulatory state approach, employing administrative measures rather than lengthy court litigations. In contrast, American high-tech giants, including IBM, Microsoft, Google and Facebook, have faced years of legal battles initiated by the U.S. government. Although the Chinese approach is often seen as more efficient in terms of speed, concerns remain around its arbitrariness. Alibaba is an example, as the Chinese government recognized the downsides of e-commerce dominance and penalized Alibaba to address concerns over its power over suppliers and delivery personnel. However, Western media has portrayed this move as a crackdown on a prominent private enterprise, instead of its monopolistic practices, highlighting a communication gap in conveying China's approach to dealing with monopolies.

In an era where innovation and entrepreneurship transcend borders, competition between the United States and China serves to drive technological progress for the benefit of humankind. However, it is the role of the government to regulate and reinforce the importance of social responsibility in companies, so that they can take a proactive approach to ensure every stakeholder is better off through the changes brought on by technological advances. The goal is to unleash the soft power of high-tech companies and foster healthy competition between China and the United States, not hinder it.

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The Potential of China's Soft Power: Sustainable Value Creation Aimed at the World's Elites

Soft power, the ability to influence others abroad by shaping their preferences, comes in two varieties that function in tandem. The soft power of Coca-Cola or Apple shapes the preferences of the general public. The second type of soft power targets the foreign elites and facilitates institutional change that can enable cross-border business models to thrive. Industries, such as energy, data and even overseas development aid, heavily depend on this form of soft power to shape the decision-making of elite individuals in nations around the world. This article focuses on the soft power that one country exercises over the elites of another country, a form of influence which is garnered on the international stage.

China has consistently contributed more to global growth than any other economy. Its system has lifted more people out of poverty than any other country in human history. Moreover, China's transition from being a provider of cheap labor to becoming a significant exporter of capital and technology has been the fastest on record. However, despite these achievements, China's soft power influence punches below its weight. There is a decline in how public opinion across advanced economies regard China⁽¹⁾. At the same time, discussions about decoupling indicate that elites in foreign countries are losing the interest they once had



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 Business

in working with China. When it comes to cross-border engagements, elites primarily focus on economic benefits rather than being driven by soft power factors like culture or political values — unless the narrative surrounding China becomes problematic.

This article looks into the causes of this paradox by examining the dynamics of the



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global narrative. It suggests that based on its sustainable performance and value created, as measured by the elite quality index (EQx), China possesses all of the elements needed to amass the type of soft power that wins the hearts and minds of the foreign





elites from Washington to Brussels, from Brasilia to Delhi, and from Riyadh to Pretoria.

Countries that struggle to make an impact in the global narrative are considered 'partial' powers rather than fully influential ones. One might compare China to the West on this basis. China's think tanks, movies and media lack the excitement and credibility that their Western counterparts possess. Think about the soft power generated by esteemed institutions like The Council on Foreign Relations (CFR), Hollywood or The Financial Times. Building top scholars, entrepreneurs, politicians, and a vibrant civil society. The process of cultivating high-quality soft power involves a combination of bottom-up approaches (allowing narratives to emerge organically in a laissez-faire or Taoist fashion) and top-down strategies (strategic planning in a Confucianist fashion). An effective narrative connects a nation to the policy-makers, academics, thought and business leaders, heads of financial institutions, and international media in other countries.

When considering the historical examples of China's soft power, it is evident that China's cultural system, governance, institutional frameworks and narratives have found success with its neighbors like Japan, Korea and Vietnam. Yet these influences have not extended much beyond the region, as they were designed to foster cohesion among elites and between elites and non-elites domestically. Consequently, the question arises: How can China dominate the global narrative to win the hearts and minds of influential figures worldwide?

China possesses various narratives, including its development story, its innovation narrative, and the Belt and Road Initiative. To be successful, a narrative must not only be linked to performance but also

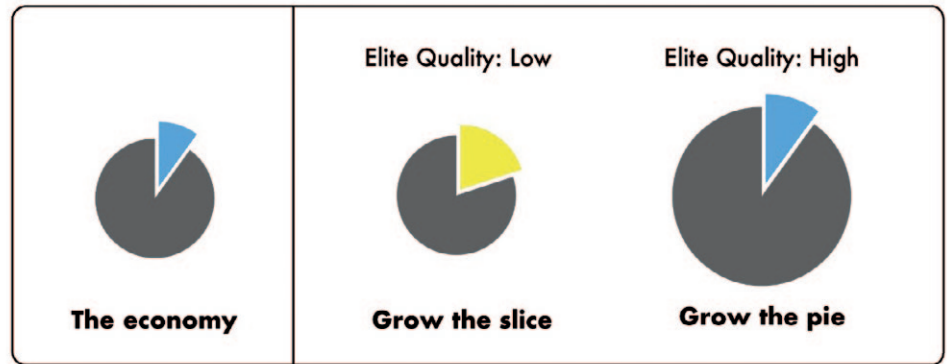


Figure 1: Elite quality depicted as a 'value pie' where high-quality elites increase the overall pie and low-quality elites increase their own slice at the expense of other business models in the economy

