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## **Kursk Incursion Draws Delayed Response From Beijing**

*by Arran Hope*



Kursk nuclear power plant. (Source: [Wikipedia](#))

### **Executive Summary:**

- Official media in the People's Republic of China (PRC) has finally begun to comment on the Ukrainian operation in Russia's Kursk oblast, which began on August 6. It gives Ukraine low odds of success, emphasizes Russia's strength and successes elsewhere in the conflict, and has started amplifying Russian propaganda about US involvement and potential Ukrainian attacks on the Kursk Nuclear Power Plant.
- For the two weeks after Ukrainian forces invaded Russia's Kursk Oblast on August 6, PRC state media either ignored the developments or provided minimal reporting, mostly recycling statements from Russian officials and media.
- The PRC's muted coverage follows a pattern of delayed responses to surprising events and volatile situations, also seen at the outbreak of the war and during Prigozhin's mutiny in June 2023. This can be taken as evidence that authoritarian systems are not necessarily capable of responding quickly to developments, especially when decision making is highly centralized.

On August 6, Ukrainian forces invaded Kursk Oblast inside the borders of the Russian Federation ([Institute for the Study of War \[ISW\]](#), August 6). This marked the first time that Ukraine has launched an offensive campaign into Russian territory. The operation was at first a closely guarded secret, leading to uncertainty about the nature and scale of the incursion, as well as about its objectives. Over two weeks later, a clearer picture has emerged. While the operation is still ongoing, by August 20, Ukrainian troops had advanced 17–22 miles into Kursk and taken control of hundreds of square miles of Russian territory. Over 120,000 civilians have been evacuated from the Kursk region, though bridges and transport links have been destroyed, severing supply lines for Russian combatants. So far, the operation has been fairly successful, with large numbers of Russian combat units surrendering to the advancing Ukrainian forces ([Comment is Freed](#), August 21). Ukrainian President Volodymyr Zelenskyy has now stated that the operation aims to create a “buffer zone” within Russia, with the hopes of using this as part of any future negotiations ([People’s Daily Online](#), August 19). For its part, Russia is yet to formulate a clear response. State media continues to downplay the invasion, and despite Putin’s rhetoric about responding “decisively,” its forces are apparently continuing to focus on the main battlegrounds in Eastern Ukraine. This might slowly be changing however, as senior officials begin to articulate a stance. For instance, Deputy Chairman of Russia’s Security Council Dmitry Medvedev wrote on Telegram this week, “There will be NO MORE NEGOTIATIONS UNTIL THE COMPLETE DEFEAT OF THE ENEMY!” ([Tass](#), August 21; [Telegram/Medvedev](#), August 21).

Against this backdrop, People’s Republic of China (PRC) Premier Li Qiang (李强) paid a visit to Moscow for the 29th regular meeting of PRC and Russian heads of government. There, he met with Russian President Vladimir Putin ([Xinhua](#), August 22). The joint communique published after the meeting made no mention of Ukraine and the current developments in the conflict along the border. In fact, it did not touch on any topics related to the military ([People’s Daily](#), August 22). This is not necessarily unexpected—the same was true of the communique that followed the previous such meeting, held last December ([FMPRC](#), December 12, 2023). Nevertheless, it is indicative of the PRC’s standard approach to dealing with unwanted surprises. In official communications, the PRC government has practically ignored the development or, when forced to acknowledge it, has played it down. This approach is symptomatic of structural weaknesses and belies the theory of “authoritarian advantage” that argues authoritarian states can respond to events more rapidly due to a centralized decision-making process, an absence of political opposition, and greater flexibility in policy implementation.

### **Circumspect on the Incursion, Amplifying Russian Propaganda**

A survey of key state media outlets in the PRC reveals a dearth of coverage of Ukraine’s incursion into Russian territory. In the *People’s Daily*, the flagship newspaper of the Chinese Communist Party (CCP), “Kursk Oblast (库尔斯克州)” is yet to be mentioned in any article since the operation first came to light. The website of the PRC foreign ministry, “fmprc.gov.cn,” contains just one mention so far, in a question-and-answer session with a ministry spokesperson. The spokesperson notes that the PRC side is “aware of the situation” and then reiterates its “consistent and clear (一贯的、明确的)” position on the Ukrainian issue, calling on the parties to observe three principles for de-escalation ([FMPRC](#), August 12). (These are no

expansion of the battlefield, no escalation of fighting and no fanning of the flames by any party.) The website for the *PLA Daily*, the official newspaper of the People's Liberation Army (PLA), is slightly more informative, containing five pieces about the situation in Kursk. However, these consist mostly of brief reports from Xinhua's Moscow bureau, Russian State media TASS, and statements from the Russian government and officials.

People's Daily Online (人民网), along with Xinhua, the official state news agency, has done more to update PRC citizens about the conflict. People's Daily Online has published 18 articles on Kursk since August 8. Yet these, too, all remain limited in scope. The early pieces largely focus on Russia's perspective, again relying heavily on Russian statements and coverage (though this could be partly due to the lack of Ukrainian acknowledgment of the operation until a statement by Zelenskyy on August 13) ([People's Daily Online](#), August 14). The pieces remain restrained, and editorials or commentary are markedly absent.

Tracking the sparse official coverage as it has developed nevertheless drives home the pro-Russian slant of PRC media, despite Beijing's frequent protestations to the contrary (see [China Brief](#), May 24). For instance, casualty figures are always those provided by the Russian side (People's Daily Online, [August 9](#); [August 12](#); [August 21](#); [August 23](#)). These likely overinflate the damage Russia has inflicted while minimizing Ukraine's impact. For instance, one article claims Ukraine has lost 4,700 men in Kursk since August 6, while another puts Russian fatalities at a mere 31 (PD Online, [August 21](#); [August 23](#)). Other journalistic strategies also reveal this implicit stance. One such strategy is to ensure that articles conclude either by quoting TASS or Russian officials, especially in articles constructed by stacking alternating quotes from Ukrainian and Russian sources. Another strategy is to selectively quote Western sources without context, pulling quotes that highlight Russian progress or Ukrainian weakness. For instance, one Xinhua piece quotes the *Economist* as saying that "losses are mounting" for the Ukrainian army in Kursk. It also quotes the *New York Times* for an article in which a Ukrainian soldier criticized the operation for reducing ammunition allocations to the Eastern front ([Xinhua](#), August 22). This same article combines the two strategies, concluding with a quote from international relations scholar John Mearsheimer, a favored Western voice in both the PRC and Russia for arguing that the West is to blame for the current conflict. Writing for the Quincy Institute, Mearsheimer is quoted as saying that the attack in Kursk was a "huge strategic mistake" that will "hasten [Ukraine's] defeat."

Here we can see that the restraint of the previous fortnight's coverage has started to shift. The Xinhua article cited above constitutes perhaps the first piece of commentary from an official outlet. It gives a substantial airing to Zelenskyy's statements and surveys the state of play on the ground with a degree of accuracy. Nevertheless, it frames the Kursk operation as a failure for Ukraine. It argues that Ukraine's strategy is to "besiege Wei to save Zhao (围魏救赵)." In other words, it hopes to create a diversion to afford it some breathing space elsewhere. Nevertheless, the diagnosis is that Russia has not reacted as Ukraine had hoped, instead increasing pressure on Ukraine in the East. Toward the end, it argues that the operation "has neither improved the situation on the front line nor affected the prospects for peace talks (既没有改善前线局势, 又影响了和谈的前景)," stating that "the gains do not outweigh the losses incurred (得不偿失)."

PRC media is now also endorsing Russian propaganda and conspiracy theories more explicitly. This continues the ongoing alignment of the two countries' discourse systems, something that was also reaffirmed in Premier Li's communique as an area in which the two sides should deepen mutual coordination (see [China Brief](#), April 12). On Wednesday, August 21, state outlet China News Service (中国新闻社) showed a screenshot of an article from the outlet RT, "exposing" the presence of personnel from a US private military contractor in Kursk. It also amplified Russian Foreign Minister Sergei Lavrov's claim that the United States orchestrated the attack ([China News](#), August 21).

The presence of a nuclear power plant in Kursk has also led to further—unsubstantiated—claims of dangerous play from Ukrainian forces. PRC state broadcaster CCTV has amplified a statement from Russia's foreign ministry that Ukraine is "trying to use 'suicide drones' to attack Kursk nuclear power plant," which it characterizes as an "act of terrorism" ([CCTV](#), August 23; [Reuters](#), August 23). While there had been earlier talk that Ukrainian forces might reach the power plant, this is now unlikely. A statement from the director general of the International Atomic Energy Agency (IAEA), who is set to visit the plant next week, will likely provide more clarity. The statement will probably debunk Russian claims, just as the IAEA did in November 2022 following inspections at the Zaporizhzhia Nuclear Power Plant ([PD Online](#), August 23; [EDM](#), November 22, 2022).

### **A Pattern of Biding Time Suggests Systemic Weakness**

There are two possible interpretations of the PRC's official silence during the first two weeks of the invasion. One is pragmatism. The invasion is a risky and developing situation that might come to nothing, in which case, there would be no need for the PRC to amplify news that boosts morale for Ukraine and its supporters at Russia's expense. The benefit of this pragmatism (in Beijing's view) is that taking the time to reach a decision makes it less likely that it will need to change course further down the line. Another interpretation—not necessarily mutually exclusive with the first—is that the PRC system is not capable of responding quickly to contentious and volatile situations. Beijing's response to the Kursk invasion is only the latest data point in a pattern of muted coverage from the Party-state communications apparatus in the wake of similar events. Back in early 2022, when Russia initially invaded, the PRC did not immediately give its comprehensive strategic partner the same level of backing that it would come to (*China Brief*, [March 25, 2022](#); [May 24](#)). Then, when Yevgeny Prigozhin led a mutiny against Putin in the summer of 2023, official media was again slow to respond ([X.com/Wen-Ti Sung](#), June 25, 2023).

One problem with this approach is that political leadership is apparently absent at crucial junctures. Then, once decisions are taken and trajectories take their course, a sunk cost effect takes hold that makes pivoting to a different agenda increasingly difficult—in part because it requires an implicit acknowledgment that the previous policy was a mistake. The most notable example of this was the refusal to change course on the "Zero-Covid" policies until late 2022, causing enormous economic and social harm ([China Economic Review](#), February 2024). This problem is exacerbated by the trend toward further centralization under Xi Jinping. The likelihood that Xi must sign off on each big decision leads to a lack of efficiency and flexibility in the system, as those lower down demur on decisions, waiting for top-down approval for fear of repercussions. There is a



further possibility that the system has responded even more slowly to the Kursk incursion, as the Party leadership was in Beidaihe for the first two weeks of August and not in Beijing.

