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IN THIS ISSUE:

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Security Dialogues with Chinese Characteristics

By John S. Van Oudenaren

This summer, the People's Republic of China (PRC) organized two multilateral security dialogues with African nations, which highlight Beijing's efforts to promote an alternative model of international security. In June, representatives of the PRC and six East African states convened in Addis Ababa, Ethiopia for the first China-Horn of Africa Peace, Governance and Development Conference, which is an initiative that was originally proposed by Foreign Minister Wang Yi during his January visit to Kenya (Guangming Daily, June 27; PRC Foreign Ministry, January 7). At the meeting, PRC Special Envoy to the Horn of Africa Xue Bing said that Beijing sought a greater role in the region, "not only in trade and investments but also in the area of peace and development" (South China Morning Post, June 23). The conference resulted in a joint statement committing to utilize confidence building, dispute resolution, dialogue and negotiation to achieve a "lasting peace" in the region (China News Service, June 23). In doing so, the parties pledged to uphold the "common, comprehensive, cooperative and sustainable security concept," which was first laid out by President Xi Jinping in 2014 as a core element of his vision for a new international security architecture (Xinhua, May 24). Xi cited the need to remain committed to this concept as motivation for the PRC's new Global Security Initiative, which he introduced in April (China Brief, May 13). Earlier this week, the Ministry of National Defense (MND) hosted the second "China-Africa Peace and Security Forum," which was virtually attended by senior defense leaders from nearly fifty African countries (Gov.cn, July 26). In his keynote remarks, State Councilor and Defense Minister Wei Fenghe read a congratulatory letter from Xi, which hailed the resilience of Sino-African friendship in a challenging international landscape and called for the implementation of the Global Security Initiative (People's Daily, July 26). Although somewhat short on specifics, Beijing has promoted the Global Security Initiative as a positive-sum, "common security" model in contrast to the militaristic, zero-sum approach it ascribes to the United States (China Brief, July 15).

(**Image:** *PRC State Councilor and Defense Minister Wei Fenghe delivers remarks at the Shangri-La Dialogue in Singapore this June,* **source**: China Daily)

Beijing has long viewed non-government organizations and think tanks, including the bilateral and multilateral dialogues that they convene, as a key source of western influence. Nevertheless, when it comes to the leading regional and international defense forums, PRC state media maintains it is better for China to participate than to remain on the sidelines (China News Service, June 4, 2014). For example, a recent piece in the domestic edition of the *Global Times* (环球时报, *Huanqiu Shibao*) acknowledges that the Shangri-La Dialogue, which is hosted annually in Singapore by the London-based International Institute for Strategic Studies, provides the U.S. Secretary of Defense with a platform to present Washington's perspective on Asian security issues. However, the article also notes approvingly that on this year's agenda, the PRC Minister of Defense is the only official given equal billing to the U.S. Secretary of Defense (Huanqiu, May 6). In addition to participating in leading multilateral defense summits such as the Shangri-La Dialogue and the Munich Security Conference, the PRC has sought to advance its own international security conferences such as the Beijing Xiangshan Forum and the World Peace Forum (see "Security Dialogues Organized by the PRC" below). A major driver of the People's Liberation Army's (PLA) increasingly proactive approach to international security dialogues, both as a participant and an organizer, is the emphasis that Xi has placed on military diplomacy as a key element of the PRC's overall foreign policy approach (Xinhuanet, January 30, 2015). This trend is likely to continue as defense dialogues are used by the PRC to socialize its new Global Security Initiative with potential partner countries. This also aligns with Beijing's record of using diplomatic summitry to establish multilateral economic development initiatives, including the Belt and Road Initiative (BRI), which is promoted through the Belt and Road Forum, as well as numerous regional and bilateral channels.

The Ministry's Mission

In the Chinese system, the MND's role is not analogous to that of foreign defense ministries. As the PLA is the armed wing of the Chinese Communist Party and not a national military, the Central Military Commission (CMC), led by chairman Xi Jinping and Vice Chairmen Xu Qiliang and Zhang Youxia, exercises command authority over the armed forces (China Brief, June 17). Consequently, the MND, which is a state body, does not superintend the Chinese military. Minister Wei sits on the CMC and the CCP Central Committee, but unlike Generals Xu and Zhang, is not on the 25-member Politburo (Gov.cn, March 19, 2018). As Kenneth Allen, Philip Saunders and Jonathan Chen note in a 2017 U.S. National Defense University (NDU) report on Chinese military diplomacy, the MND's main role is "representing military equities and liaising with the State Council in areas of overlapping concern (including foreign policy)." **[1]** Despite the MND's circumscribed function, it has carved out a role in military diplomacy, which is interfacing with foreign defense establishments and elites. The Minister of Defense serves as the PRC's top military representative in most meetings with foreign defense chiefs, and in multilateral defense dialogues. Of these engagements, perhaps the most high-touch interactions are with the defense chiefs of other major military powers, the U.S. and Russia.

Navigating the PRC's defense bureaucracy has sometimes frustrated foreign interlocutors. Shortly after taking office, U.S. Secretary of Defense Lloyd Austin sought for months to arrange a meeting with CMC Vice Chairman Xu Qiliang, the highest-ranking uniformed officer in the PLA, in order to open lines of communications and establish guardrails for military-military interactions in an increasingly tense Indo-Pacific security environment. However, these requests were repeatedly rebuffed by the PRC on protocol grounds (Straits Times, June 1). The U.S. side was operating from the premise that the Secretary of Defense and CMC Vice Chairman are functionally equivalent in rank and role, but the PRC insisted that any discussions be held at the ministerial level. The Pentagon eventually relented, and Secretary Austin and Minister Wei met on the sidelines of this year's Shangri-La Dialogue in Singapore (People's Daily, June 11).

Beyond Shangri-La

The PRC has sent high-level delegations to the Shangri-La Dialogue since 2007 (CGTN, May 31, 2019). Although China is a long-time dialogue participant, the representatives of the PLA have not always been comfortable in what is considered a pro-Western forum, especially in Beijing's more hawkish circles (Global

Times, October 22, 2019). During this year's Shangri-La Dialogue, the domestic edition of *Global Times* published a screenshot of a tweet from Olivia Enos, an Asia policy analyst at the Heritage Foundation in Washington, D.C., claiming that the Chinese delegation had left Ukrainian President Volodymyr Zelenskyy's virtual address to the forum (Huanqiu, June 12). The article noted that the PRC delegation actually did not attend Zelenskyy's speech due to conflicting meetings (likely not a coincidence). However, the piece also accused Enos of being "the first to spread rumors and slander," despite her subsequent deletion of the tweet and acknowledgement that she was mistaken.

Last week, Qin Gang, the PRC Ambassador to the U.S., participated in a "fireside chat" at the Aspen Security Forum, which coincided with the news of U.S. Speaker of the House of Representatives Nancy Pelosi's planned visit to Taiwan in August. Qin did not directly address the visit, but warned that the only way to avert conflict in the Taiwan Straits was through "peaceful reunification," stressed the need to restrain Taiwan "separatist forces" and urged Washington to stop undermining the One China Principle (Embassy of the PRC in the U.S., July 22; The Aspen Institute- YouTube, July 20). At the same time, Ambassador Qin sought to reassure the mostly American audience that there is a "misunderstanding of China-Russia relations," acknowledging that while Beijing and Moscow share common views on "democracy, security, development and world order," their "relationship is not an alliance,"

Security Dialogues Organized by the PRC

China is certain to continue its high-level participation in international defense summits and dialogues, even those hosted by rivals such as the United States. Nevertheless, the PRC also clearly derives discrete benefits from organizing its own security dialogues, the most prominent of which is Beijing Xiangshan forum (Beijing Xiangshan Forum; China Brief, November 19, 2019). The forum, which was launched by the China Association for Military Science (subordinate to the PLA Academy of Military Science) in 2006, began as a Track 2 mechanism for Asia-Pacific Security Dialogue. In 2014, the dialogue was upgraded to a track 1.5 dialogue including defense officials and senior military officers (the table below provides a preliminary list of the current high-level security dialogues that are organized or co-organized by the PRC).