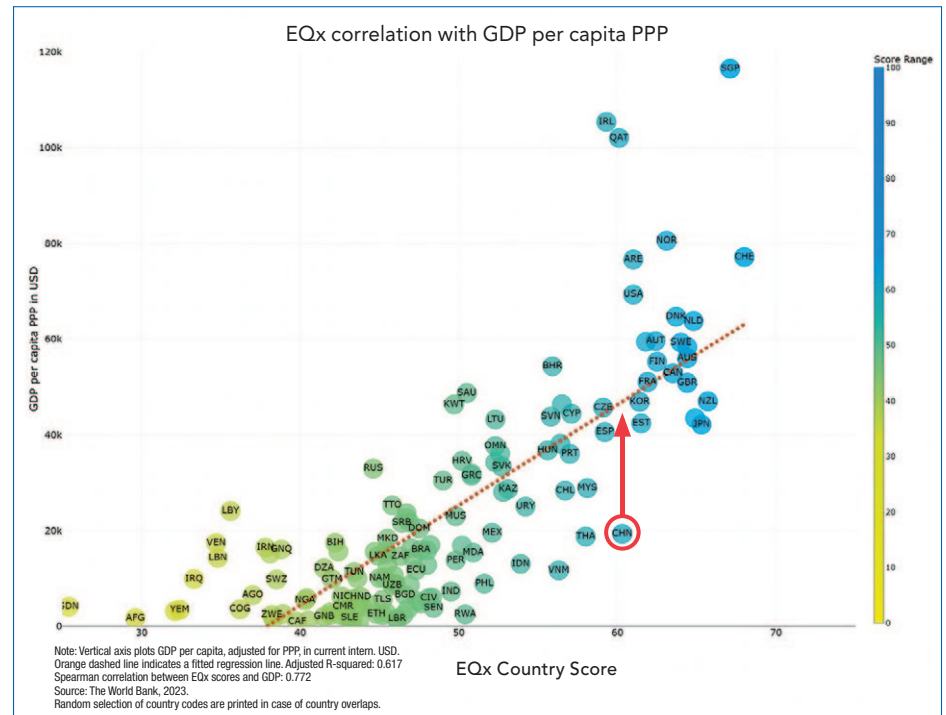


Figure 2: EQx score and GDP per capita (PPP) correlation. The red arrow shows that on the basis of its Elite Quality and the sustainable value creation of its elite business models, China's GDP per capita is poised to double to reach the intercept line.

be values-based, open-ended and extend an invitation for participation⁽²⁾. An easily achievable set of measures is for China to explain its high performance not as isolated success stories – such as its successful partnership at the port of Haifa or its quantum computing powers – but rather through the lens of sustainable value creation. This is a source of soft power in which China excels at, according to the results of the Elite Quality Index (EQx2023)⁽²⁾, a comparative global measure of a nations’ sustainable value creation.

The concept behind the EQx can be summarized as: in certain countries, elites contribute to expanding the overall share of sustainable value creation of business models, while in other countries, they increase their own share of the pie without growing the overall pie (see Figure 1). Over the past 40 years, China’s growth has been unparalleled due to its ability to expand the overall pie, surpassing any other nation in history. The 75,000 vendors in Yiwu’s ‘trinket town’ or on Alibaba’s ecommerce platforms exemplify the result of a political economy engaged in inclusive value creation. However, this success story has not been effectively presented as a narrative, lacking proper framing and thus failing to gain significant soft power influence globally.

Based on the Dean of Fudan School of Economics and Director and Professor of the China Center for Economic Research, Dr. Zhang Jun analyzed the EQx data and concluded that with its EQx score reflecting the aggregate of sustainable value creation, China has the potential to more than double its GDP per capita (see Figure 2: p. 24). China’s elites engage in business models that create value rather than simply transferring it. They do so at the global context, too, as leading Chinese firms create sustainable value for their international stakeholders.

“When considering the historical examples of China’s soft power, it is evident that China’s cultural system, governance, institutional frameworks and narratives have found success with its neighbors like Japan, Korea and Vietnam. Yet these influences have not extended much beyond the region, as they were designed to foster cohesion among elites and between elites and non-elites domestically. Consequently, the question arises: How can China dominate the global narrative to win the hearts and minds of influential figures worldwide?”

TikTok, for example, is a prominent social commerce platform connecting countless services and customers from around the world through sophisticated algorithms. Another example is SHEIN, the world’s largest clothing retailer since 2022, which delivers affordable fashion to consumers in 150 countries. Additionally, Transsion Holdings, a mobile phone manufacturer is the largest smartphone provider by sales in Africa, driving digitalization across the continent. While these companies create immense value for global consumers, provide technological infrastructure and help lower inflation rates, their impact is rarely viewed beyond the narrow confines of financial performance. Yet collectively, there is a latent narrative that connects China’s cultural, political and institutional capacity. The question then is: how can this type of sustainable value creation framework resonate within a narrative that exercises soft power among the global elites? Essentially, China needs to nurture its value connection with the global elites. Investments in this direction could become an important pillar for China’s rise in soft power through the global narrative.

In recent decades, China has surpassed its rivals in various industries from EVs to quantum computing. It can do the same in international relations through the development of soft power with Chinese characteristics. The key is to explain the country’s performance based on an original framework for the political economy - one that is inviting, open-ended and values-based.

(1) <https://www.reuters.com/world/china/opinion-china-advanced-economies-sources-precipitously-under-xi-pew-2022-09-29/>

(2) https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4418550

RAMÓN MARÍA MORENO / Secretary-General of the Spain-China Council Foundation, Ministry of Foreign Affairs, the European Union and Cooperation

Technology and Soft Power: China's Rise as a Global Player

On behalf of the Spain-China Council Foundation, I would like to thank the IE China Center for the opportunity to once again participate in its annual report, which this year looks at soft power. We are living through a time of enormous geopolitical complexity; the ability of countries to project their value system through cultural and ideological means is more important than ever. And it is in this context that technological platforms play an essential role. Entertainment and socialization are increasingly taking place, especially among young people, within the digital world. The leading technology companies are therefore major players in the projection of a country's image.

Chinese technology companies are also part of this process, and many of them have a global presence. They include manufacturers of digital devices such as Huawei and Xiaomi, online marketplaces for all kinds of goods, such as Alibaba, and social networks such as TikTok. We all use Chinese technology: we interact in Chinese virtual spaces, and we buy things in Chinese digital marketplaces. China's rise as a major political power is accompanied by the rise of its technology companies as universally recognized brands in the global consumer and leisure market.