### **Conclusion**

The Kursk invasion constitutes a real possibility that the narrative of the war will turn, energizing Ukraine and its supporters. Depending on how it plays out in the next few crucial weeks, it could come to be seen as a significant moment in the conflict. The unwillingness of the PRC to acknowledge the invasion at first does as much to reaffirm Beijing's commitment to Moscow as Premier Li Qiang's visit did this week. The same is true for its later stance downplaying its likelihood of success, suggesting US involvement, and implying nuclear brinkmanship. Taking a step back, this moment also provides useful insight into some of the operations of Beijing's authoritarian regime, including some of its weaknesses.

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**PRC-UAE Collaboration and US Technology Transfer Concerns in Abu Dhabi**

*by Cheryl Yu*



IBT Borderless Technology and MBZUAI Establish a Joint Research Laboratory. (Source: [Sohu](#))

**Executive Summary:**

- The Mohamed bin Zayed University of Artificial Intelligence (MBZUAI) poses a high risk of technology transfer due to its deep connections to the People's Republic of China (PRC) and its collaborations with leading US technology companies and universities.
- MBZUAI—and thus PRC researchers—have access to chips that are currently under US export controls to the PRC, such as NVIDIA A100 GPUs, and have received resources from the US Department of Defense and Intelligence Community that are supposed to be supporting US national interest.
- MBZUAI's president, founding members, trustees, and board members have connections to united front organizations involved with technology transfer or have received awards from PRC government entities.
- Since its inception, MBZUAI has aligned with Beijing's explicit policy goals for deepening AI cooperation to achieve its strategic ambitions.

On August 1, *Politico* reported that Microsoft had decided to scale back its \$1.5 billion partnership with the Abu Dhabi artificial intelligence (AI) firm Group 42 (G42) ([Politico](#), August 1). While Microsoft did not specify a reason for the action, the US Government's House Select Committee on Strategic Competition between the United States and the Chinese Communist Party recently called out G42 for its connections with the People's Republic of China (PRC) ([Select Committee on the CCP](#), January 9). G42, however, is not the only organization in the gulf state that the United States should be concerned about. Connected to G42 through its trustee Xiao Peng (肖鹏), the Mohamed bin Zayed University of Artificial Intelligence (MBZUAI) aligns with the global ambitions of the Chinese Communist Party (CCP). Established in 2019 in cooperation between the United Arab Emirates (UAE) and the PRC, MBZUAI appointed one of the PRC's "leading AI scholars" as its president, and includes many western academics among its faculty ([UAE Embassy in China](#), July 8, 2021). The university also has access to technology from leading US firms. This raises the possibility that the PRC could use the university or similar organizations in third countries to circumvent US technology controls and acquire advanced US technologies.

### **MBZUAI Aligns With State Council Policy**

The CCP considers AI a crucial resource for gaining the upper hand in its ongoing great power competition with the United States. In October 2018, CCP Chairman Xi Jinping stated that "accelerating the development of next-generation AI is an important strategic move for us to gain the initiative in global technological competition" ([Xinhua](#), October 31, 2018). The "Next-generation AI Development Plan," published by the PRC State Council in July 2017, states that "the world's major developed countries view the development of AI as a major strategy to enhance national competitiveness and maintain national security ... they strive to take the lead in the new round of international technological competition" ([State Council](#), July 20, 2017). It goes on to say that the PRC needs to "position the development of AI at the national strategic level in a systematic layout" and "seize the strategic initiative in the new stage of international competition in AI development ... [to] effectively ensure national security." Among the plan's main tasks are "supporting domestic AI enterprises in collaborating with leading international AI universities" and "promoting the establishment of international AI technology cooperation bases and joint research centers" along One Belt One Road (OBOR) initiative countries. In this way, MBZUAI, which was founded two years after the State Council promulgated this plan, appears to perfectly align with the goals of the PRC central government.

In its own National Strategy for Artificial Intelligence 2031, the UAE has articulated an ambition to become a world leader in AI ([UAE Minister of State for Artificial Intelligence Office](#), 2018). This makes it an ideal partner for the PRC to implement its policy prescriptions. The PRC and UAE have consequently deepened cooperation in recent years. In July 2018, they upgraded their relationship to the level of "comprehensive strategic partnership" and the UAE officially joined OBOR ([MFA](#), April). In July 2019, a joint statement on strengthening this partnership aimed to "advance the exchange of professionals and experts, jointly build laboratories, cooperate in science parks, and engage in technology transfer" and "exchange experiences in high-tech industries such as ... AI ...to create new areas of cooperation" ([Xinhua](#), July 23, 2019). A few months later, MBZUAI was established.



## **MBZUAI's People and Their Party Connections**

MBZUAI is the first university focused on graduate-level AI research established in Abu Dhabi. According to its website, it was established to support the UAE's National Strategy for AI. The university aims to attract top global talent, providing full scholarships to admitted students and fostering an environment conducive to innovation. MBZUAI claims to be fully funded by the UAE government, though the UAE-based think tank Trends Research & Advisory has highlighted cooperation from PRC entities in building MBZUAI, and PRC firms such as Huawei have supported researchers and projects ([MBZUAI](#), Accessed August 6; [Trends Research & Advisory](#), March 26).

MBZUAI is linked with organizations and individuals with strong ties to the PRC government. The university was incubated by Shao Ling (邵岭) as its first Executive Vice President and Provost, and by his UAE-based national research organization the Inception Institute of Artificial Intelligence (now part of G42) (See Appendix 1; [British Chinese Society of Health Informatics](#), July 31, 2020). Shao is now Chief Scientist and President of Terminus International, an AI smart service provider. In addition, Shao attended a 2012 event hosted by the Guangdong Bureau of Foreign Experts Affairs, a local-level branch of the State Administration of Foreign Experts Affairs (SAFEA), an organization that is involved with technology transfer ([Guangdong University of Technology](#), December 7, 2012).

Besides Shao Ling and Xiao Peng, MBZUAI's current president Eric Xing (邢波) is also connected to the PRC. Xing, professor at Carnegie Mellon University (CMU), was appointed as a "Zhongguancun Overseas Strategic Scientist" in March 2017 at the Beijing-Silicon Valley High-end Talent Summit by the head of Beijing Talent Work Leading Group, a local level agency in charge of coordinating talent work ([Career Engine](#), March 10, 2017). The Zhongguancun Overseas Scientists Office, which is housed at the ZGC Innovation Center at Silicon Valley and is referred to in an official document as a "technology transfer cooperation platform," encouraged Xing and other scientists to "use offshore innovation resources to carry out scientific research" ([Luyi Talent Information Network](#), April 16, 2018; [People's Daily](#), March 7, 2017). Xing also runs an AI startup, Petuum. Investors in the startup include Advantech Capital (尚城资本), whose founder Yu Jianming (于剑鸣) is close to former PRC Premier Wen Jiabao's family. Others include Oriza Ventures, an investment arm of the Suzhou government ([Yiming Net](#), October 11, 2017; [Voice of America](#), May 20, 2016; [Reuters](#), June 29, 2018).

One of MBZUAI's founding board members, Andrew Chi-Chih Yao (姚期智), current head of CollegeAI at Tsinghua University, also has links to the PRC government. In 2005, Beijing presented him with the Chinese Government Friendship Award, which SAFEA awards to "commend foreign experts who have made outstanding contributions to China's reform and development" ([Institute for Interdisciplinary Information Sciences, Tsinghua University](#), October 14, 2005; [Australian Strategic Policy Institute \[ASPI\]](#), August 20, 2020).

**Table 1: MBZUAI Personnel With Potential Connections to PRC Technology Transfer**

Name	Leadership position at MBZUAI	Potential technology transfer connection
Eric Xing	President	“Zhongguancun Overseas Strategic Scientist” by the head of Beijing Talent Work Leading Group
Shao Ling	Founding member and former Executive Vice President and Provost	Attended the event “hundreds overseas experts visit to Guangdong” hosted by the Guangdong Bureau of Foreign Experts Affairs
Min Wanli	Former advisory board	Zhejiang Province Distinguished Expert for Overseas High-Level Talent in 2014; Member of the advisory committee of the next-generation AI strategy under China's Ministry of Science and Technology in 2018; Zhejiang provincial “Thousand Talents Plan” expert.
Lee Kai-Fu	Trustee	Pronounced a “40 Chinese Returned Overseas Students in 40 Years of Reform and Opening-up” honoree by united front-affiliated organizations; board member of the Chinese Academy of Science and Technology for Development’s National High-level Think Tank, which is directly affiliated with MOST
Andrew Chi-Chih Yao	Founding board member	2005 Chinese Government Friendship Award from the State Administration of Foreign Experts Affairs.
Xiao Peng	Trustee	(See <a href="#">Select Committee on the CCP</a> , January 9)
Daniela Rus	Trustee	Honorary Professor, Shanghai Jiao Tong University ( <a href="#">John Hopcroft Center for Computer Science</a> , June 30, 2020)
Anil Kumar Jain	Trustee	Foreign member of the Chinese Academy of Sciences ( <a href="#">Academic Divisions of the Chinese Academy of Sciences</a> , accessed August 5)
Michael Brady	Trustee	Honorary Professor, Central South University ( <a href="#">Central South University</a> , October 27, 2010)

(Source: Author research)

Kai-Fu Lee (李开复), Chairman and CEO of Sinovation Ventures, is also an MBZUAI trustee. Lee has been recognized as one of “40 Chinese Returned Overseas Students in 40 Years of Reform and Opening-up” by united front-affiliated organizations, which are central to illicit technology transfer efforts in the PRC ([Global Times](#), December 22, 2018; [ASPI](#), June 9, 2020). In August 2019, Lee became a board member of the Chinese Academy of Science and Technology for Development’s National High-level Think Tank (中国科学

技术发展战略研究院国家高端智库), which is directly affiliated with the PRC Ministry Of Science and Technology (MOST). MOST is a member of the Central Leading Group on Talent Work that has highlighted returnee scientists as targets for knowledge and technology transfer ([ZGC Forum](#), [Chinese Academy of Science and Technology for Development](#), accessed August 7; [State Council](#), November 7, 2017; [MOST](#), October 12, 2021).

Min Wanli (闵万里), who sat on MBZUAI's advisory board until at least November 2022, has similar connections. In 2014, he was recognized as a Zhejiang Province Distinguished Expert for Overseas High-Level Talent; in 2018 he was appointed to the advisory committee of the next-generation AI strategy under MOST; and in 2019 he was selected as a Zhejiang provincial "Thousand Talents Plan" expert ([MBZUAI](#), Accessed November 11, 2022; [Sohu](#), November 27, 2023; [Zhejiang Haibang Investment](#), April 11, 2019).