How does China benefit from organizing its own international security forums? First, these meetings provide a platform for Chinese officials and government experts to act on Xi's directive to "tell the China story well" (讲好中国故事, *jiang hao zhongguo gushi*) (China Media Project, April 16, 2021). A key element of these efforts is "strengthening the agenda setting" (加强议题设置, *jiaqiang yiti shezi*) capability of the CCP (QSTheory.cn, July 21, 2020). Agenda setting applies not only to domestic affairs, but also to foreign policy. In its diplomatic relations, the PRC seeks to overcome the "China threat theory" and assure a global audience that China is a peaceful power, true to its stated objectives of building a "community of common destiny for humanity" through the BRI and other initiatives. Organizing multilateral conferences (which includes the opportunity to develop a theme, set an itinerary and select speakers) provides an excellent opportunity for the PRC to be an "agenda-setter" in international politics.

In addition to their messaging value, security dialogues play an important role in military diplomacy, particularly the cultivation of ties with foreign military elites. For the PLA, these engagements compliment other elements of military diplomacy, including joint training and exercises, port calls and delegation visits, and foreign military education at the PLA National Defense University and other defense colleges.

High-Level Multilateral Security Dialogues Organized or Co-Organized by the PRC [2]				
Forum Name	**Organizer (Italics= Non-PRC)**	**Years Held**	**Most Recent Conference and Themes**	**Notable Participants in Most Recent Iteration**
Beijing Xiangshan Forum (北京香山论坛)	China Association for Military Science (subordinate to the PLA Academy of Military Science) and the China Institute for International Strategic Studies (PRC Foreign Ministry- affiliated think tank)	2006, 2008, 2010, 2012, 2014, 2015, 2016, 2018, 2019, 2021	2021: "Pursue Win-Win Cooperation, Advance Global Security Governance"	CMC Vice Chairman Xu Qiliang; Defense Ministers of China, Russia, Egypt, Vietnam, Nepal, Serbia, Cambodia, Rwanda, Kazakhstan, Belarus
World Peace Forum (世界和平论坛)	Tsinghua University and the China People's Institute of Foreign Affairs (an arm of the PRC foreign ministry that acts as a think tank/mechanism for personnel exchanges) . The forum is "held under the approval" of the PRC State Council.	2012; 2013; 2014; 2015; 2016; 2017; 2018; 2019 2021; 2022	2022: "Preserving International Stability: Commonality, Comprehensiveness and Cooperation."	Wang Chao, President of the Chinese People's Institute of Foreign Affairs; Yan Xuetong, Tsinghua Professor and Secretary-General of the World Peace Forum; Yukio Hatoyama, Prime Minister of Japan (2009-2010); Ban Ki-moon, Secretary-General of the UN (2007-2016); Kevin Rudd, Prime Minister of Australia (2007-2010, 2013), Dominique de Villepin, President of France (2005-2007); Igor Ivanov, President of the Russian International Affairs Council
ASEAN-China Defence Ministers' Informal Meeting (中国—东盟国防部长非正式会晤视频会议)	Ministry of National Defense; *ASEAN Secretariat*	13 meetings since 2015	June 22, 2022: N/A	Defense Ministers from China and the Ten Association of Southeast Asian Nation (ASEAN) countries
China-EU Defense and Security Policy Dialogue (中国与欧盟防务安全政策对话)	Central Military Commission (CMC), Office of International Military Cooperation; *European External Action Service* (EEAS)	12th iteration held in 2022		
China-Africa Peace and Security Forum (中非和平安全论坛)	Ministry of National Defense	2019; 2022	2022: "Strengthening Solidarity and Cooperation to Achieve Common Security"	Defense Minister Wei Fenghe; 50 ministerial leaders and high-level representatives from the African Union and Africa
China-Horn of Africa Peace, Governance and Development Conference(中国—非洲之角和平会议)	Ministry of Foreign Affairs	2022		Special Envoy for Horn of Africa Affairs Xue Bing; PRC Ambassador to Ethiopia; Senior Diplomats from Ethiopia, Djibouti, Somalia, Kenya, Uganda, Sudan and South Sudan

Conclusion

The pattern through which new initiatives take shape in the PRC system is for top leadership to first introduce a broad concept (or concepts) that provides a general policy framework (e.g. Xi's proposal for a "new Silk Road" in 2013). Then, the relevant party and state bureaucracies respond to the leader's directive by laying out plans and undertaking specific actions in their respective areas of responsibility to implement the initiative. The Global Security Initiative appears to be following this trajectory. Now that Xi has articulated that the initiative is a means to build a "balanced, sustainable and effective" international security architecture, the bureaucracy is developing specific measures to actualize this vision. Based on the toolkit that China has used to establish other multilateral initiatives, as well as the prioritization of PLA diplomacy within the PRC's overall foreign policy efforts, a Global Security Forum or Dialogue in Beijing appears inevitable.

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Notes

[1] Kenneth Allen, Philip Saunders and Jonathan Chen, “Chinese Military Diplomacy, 2003–2016,”, *China Strategic Perspectives* (Washington, D.C.,:NDU Press), July 11 2017), https://ndupress.ndu.edu/Portals/68/Documents/stratperspective/china/ChinaPerspectives-11.pdf?ver=2017-07-17-153301-093

[2] Information in the table is derived from the following sources: Tsinghua University; PRC Ministry of Defense; PRC Foreign Ministry; Xiangshan Forum Website; 81.cn; Xinhuanet; People’s Daily Online; China Military Online; Global Times; Forum on China-Africa Cooperation

Economic Woes Worsen as Support for Xi Jinping's Leadership Begins to Falter

By Willy Wo-Lap Lam

(**Image:** *Bank customers unable to access their deposits protest in Zhengzhou, Henan,* **source**: RFA))

Introduction

The relentless cascade of bad economic news in China has not only cast doubt on the governance ability of the Xi Jinping leadership, but has also called into question the long-term viability of the Chinese economic model, which stresses maintaining party-state control of the market and limiting international access to sensitive sectors such as finance. Given supreme leader Xi's Maoist-style and statist approach to the economy as well as his insistence on a "zero-tolerance" pandemic policy, confidence in China's future among its neighbors and trading partners is tipped to drop even further, especially if Xi realizes his long-held ambition and gains an unprecedented third or even fourth five-year term as "core of the Chinese Communist Party (CCP) leadership" at the upcoming 20th Party Congress. Xi has undoubtedly been forced to allow Premier Li Keqiang – a political foe and leader of the opposition Communist Youth League (CYL) faction – and technocrats in the central-government apparatus to assume day-to-day management of the economy. Due to his dented authority – and the threats to stability posed by the growing rebelliousness of China's 400 million-strong middle class who have grown increasingly frustrated with Beijing's problematic governance record since the early 2010s – the 69-year-old Xi may be forced to make pledges to adopt a more pro-market stance after the Party Congress. The supreme leader might also be obliged to appoint more members of the "anti-Xi faction" to the Central Committee and the all-powerful Politburo to be endorsed at the Party Congress this fall (China Brief, May 27).