At the Spain-China Council Foundation, one of our main focuses of attention is China's consolidation as a major scientific and technological power. We have dedicated several editions of our flagship program, Future Chinese Leaders, to this, and each year we



organize a stay in Spain for young Chinese professionals from emerging sectors. Entrepreneurship, start-ups, cultural industries or artificial intelligence are some of the topics that have been the focus of this program in recent years. In 2022 we have continued to work online with an edition dedicated, precisely, to "New Technological Frontiers". We hope that over the course of 2023 we will be able to return to meeting face to face.

We also regularly interview Chinese and international experts on this issue and have a specific series of meetings, China and the Future, which looks at China's role in the technologies that will define the future of humanity. We started it with a conversation dedicated to China's rise in artificial intelligence and 5G; last year's second edition was on the aeronautics sector. And we are currently preparing a third session focused on quantum communications.

In any case, due to our public-private nature, this intersection between business

and a country's image internationally is something that directly affects the Foundation. Our Board of Trustees includes some of the largest Spanish companies with a presence in China. In addition, we work hand in hand with the Ministry of Foreign Affairs, the European Union and Cooperation as part of our strategic contribution to strengthening Spain's global image.

Spain has large technology companies such as Acciona, Indra and Telefónica, as well as brands known around the world such as Inditex and LaLiga. Our entrepreneurial ecosystem must be able to compete and continue making a decisive commitment to research and development. This is undoubtedly the way forward, and we must not give up competing with the world's major innovation hubs, such as Silicon Valley or the Chinese cities of Beijing, Shenzhen or Hangzhou. In today's world, this is an opportunity we cannot afford to miss. We must have a presence in the digital spaces where we consume, communicate and entertain ourselves, since these have a direct relationship with the soft power we are capable of exercising and, ultimately, with the image of Spain in the world.

China's emergence as a major technological power, and its technology companies as global competitors, is a major trend of our time. At the Spain-China Council Foundation we will continue to pay special attention to it, focusing on our vocation to be a node for large companies, public entities and civil societies.

GONZALO GARLAND / Professor of Economics, Executive Vice President at IE Foundatio

Which is the World's Largest Economy? It all Depends how you Measure it

Every year, the World Bank publishes statistics for every country in the world, including the size of their economies, as measured by GDP, along with per capita incomes, among others. Economists, and many non-economists, pay close attention to the numbers, which are widely regarded as the benchmark.

One might be forgiven for thinking that it would be a fairly straightforward business to produce a table to measure the size of the world's economies, but the truth is that it's a complex business. Each country measures its GDP in its own currency, making it difficult to compare the billions of dollars of one with the trillions of pesos or dinars of others. That's why the World Bank creates a table with a common measure, which is the U.S. dollar. To do this, it has to convert the GDP of each country, expressed in its own currency, to dollars. This requires an exchange rate. The World Bank uses the Atlas Method, based on the average exchange rate of the last three years to avoid short-term distortions due to a particularly strong or weak currency in a given year. Once this conversion to dollars has been made, we have the table, for a given year, of total GDP by country expressed in dollars. In the latest data, for 2021, global GDP has been calculated at just over \$96 trillion. The United States has the world's largest economy, at almost \$23 trillion, followed by China with \$17.7 trillion. The two countries together account for 42% of the world's total output.

But as many readers will know, an alternative way to measure GDP is through pur-

chasing power parity, which aligns the prices of things across countries so that the same output is valued uniformly around the world. This attempts to correct the distortions that occur when each country values its production in local prices. Thus, if one country is particularly expensive, everything produced there will tend to raise the value of GDP, and, conversely, a country where these same products are cheaper will tend to lower the value of that second country's GDP.

For example, we can imagine two countries producing exactly the same things, but one may have a 20% higher GDP than the other simply because its prices are 20% higher in all goods and services. That's why the World Bank also publishes a table of the world's economies with GDP measured in terms of purchasing power parity every year. And, to do that, it estimates the output of all countries of the world using U.S. prices as a common measure. In the table published for 2021 the world GDP measured in terms of purchasing power parity is estimated to be just under \$147 trillion. This level is higher than the global GDP measured with local prices because there are many countries with lower prices than the United States. In short, valuing all global production at U.S. prices increases global GDP. But in terms of purchasing power parity, with a GDP of \$27.3 trillion, China is the world's largest economy, and the United States is second with nearly \$23 trillion, pretty much the same as the traditional measurement, since it is already measured with the US prices. And the



two economies combined account for just over a third of the world economy.

So, as has been the case for a few years now, and will most likely remain so for a few more years, it is not entirely clear which is the world's largest economy. By the most traditional and widely used measure, it is still the United States, followed by China, which is about 23% smaller. By contrast, if measured at purchasing power parity, China is the world's bigger economy by about 16%.

So if you meet someone who tells you that the largest economy in the world is the United States and someone else who tells you that it is China, then to some extent both of them will be right.

MARGARET CHEN / Founder, Optimus Horizon

The Sixth World Center for Science and Technology

With a civilization dating back 5,000 years, China has long been a world leader, making remarkable contributions to humanity over the centuries. More than a thousand years ago, China was already a global technology hub, exporting numerous inventions to Eurasia that would spark the printing revolution, improve navigation and drive any number of industrial processes, prompting English philosopher Francis Bacon to write in the late 16th century: “The three great inventions, printing, gunpowder, and the compass, have changed the appearance and state of so many things throughout the world in literature, warfare, and navigation, and have caused such innumerable changes thereby that no empire, no faction, no planet, seems to have had a greater impetus and influence on human affairs than these technical inventions.”