### **Huawei, Other PRC Entities Collaborating With MBZUAI**

Beyond the people involved with the university, MBZUAI has also built relationships and collaborated with PRC companies and institutions. In March 2023, it signed a five-year research and development cooperation agreement with Beijing Infinite Brain Technology Company (无疆科技; IBT) to establish a joint research laboratory that develops digital therapeutic products for human brain health by advancing and optimizing AI technology ([IBT](#), March 24, 2023). IBT was co-founded by Xue Gui (薛贵), a Changjiang Scholar chair professor in the National Key Laboratory of Cognitive Neuroscience and Learning at Beijing Normal University (BNU) ([IBT](#), January 20, 2023). In the same month, MBZUAI established a strategic partnership with BioMap (百图生科) to create the first biocomputing innovation research laboratory in the Middle East ([China Council for the Promotion of International Trade Beijing Sub-council](#), March 9, 2023). BioMap was established by Baidu CEO Robin Li (李彦宏), who has been a member of the Chinese People's Political Consultative Conference (CPPCC) and the vice chair of the All-China Federation of Industry and Commerce (ACFIC), both of which are part of the CCP's united front system ([ACFIC](#), May 22, 2020).

MBZUAI also works with PRC tech giants with strong government links. For example, Huawei has supported individuals with affiliations to MBZUAI and provided them with GPU computing services for research (MBZUAI, [September 1, 2022](#); [January 1, 2023](#); [July 23, 2023](#)). The university has also connected its students with Huawei through the Student Opportunities Fair ([MBZUAI](#), March 22, 2022). Both MBZUAI and Huawei are part of the National Program for Coders established by the UAE government that, according to the UAE's Minister of State for Artificial Intelligence, Digital Economy and Remote Work Applications Omar Sultan Al Olama, "activates the global public and private partnerships within the framework of the program" ([MBZUAI](#), July 15, 2021).

### **Accessing US AI Technologies**

MBZUAI has been able to access AI technologies from US companies. According to its website, the MBZUAI campus is "furnished with top-of-the-line GPU facilities and has access to more than 800 NVIDIA GPUs,"

including 400 A100 chips banned by the United States in October 2022 ([MBZUAI](#), Accessed August 6; [US Security and Exchange Commission](#), October 17, 2023). In October 2022, Texas-based Hewlett Packard Enterprise announced that it is building a new supercomputer for MBZUAI to enhance the university's ability to run complex AI models ([MBZUAI](#), October 12, 2022).

MBZUAI has been seeking to establish strategic partnerships with leading AI institutions globally, but especially those in the United States. In May 2022, MBZUAI signed a Memorandum of Understanding with IBM to establish an AI Center of Excellence. Under the MoU, IBM has provided training and technology, including IBM tools, software, courseware, and cloud accounts, to support the university's aim of becoming a global leader in AI research and applications ([IBM](#), May 25, 2022). The center was officially launched in January 2023 to develop carbon neutral solutions to existing energy supplies and improve natural language processing for Arabic dialects ([IBM](#), January 18, 2023). In November 2023, the university worked with IBM to apply the company's geospatial foundation model to understand the urban environment in Abu Dhabi ([IBM](#), November 30, 2023). MBZUAI is also a member of the AI Alliance, a group launched by IBM and Meta in December 2023. According to a Meta blog post, the alliance "supports open innovation and open science in AI" ([Meta](#), December 4, 2023).

US government funding is also supporting the President of MBZUAI. In January this year, a research project titled "Concept-centric Representation, Learning, Reasoning, and Interaction" received a \$4 million grant from the US Department of Defense and intelligence community on AI collaboration in defense ([UC San Diego](#), January 24). Eric Xing, who is the president of MBZUAI and concurrently a professor at US-based Carnegie Mellon University, is a co-investigator on the project ([CMU](#), last accessed August 15). Other partners of the university include Meta, Amazon, the University of Michigan Ann Arbor, the Center for the Theoretical Foundations of Learning, Inference, Information, Intelligence, Mathematics and Microeconomics at UC Berkeley (CLIMB), Cerebras System, CMU, Stanford, and New York University (NYU) ([MBZUAI](#), May 6; [MBZUAI](#), July 15, 2021; [CLIMB](#), Accessed August 8; [MBZUAI](#), June 22, 2023; [Cerebras](#), August 30, 2023; [NYU Abu Dhabi](#), September 29, 2022).

## **Conclusion**

Collaboration between the PRC and the UAE in AI, exemplified by G42 and MBZUAI, form part of the PRC's strategy to achieve its ambitions of becoming a global leader in AI. This is reinforced by the projects' various connections to the CCP, PRC organizations engaged in technology transfer, and state-funded entities in the PRC that support its Military-Civil Fusion Development Strategy.

The involvement of such entities in such close proximity to leading US technology companies, collaborating with US universities, and benefitting not just from US government funding but also from chips that violate current US export controls, suggest that more scrutiny is required and more action taken to ensure US national security and preferences are being maintained. More broadly, it suggests that the PRC is increasingly adept at deploying resources in third countries to circumvent US restrictions and achieve its ends. Given the extensive partnerships MBZUAI has established with leading US technology companies, it is

crucial for the United States to closely monitor the university's development and scrutinize the relationships it builds to safeguard its technological assets.

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## Government Cracks Down on SOEs but Runs Risks

*by Ann Listerud*



The main gate of the Supreme People's Court in Beijing. (Source: [Wikipedia](#))

### Executive Summary:

- The Supreme People's Court and Central Government Regulators have put State-owned Enterprises (SOEs) on notice for fraudulent accounting practices, releasing five case studies to name and shame bad actors.
- The Central government made clear SOE fraud carries both economic risk and reputational risk to government legitimacy, as SOEs are instrumental to the implementation of Beijing's ambitious policy agenda and are perceived as extensions of the state.
- The anticorruption drive could have negative externalities. The government is trying to engineer a shift to a new economic model while faced with soaring unemployment and straitened economic circumstances. SOEs are both major employers nationwide and pivotal to the country's economic development.
- SOEs historically have enjoyed special privileges and lack of oversight, but their protected status has meant that reliable data on firm malpractice is difficult to come by, particularly at the provincial level and below

On June 26 this year, the Supreme People's Court (SPC) of the People's Republic of China (PRC) issued a set of five case studies of corporate fraud that the court described as commonplace and a high priority for regulators to investigate and prosecute ([STCN](#), June 27). In the opening paragraphs, the SPC says that these fraudulent cases appear in both private and state-owned enterprises, signaling that even companies owned and managed by local governments are not exempt from prosecution.

Three days later, the PRC's financial regulatory bodies issued a co-signed guiding opinion on reducing financial fraud and implementing more comprehensive punishment for those caught in the act ([MEE](#), July 17). Once again, state-owned enterprises (SOEs) are called out alongside privately owned ones. The opinion was signed by the China Securities Regulatory Commission (CSRC), the Ministry of Public Security, the Ministry of Finance, the People's Bank of China, the Financial Regulatory Bureau, and the State-owned Assets Supervision and Administration Commission. On July 17, the State Council put its seal of approval on the statement and reissued it alongside a call for all provinces, ministries, commissions, and institutions that it oversees to carry out the contents of these opinions.

Amid coverage of attempts by Xi Jinping's administration to tackle corruption within the People's Liberation Army (PLA) and the implications this could have for the PRC's military ambitions, this latest dive into institutional corruption aimed at SOEs has received less international coverage. Though the latter does not directly affect the country's military capabilities, the anticorruption campaign will have a huge effect on civil society and has long term implications for the PRC's domestic stability and its prospects for research and development.

### **Fraud Frequent Among Regional SOEs**

SOEs play a large role in the PRC's domestic economy, but their administration is highly regionalized. Parallel to the rest of the country's civilian government, SOEs fall under different administrative levels, with the largest and most powerful controlled by the central government and others managed by provincial, city, or township governments. Today, the central SOEs are multinational conglomerates and international contenders in their respective sectors. However, the vast majority of SOEs throughout the rest of the country are considerably smaller.

Regional SOEs do not have nationwide sway in the way that Central SOEs do, but they do enjoy considerable power and influence within the regions in which they reside. For example, in the late 2000s, many SOEs tried to manage their debt by making debt-equity swaps with the PRC's Asset Management Companies (AMCs). This is a typical practice that offers the purchaser three options: They can either re-sell the debt to someone else, liquidate the company, or hold on to the equity long-term. At the time, however, local governments did not allow AMCs to take either of the first two options. This left only the third, which conveniently required the least change to SOEs themselves while providing enterprises with the greatest political and commercial shield ([KK News](#), July 22, 2018).

Corruption within the PRC has never been confined to the government sector. Fighting commercial fraud is a longstanding goal of Xi Jinping's government. The national social credit score system, best known

internationally for cases where people have received boosts and demerits based on political actions, was originally created to make for a healthier financial credit system by emulating credit score systems commonly practiced in the United States or other developed economies. Additionally, as part of a push by PRC regulators to cut down on local corruption and fraud, corporate ownership records were made publicly available. [1]

The probability that regional SOEs also engage in fraud is fairly high, but given their political backing and protections it is difficult to get reliable estimates. Now that the government has declared its new focus on prosecuting SOE fraud, case studies are coming out of the woodwork and being published by the media.

### **SOE Fraud Involves Balance Sheet Manipulation, Fabrication**

Based on case studies published this year, SOE fraud is very straightforward. Companies declare their costs to be significantly lower and their income to be significantly higher than they really are, allowing them to report higher profits.

Of the five cases published by the SPC, one case centers on an unnamed municipal state-owned investment company in Fujian province and the auditing firm they hired in 2020 to evaluate the price of a building the investment company counted as an asset ([STCN](#), June 27). The initial appraisal priced the building at 60 million RMB (\$8.36mn), but the SOE insisted the building instead be priced at 80mn RMB (\$11.1mn). The final appraisal report of the property listed the price at 78.8mn RMB (\$11.0mn). In 2021, the local government expropriated the property to cover debts accumulated by the SOE with the assumption the asset was worth the reported appraised price. It was only after investigation that the local government office found the falsified appraisal and discovered they were 20mn RMB (\$2.79mn) short of where they expected.

The government of Guangdong Province published its own case study centered on state-owned fiber optics company Shenzhen SDG DONZHI Technology (SDGI; 特发东智) ([Sohu](#), May 13). The company was found to have falsified its annual reported revenue for five consecutive years between 2015 and 2019 ([Eastmoney](#), May 12). In April 2015, SDGI acquired a subsidiary called Dongzhi Technologies (东志科技). That same year, Dongzhi Technologies' leadership signed an internal agreement that the net profit for Dongzhi between 2015 and 2017 would be at least 143mn RMB (\$19.9m) and that between 2018 and 2020, it would be at least 58mn RMB (\$8.08mn). The company accomplished this by forging sale orders, underreporting costs, and moving the recorded date of purchases and sales based on when it would look best on their balance sheets. Dongzhi's falsified profits translated into a bump in the total profits of parent company SDGI to the tune of 91.7mn RMB (\$12.8mn) in 2016, accounting for 34 percent of SDGI's total profits that year.