Reeling Retail, Real Estate Sectors

The Chinese economy grew by barely 0.4 percent in the second quarter of this year, which is the second worst figure recorded in the past 30 years. President and commander-in-chief, Xi has asked officials to do whatever is necessary to ensure that the 5.5 percent GDP expansion target announced early this year is reached, but most Western banks and think tanks have lowered their annual growth forecasts for China to only around 3 percent (SCMP, July 15; BBC Chinese, July 15).

Almost all economic sectors are under-performing. At least 460,000 companies – mostly small and medium enterprises, which are major job providers – closed their doors in the first quarter of the year. Unemployment among the crucial sixteen to twenty-four year-old age group surged to an unprecedented 19.3 percent last month (National Bureau of Statistics (NBS), July 15). Despite the apparent decrease in new COVID-19 cases, lockdowns are still affecting more than 30 cities. This has disrupted the work schedules of some 248 million citizens, as well as 17.5 percent of the nation's aggregate economic activities (Ming Pao, July 17; Thebl.com, July 16; BBC Chinese, July 8). These atrocious business conditions have also been a drag on retail sales, a major growth impetus, which went up by a mere 3.1 percent year-on-year last month (NBS, July 15; Global Times, July 15).

The real estate sector, which used to make up 30 percent of GDP, is in dire straits. In May, new home prices in 70 cities fell for the ninth straight month. In the wake of multi-billion yuan developers such as Evergrande and Shimao declaring insolvency, more and more buyers of unfinished apartment buildings have refused to pay their mortgages. The amount of mortgage loans that would-be homebuyers refuse to pay their banks has now mushroomed to an estimated 2 trillion yuan ($297 billion). Officials estimate that developers lack funds to finish work on approximately 500 million square meters of near-empty sites. Although the first known outbreak of large-scale non-payments of housing loans began only last month, this trend has spread to more than 1,000 buildings in at least 18 provinces and 40 cities (Radio Free Asia, July 15; Ming Pao, July 15). The official Security Times warned that "although financial institutions have real estate as collateral, the undelivered projects can only become bad debt." Security Times and other state-run financial outlets have also warned that when bad debt increases, horrendous systemic financial risks could multiply (CNN, July 14; Jycf360.com, July 12).

Financial Crunch

At present, both central and regional government coffers are running low on funds. In the first quarter of this year, China's total social debt (including borrowings by administrations, enterprises and households) increased by $2.5 trillion year-on-year (Reuters, May 18; China Macroeconomy Forum, February 9). Runs on both gigantic state-owned banks as well as county-level rural banks (which function like "financial co-ops" that theoretically restrict customers to local inhabitants) have taken place in Henan, Anhui and Liaoning provinces. Runs on state-owned banks have even occurred in prosperous cities such as Shenzhen and

Shanghai. On July 12, several hundred depositors in four county-level banks in Henan protested outside government offices in the provincial capital, Zhengzhou. They demanded that the four delinquent banks reimburse their clients' deposits of approximately 39 billion yuan ($5.77 billion). The authorities sent police and apparently triad members to disperse the crowd and beat up the angriest protestors. A few days later, the China Securities and Banks Regulatory Commission said depositors with up to 50,000 yuan ($7,400) in funds would be reimbursed within several days; but no promises were made to those with larger sums in the banks. A similar scenario occurred in several individual counties in Anhui Province (HK01.com, July 15; Indianexpress.com, July 12; BBC Chinese, July 12).

State-owned banks such as the huge Agriculture Bank of China have adopted dubious measures to discourage depositors from withdrawing cash. In cities, including metropolises such as Shanghai, Shenzhen and Tianjin, large numbers of ATMs have stopped working. Many bank branches have either set a "quota" limiting the maximum number of clients they will serve each day or have placed forced limits on customers barring them from withdrawing more than 1,000 yuan ($148) in cash per day (Finance.sina.com, June 21). In a reflection of the entire country's shortage of foreign exchange- especially U.S. dollars, most banks have failed to deliver on the long-standing practice of allowing each household to withdraw U.S. $50,000 a year. Immigration and police authorities have even gone so far as to formally advise citizens not to leave China unless they have valid reasons to do so. This has been interpreted as yet another attempt at preventing foreign exchange from leaving the country (BBC Chinese, May 17; Jz.gov.cn, May 5).

Exports, perhaps the only sector to achieve a significant recovery, grew by 17.9 percent year-on-year to $331.3 billion in June, beating market forecasts of 12 percent and outperforming the May figure of 16.9 percent. However, these statistics could have been massaged as the upsurge of different types of exports is partly due to the record high inflation rates in major markets such as the U.S. and the EU (Eastmoney.com, July 14; Gov.cn, July 13). Moreover, the future prospects of exports depend in no small measure on whether the administration of U.S. President Joseph Biden would lift tariffs on a wide range of Chinese imports so as to tamp down inflationary pressures in America.

No Easy Way Out

The various economic task forces run by Premier Li, who has been sidelined by Xi for the past nine years, have convened marathon nation-wide meetings to address the country's mounting financial issues. However, the magic bullet they have come up with is nothing new: augmenting state fiscal injections into infrastructure development in order to jack up the GDP growth rate. In April, the State Council announced that Beijing would roll out an investment stimulus worth 14.8 trillion yuan ($2.2 trillion) to boost infrastructure building (Gov.cn, July 6; qq.com, April 8). Despite the multiplier effects of individual state stimulus injections, the immediate result seems to be regional governments accumulating more debt rather than a palpable reinvigoration of overall business activities. These measures do not address the issues of greatest concern to countries and multinationals with major commercial stakes in China, who are increasingly apprehensive over the long-term fiscal health of the entire country as well as over-leveraged enterprises. In order to save money, Beijing has cut down on social-welfare benefits, extended the age of retirement and obliged managers and workers to contribute more to pension funds (Qiushi, July 12; Nikkei Asia, February 25).

Due to the ongoing economic slowdown, the financial standing of numerous provinces and big cities has also declined dramatically. Per official statistics, in the first four months of this year, the revenue of erstwhile prosperous provinces and cities dropped precipitously. For example, Guangdong, Zhejiang, Jiangsu, Shanghai and Beijing respectively earned 10.20 percent, 5.10 percent, 14.00 percent, 6.63 percent and 3.48 percent less in revenue than they had during the same period in 2021. At the same time, partly in view of the increasing discrepancy with much-higher American interest rates, overseas buyers of bonds issued by Chinese government agencies and state-owned enterprises (SOEs) sold an estimated $5.5 billion worth of their PRC portfolios last February (163.com, May 26; new.qq.com, May 26).

Many of the economic predicaments currently facing China have been worsened by Xi's refusal to downgrade the "no limits" partnership with Vladimir Putin's Russia. The possibility of Washington imposing secondary sanctions on Russia-friendly China-based enterprises – particularly financial and logistics companies, many of which are listed on the New York Stock Exchange – is one factor driving multinationals to continue to move their production bases to China's neighbors such as Vietnam and Bangladesh, where land and labor costs are also much lower (Ceweekly.cn, May 30; Finance.sina.com, May 23). For example, if more Chinese financial institutions and SOEs are expelled from the SWIFT currency-swap system, foreign businesses may find it more difficult to operate in China.