Since the development of modern technology over the last 400 years, the world has experienced scientific and technological shifts, beginning with Italy, and including France, Great Britain, Germany, and for the last century, the United States, with each country’s technological boom averaging around 80 years.

The world’s leading economies today share the following characteristics: they have a significantly higher overall innovation index (China ranks 20th); the contribution made by scientific and technological progress is above 70% (China’s contribution rate is 55%); R&D investment as a percentage of GDP is generally above 2% (China’s is 2.4% v. the

United States’ 2.5%); the external technology dependence indicator is generally below 30% (China’s is 40%); and finally, the number of patents.

There is international consensus that technology is the leading productive force, and the new wave of technology is not only changing people’s lives, but also international relations. Technology is becoming the most important area of competition between major powers, and for the last two decades, the most intense rivalry has been between China and the United States.

The rise of science and technology innovation in modern China over the past 40 years is changing the world’s innovation landscape. Through its relentless efforts, China has moved from being a follower to being a leader in some areas of science and technology, having created a complete innovation value chain and science and technology system, and its achievements are beginning to have a major international impact.

For example, continued breakthroughs in human spaceflight, deep-sea exploration, supercomputing, coal chemistry and artificial intelligence have led to the development of related scientific, technological and engineering fields. Technologies in areas such as high-speed railways, ultra-high voltage power transmission and transformation, deep oil and gas fields, nuclear power and super-rice are maturing and beginning to be exported internationally. A number of world-leading major achievements have been made in research in several frontier



and emerging areas such as iron-based superconductivity, neutrino, quantum information, nanotechnology, space science, stem cell and regenerative medicine, and the origin and evolution of life. China also leads the world in innovation in two key areas: computer products and improvements in manufacturing processes. China is at the forefront of mobile internet, mobile payments and the “sharing economy”, which are far more widespread than in any other part of the world.

In 2022, the combination of factors such as the impact of the Covid19 epidemic, upcoming food shortages, soaring energy prices, the Russia-Ukraine war and inflation were catalyzing the digitization and intelligence of human society, boosting the speed at which the digital infrastructure, including AI and the Internet of Things, cross-pollinates all industries. Today, China’s AI technology has moved out of the lab and into the +AI stage, creating greater economic value. In recent years, the concept of the metaverse has emerged, in which blockchain encryption, digital twinning, spatial computing and holographic projection technologies are being applied and iteratively upgraded in the construction of scenarios that integrate reality and time and space.

China’s comparative advantages in science and technology development are mainly in the following six areas

■ **A large domestic market.** China has a population of 1.4 billion and a GDP per capita of approximately US\$10,000; its total economic volume in terms of purchasing power parity exceeds that of the United States. China’s large market size and externally-oriented economic model not only facilitate the localization of technologies such as microelectronics and aerospace but also

“Technology is becoming the most important area of competition between major powers, and for the last two decades, the most intense rivalry has been between China and the United States”

“Through its relentless efforts, China has moved from being a follower to being a leader in some areas of science and technology”

promote technological innovation and diffusion and application. For example, China’s electric cars and electronic payments are ahead of the rest of the world and are typical examples of innovative applications. For a number of industries, the size of the market is decisive, with China’s population determining the largest AI market.

■ **Continued strong investment.** Although there is still a gap between China and the United States in terms of investment in R&D, China is fast catching up. In 2021, China’s investment in R&D already accounted for 2.4% of GDP, which is comparable to the 2.5% of the United States. According to the Bureau of Statistics, China’s total R&D investment is the second-highest in the world.

■ **A huge talent pool.** With around eight million university graduates each year, half of whom study mathematics, mechanics and technology, there is no shortage of talent in the high-tech sector. The quality of Chinese research papers is also approaching that of the United States, which occupies first place with 24.7% of the top 10% of papers cited, while China is in second place with 22%. Although the United States currently has more than 4,300 researchers per million people, three times as many as China, China has a huge base of researchers (80 million), a quarter of the world’s engineers and produces as many engineers each year as the US, Europe, Japan and India combined, and with long-term investment in education, the gap between China and the United States is closing fast.

■ **A market-based financing system** has been created for science and technology innovation. China has successfully created its own environment for science and tech-



nology innovation, even creating a science and innovation board within the Shanghai Stock Exchange to finance science and technology innovation.

■ **Strong top-down guidance and planning capabilities.** China is one of the few countries in the world that has been able to formulate and implement long-term plans; in 2006, Beijing set the goal of developing an innovative economy, followed by guiding documents such as Made in China 2025 and Internet Plus, which are dedicated to supporting technological innovation in social enterprises and focusing on key projects. The Chinese government is fully committed to supporting the technological innovation of social enterprises and implementing focused research on key projects.

■ **Strategic cultural advantage.** China has a strong cultural heritage and is the oldest surviving uninterrupted civilization, with 5,000 years of history. It has relied on this cultural heritage not only to resist invasion, but also to produce the world's largest population and economy. The Chinese elite are good at planning for the long term, typically looking ahead decades.

Nevertheless, China still faces a number of problems, mainly in six areas:

■ **How to build its own innovation system.** There is a fundamental difference from the catch-up innovation of the past to being a leader in innovation, which is often a two-steps-forward-one-step-back process.

■ **The US technology embargo will continue for a long time.** The US policy of seeking to “decouple” technology from China

over the past five years will continue. To rebuild its own set of technological systems will require a huge cost and long-term effort.

■ **China's economic growth is slowing down.** The high rate of growth seen in the past is no longer possible, with growth rates below 6% being the new normal, and investment in innovation likely to decline as a result.

■ **A lack of successful role models.** So far, no developing country has succeeded in finding its own way of innovating. Even Japan and South Korea, the two most successful countries, are still followers.

■ **China's intellectual property royalty income is only half that of the United States,** and the economic benefits of scientific research are still far below those of Europe and the United States.