Another case study involved Shanghai-based engineering company SIIC-LongChuang Smartech (上海上实龙创智能科技). SIIC-LongChuang generated fake business contracts to inflate its revenue ([STCN](#), June 4). These documents included claims that it was participating in trade related to Military-Civil Fusion, something that turned out to be entirely fictional ([info.10000link](#), May 6). Between 2016 and 2021, the company included



fake revenue amounting to 4.72 billion RMB (\$650mn) and a profit of 614mn RMB (\$84.6mn) in their annual reports. As with Dongzhi Technologies, these reports had ripple effects beyond SIIC itself. In 2017, the annual reports for SIIC's parent company, state-owned Shanghai Industrial Development (上海实业发展), included cumulative profits, of which SIIC's false reports constituted 18.3 percent of overall profits.

### **Tackling SOE Fraud**

Regulators are not taking the issue of SOE fraud lightly and are responding with punitive measures. CSRC has amended commercial fraud laws to increase penalties against both corporate entities and individual persons ([CSRC](#), July 5). Previously, corporate fraud convictions consisted of fines for entities of 600,000 RMB (\$83,600), and individual perpetrators could be fined 300,000 RMB (\$41,800) and imprisoned for 3 years. With the new changes, fines against entities have been raised to 10mn RMB (\$1.39mn), and individuals face fines of 5mn RMB (\$700,000) and prison terms of up to 10 years. Additionally, intermediaries who issue falsified certificates, such as the auditors in the Fujian case, can be sentenced to 10 years in prison.

These laws apply equally to privately held entities, but regulators view SOEs as posing unique risks to the economy. When describing the case of Dongzhi Technologies, the Guangdong government characterized SOE fraud as follows ([Sohu](#), May 13):

“When facing operating pressure, some companies will choose to cover up the true operating conditions through fraud. However, this behavior is tantamount to drinking poison to quench thirst. Not only can it not solve the fundamental problem, but it will increase the company's operating risks and eventually fall into a deeper predicament. ... Among state-owned listed companies, financial fraud is even more related to the image of the country. Once it loses the trust of the people, it will inevitably weaken the public's trust in state-owned enterprises (一些公司在面临经营压力时，会选择通过财务造假来掩盖真实的经营状况。然而，这种行为无异于饮鸩止渴，不仅不能解决根本问题，反而会加剧公司的经营风险，最终陷入更深的困境 ... 在国有上市公司中，财务造假更是关乎国家形象，一旦失信于民，必将削弱公众对国有企业的信任).”

For regulators—and for Xi's administration more broadly—SOEs are seen as extensions of the state, and therefore, their actions impact the government's perceptions. In this way, SOE corruption is more than simply an issue of commercial malpractice; it calls into question the regime's competence and legitimacy.

### **Wider Implications**

Regional SOEs in the PRC are used to enjoying unique privileges due to their position as enterprises owned and controlled by local governments. Now, as the State Council names and shames local SOEs and provides instructions to prosecute similar cases to those it highlights, it is possible that SOEs will no longer be as indestructible as they were in the past.

Cleaning house serves Beijing's interests well. National-level policymakers are aware and accept that many regional SOEs are inefficient and draw away fiscal resources that could have greater impact elsewhere. More importantly, Beijing depends on regional governments and enterprises to report on what is happening locally. Without reliable reporting, the central government is left blind when formulating policy. Beijing is also acutely aware of this, as it has previously had to deal with the fallout from policy mistakes borne in part out of distorted reporting from local governments. [2]

Investigating balance sheets is a double-edged sword, however, and regulators will have to be mindful of the negative externalities of this anticorruption drive. Executives at SOEs sit in cross-functional positions, somewhere between corporate stewards and career civil servants, and both the individuals and the enterprises often have close relationships within government. Moreover, SOEs are usually a source of long-term stable employment for non-executives. Depending on how wide a net regulators cast, these investigations could affect the careers of many at a time when stable employment is hard to find. This, in turn, could risk stimulating social unrest.

Another risk is that the PRC's long-term research and development (R&D) goals could be affected. Regional SOEs are an important channel through which local governments pursue national scientific development goals, both directly through research carried out by SOEs and indirectly through state-owned investment companies. Budgets for R&D could disappear once true revenue figures come to light and difficult cuts have to be made. Even for companies that have stayed on the straight and narrow, there will be greater pressure to be conservative with budgets and less flexibility for researchers to modify projects to reflect unforeseen opportunities or complications.

## **Conclusion**

Xi Jinping's administration has gone after corruption in the military. Now, it is going after fraud in SOEs. How this gamble will play out in the long term remains to be seen. What is clear is that another pocket of the PRC's governing authority and civil society that thought it could operate under the radar is now under the microscope.

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## **Notes**

[1] Corporate ownership records have since become the basis of several foreign policy research consulting firms' market research and open-source databases.

[2] The Great Leap Forward during the Mao era constitutes the most egregious and indelible such example.



## Taiwan's Energy Policy at Odds With Economic Needs

*By Matthew Fulco*



Lungmen Nuclear Power Plant in Fulong Beach, Gongliao, New Taipei. (Source: [Wikipedia](#))

### Executive Summary:

- Taiwan's president Lai Ching-te could be open to restarting the island's nuclear power program, with Premier Cho Jung-tai suggesting the Legislative Yuan could discuss the topic, and pro-nuclear business executive Tung Tzu-hsien being appointed to a newly established National Climate Change Committee.
- Taiwan's manufacturing industry—its most economically and strategically important sector—is unusually energy intensive. Constantly increasing demand for electricity is set to force tradeoffs unless the island's energy policy is reformed.
- Currently, nuclear power generation in Taiwan is set to fall to zero by the middle of 2025 without policy intervention, following the winding down of the island's last remaining power plant as a result of the previous administration's "nuclear-free homeland" policy.
- A lack of alternatives to nuclear are leading to problems with the island's energy mix. On the one hand, an overreliance on fossil fuels has led to heavily polluted cities; on the other, the solar and wind sectors have undershot expectations and are increasingly not seen as viable, with several Japanese firms exiting the market last year.

On July 27, Taiwan shut down its second-to-last operational nuclear reactor, signaling the determination of the ruling Democratic Progressive Party (DPP) to press forward with its pledge to eliminate the use of atomic energy despite the policy's economic risks ([United Daily News \[UDN\]](#), July 27). In 2023, nuclear power accounted for about 6.3 percent of the island's energy use, down from 12 percent in 2016 at the beginning of former President Tsai Ing-wen's (蔡英文) first term ([Ministry of Economic Affairs](#), 2023). It is set to fall to zero with the scheduled closure of Taiwan's last operational nuclear reactor, located in the southern county of Pingtung, in May 2025.

While Taiwan has a long history of anti-nuclear activism, 59 percent of voters in a November 2018 referendum rejected phasing out atomic energy. Min Lee (李敏), a nuclear engineering professor at Taiwan's National Tsing Hua University, said at the time that the island democracy "cannot make it without nuclear power" because the alternative would be to rely more heavily on fossil fuels, which are both polluting and vulnerable to supply shocks. He questioned whether Taiwan had adequate land to install significant solar and wind energy capacity ([Science.org](#), November 27, 2018).

The Tsai administration, however, ignored the results of the referendum and held another in late 2021. This time, voters aligned with the administration, rejecting the proposal to restart work on Taiwan's fourth nuclear power plant by a margin of about 53 percent to 47 percent ([The Taipei Times](#), December 19, 2021). At the same time, the Tsai administration doubled down on energy-intensive manufacturing. With the outbreak of the trade war between the United States and the People's Republic of China (PRC) in 2018, Taiwan saw an opportunity to bring home manufacturers that had previously moved across the Strait to take advantage of lower labor costs and tax breaks but now sought to avoid the impact of US tariffs. This "reshoring" policy has generated nearly US\$38 billion in investments ([National Development Council](#), August 9) but has coincided with growing strain on Taiwan's electricity grid. Northern Taiwan had an electricity shortfall of about 20 billion kilowatt (KW) hours in 2023 ([TYE News](#), August 16). The grid will likely be tested further as Taiwan's semiconductor industry ramps up production of power-hungry artificial intelligence (AI) chips.

President Lai Ching-te (賴清德), who served as Tsai's vice president for four years (2016–2020), has promised to carry out her "nuclear-free homeland 2025 (2025 非核家園)" policy but is governing without the majority she enjoyed in Taiwan's parliament, the Legislative Yuan. The main opposition party, the Kuomintang (KMT), as well as the smaller Taiwan People's Party (TPP), are both pressing Lai to change course on the nuclear-free goal ([Central News Agency](#), June 30). While he has not yet changed course, it is unclear if Taiwan can phase out atomic energy without facing a substantial electricity shortage. Doing so might deal a blow to the island's energy security, which faces significant challenges (see [China Brief](#), March 29).

### **Renewable Energy Shortfall**

Taiwan's electric power situation has become increasingly precarious in part because the government set an extremely ambitious renewable energy target that it has not been able to meet. The Tsai administration pledged in 2016 that renewables would account for 20 percent of the energy mix by 2025, but the total only

reached 9.5 percent at the end of 2023. By 2025, it is predicted instead to reach just 15.1 percent ([Risk Society and Policy Research Center](#), March 25, 2023). Fossil fuels, meanwhile, made up an even larger portion of Taiwan's total generation in 2023 than they had in 2016: 81.7 percent compared to 77.4 percent ([Ministry of Economic Affairs](#), July 4). The American Chamber of Commerce in Taiwan, the largest foreign business association on the island, notes that "the rate at which power produced from renewables is growing is falling behind set goals," in its 2024 White Paper ([AmCham Taiwan](#), June 6).

Burdensome regulations for the offshore wind industry are a key part of the problem, given the fact that wind and solar power represent the main two viable clean energy alternatives in Taiwan. For instance, Taiwan currently requires offshore wind developers to procure 70 percent of their equipment from local manufacturers, which raises the cost of projects significantly. Taiwan's CommonWealth Magazine cited a wind power industry consultant who estimated that Taiwan's wind farms cost 2.5 times more than equivalent projects in Europe ([CommonWealth Magazine](#), April 17). Purvin Patel, Asia-Pacific president for the Danish offshore wind turbine maker Vestas, told CommonWealth that such localization requirements would inflate electricity prices and consequently deter buyers, causing most of the island's wind farms to be financially unviable. "Europe took nearly 30 years to naturally develop a global offshore wind supply chain, whereas Taiwan aims to catch up within a decade, with insufficient scale to reduce costs," he said. In a pessimistic scenario, none of Taiwan's planned Phase 3 offshore wind farms, totaling 6 gigawatts (GW) across 18 sites, may be realized ([CommonWealth](#), April 17).