As more cases of the B5 Omicron variant emerge, President Xi will likely continue his zero-tolerance COVID-19 policy, which seeks to stem the spread of the virus through mass testing and lockdowns. Last month, Xi told cadres that they must give equal attention to "efficiently coordinating COVID-19 prevention and control" on the one hand, and fulfilling "economic and social development" on the other (RTHK.hk, June 10; Gov.cn, June 9). However, in his speeches on how to more efficiently resuscitate the economy and achieve a tolerable employment rate, Premier Li has never accorded top priority to Xi's pandemic-related strictures. On a few occasions, Li did not even mention either Xi's pandemic strategies – or the supreme leader's name – for example, during his recent meetings with provincial administrators (Hong Kong Free Press, June 10, Radio French International, May 15).

Over the past month, as though to help Xi shirk responsibility for mishandling the economy, official media has focused on his July 1 visit to Hong Kong and subsequent week-long visit to the Xinjiang Uighur Autonomous Region. On both occasions, the supreme leader stoked the flames of nationalism apparently in the belief that the public's attention can be shifted away from deprivations and declining livelihood by focusing on matters of national pride (China Daily, July 17; People's Daily, July 15). However, as Xi still heads the nation's two highest economic decision-making organs– the party's Central Finance and Economic Commission and the Central Commission on Comprehensively Deepening Reforms – the fact that he has to delegate authority to Premier Li and his State Council bureaucrats to tackle pressing financial threats could indicate that the "Chairman of Everything" has indirectly admitted his incompetency on economic matters. Moreover, the widening schism between the Xi camarilla and anti-Xi forces militates against the CCP's traditional emphasis on party unity ahead of the once every five-year party congress.

Conclusion

Over the long term, whether Xi can extend his tenure matters less than the sustainability of the Chinese way of running the economy and the country. If fiscal indicators continue to deteriorate, it is possible that the supreme leader could double down on Beijing's policy of "brandishing the sword" over sovereignty disputes in the South China Sea and the East China Sea. An invasion of Taiwan would allow the CCP not only to divert the attention of a disgruntled public, but would also enable Beijing to declare martial law in order to tamp down the increasingly frequent – and daring – acts of rebellion by Chinese from all backgrounds. A China that is even more bellicose in its projection of hard and soft power would also tend to enhance the status and potency of a Beijing-originated "axis" of likeminded authoritarian states such as Russia, North Korea, Thailand and Myanmar.

The headwinds buffeting the economy are expected to grow stronger, particularly given the clear U.S. readiness to slap sanctions on more Chinese firms as well as to deny Chinese IT firms access to key high technology components (Cn.nytimes.com, July 6; Carnegie Endowment, April 25). Moreover, political stability – another top priority of the party – may be further jeopardized by angry citizens who have lost money due to mismanagement in the financial and real-estate sectors. Despite the relative likelihood that Xi will be able to rule for five or even ten more years, the supreme leader might be presiding over the inexorable decline of the authoritarian China model, which has now fully exposed the cracks in its armor.

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China Pushes for Maritime Preeminence in the Yellow Sea

By Joshua NT Park

(**Image**: *PLA Navy sailors attend a ceremony marking the Navy's 73rd founding anniversary on April 23, 2022 in Qingdao* (**Source:** Global Times)

Introduction

Recent headlines on Northeast Asian maritime affairs have focused on Beijing's claim that the Taiwan Strait should not be considered international waters based on the principle that Taiwan is Chinese territory (Huanqiu Shibao, June 23; Liberty Times, June 23; JongangIlbo, June 20). With international attention focused on Taiwan, the South Korea-China Maritime Cooperation Dialogue meeting on June 17 went largely unnoticed (Yonhap News, June 17; People.cn, June 17). The dialogue, which was launched in 2021, promotes cooperation on maritime issues in the Yellow Sea. The meeting was hosted by the South Korean and Chinese foreign ministries, but also included each country's coast guard, defense ministry, and several other relevant government agencies.

Several points of contention between South Korea and China exist in the Yellow Sea, including unresolved maritime boundary delimitation, frequent illegal fishing by Chinese vessels, disagreement over the status of Socotra Rock (an underwater reef known as Ieodo in Korean), and Chinese military assertiveness. **[1]** Beijing is in no hurry to resolve these matters, but Seoul is less patient. China apparently believes that time is on its side, and officially declares that it has no serious maritime issues with South Korea in the Yellow Sea. By contrast, South Korea is concerned about China's coercive attitude toward its weaker neighbors, and expects Chinese naval influence to become stronger, putting Korea at an increasing disadvantage. Moreover, the

South Korean Navy, Coast Guard, and even civilian fishermen report daily encounters with Chinese naval and fishing vessels in the Yellow Sea (KBS News, October 16, 2021; Financial News, April 18, 2022).

The eastern seaboard of China abuts four seas, the northernmost of which is the Yellow Sea (known as "the West Sea" in Korean), which is perhaps the most vital to China from both a security and economic perspective. The geographical position of the Yellow Sea, with the large port city of Tianjin on its western edge is only 120 kilometers from Beijing, which makes it a critical area in terms of security. Despite the strategic importance of the Yellow Sea, it has not attracted much external attention. This article discusses three key issues concerning the Yellow Sea that are poorly understood:

1. Historical background and current perceptions concerning the Yellow Sea's strategic value to China;
2. China's current actions in the Yellow Sea;
3. Policy options for responding to China's increasing assertiveness in the Yellow Sea.

The Weight of History

In China's official narrative, the period from the mid 19th to the early 20th century is regarded as a historical nadir, an era that is known as the "century of humiliation." During that time, China fell victim to foreign colonial powers that leveraged their naval superiority to project force on to the Chinese Mainland and compel the Qing dynasty to make concessions through a series of "unequal treaties" (不平等条约, *bu pingdeng tiaoyue*).

A decisive event in China's decline was the Sino-Japanese War (1894-1895), which also involved Korea's Chosun dynasty. In September 1894, the Qing dynasty's Beiyang Fleet was soundly defeated by the Japanese navy in the Battle of the Yellow Sea. Then, in 1900, during the Boxer Rebellion, the foreign legations in Beijing came under siege. In response, a multilateral force of eight countries led by Great Britain passed through the Yellow Sea to land at Tianjin, and later entered Beijing. This Western pressure was an essential factor in the subsequent collapse of the Qing Dynasty.

In April 2019, President Xi Jinping attended a ceremony at Qingdao, a city that was once a German treaty port, to commemorate the 70th anniversary of the founding of the People's Liberation Army (PLA) Navy. For Xi, marking China's burgeoning naval power on the Yellow Sea sent a signal that by "striving to build the PLA Navy into a world class navy in an all-around way," China had overcome its tragic legacy of past defeats at the hands of foreign powers (Xinhuanet, April 23, 2019).

Contemporary Attitudes

Historical experience frames the current security perspective of the Chinese government, particularly its goal of preventing foreign powers from entering the Yellow Sea. Two cases in 2003 and 2010, respectively, illustrate the Chinese attitude. In 2003, then North Korean leader Kim Jong-il tried to stimulate his country's economy by opening up several ports to the outside world: Chongjin and Rajin on the eastern coast of North Korea, and Sinuiju on the western coast. Sinuiju is a port city on the border between China and North Korea, and China did everything possible to obstruct its opening. When North Korea appointed Chinese businessman Yang Bin as chief executive of the Sinuiju Special Economic District, China suddenly arrested him on charges of bribery and tax evasion. Amidst the ensuing confusion, Pyongyang eventually canceled the creation of the Sinuiju Special Zone (Yonhap News, September 24, 2002). In response to the sinking of the South Korean corvette *Cheonan* by North Korea in 2010, the U.S. and South Korea planned military exercises in the Yellow Sea involving a U.S. aircraft carrier. China fervently objected to the presence of an American carrier in the Yellow sea, causing the Obama administration to move the exercises to the East Sea (also known as the Sea of Japan) (China.org.cn, July 7, 2010). Thus, the primary task of China's North Sea Fleet , is to fully control the Yellow Sea in order to protect the approaches to Beijing.