■ **Faced with US measures** such as decoupling, sanctions, encirclement and ring-fencing, China's countermeasures and an effective way-out are not yet clear.

China recognizes that it has to improve its capacity for innovation, and that core technologies in key areas are still controlled by other countries. In short, the supply of science and technology cannot effectively meet the needs of economic and social development and national security, and there is a problem of innovation path dependence. In particular, there is a major structural contradiction between technology supply and demand, while the effective supply of technology is insufficient and the quality of supply is not high. The lack of core technology with independent intellectual property rights is also a problem, reducing the country's capacity to transform and upgrade traditional industries and create new ones.

“The basic conditions for promoting the construction of a science and innovation center and the construction of a scientific culture are already in place”

Despite all the shortcomings, the path to building a scientific culture in China is taking the form of the integration of multiple cultural vectors: culture; science; ideology and industry. After 40 years of rapid development through reform and opening up, China's economy and society have made great strides and technology is changing rapidly. Coupled with the fact that the number of years spent in education per capita has increased significantly, the basis for understanding and accepting new knowledge is already in place, a fundamental aspect conducive to promoting cultural and industrial enlightenment throughout society.

With more than 218 million people with a university education and a rapid increase in the number of university graduates by eight to 10 million every year, this population has a relatively good understanding and recognition of scientific concepts, new ideas and the industrial revolution, and can promote what Beijing calls scientific and ideological enlightenment. With the gradual advancement of all levels of society, a productive cultural ecosystem will emerge on a macro level. Based on this, the basic conditions for promoting the construction of a science and innovation center and the construction of a scientific culture are already in place.

I therefore believe that the era of the fifth world center of science and technology will soon come to an end, and that with the right eco-system for innovation, China is ready to become the sixth world centre of science and technology.

ÁGUEDA PARRA / Tech Founder & Editor-in-Chief. ChinaGeo

Technological Soft Power, the New Face of Diplomacy

During its rise as a global actor, China has used soft power as a powerful regional and global tool for deploying diplomacy. As a parallel strategy to its growing economic power, along with its ambitious plan to rebalance global military capabilities by mid-century, the deployment of soft power has enabled the Asian giant to cultivate a more positive image on the global stage in the style of other great powers.

China is a newcomer to soft power. The use of soft power as a diplomatic strategy only came to prominence in the mid-2000s. Since then, ambitious international moves such as the Belt and Road Initiative and the Digital Silk Road have fostered greater use of soft power to back up its economic and military ambitions, particularly in the race to develop cutting-edge technologies.

In a geopolitics in transition, which seeks to accommodate the role of new actors in the global sphere in the face of the challenges posed by the international situation, the growing technological rivalry between the United States and China has made the geopolitics of technology the central axis around which the struggle for world hegemony revolves. Advanced industries will set the pace of world economic growth, and the new generation of military capabilities will also be linked to technological innovation. In short, a scenario in which technological development will be crucial in an increasingly inter-connected world that will require nations to deploy a combination of technological competitiveness and soft power.

With the technological rivalry between the United States and China fast reaching a decisive stage, technological soft power is increasingly a zero-sum game, where one side's gain comes at the expense of the other. The race to set the pace of innovation is accelerating, and suppliers such as Huawei have become a focal point in the geopolitical arena driven by the 5G revolution, with soft power being used to align countries around the world towards one technological pole or the other.

In this race to deploy soft power, social commerce is playing an important role on the geopolitical chessboard as a tool to boost the Designed in China model. As Chinese brands expand their overseas footprint, they become ambassadors of China's tech revolution, powering the trends and habits of China's digital natives.

One example of this is Mi Fans, an online club that brings together Xiaomi followers who have driven the brand to become the third best-selling in the world, according to Counterpoint. Given the allure of the digital ecosystem, the smartphone will gradually give way in Xiaomi's growth strategy to new iconic products such as smart bracelets and scooters, reinforcing its brand image as an innovator.

TikTok is another case of a soft power that transcends borders. Its stellar entry into the social networks, more along the lines of a homegrown Silicon Valley-style unicorn, has been the major disruption in the digital environment. From being a largely



unnoticed Chinese-owned app, TikTok has been the most downloaded application in the world for the second year in a row, and many companies are already beginning to expand their digital marketing strategies to include a presence on the social network of the moment.

Over the last two decades, the international expansion of China's technological ecosystem has increased its digital sphere of influence globally, associated with the innovative capabilities of its tech titans. Thanks to soft power, the Designed in China digital economy has attracted the interest of international investors, who value a disruptive technological ecosystem, hence international stock exchanges have become the new stage on which to deploy soft power. In short, a new digital scenario where US-China growing rivalry could lead to technological bipolarity, with undesirable effects.

RAFAEL BUENO / Director of Policy & Society & Educational Programs. Casa Asia

China's Dual-Circulation Economic Strategy



Ever since President Xi Jinping launched his grand Belt and Road strategic vision, better known as the New Silk Road, from Kazakhstan in September 2013, the world, including the media, has largely focused on this initiative as the most important driver of China's transformation.

However, it is worth highlighting the other major strategy that Beijing needs to implement if it is to achieve independence from foreign markets and technology at a time of heightening competition with the United States and thus offer a reliable alternative to the West in the latest phase of globalization where the rules of a game established decades ago will have to be rewritten.

For at least the last decade Beijing has understood the limitations of the growth model created by the architect of China's modernization, Deng Xiaoping, which has so far proved to be very successful.

But Chinese leaders now recognize that the country's long reliance on savings to finance large investments no longer makes

sense now that China closed the huge gap that had emerged in the late 1970s between its moderately high investment needs and its extremely low level of investment.