Amid these travails, several Japanese companies exited Taiwan's offshore wind sector in 2023. Shikoku Electric Power Co. pulled out of the Yunlin Offshore Wind Project, citing delays threatening its profitability. Electricity generator JERA Co., meanwhile, completed the sale of its stake in Formosa 3, another Taiwanese offshore wind project, in June 2023. Japan's Eneos Holdings has also cast doubt on its willingness to remain involved in the Yunlin project ([UDN](#), November 17, 2023).

Taiwan's progress in solar energy has been marginally better. As of November 2023, Taiwan had 12GW of solar capacity, which would require that it add about 4 GW per year to meet the 20GW goal by 2025. Market intelligence firm S&P Global estimates that the target is ambitious, however. Most of Taiwan's rooftop capacities suitable for solar panel installation have already been developed, while solar photovoltaic (PV) projects often overlap with land resources used by Taiwan's agricultural and fishery sectors ([S&P Global](#), February 1). The lack of space is a difficult hurdle to overcome in what is one of the most densely populated countries in the world. However, there remains little direction from the top of government. A report from May 2022 lamented the lack of a white paper on spatial development that would provide direction to help deal with this problem ([TWReporter](#), May 25, 2022).

### **Power Crunch**

In recent years, Taiwan has struggled with periodic blackouts that highlight weaknesses in its electrical grid infrastructure. A March 2022 blackout caused 12 hours of power outages across the island, affecting 5.5 million households. The technology hardware, petrochemical, and steel sectors all suffered costly

interruptions to their operations. A subsequent government investigation found that negligence on the part of state-run Taiwan Power Co (Taipower) workers caused the blackout ([The Control Yuan](#), July 5, 2023).

In April 2024, Taipower president Wang Yao-ting (王耀庭) resigned from his position after the company suffered heavy criticism over a series of a power outages in the northern city of Taoyuan. However, Premier Chen Chien-jen (陳建仁) persuaded Wang to remain in his post. At a subsequent press conference, Wang said that Taipower had been used “as a political tool” and defended the company’s record, noting that the number of Taiwan’s annual power outages had fallen about 70 percent in the past decade ([Central News Agency \[CNA\]](#), April 22). However, Taipower has again come under fire following the government’s August 10 announcement that Taiwan has stopped approving data centers larger than 5MW north of Taoyuan due to inadequate power supply in the region. The Ministry of Economic Affairs emphasized in a Facebook post that if northern Taiwan “hopes to win over major manufacturers of AI chips, the best way is to support the construction of new power plants and grids” ([Facebook/Ministry of Economic Affairs](#), August 10).

Taiwan’s Energy Administration estimates the island democracy’s electricity demand will grow by about 2.5 percent annually through 2028. A key driver of rising demand will be the power needs of AI technologies, which are expected to jump eightfold from 240 MW in 2023 to 2.24 GW in 2028 ([World Journal](#), July 16). These estimates broadly align with an international consensus that AI will consume an increasingly large share of electricity resources. The investment bank Goldman Sachs estimates that data center power demand globally will grow 160 percent by 2030 as the use of AI applications rises. The bank notes that data centers currently consume 1–2 percent of overall power, but predicts that this will grow to 3–4 percent by the end of the decade, with AI accounting for nearly a fifth of data center power demand ([Goldman Sachs](#), May 14).

### **Lai Open to Nuclear Option**

There are signs that Lai may be more amenable to the idea of maintaining nuclear power than his predecessor, even if his administration has yet to reverse its stance on nuclear power. Lai is not personally tied to the policy in the same way Tsai Ing-wen was. Tsai campaigned on a promise to make Taiwan nuclear free by 2025. In contrast, during Lai’s campaign in October 2023, he said that if Taiwanese people’s concerns about nuclear safety and disposal of nuclear waste can be properly addressed, he believed that “society will accept nuclear energy” ([CNA](#), October 19, 2023).

Lai appointed a pro-nuclear business executive, deputy Pegatron Group chairman Tung Tzu-hsien (童子賢; T.H. Tung) to be a deputy convener of a newly established National Climate Change Committee ([Office of the President](#), July 6). Tung, whose company is one of Taiwan’s largest contract electronics manufacturers, advocates an energy mix in which both renewables and nuclear power each have a 30 percent share, in contrast to the Taiwanese government’s stated goal of clean energy accounting for 60–70 percent of energy use by 2050. In June, Tung noted that Taiwan’s nuclear power plants have performed well in their 40 years of operation, with strong safety records—including high rankings in international safety assessments—and low costs. He warned that, given the limitations Taiwan faces in terms of solar and wind capacity, eliminating

atomic power would lead to greater fossil fuel use, which would both raise electricity costs and increase air pollution ([Yahoo News Taiwan](#), July 12).

The Chinese National Federation of Industries (CNFI), a major business association in Taiwan, is also urging the government to rethink its nuclear-free goal. Its chairman, Pan Chun-jung (潘俊榮), noted in May that France, Japan, and South Korea all use nuclear power and that the G7 nations recognize it as a zero-emission, low-cost energy source ([Commercial Times](#), May 8). South Korea, which is building three new reactors, estimates that by 2038 atomic energy could account for more than 35 percent of its total power generation ([KEEI](#), May 31). Japan, meanwhile, reportedly plans to allow utilities to build new nuclear reactors on condition they decommission the same number of aging reactors elsewhere ([Asahi Shimbun](#), June 16).

In the clearest sign yet Lai's administration may be reconsidering its aversion to nuclear power, Premier Cho Jung-tai (卓榮泰) told *The Liberty Times*—Taiwan's largest daily—on August 1 that the Legislative Yuan could discuss with Taiwanese society whether there was a place for nuclear power in the island's future. He noted that the issue remains polarized, but if nuclear energy were safe and there were no problems with its waste, "everyone might have a new perspective" ([The Liberty Times](#), August 1).

### **Conclusion**

Taiwan's ruling Democratic Progressive Party has long opposed nuclear energy and sought to completely replace it with solar and wind power. However, the renewable energy drive of the past eight years has fallen far short of expectations, with little prospects of scaling significantly in the coming years. The result has been greater use of both natural gas and coal, with negative implications for Taiwan's environment and efforts to tackle climate change. The southwestern Taiwanese cities of Changhua, Tainan, Pingtung, Kaohsiung, and Chiayi were all named in March among the top 100 most polluted cities globally by Swiss air quality tracking company IQAir ([Yahoo News Taiwan](#), March 20).

At the same time, Taiwan remains committed to an economic model heavily dependent on energy-intensive manufacturing. The manufacturing sector accounts for 38 percent of GDP, unusually high for an advanced economy ([US International Trade Commission](#), May 30). In South Korea, that figure is 25.5 percent, and in Japan 19 percent ([US International Trade Administration](#), December 5, 2023; [World Bank Group](#), accessed August 16). Those manufacturers are now pressing the Lai administration to change course on nuclear power because they do not believe Taiwan's current energy policy will ensure stable electricity supply for their business operations in the future. They can be reasonably sure of strong public support given the results of Taiwan's two referenda on nuclear energy, though it is unclear if they will have the support of the majority. While Lai faces a political risk if he jettisons the nuclear-free policy Tsai Ing-wen championed, the cost of doubling down on what has become an unsuccessful energy policy could bode worse for both Taiwan's economic well-being and his electoral prospects in 2028. For these reasons, an adjustment of the DPP's "nuclear-free homeland" policy looks increasingly possible.

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**Survey: How Do Elite Chinese Students Feel About the Risks of AI?**

*by Nick Corvino and Boshen Li*



A panel discussion on AI risk. (Source: [Wikimedia](#))

**Executive Summary:**

In April 2024, the authors surveyed 510 students from Tsinghua University and 518 students from Peking University—the PRC’s two preeminent institutions—about their views on the risks of artificial intelligence (AI). The key findings are as follows:

- **Students are more optimistic about the benefits of artificial intelligence (AI) than concerned about the harms.** 80 percent of respondents agreed or strongly agreed with the statement that AI will do more good than harm for society, with only 7.5 percent actively believing the harms could outweigh the benefits. This could indicate that the People’s Republic of China (PRC) is one of the most optimistic countries concerning the development of AI.
- **Students strongly believe the government of the PRC should regulate AI.** 85.31 percent of respondents believe AI should be regulated by the government, with only 6 percent actively believing it should not. This contrasts with trends seen in other countries, where there is typically a positive correlation between optimism about AI and calls for minimizing regulation. The strong support for regulation in the PRC, even as optimism about AI remains high, suggests a distinct perspective on the role of government oversight in the PRC context.
- **Students ranked AI lowest among all possible existential threats to humanity.** When asked about the most likely causes of human extinction, misaligned artificial intelligence received the lowest score. Nuclear war, natural disaster, climate change, and pandemics all proved more concerning for students.
- **Students lean toward cooperation between the United States and the PRC as necessary for the safe and responsible development of AI.** 60.7 percent of respondents believe AI will not be developed safely without cooperation between China and the United States, with 25.68 percent believing it will develop safely no matter the level of cooperation. China and the United States are arguably the two most important countries in shaping the global development of AI, but currently face geopolitical tensions.

Transformative artificial intelligence (AI) poses many potential benefits for humanity's future, but it also poses many risks. The People's Republic of China (PRC) will likely play a prominent role in shaping this trajectory. As the recent decision (决定) document from the Third Plenum meetings in July made clear, AI is one of eight technologies that the Chinese Communist Party (CCP) leadership sees as critical for achieving "Chinese-style modernization (中国式现代化)," and is central to the strategy of centering the country's economic future around breakthroughs in frontier science ([People's Daily](#), July 22). Beyond the level of national economic strategy, AI is also seen as crucial for gaining military advantage. AI technology is already being integrated into air defense systems, while large language models (LLMs) are being put to use in Cognitive Domain Operations around the world (*China Brief*, [June 21](#); [September 22, 2023](#)). The PRC also seeks to shape international norms on AI, including on AI risks. In October 2023, Xi Jinping announced a "Global AI Governance Initiative (全球人工智能治理倡议)" ([CAC](#), October 18, 2023).

Despite the potential revolutionary significance of AI, for either good or ill, and its increasing importance in the eyes of the CCP leadership, publicly accessible survey data on what people in the PRC think about this technology is rare. To gain insights into this question, the authors conducted a survey to assess how students at Tsinghua University and Peking University (PKU) view the frontier risks of developing AI. Tsinghua and PKU are the two preeminent academic institutions in the PRC, many of whose graduates will be very influential in shaping the country's future. These students may also be some of China's most informed citizens on the societal implications of AI, with both schools housing prominent generative AI and safe AI development programs.