The Yellow Sea region is also vitally important to China from an economic perspective. Western China is dominated by deserts and mountain ranges, whereas the eastern part is densely populated with many major cities, including Dalian, Qingdao, and Shanghai, which are all on the coast of the Yellow Sea and account for a very high percentage of the Chinese economy. In addition, there is an oil field in Bohai Bay, which lines in the innermost area of the Yellow Sea. Given its strategic and economic value to China, it is unsurprising that Beijing seeks to deny external powers, particularly the U.S., access to the Yellow Sea. However, China's effort to essentially turn the Yellow Sea into its own domain is extremely worrisome for Seoul (Newsis, February 25, 2011). **[2]**

If China achieves its goals in the Yellow Sea, it will also considerably advance Beijing's efforts to bring about unification with Taiwan. For China, achieving full control of the Yellow Sea is a prerequisite for a successful attack on Taiwan. **[3]** In order to achieve a forcible reunification, China will need to control the East China Sea to the north of Taiwan and the South China Sea to the south. Establishing control of the East China Sea will prove challenging, as Japan maintains substantial naval power there. In order to succeed in any struggle with Japan, China must secure the Yellow Sea to serve as a strong rear base for operations.

Furthermore, by blocking the Yellow Sea, China could also divide Japan's naval forces. The Japanese fleet has two components, one in the Pacific and one in the East Sea (a.k.a. Sea of Japan), with the Japanese islands in between them. Passage from the East Sea to the East China Sea skirts the edge of the Yellow Sea, so China taking full control of the Yellow Sea would limit Japan's ability to support the defense of Taiwan. Likewise, should China achieve total control of the Yellow Sea, this would also prevent U.S. Forces in Korea (USFK) in Pyeongtaek from being transported by ship from this port on the west coast of Korea. Again, this would hamper support for Taiwan.

China's Current Actions in the Yellow Sea

The second issue that deserves greater attention is China's current actions in the Yellow Sea.
From a security standpoint, China is, broadly speaking, seeking to strengthen its maritime dominance in the Yellow Sea through military power. Moreover, in economic terms, China is attempting to extract as many resources from the waters as possible. Since around 2010, China has sought to strengthen its North Sea Fleet, having previously prioritized its East Sea Fleet which focuses on Taiwan, and its South Sea Fleet, which contends directly with the U.S. Navy in a struggle to establish and secure maritime territories in the South China Sea. The North Sea Fleet was thus the place where the oldest ships were re-deployed, earning it the moniker "the Nursing Home Fleet." Recently, however, the PLA Navy (PLAN) has been deploying newer ships to the

North Sea Fleet, including both Type 055 destroyers and the latest Type 052D destroyers. **[4]** China enjoys overwhelming naval superiority over South Korea in the Yellow Sea, but the South Korean Navy nevertheless maintains a policy of responding proportionally to the PLAN. If the South Korean Navy sends one warship towards China, however, the PLAN sends five or six ships as a countermeasure, so the effectiveness of the South Korean Navy is limited by China's quantitative advantage.

The economic importance of the Yellow Sea for China is underpinned by political motives, specifically the need to achieve economic stability in northeast China, and garner popular support for the ruling Communist Party. The provinces bordering the Yellow Sea are Shandong [山东] and Liaoning[辽宁], which along with Heilongjiang [黑龙江] and Jilin[吉林] comprise the Three Northeastern Provinces [东北三省, *Dong Bei San Sheng*]. Notably, the population of the Three Northeastern Provinces includes many ethnic Koreans and Manchurians and relatively fewer Han Chinese, so this region has historically presented a threat to Beijing. Thus, the region is considered to be more vulnerable to political disaffection than other regions; hence the importance of ensuring economic stability.

China has been passive about negotiating the delimitation of the maritime boundary, but it has engaged successfully with South Korea on fisheries, signing a 2001 Fisheries Agreement to create a Provisional Measures Zone managed by a Joint Fisheries Commission to manage overlapping exclusive economic zone (EEZ) use given the lack of maritime boundary delimitation. **[5]** While Chinese authorities punish illegal fishing in response to South Korean requests, they do not take the initiative to independently enforce the agreement. Fish stocks have been devastated by maritime pollution and overfishing, so China is also promoting fish farming in order to meet the economic needs of the regions adjacent to the Yellow Sea.

A Policy Challenge

Concerns are growing in South Korea that Beijing is ultimately seeking to turn the Yellow Sea into a Chinese inland sea and is therefore beginning to consider China as a potential military threat. In addition to the PLAN, the PLA Air Force also present concerns for South Korea. The South Korean Navy has daily encounters with Chinese vessels in the Yellow Sea, and the South Korean Air Force routinely monitors Chinese aircraft departing from the Yellow Sea, circling the southern part of the Korean Peninsula without giving notice of entering KADIZ (Korea Air Defense Identification Zone). There are also joint flight exercises between Chinese and Russian military aircraft in the East Sea (a.k.a. Sea of Japan). In July 2019, during one such exercise, a Russian military aircraft entered the territorial airspace of Dokdo, an island that is claimed by both South Korea and Japan in a longstanding dispute. During this incident, South Korean fighters fired warning shots. Due to increased military presence in the region, there is clearly a growing risk of a serious accidental military confrontation (Yonhap news, July 23, 2019).

From a South Korean perspective, it is also troubling that China's efforts to assert control over the Yellow Sea have progressed largely undisturbed. China has had naval predominance in the Yellow Sea since 2010, when US carriers were withdrawn from its waters (Xinhua Daily Media Group, August 27, 2020). In recent years, the U.S. military has conducted reconnaissance flights to monitor Chinese military activity in the Yellow Sea. On August 25, 2020, USFK sent a U-2 reconnaissance aircraft over the Bohai Bay. The PLA had previously announced a no-fly zone from August 22-26 in the Yellow Sea and the Bohai Bay, and was conducting military exercises. A Chinese military spokesperson strongly condemned the US flight (Xinhuanet, August 26, 2020). U.S. efforts to counter China have been largely focused on the South China Sea and the Taiwan Strait. Meanwhile, South Korea, the country most closely affected by China's Yellow Sea activities, has limited options to respond to China's growing naval strength and assertiveness.

Unfortunately, external powers have demonstrated relatively little interest in the Yellow Sea. America is occupied by Chinese naval forces elsewhere in Northeast Asia, and so it seems that the Yellow Sea is destined to become a Chinese inland sea. On its own, South Korea can do little to prevent or even delay this outcome, but if and when China takes full control of the Yellow Sea, then the U.S. and Japan will surely regret their current inaction.

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Notes

[1] Negotiations to establish the Korea-China Maritime boundary in the Yellow Sea have been ongoing since 1996 but without significant progress. South Korea insists on a median line equidistant from the two coastlines; whereas China argues that comparative length of relevant coastlines, the relative population of fishermen, and the topography of seabed should be considered, emphasizing "equity". However, since the creation of a provisional measures zone by the Sino-Korean fisheries agreement signed in 2001, China has no major problems with fishing, and expects its negotiating position to improve as time goes on. China is therefore not actively pursuing the maritime boundary delimitation negotiations with South Korea.