Seven years after the announcement of the New Silk Road in the heart of Central Asia, in May 2020, Chinese President Xi Jinping announced the dual circulation economic strategy, whereby the country will rely mainly on "internal circulation", the internal cycle of production, distribution and consumption, for its development, supported by innovation. In other words, Chinese development will have to be based on internal consumption, albeit supported by the "external circulation" of the foreign market. This external circulation is not new either. Thirty years ago, Deng already decided to adopt an "external circulation" strategy, but the global financial crisis of 2008-2009 exposed the vulnerability of the export-led model and pushed the authorities to rebalance growth towards domestic demand.

The "dual circulation" strategy is already a key priority, as demonstrated by its endorsement in the government's 14th five-year plan (2021-2025) in early 2021. Now, in a world still reeling after a three-year pandemic from which China has yet to recover, and despite having suffered less damage than other countries, Beijing understands that for "internal circulation" to work, China needs to boost household income and consumption.

The key to this lies in its urbanization program to further convert millions of migrant workers into city dwellers and expand China's middle class. No one could have imagined when Chairman Mao died that within half a century, almost 60% of China's population

would live in cities and that the country would have a rapidly growing middle class of over 400 million people. So far this year, the recovery in consumption has lagged behind production, due in part to job losses and economic uncertainty caused by the coronavirus pandemic. Despite all this, China still boasts the most comprehensive manufacturing supply chains in the world, although its reliance on U.S. high-tech products such as semiconductors has forced Beijing to boost domestic innovation in an effort to secure domestic supply chains.

With this "dual circulation" strategy, Xi is also aiming to drive technological innovation and push Chinese companies up the global value chain, key to globalizing China's local businesses, boosting household incomes and, in turn, stimulating domestic demand, so as to be as less dependent as possible on the outside world.

Paradoxically, to do so, China still needs further market opening to attract more foreign investment in high-end manufacturing and thus strengthen supply chain security.

In conclusion, coronavirus has highlighted the risks and vulnerabilities inherent in deep trade integration, prompting countries to reduce their dependence on other economies.

The Russian invasion of Ukraine has also highlighted how many countries, especially in Asia, prefer to remain neutral in a conflict they increasingly see as a conflagration of values and where they do identify fully with one side. It remains to be seen where this ever-changing world is heading, but China has already opted to strengthen a closed economy and pursue a global policy through its new Silk Road.

PEDRO GETE / Professor and Chair, Department of Finance IE Business School and IE University

The Economic Consequences of a Math-Oriented Education

Eileen Feng Gu, also known by her Chinese name Gu Ailing (Chinese: 谷爱凌), is an American-born freestyle skier and model who attracted significant attention when in June 2019 she decided to switch from Team USA to competing for China, and becoming the focus of intense media scrutiny during the 2022 Winter Olympics in Beijing. Gu, at age 18, became the youngest Olympic champion in freestyle skiing after winning gold medals in big air and halfpipe, and a silver medal in slopesstyle. She is the first freestyle skier to win three medals at a single Winter Olympics. Time magazine named her as one of the 100 most influential people in the world under the 'Pioneers' category on its annual list in 2022.

Gu seemed destined to be a ski champion from her early years. At the age of nine she swept the national junior championship; at 13 she won the first place in the adult event; at 15 she reached the top of the International Ski Federation annual points list. But while these achievements clearly signaled a professional career in skiing, Gu also studied mathematics. She once told a media outlet: "My mother told me that having math classes in China for 10 days would be equivalent to an entire year's worth of learning in the U.S.", which is why she trained hard for the math Olympiad during her annual visits to Beijing.

Gu illustrates the importance China places on a strong basic education in mathematics. Two aspects are particularly noteworthy.



“The combination of tech-savvy customers and skilled programmers gives China a comparative advantage in the tech sector. The consequence is the fast and successful development of companies such as Alibaba, ByteDance, Huawei, Xiaomi or Tencent, among many others”

First, the high (relative to other countries) amount of time devoted to studying mathematics. In China, mandatory education requires nine years of education starting at the age of six. The Chinese math curriculum covers the nine-years with four teaching periods a week, with most schools arranging more than five periods. It is normal for Chinese pupils, particularly secondary and high school students, to spend more than 15 hours each week on mathematics, both in and outside the classroom.

Second, in China, nearly all teachers are responsible for a single subject. Most of them teach only two classes per day in primary and secondary schools. Thus, Chinese math teachers can spend a considerable amount of time preparing detailed lesson plans or correcting homework and marking examination papers. They also have access to locally-organized teachers' research groups, where they can find suggestions for lesson plans. The result is high-quality math teaching. This led England in 2014 to hire math teachers from Shanghai to deploy them in a network of 30 math hubs, providing on-the-job training for British teachers alongside high-level classes for students.

China now has the most medals in the International Olympiad in mathematics for pre-university students. It also scores high in rankings that measure the math skills of its students. This has important economic implications, because math is the founda-





tion for a STEM education. Moreover, solving math problems helps develop digital and analytical skills.

As a result of having developed such skills, China is more open to accepting innovations in technology. Customers adapt easily and welcome new services. Surveys as Deloitte's China Mobile Consumer Survey show that Chinese consumers are at the forefront of digital technologies. For example, Chinese customers lead the world in ownership of smartphones and the use of Artificial Intelligence-powered mobile apps. The percentage of mobile phones used to manage personal banking accounts and pay for shopping in China is well above the global average.

Similarly, Chinese students' education equips them to be great programmers. A report from HackerRank, a leading company in the market for assessing developer skills, shows that while the United States and India have lots of programmers, China and Russia (another country with an outstanding math tradition) have the most talented developers. The report looked at the results of 1.4 million coding test submissions over recent years. Chinese programmers outscore all other countries in mathematics, functional programming and data structure challenges, while Russians dominate in algorithms. Moreover, Chinese programmers have a reputation for being very hardworking. There is an unspoken rule that says that programmers work on a "996" work schedule. This means that they start work at 9 am and finish at 9 pm, six days a week. Little wonder that Chinese tech companies have access to a hard-working and skilled workforce in programming, giving them a crucial advantage.