### **Note on Methodology**

The survey collected 1028 valid responses, with 49.61 percent of the sample population's respondents attending Peking University and 50.39 percent attending Tsinghua University. It was modeled after work by YouGov, Monmouth University, The Center for Long-Term Artificial Intelligence (CLAI), The Artificial Intelligence Policy Institute (AIPI), and, most directly, from a poll done by Rethink Priorities. [1]

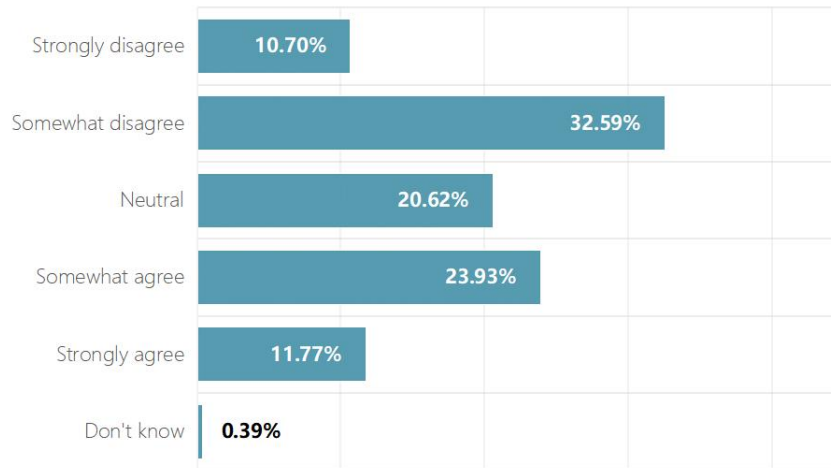
To administer the survey, the authors leveraged the "Treehole (树洞)" online platforms, which are exclusive to each university and can be accessed only by current students. Respondents used their WeChat IDs to receive monetary compensation (a range of 3–20 RMB (\$0.42–\$2.80) per participant, randomly assigned). Respondents were also asked to state their university and detected IP address to mark those outside the two universities as invalid. These measures prevented multiple responses from single accounts and responses from bots.

One key uncertainty, however, is whether the gender demographics of the survey accurately reflect the composition of Tsinghua and PKU. Survey respondents reported a gender breakdown of 59.73 percent male and 40.27 percent female. Neither university publicly discloses its official gender demographics, so definitively comparing the survey demographics to the general population is not possible. Analysis of indirect sources such as departmental announcements, blog posts, and other websites led the authors to conclude that the likely gender ratio is approximately 60 percent male, 40 percent female. Using this as their baseline

probability assumption before conducting the survey, they found that the results aligned with this estimated ratio. As a result, post-stratification of the dataset was not necessary.

### Analysis of Survey Responses

*Question 1: Would you support pausing the development of large-scale AI systems for at least six months worldwide?*



Respondents leaned toward not pausing large-scale AI systems. 43.29 percent disagreed or disagreed strongly with the claim that AI should be paused, while 35.16 percent agreed and 21 percent remained neutral or uncertain.

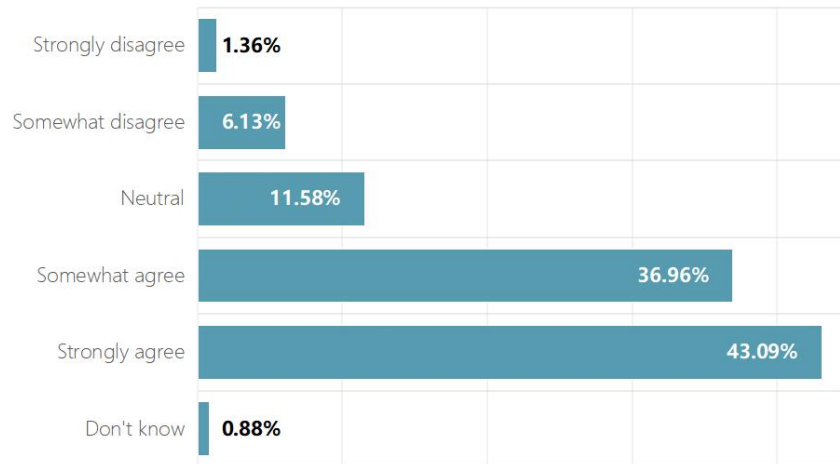
This question was inspired by the open letter issued by the Future of Life Institute in March 2023, and signed by influential figures such as Elon Musk, Steve Wozniak, and Stuart Russell, urging AI labs to suspend development for a minimum of six months to address potential safety concerns ([Future of Life Institute](#), March 22, 2023). [2]

A YouGov poll asked this question to a pool of respondents from the United States. 58–61 percent (depending on framing) supported and 19–23 percent opposed a pause on certain kinds of AI development ([YouGov](#), 2023). Another research institute, Rethink Priorities, replicated the question for US adults, including the Future of Life Institute letter but altering the framing from “>1000” to “some” technology leaders signing it. Their estimates indicated 51 percent of US adults would support a pause, whereas 25 percent would oppose it ([Rethink Priorities](#), May 12, 2023). Both surveys show a stronger desire for pausing AI development than our results.

The Center for Long-Term AI (CLAI), a Beijing-based research organization run by Tsinghua and Chinese Academy of Sciences Professor Zeng Yi (曾毅) asked a similar question to an exclusively Chinese population sample about “pausing giant AI experiments.” 27.4 percent of respondents supported pausing the training of AI systems more powerful than GPT-4 for at least six months, and 5.65 percent supported a six-

month pause on all large AI model research. However, when a less specific question was asked, “Do you support the ethics, safety, and governance framework being mandatory for every large AI model used in social services?” 90.81 percent of participants expressed support.

*Question 2: How much do you agree or disagree with this statement: “AI will do more good than harm for society?”*

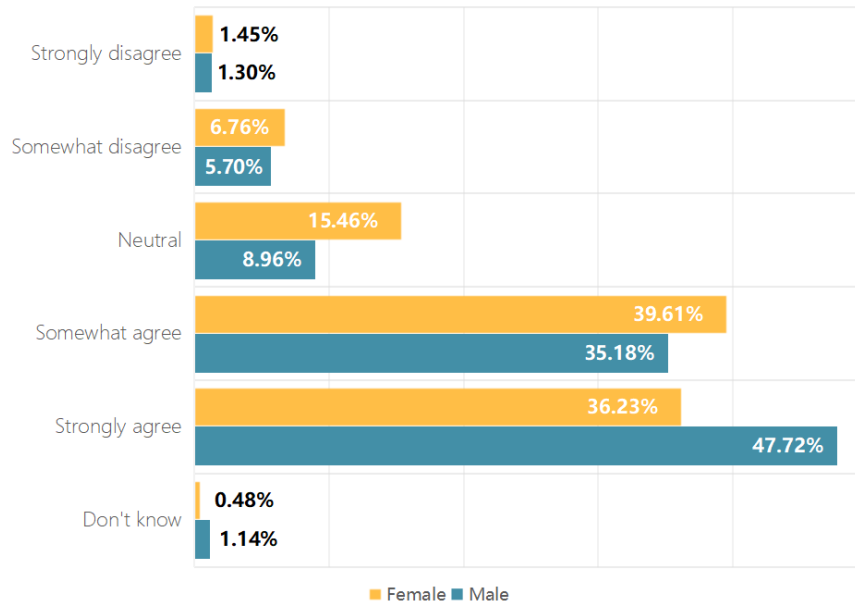


Respondents strongly believed that the benefits of AI outweigh the risks. 80 percent agreed or strongly agreed with the statement that AI will be more beneficial than harmful for society. Only 7.49 percent actively believed the harms could outweigh the benefits, while 12.46 percent remained neutral or uncertain.

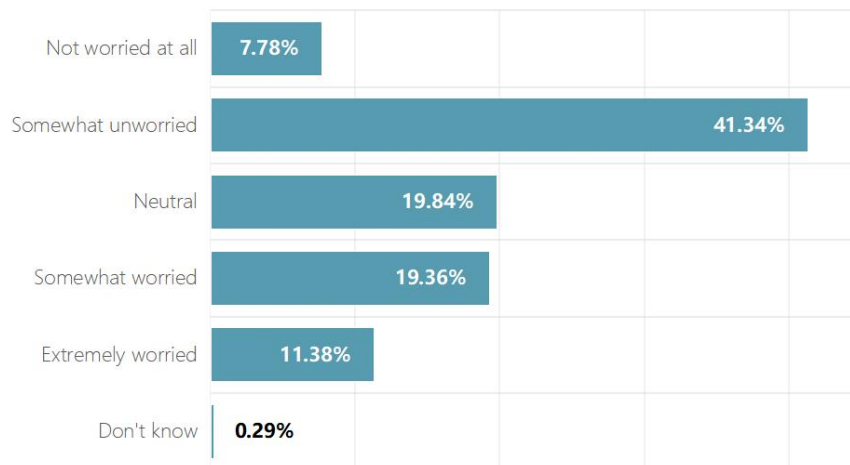
Our results closely align with a 2022 cross-country Ipsos survey where 78 percent of Chinese respondents viewed AI’s benefits as outweighing drawbacks—the most optimistic of all countries polled ([Ipsos](#), January 2022). This sharply contrasts Western sentiment where polls suggest the majority of citizens worry more about transformative AI’s dangers than its upsides. In the Ipsos survey, only 35 percent of US respondents believed AI offers more benefits than harms. Conversely, the PRC has consistently demonstrated itself to be among the most optimistic countries on AI.

Breaking the results down by gender reveals differences in perspectives on this question. Male-identifying students displayed slightly greater optimism about AI’s societal impact compared to their female-identifying counterparts (82.9 percent versus 75.8 percent). This tallies with a 2022 study by Pew Research, showing that women tend to be less optimistic about AI than men ([Pew](#), August 3, 2022).





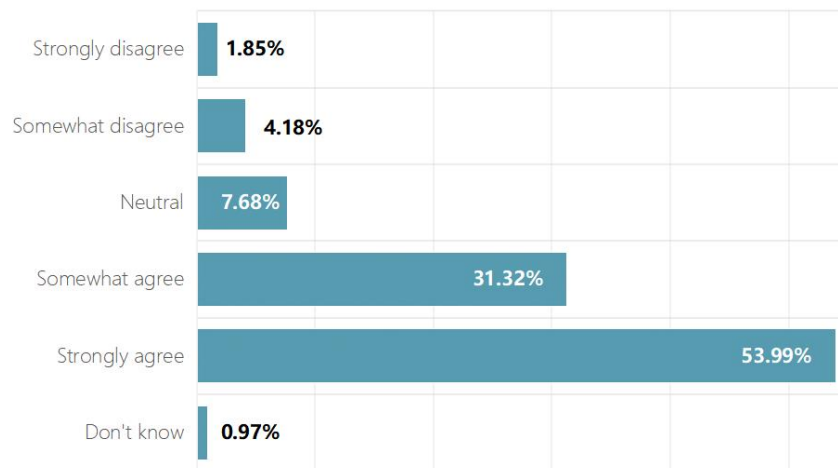
*Question 3: In your daily life, how much do you worry about the effects AI could have on your life broadly?*



Likely owing to their optimism about the benefits of AI, respondents tended to not be worried about the effects of AI in their daily life. 49.12 percent of respondents feel somewhat or not at all worried, while 31.2 percent report concern and 20.13 percent were neutral or uncertain.