[2] Usually, the term 'inland sea' refers to semi-enclosed oceanic areas completely surrounded by land or connected to the ocean on one side. The connotations of the term therefore imply that such waters are fully under Chinese jurisdiction. In South Korea, China's attempt to gradually seize the Yellow Sea has raised significant concerns. The issue was discussed at the National Assembly in 2011 when National Assembly member Chung Mong-joon demanded measures in response from then Prime Minister Kim Hwang-shik.

[3] See Chinese scholar Zhang Wenmu's book, which highlights the role of the Yellow Sea as part of the bigger picture of Taiwan's unification, Zhang Wenmu [张文木], *On Chinese Sea Power* [论中国海权] (Beijing: Ocean Press), 2009.

[4] The Type 055 and Type 052D destroyers are the Chinese Navy's most modern surface ships. In particular, the Type 055 Nanchang (南昌), launched on January 13, 2020, is the largest similar vessel in Asia (12,000 tonne-class) with Aegis-class air defense capabilities.
[5] See Young Kil Park, "The Role of Fishing Disputes in China–South Korea Relations," National Bureau of Asian Research Maritime Awareness Project, April 23, 2020, https://www.nbr.org/publication/the-role-of-fishing-disputes-in-china-south-korea-relations/

Regulations or Restrictions: China's Foreign Exchange Control

By Harry He

(**Image:** *An electronic stock tracker for the Shanghai Stock exchange* , **source:** CGTN)

Introduction

On June 10, the China Securities Regulatory Commission (CSRC) released a ministerial order to amend the Several Provisions on the Interconnection Mechanism for Transactions in the Mainland and Hong Kong Stock Markets (hereinafter referred to as "Provisions"), six months after its announcement requesting public comments on the intended changes (CSRC, June 10; CSRC, December 17, 2021). The amendment outlines eligibility to participate in the Shanghai-Hong Kong Stock Connect (沪港通, *Hu Gang Tong*) and Shenzhen-Hong Kong Stock Connect (深港通, *Shen Gang Tong*), restricting Chinese nationals from purchasing and selling domestic shares (also known as A-shares, or A股, "A" *gu*) with Hong Kong accounts. The amended Provisions, which went into effect on July 25, give investors currently in violation of the new stipulations a one-year grace period to sell off their shares.

Launched by the CSRC in November 2014 and 2016, the two Stock Connects created four channels between stock exchanges in mainland China and Hong Kong. Two northbound connect links allow foreign investors to open brokerage accounts in Hong Kong and trade stocks listed in Shanghai and Shenzhen. The two southbound connect links, on the other hand, enable domestic investors in China to access Hong Kong's stock market. To maintain government control over cross-border capital flows, both northbound capital (北上资金, *beishang zijin*) and southbound capital (南下资金, *nanxia zijin*) are kept within closed loops (Caixin, November 17, 2016). This means that after the transactions are settled, money is automatically debited from or credited to investors' accounts denominated in local currencies—the renminbi in mainland China and the Hong Kong dollar in Hong Kong—thereby preventing investors from exploiting the Stock Connect to transfer capital into and out of China.

Closing the Stock Connect Loopholes

The Stock Connect system, however, is not without loopholes. In its explanation of the proposed amendment, the CSRC revealed that over 170,000 domestic investors have opened brokerage accounts in Hong Kong to exercise the northbound connect and trade A-shares (CSRC, June 10). Although only 39,000 domestic investors have utilized the Stock Connect services in the past three years and the total volume of these transactions accounts for only 1 percent of all northbound transfers, these "fake foreign capital" transactions increase the risks of illegal cross-border activities and contravene the original purpose of the Stock Connect systems. The CSRC also stated that over 98 percent of these investors have domestic brokerage accounts through which they can trade A-shares.

In 2014, news reports appeared in mainland China that discussed the appeal of the Hong Kong financial market and highlighted the Securities and Futures Commission (SFC)'s more relaxed rules on margin trading and the city's lower interest rates (Ifeng News, November 18, 2014). These accounts occurred at a time of strong stock market performance in China, high domestic enthusiasm following financial relaxation, and unprecedented market opportunities after the launch of the Shanghai-Hong Kong Stock Connect. In the early 2010s, the CSRC loosened several financial regulations, allowing investors to sell short and trade on margin. Under the new rules, investors can take out loans at a 50 percent margin (2:1 leveraging), and some channels provide loans at a 20 percent margin (5:1 leveraging) (China News Service, November 21, 2014). These new financing opportunities, which allowed domestic investors to expand their market exposure and to dramatically increase their returns, partially contributed to the stock market bubble and economic turbulence in 2015. At the same time, many Hong Kong brokers offered leveraged trading at a 15 percent (20:3 leveraging) to a 10 percent margin (10:1 leveraging), allowing investors to reap 6.7 times and 9 times more profit respectively (discounting interest expenses) (Ifeng News, November 18, 2014).

The appeal of the Stock Connect system does not end there. Under the rules of the closed loop system, domestic investors who trade A-shares in Hong Kong see their earnings transferred directly to their Hong Kong accounts after transactions are settled. Given China's tightening of foreign exchange control measures, the Stock Connect systems thus create an unintended channel through which the tech- and financial-savvy Chinese nationals can bypass government-imposed limits and transfer money abroad. This arguably poses a much more serious problem for the Chinese government and the CSRC than the risks posed by "fake foreign capital" that still only account for a very small portion of capital flows through the Stock Connect systems.

Chinese Foreign Exchange Control

In 2007, the Chinese State Administration of Foreign Exchange (SAFE) introduced the Measures for the Administration of Individual Foreign Exchange (hereinafter referred to as "Measures"), stipulating $50,000 as the maximum for the domestic individual purchase of foreign exchange per person per year (SAFE, December 25, 2006). In 2017, SAFE required all Chinese nationals purchasing foreign exchange to fill out the Application Form for Personal Purchase of Foreign Exchange (*People's Daily*, January 3, 2017). The application form asks applicants to specify the purpose of their purchases and distinctly bans using foreign exchange for investing in properties, securities, and dividend-paying insurance products (SAFE, July 28, 2017).

Under tight foreign exchange controls, many Chinese citizens have utilized a method called "ants moving" (蚂蚁搬家, *mayi banjia*)—"borrowing" quotas from friends and relatives—to circumvent the annual quota. In order to crack down on these violations of official regulations, SAFE outlawed "split settlements" (拆分购汇, *chaifen gouhui*) in 2009 and placed suspicious "ants moving" activities under its watch list in 2017 (SAFE, April 29, 2019; *People's Daily*, January 3, 2017).

The "ants moving" tactic, despite its popularity, is time-consuming and cumbersome. More resourceful individuals and companies have resorted to underground banks (地下钱庄, *dixia qianzhuang*) to funnel money abroad, often via Hong Kong. For over a decade, the Chinese government has launched several national and regional campaigns to crack down on underground banks and halt illegal foreign exchange activities. For example, in 2005, public security organs reportedly destroyed 47 underground banks (ENorth News, February 14, 2006). In 2015, SAFE publicly announced plans to "firmly crack down underground banks" and joined four other departments and ministries to launch a nationwide special operation (China Forex, September 17, 2015; *Global Times*, April 16, 2015). In 2021 the Ministry of Public Security (MPS) commenced the "Annihilate 21" (歼击21, *Jianji* 21) special operation, breaking up 2,140 cross-regional criminal groups, solving over 10,000 cases, and recovering economic losses of 1.46 billion yuan ($208.57 million) (MPS, April 15).

In seeking to close any illegal channels or loopholes through which Chinese citizens have managed to evade the SAFE quota, the new CSRC amendment is a continuation of Beijing's moves to strengthen control over foreign exchange.