The combination of tech-savvy customers and skilled programmers gives China a comparative advantage in the tech sector. The consequence is the fast and successful



“Gu also studied mathematics. She once told a media outlet: “My mother told me that having math classes in China for 10 days would be equivalent to an entire year’s worth of learning in the U.S.”. Which is why she trained hard for the math Olympiad during her annual visits to Beijing”

development of companies such as Alibaba, ByteDance, Huawei, Xiaomi or Tencent, among many others. Moreover, the 2021 report from Harvard's Belfer Center on the "Great Technological Rivalry" shows that in each of the foundational technologies of the 21st century (artificial intelligence, semiconductors, 5G wireless, quantum information science, biotechnology and green energy) China could soon be the global leader.

China's advantage in the tech sector is a key factor behind China's soft power. Many advanced and emerging economies see China as a partner that can help their technological development, which is essential for economic growth. This is translated into China's Digital Silk Road, which is a key part of Beijing's Belt and Road Initiative, which is providing aid, political support and other assistance to many states, especially in Africa.

Educational policies play out over time, which is why I expect China's focus on mathematics to give it a competitive advantage for many years to come, helping it sustain high growth rates. It will also be beneficial for the rest of the world as technological innovation rapidly expands across countries through trade and partnerships.

ESTELA LI / President, China Club Spain

China's Global Connectivity Beyond the Digital Silk Road

According to the *Shàngshū* (尚书), China's first official history book, "yǒu róng, dé nǎi dà" (有容, 德乃大) suggests "greatness lies in capability and tolerance". This ancient wisdom still underpins China's philosophy regarding international relations and global connectivity, stressing the strength that emerges from inclusive leadership.

The Digital Silk Road (DSR) has recently begun to attract attention around the world. The concept refers to China's initiative to foster global connectivity through digital infrastructure and international cooperation, and is an integral component of China's overall Belt and Road Initiative (BRI). During the age of globalization, China's reach has extended far beyond the DSR, extending into fields like trade and investment, infrastructure development, digital innovation, and other soft power initiatives. These strategies are part of China's aim to be a world leader, although their reception internationally has been mixed, due to the concerns of Western nations about debt diplomacy, transparency, IP protection, and regulatory and data security.

The rivalry between G-20 members has sometimes fostered a lack of understanding that has highlighted cultural nuances, divergent historical perspectives and geopolitical competition. A more comprehensive understanding of China's global role is therefore vital to bridge this knowledge gap.

China is the world's largest exporter and a crucial trading partner for many countries, including major economies like the United



“The rivalry between G-20 members has sometimes fostered a lack of understanding that has highlighted cultural nuances, divergent historical perspectives and geopolitical competition. A more comprehensive understanding of China's global role is therefore vital to bridge this knowledge gap”

States and the European Union. Moreover, China's outward direct investment, putting it among the world's top three, is another key factor in its global connectivity, driven largely by the Bring In and Go Global Policy, along with the BRI.

Since joining the WTO in 2001, these approaches have created the world's largest manufacturing system, turning China into the world's workshop. Backed by robust infrastructure, the country enjoys a vertical integrated supply chain, taking in raw materials and components to final assembly and distribution in many sectors. In addition, modern advanced manufacturers utilize IoT, AI, machine learning, and big data analytics



to optimize production, as seen in automotive giants like Geely, BYD, and SAIC Motor.

Huge investments in national high-speed rail projects following the 2007-2008 global financial crisis have stimulated business, consumption and economic growth, inspiring China to extend this infrastructure model overseas. Supported by the Asian Infrastructure Investment Bank and other funding channels, the BRI has facilitated the development of extensive trade and infrastructure projects across Southeast Asia, Central and Eastern Europe, Africa and Latin America.

Taking a retrospective view, technology was part of the ancient silk road, helping spread inventions like papermaking and printing. Today, China's new infrastructure aims to digitally transform the economy, integrating advancements in 5G networks, AI, cloud computing, e-commerce and smart cities to connect it with the world.

The digital economy based on new technology contributed more than 40% of China's GDP in 2022, according to the report on the development of China's digital industry released at the 6th Digital China Summit. Clearly, it plays a fundamental role in China's GDP growth strategy, offering its multinationals a competitive edge in emerging markets. Taking this opportunity, a variety of Chinese giants are further developing international DSR connectivity.

Among them is Alibaba Group, which has reinforced its global digital infrastructure, contributing to the construction of data centers and providing smart city solutions like ET City Brain to enhance urban management and improve living conditions in various locations, including Malaysia and China.

Hengtong Group, the largest optical fiber manufacturer in China, has also made significant contributions to global connectivity through the construction of submarine



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cable systems. One of its notable projects is the “PEACE Cable System”, which aims to establish a major Asia-Africa-Europe internet interconnection from Singapore to France, boosting economic development in the countries along the route.

Furthermore, China's pursuit of global connectivity extends to the educational and cultural spheres, promoting its history, language, and tourism. China actively participates in international events and hosts festivals to showcase its culture and artistic achievements. For instance, the Chinese Spring Festival is celebrated around the world, with colorful parades, traditional performances, delicious cuisine, movie festivals and exhibitions of art and crafts.

The Asian Giant's commitment to achieving carbon neutrality by 2060 also demon-

strates its dedication to tackling climate change as a responsible global player. With substantial investments in renewable energy like wind, solar, and hydroelectricity at home and abroad, China's efforts to reinforce its global connectivity align with the UN's Energy Strategy.