The PRC already deploys AI to a high degree. Use cases include surveillance, healthcare, transportation, and education. This context raises the possibility that students' views in the PRC might differ from counterparts in the United States, as the prevalence of AI in daily life is more pronounced. We therefore chose to use the exact wording of the survey of US adults performed by Rethink Priorities (with their permission), which found that the majority (72 percent) of US adults worry little or not at all about the effects of AI. Our data showed a similar trend toward being unconcerned, though not at the high levels of the Rethink Priorities dataset.

Question 4: How much do you agree or disagree with this statement: “AI should be regulated by the Chinese government”?

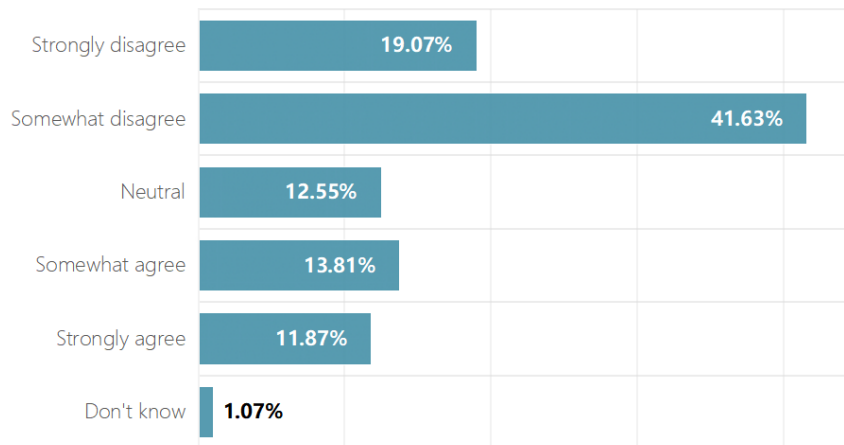


In the survey’s most pronounced result, 85.3 percent of respondents agreed or strongly agreed with the claim that AI should be regulated by the government, with only 6.03 percent disagreeing and 8.65 percent remaining neutral or uncertain.

A Harris-MITRE poll conducted in November 2022 estimated that 82 percent of US adults would support such regulation ([Harris-MITRE](#), February 9, 2023). Meanwhile, a January 2023 poll from Monmouth University estimated that 55 percent of Americans favored having “a federal agency regulate the use of artificial intelligence similar to how the FDA regulates the approval of drugs and medical devices,” with only 41 percent opposed ([Monmouth University](#), February 15, 2023). Using similar question framing, Rethink Priorities estimated that a sizeable majority (70 percent of US adults) would favor federal regulation of AI, with 21 percent opposed ([Rethink Priorities](#), May 12, 2023). We chose not to specify a particular government agency that would oversee AI regulation, as the regulatory landscape in the PRC differs from the US. Even so, our results still reflect a comparably high demand for the government to implement oversight and control measures.

The PRC began regulating AI in 2021 and has been an early leader in developing a detailed governance regime for the technology. It has also supercharged development efforts, providing top labs at firms such as Baidu and Tencent with resources to compete against Western labs such as OpenAI and Anthropic. However, funding for dedicated AI safety research remains weak, perhaps owing to the PRC’s optimism about AI safety. Beijing has yet to make major state investments in safety research through initiatives like National Natural Science Foundation grants or government pilots.

*Question 5: How much do you agree or disagree with this statement: “AI will be developed safely without cooperation between China and the United States”?*

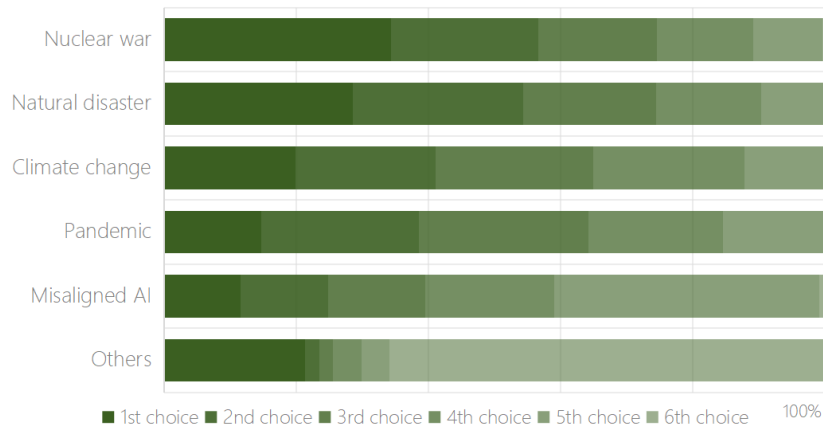


Students believe AI will not be developed safely without cooperation between the United States and the PRC. 60.7 percent of respondents disagreed that AI would develop safely, while 25.68 percent agreed, and 13.62 percent remained neutral or uncertain.

A similar—though narrower—question was put to American voters in a survey conducted by The Artificial Intelligence Policy Institute (AIPI), inquiring whether respondents support the PRC and United States agreeing to ban AI in drone warfare, in which 59 percent supported and only 20 percent did not support ([AIPI](#), November 29, 2023). In contrast, a separate AIPI poll saw 71 percent of US adults, including 69 percent of Democrats and 78 percent of Republicans, disapprove of chip design firm Nvidia selling high-performance chips to the PRC, while just 18 percent approved ([AIPI](#), October 19, 2023).

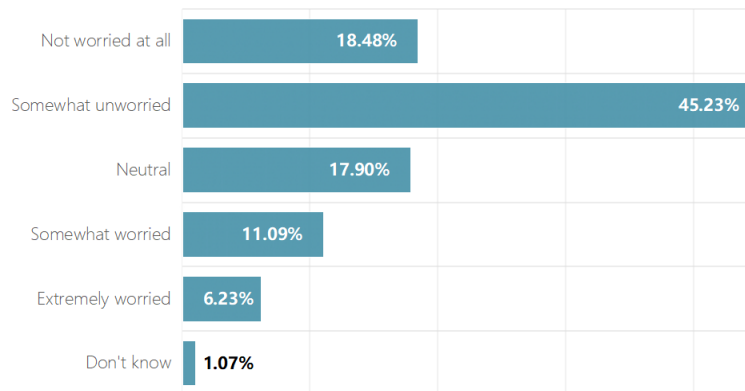
AI has increased in prevalence as a topic in US-PRC diplomacy. It was a major topic in the November 2023 Woodside Summit meeting in San Francisco between PRC President Xi Jinping and US President Joe Biden ([Xinhua](#), November 16, 2023; [White House](#), November 15, 2023). This led to a series of bilateral talks on the development of AI. Internationally, the PRC has engaged in AI safety discussions, co-signing the “Bletchley Declaration” and contributing to joint papers and dialogues calling for increased safety research and governance policies ([UK Government](#), November 1, 2023; [UC Berkeley Center for Human-Compatible AI](#), October 31, 2023).

*Question 6: In your opinion, what are the most likely causes of human extinction?*



Misaligned AI scored lowest out of a range of potential causes of human extinction, receiving the least number of first-place votes among available options and the lowest aggregate score when combining all ordinal rankings. Nuclear war, natural disaster, climate change, and pandemics all proved more concerning for students. This tallies with the Rethink Priorities survey of US adults that received similar results in response to a near-identical question, with AI ranking lowest among similar options ([Rethink Priorities](#), May 12, 2023).

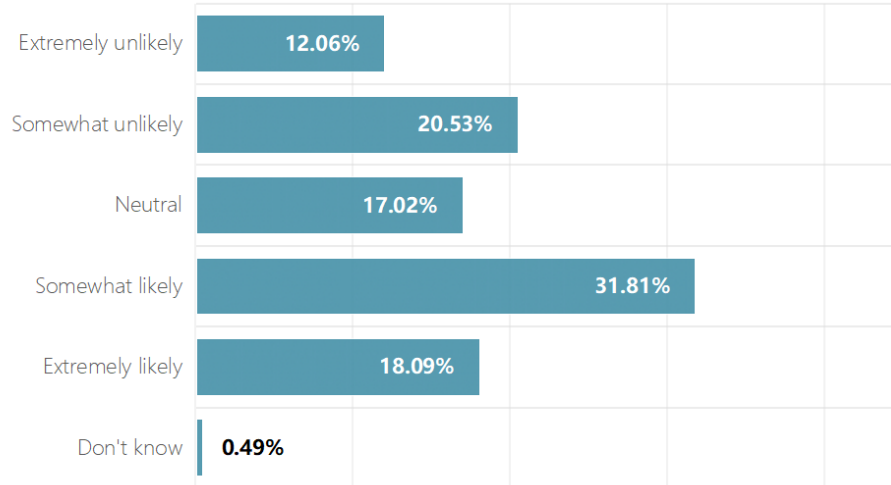
*Question 7: How worried are you that machines with AI could eventually pose a threat to the human race?*



Fears of AI's existential threat to humanity were also low. Just 17.32 percent of respondents agreed or strongly agreed with the possibility that AI could pose an extinction-level threat, while 63.71 percent of respondents disagreed or strongly disagreed. 18.97 percent remained neutral or uncertain.

This question closely follows the wording of a YouGov poll of 1000 US adults ([YouGov](#), 2023). Results from the YouGov poll suggested high estimates of the likelihood of extinction caused by AI. 17 percent reported it “very likely” while an additional 27 percent reported it “somewhat likely.” When Rethink Priorities replicated the survey question, they received lower estimates. However, they chose to make their questions time-bound (e.g., the likelihood of AI causing human extinction in the next 10 or 50 years).