China's Capital Flight Problem

The timing of the CSRC amendment is also interesting. Why is the government moving to ban domestic investors from opening accounts in Hong Kong to buy A-shares when the size of such activity remains small and its impact very limited? While one may see this as a preventive measure to stabilize the market and strengthen the reputation of Shanghai and Shenzhen as financial centers amidst global economic downturn, the domestic and international political situations cannot be overlooked.

It is no secret that China has been confronting a capital flight problem for decades. Since the late 1970s, foreign direct investment (FDI) pouring into China has helped fuel the country's miraculous economic growth, but at the same time, money has been leaving China at a rapid and accelerating pace. Moreover, recent capital flights are driven more by corruption, income inequality, and desires to migrate than "traditional" explanations such as overvalued exchange rates and relaxed capital controls—evident from the exposed overseas accounts and properties owned by Chinese officials and their relatives**. [1]** In recent years, the capital flight problem has only worsened by geopolitical shocks including rising US-China trade tensions, changes in US monetary policies, and the Russian invasion of Ukraine (*South China Morning Post*, April 27). While the Chinese government and the CSRC in particular are concerned about foreign investors pulling money out of China, capital outflows of Chinese nationals also constitute a grave and more difficult threat.

In 2022, a new meme, "runology" (润学, *run xue*)—"the study of running away"—went viral among Chinese youth (Netease, May 26). A generation previously known to be aggressively ethno-nationalistic and proud of China's recent achievements seemed to have instantaneously become staunch critics of the party-state. The sudden popularity of "runology" corresponded with the start of the Shanghai lockdown in April 2022, as the often ineffective and problematic implementations of the party's stringent "dynamic zero-Covid" policy severely disrupted the daily lives of millions of citizens and left them feeling helpless, disappointed, and in despair (Council on Foreign Relations, June 1; China Brief, April 8). Yet latent discontent of the difficult socio-economic environment—high living costs, gender inequality, intense pressure and competition, and lack of agency, autonomy, and assurance—has been bubbling for months, if not years.

"Runology," which is most associated with the well-educated high-income middle class in large cities such as Shanghai, differs significantly from previous waves of capital flight and emigration of top financial and political elites. Compared to underground banks, less risky options such as the "ants moving" tactic and the Stock Connect loopholes present more viable options to the former group. With the new CSRC amendment and tightening SAFE supervision of any cross-border foreign exchange transactions, China is closing the remaining asset transfer channels for its financial-savvy middle class.

Conclusion

In an effort to eliminate "fake foreign capital" in the northbound connect, the CSRC is shutting down another channel through which Chinese nationals can bypass SAFE's quota. This article argues that although CSRC's explanations for the new amendment do not mention the capital flight problem, the further tightening of China's foreign exchange control is not an unintended consequence but a direct objective. The timing of the policy change—rising domestic uncertainties and discontent coupled with mounting international pressure and challenges—coincides not with an increasing volume of "fake foreign capital" that directly threatens the stability of the Chinese stock market but rather with new threats of capital flight from the Chinese middle class. The CSRC's new amendment thus joins existing SAFE regulations and ongoing MPS anti-underground bank operations as the most recent effort by Beijing to strengthen foreign exchange control and restrict capital outflows.

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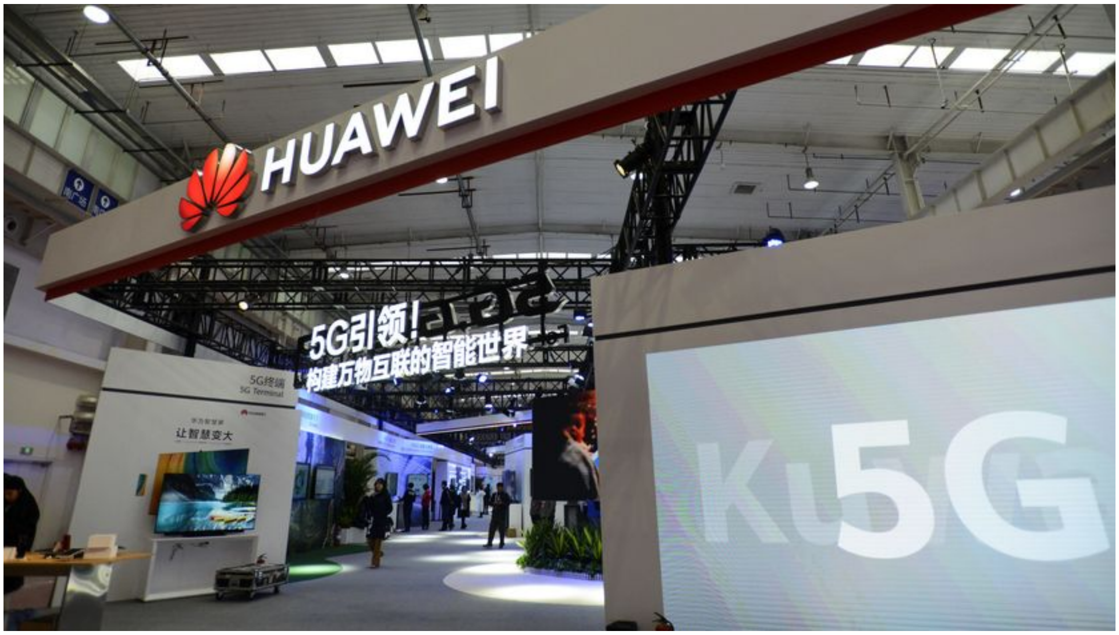
Notes

[1] Frank R. Gunter, "Corruption, Costs, and Family: Chinese Capital Flight, 1984–2014," *China Economic Review* 43 (2017): 105-117.

The Real U.S.-China 5G Contest is Just Getting Started

By Philip Hsu



(**Image:** Huawei's exhibition booth at the 2019 World 5G Convention in Beijing, November, 2019, **source:** CGTN)

Introduction

On June 6, China declared the three-year anniversary of its business deployment of 5G, with the country having invested nearly 185 billion yuan in related infrastructure in 2021 alone (Xinhua Baoye, June 5). However, China's 5G ambitions, which continue to form a substantial component of its national and international development policies, began years ago with Huawei. After Apple revolutionized the smartphone, demand for sophisticated computer "chips" and other components skyrocketed. Companies like Taiwan Semiconductor Manufacturing Corporation (TSMC) and Foxconn capitalized on this shift to become the main pillars of Taiwan's economy. In addition to supplying Samsung, Apple and HTC, a lesser-known, nominally private Chinese company, Huawei was also starting to make smartphones around this time using Taiwanese hardware (Nikkei Asia, 2016).

Although in recent years up to 60 percent of 5G-capable Huawei phone components have been manufactured in China, which is due in large part to U.S. sanctions against it and other Chinese technology companies, a new technological Cold War is unlikely to materialize over 5G. The economic stakes over advanced computing and a new generation of telecommunications infrastructure are too high for the international community to afford any one nation or corporation primacy across the deep and diverse set of software, hardware and human capital requirements this technology will demand.