China has an invaluable cultural heritage dating back millennia, along with well-defined long-term strategies to develop its international relations. But in the post-pandemic era it needs to define a more resilient roadmap for achieving comprehensive recognition in global public affairs, making it imperative for China to chart its own unique path. It is crucial for China to proactively communicate its history and capability, allowing the world to understand its past and appreciate its evolving position over time.

China faces challenges in its aspiration to become a center of global connectivity, well beyond the DSR initiative. To achieve this, it should strive for a balance between power and inclusivity. The country's journey toward meeting this goal will require continuous and unwavering efforts, along with the effective development of all the above-mentioned initiatives. In short, it must embody the determination of that renowned character from the traditional Chinese fable, Yú Gōng (愚公) who relentlessly moves mountains, persevering for years to come.

(1) Yú gōng moves mountains (Yú gōng yí shān) tells the story of an old man Yú gōng who, against all odds, decides to move two massive mountains blocking his path. Despite being ridiculed for his seemingly impossible goal, Yú gōng persists with determination until he moves the Jade Emperor to relocate the mountains. This fable serves as a metaphor, emphasizing the significance of perseverance, resilience, and the belief that with unwavering determination, any obstacle can be conquered.

LISA WANG / Founder of Link The World Advisers

If iYou Want to Understand China's Soft Power, Look to the Dragon

Soft power is the ability of a state to lead on the international stage without the use of force or coercion. According to Joseph Nye, a former US Assistant-Secretary of Defense for International Security Affairs, soft power rests on three fundamental pillars: culture, political values and international policies.

Who leads the world in terms of soft power? According to a study prepared by Brand Finance in 2022, before the Russia-Ukraine war, the United States, Great Britain, Germany, China and Japan top the ranking of nations with the greatest political and cultural influence. China has reached its highest position, surpassing countries that until recently were superpowers, such as Japan or France, thanks to economic growth, among other factors.

However, it is worth noting that China and the West's approach to soft power is very different. Western countries base their soft power on concepts such as liberal democracy, while China relies on economic development and peaceful coexistence, a pragmatic stance far removed from ideological superiority. It is what some scholars call the "peaceful rise," a concept that has its historical and cultural roots in Confucianism: the politics of tolerance and coexistence, not imposition.

The pathways of influence of Chinese culture and values

Chinese policymakers are increasingly aware of the role the country's culture plays in its



“ Since the end of the Qing dynasty (1840-1912), its relevance in the international arena waned. It is only in recent decades, with political, military and economic growth, that China's soft power has been gaining ground again and it has found its international voice”

soft power. China is one of the oldest civilizations, and is respected worldwide. The Chinese New Year is celebrated in cities around the globe, cultural events take place throughout the year, its cuisine is enjoyed and its language studied in Confucius Institutes. Similarly, Chinese media such as CGTN broadcasts programs in Spanish, while the Xinhua news agency reports in several languages including Chinese, Spanish and English.

This influence is reinforced by the network of citizens of Chinese origin living abroad, with important communities in many capitals around the world. Among the values they transmit, along with the growing commercial interaction of Chinese companies abroad, are hard work, a practical approach to learning, the importance of family and friends, hierarchy in organizations and an ability to adapt to just about any environment.

China's soft power in Spain and the world

China was a major power long before the concept of soft power was invented. However, since the end of the Qing dynasty (1840-1912), its relevance in the international arena has waned. It is only in recent decades, with political, military and economic growth, that China's soft power has been gaining ground again and it has found its international voice.

In the last 20 years, China has made major progress in establishing a presence in



the international arena: it joined the World Trade Organization in 2001 and voluntarily ratified the Kyoto Protocol in 2002, despite not being a signatory. China is also one of the five permanent members of the UN Security Council.

Relations between China and Spain date back to the 2nd century BCE, through the Silk Road, although diplomatic relations between the two countries were only established in 1973. Since then, both nations have fostered cultural exchanges and gestures of friendship, channeling soft power in both directions. Today more than 50,000 Spanish students study Chinese and more than 50,000 Chinese students learn Spanish.

China is also the second-largest investor in Latin America and the second-largest trading partner in the region. Economic cooperation between the two has fostered infrastructure interconnectivity, generating mutual benefits.

Cultural exchange initiatives are not limited to the Spanish-speaking world. China provides training to government officials throughout the southern hemisphere, showcasing its unique economic model and its results in the fight against poverty. In Africa, it has developed a foreign economic policy based on its experience in reform and development. China has become the world's leading investor in Africa, providing capital to build vital development infrastructure, offering humanitarian assistance and promoting training programs.

Critics point to China's geopolitical interest in the southern hemisphere or describe Chinese soft power as a new "neocolonialism", but the truth is that China's idea of shared development is increasingly recognized and appreciated by Latin Americans and Africans. Trade cooperation has also translated into increased cultural exchanges.



“China is also the second-largest investor in Latin America and the second-largest trading partner in the region. Economic cooperation between the two has fostered infrastructure interconnectivity, generating mutual benefits”

As we can see, China's approach to soft power is very different from other superpowers. In Chinese culture, the dragon is a symbol of both peace and power. Chinese leaders have drawn inspiration from this duality when designing their soft power strategy.

The evolution of soft power

Like culture, soft power also evolves by continuously feeding on external influences. We are in the midst of a period of immense change: pandemics, inflation, climate change, economic crisis, wars... Globalization is giving way to a new geopolitics of blocs that

will determine the shape of internationalization and the world economy.

The ongoing international turbulence is putting, making it more necessary than ever for people, organizations and nations to adapt and use their power with the common interest in mind.

As Darwin explained, it is not the strongest or the smartest member of the species that survives, but the one that adapts best to change. Let us hope that flexibility and resilience, two essential values in Chinese cultural identity, will help us all overcome adversity and emerge stronger.



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