The U.S.-Huawei Breakup and its Fallout

In 2015, the U.S. government disclosed that Chinese agents stole massive amounts of U.S. background investigation and other personal information by hacking the Office of Personnel Management (OPM), which is the agency responsible for administering security clearances to Federal employees (OPM.gov). Huawei later came into focus, as the U.S. government designated their equipment and services as a cybersecurity threat. This was due to the potential for Chinese-manufactured equipment to contain "backdoors" or other programs, which could send user data back to the Chinese government. The U.S. government could not or would not provide direct, cyber-forensic evidence for these claims. Nevertheless, Washington maintained that it was not necessary to find "hard evidence" of such activity or programs, based on the presumption that there was ample evidence to suggest that no Chinese company could reasonably deny a request to divulge information or provide data about the users of its products and services if pressed by their own government. **[1]**

In addition to defending the credibility and security of Huawei and Chinese State-owned electronics or telecommunications companies, Chinese sources have generally highlighted these companies' economic reach and performance (Huawei, 2019; Zhitong Caijing, 2021). While Huawei phones have all been shut out of the U.S. market, these and other Chinese smartphone brands such as Oppo, Xiaomi and Honor (a Huawei-affiliated brand) are gaining and even dominating market share practically everywhere else in the world. By one account, 46 percent of 5G smartphones sold in 2019 were Chinese-made, more than any other nation (Counterpoint, 2020). However, the United States and Western Europe have long been the largest markets for smartphones, so it is doubtful that Huawei will ever fully overtake manufacturers like Apple or even Samsung.

Despite this apparent stalemate over smartphone sales, a contest between the West and China has subsequently emerged over 5G, which is considered a fundamental basis of the Internet of Things (IoT), cloud computing, and "Big Data."

Blanket Coverage

The basic discerning characteristic of 5G is that while it is indeed very fast, it does not have extensive range. Whereas 2G-4G can be delivered through cell phone towers over distances spanning several square miles, 5G physical transmitters must be installed on towers whose signals may cover an area equivalent to four American football fields in the open, or install multiple 5G transmitters within the same floor or floors of an office building.

Huawei and other major Chinese telecommunications infrastructure manufacturers and developers are building 5G towers across the world, and these companies are also blanketing their own country with them - more than 60 percent of 5G towers globally are Chinese-made, and 10.1 transmitters are available per each Chinese resident by the government's last count (Gov.cn, February 12). The U.S. government has criticized these construction projects, suggesting that these systems may be used to siphon data back to Beijing (Federal Communications Commission, 2020). Moreover, quite a few countries have rejected China's 5G infrastructure and technology after conducting their own risk assessments, and have pledged to develop their own networks or with U.S. help and coordination (Zaobao, May 20).

5G could be very useful for Internet of things (IoT) applications in remote, industrial or transportation settings. Much of the "Big Data" referenced in the media comes from these small sensors, which can be placed in factories, buses or airplanes, or in remote areas to provide large amounts of structured data (such as numbers) and unstructured data (such as text, video and audio) in real-time directly to a cloud server.

The powerful and specialized computers that comprise the cloud can quickly process this information and allow new and near-instantaneous conclusions to be drawn about business and manufacturing processes, the performance of Smart Cities, energy usage, attendance at and real-time visual feeds from major sporting or public events. (GSMA, 2018).

A Global Contest?

Due to the value of these 5G-related cloud computing applications and real national security concerns, Washington has made it progressively harder for Chinese companies to purchase the U.S. chips necessary for mobile and advanced computing applications. As a result, Chinese efforts to indigenously develop advanced semiconductors have accelerated.

Subsequently, semiconductors and 5G have squarely entered the geopolitical realm, in addition to being approached as an economic or technological issue. Newspapers like *Nikkei Asian Review* have broken down the costs of the major individual components of Huawei smartphones compared to Apple or other competing devices. These essential components include parts like advanced cameras, LCD touchscreens, flash and other memory storage units and processing chips. Nikkei listed the approximate price of each component, along with the country in which the parts were manufactured (Nikkei Asia, May 14, 2020).

Most of the Apple iPhone’s components are currently made in the U.S., Japan, South Korea, or Taiwan. In Huawei's flagship phone, its processing chip—which is the most valuable and arguably most important manufactured component of any smartphone—is now made in China, along with several other crucial components (Nikkei Asia, August 31, 2021). In this instance, Beijing was able to adapt its 5G production in order to compete with U.S. and Taiwanese hardware supply chains.

Chinese telecommunications companies’ international construction of 5G and basic internet infrastructure has occurred in countries where foreign competitors are hesitant to operate. Notably, Huawei has captured market share in countries subject to U.S. sanctions, and/or those that have welcomed Chinese investment as an alternative to Western funding, which is seen as more conditional, at least as far as significant economic and technological development is concerned (China Daily, March 17). These projects have taken place all over the globe, ranging from Central Asia, Africa, and even Latin America.

Technically, 4G/LTE or Wi-Fi are no longer required for built-from-scratch 5G network infrastructure to function. For example, if a country was never offered advanced Internet because of its government’s human rights record or poor compliance with nuclear nonproliferation treaties, construction of 5G infrastructure still remains possible. In these countries deemed undesirable by nations possessing 4G, Wi-Fi and advanced computing technologies, China appears to have found an opening.

Accessing 5G does not even necessarily require a smartphone or traditional computer. All applications, including voice calls, could be run from a conveniently portable touchscreen device, which requires no advanced, expensive semiconductor chip or hard drive embedded inside of it, since both processing and storage would be conducted in the cloud. All computing tasks and user applications would be conducted directly from the cloud, as the device transmits the results back and forth to the screen via an ultra-fast 5G network.

China's plan domestically and globally is for its variants of 5G to be everywhere, along with 5G-capable devices it produces. Therefore, beyond just monitoring factories or evaluating the performance of solar energy panels, 5G has the potential to change computing as we know it, in ways we cannot yet possibly comprehend. That is what the U.S. and China are contesting, and what the global community is watching very closely.

Conclusion

Massive uncertainty exists over how this industry will develop, specifically in regards to whether cloud computing can be effectively integrated with myriad other forms of existing technology. For this reason, it is unlikely that a new technological Cold War will develop. The supply and research and development chains of these software and hardware technologies, along with the markets they serve, are far too cross-reliant to be separated.

The economic stakes are also higher than any one nation, even a technological and economic superpower, can bear alone. There are few limits to how powerful computing can be in the cloud, and as augmented, metaverse and virtual reality applications become more widespread and the average user starts to utilize or consume more unstructured data, local computing will become a bottleneck, along with the human talent that designs and supplies creative content.

Furthermore, global demand— particularly in the developing world—for powerful, cheaper, more interconnected and potentially more secure mobile and personal computing solutions will continue to rise. Cloud computing with 5G could address this need, and China clearly now has many of the cards in hand. However, international politics, computing technology and the modern global economy are more complicated than who can build the most 5G towers.

In order to make 5G work at its full potential as described previously, one needs more than just physical infrastructure. Specialized hardware and software which are designed to work with this version of a cloud computing model, or in tandem with the local device-based computing model, will have to be developed. Tangible technology ecosystems must be nourished as well, and applications and software must be tested and re-tested in diverse environments. In this regard, the U.S. and other advanced economies are well-positioned in what will undoubtedly be a decades-long process of transitioning to a 5G and even a 6G world.

Ultimately, trends point towards a necessary global collaboration on 5G. That said, no country wants to be dominated by another country or corporation. If the digital future of one nation is in the metaphorical hands of another one, there are going to be questions raised, even if everything works perfectly, and regardless of whether it is China, or the U.S., or Foxconn who are providing the users' entire digital suite.

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Notes

[1] For discussions of these concerns, see Arjun Kharpal, "Huawei says it would never hand data to China's government. Experts say it wouldn't have a choice, CNBC, March 5, 2019, https://www.cnbc.com/2019/03/05/huawei-would-have-to-give-data-to-china-government-if-asked-experts.html; Murray Scott Tanner, "Beijing's New National Intelligence Law: From Defense to Offense," Lawfare, July 20, 2017, https://www.lawfareblog.com/beijings-new-national-intelligence-law-defense-offense;