*Question 8: How likely do you think it is that AI will one day be more intelligent than humans?*

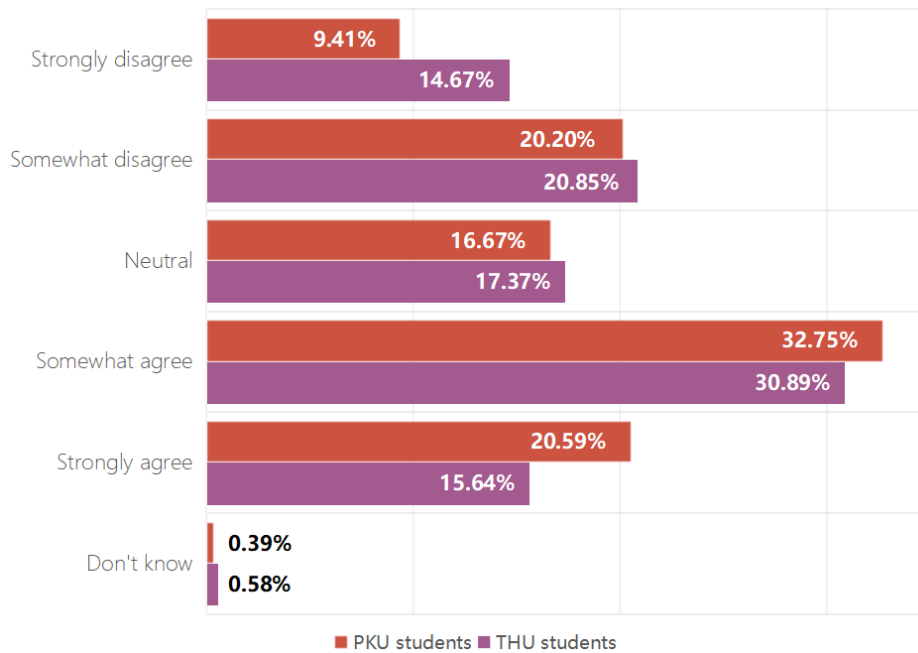


50 percent of respondents agreed or strongly agreed with the claim that AI will eventually be more intelligent than humans, while 32.59 percent disagreed and 17.51 percent remained neutral or uncertain.

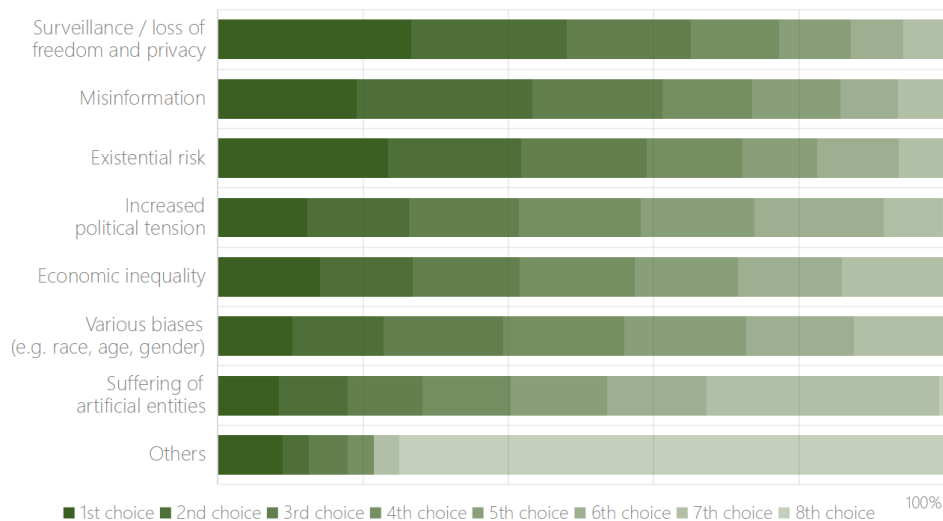
When Rethink Priorities asked this question, they estimated that 67 percent of US adults believe it is moderately likely, highly likely, or extremely likely that AI will become more intelligent than people. A survey conducted in the PRC by CLAI asked a related question to young and middle-aged students and scholars in AI-related fields, but instead chose to word the question as “strong AI (强人工智能)” —a catch-all term combining artificial general intelligence, human-level AI, and superintelligence. Of their participants, 76 percent believed “strong AI” could be achieved, although most participants believed Strong AI could not be achieved before 2050, and around 90 percent believed it would only appear “after 2120” ([CLAI](#), May 12, 2023). Both surveys show a more substantial reported likelihood of smarter-than-human intelligence than our results.

Our results also showed differences between students at the two universities surveyed. Tsinghua students exhibited a lower tendency to believe AI would eventually surpass human intelligence levels compared to their counterparts at PKU. Tsinghua has a more scientific orientation and reported higher familiarity with AI than PKU.





*Question 9: Which risks posed by AI do you find the most concerning?*



In a ranked choice question, surveillance or loss of privacy proved to be the most concerning risk for students. It received the highest number of first choice votes among available options (26.64 percent). This was followed by existential risk, misinformation, wealth inequality, increased political tension, and issues related to various biases (e.g., race, age, or gender). The welfare of AI entities received the fewest first place votes. When aggregating ordinal rankings, surveillance also received the highest total score, followed by misinformation existential risk, increased political tension, wealth inequality, and various types of bias, with the welfare of AI entities receiving the lowest total score.

The PRC has actively invested in its surveillance state apparatus in recent years, expanding extensive CCTV and digital monitoring systems in major cities, often equipped with facial recognition technology. While nominally enhancing public safety and the efficiency of governance, these systems also raise concerns of infringing upon individual liberties to bolster the CCP regime's security (see *China Brief*, [August 17, 2017](#), [March 1](#), [April 12](#)). There is little data suggesting how exactly these tradeoffs of surveillance are viewed by PRC citizens it directly affects. Our results nevertheless indicate that students see surveillance and the loss of freedom as a serious risk.

## Implications

Limited survey data in the PRC assesses how PRC citizens perceive the risks of AI. Nevertheless, our results suggest that students in the PRC are broadly more optimistic about the prospects of AI than people in the United States and Europe.

This optimism instead aligns more closely with sentiments found in countries of the Global South, which tend to view AI's potential in a more positive light ([Ipsos](#), January 2022). The PRC has perhaps sought to position itself as an ally to the developing world on AI-related issues, with some observers viewing "AI doomerism" in the West as a preoccupation of the First World that may even be an attempt to hinder technological progress in the Global South ([Nikkei](#), December 18, 2023). As a result, developing countries may become more receptive to the PRC's messaging on AI cooperation and technology development, posing challenges for the West in competing for influence on AI issues internationally.

Among the major players in the global AI race, the PRC's stance on addressing the risks of the technology remains the least clear ([Concordia AI](#), October 2023). The present survey suggests that this could in part be a function of lower concern in the PRC about those risks. That said, the country does appear to be taking risks more seriously, such as the Decision from the Third Plenum called "building AI safety oversight systems (建立人工智能安全监管制度)" ([People's Daily](#), July 22). Additionally, the PRC's Artificial Intelligence Industry Association (AIIA), a government-led organization, created an ethics working group and released a risk management framework in late 2023 ([Weixin/AIIA](#), December 23, 2023).

As with any survey, there are important caveats to bear in mind. First, as this survey was conducted exclusively among students at the country's two most elite institutions in Beijing, the results cannot be extrapolated to provide insight into views held more broadly in the PRC. Second, conducting surveys in Chinese raises potential issues with translation. For example, "transformative AI" could not be translated literally. Instead, the authors used "frontier AI (前沿人工智能)," a more commonly used phrase conveying a similar meaning. However, the authors structured the framing of each question so that the answers respondent would give in either language would likely be the same, attempting to ensure language-independent responses despite disparities in phrasing.

Surveys conducted in authoritarian systems also suffer from concerns over reliability. Fears of repercussions from the state's security apparatus may cause individuals to give socially desirable responses rather than

their real opinions. This problem was difficult to control for. While this survey's responses are anonymous, respondents did submit their WeChat IDs so that they could be remunerated for participation. Of the questions presented to respondents, most were intended to be apolitical in nature, focusing purely on views on AI as a technology and the impacts it could have. However, questions four and five, which dealt with government regulation and US-PRC cooperation do have political implications. The responses showed strong support for both regulation and cooperation, which is in line with PRC government preferences. However, as our comparative analysis indicates, support for regulation is also high in the United States, where views on cooperation are at least mixed. Despite these caveats, data conducted from surveys on the ground remain a valuable source for understanding how people in the PRC are thinking about significant topics that have a bearing on both the PRC's trajectory and that of its relationship with the United States as well as the wider world. [3]

## **Conclusion**

AI technology will continue to evolve at a rapid pace. As it does, public opinion will shift. This survey attempts to provide data on a cross-section of an important demographic at a brief point in time. It suggests that, in general, the most advanced Chinese students have more positive perceptions of AI and its potential future impact, are less worried about the existential threat from AI than counterparts in Europe in the United States, yet still desire a high-level of regulation from the government. Due to the scarcity of publicly accessible survey data in the PRC, it is hopeful that future polling will be conducted, such as investigating how different age demographics, urban and agrarian populations, and people working in different industries in the PRC feel about AI.

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## **Notes**

[1] For these surveys, see the following:

YouGov: [https://docs.cdn.yougov.com/bfoyp7p28/results\\_AI\\_percent20and\\_percent20the\\_percent20End\\_percent20of\\_percent20Humanity.pdf](https://docs.cdn.yougov.com/bfoyp7p28/results_AI_percent20and_percent20the_percent20End_percent20of_percent20Humanity.pdf)

Monmouth University: [https://www.monmouth.edu/polling-institute/documents/monmouthpoll\\_us\\_021523.pdf/](https://www.monmouth.edu/polling-institute/documents/monmouthpoll_us_021523.pdf/)

The Center for Long-Term Artificial Intelligence: <https://long-term-ai.center/research/f/whether-we-can-and-should-develop-strong-artificial-intelligence>

The Artificial Intelligence Policy Institute: <https://theaipi.org/poll-biden-ai-executive-order-10-30-5/>

Rethink Priorities: <https://rethinkpriorities.org/publications/us-public-opinion-of-ai-policy-and-risk>

N.B. The present survey was conducted around one year later than many of the other studies used for comparative data. In that time, the field of AI advanced significantly. Even from the date the survey was initially administered (April 18–20, 2024) to publication, major developments have unfolded, such as the release of OpenAI’s multimodal GPT-4o model and the first US-PRC bilateral talk on AI safety ([White House](#), May 15; [Mofcom](#), May 13).

[2] Our survey was conducted approximately one year after the Future of Life Institute’s open letter was published, meaning the topic of AI safety was likely not as fresh in respondents’ minds. Additional advances in AI development in the interceding year could have also impacted respondents’ views.

[3] For more on conducting surveys in the PRC, see: Carter EB, Carter BL, Schick S. Do Chinese Citizens Conceal Opposition to the CCP in Surveys? Evidence from Two Experiments. *The China Quarterly*. Published online 2024:1-10. doi:10.1017/S0305741023001819. <https://www.cambridge.org/core/journals/china-quarterly/article/do-chinese-citizens-conceal-opposition-to-the-ccp-in-surveys-evidence-from-two-experiments/12A2440F948D016E8D845C492F7D0CFE>; Shen, Xiaoxiao and Truex, Rory, In Search of Self-Censorship (March 16, 2020). *British Journal of Political Science* (2021), 51, 1672–1684: <https://ssrn.com/abstract=4177242>; King, Gary, Jennifer Pan, and Margaret E. Roberts. 2013. “How Censorship in China Allows Government Criticism but Silences Collective Expression.” *American Political Science Review* 107, no. 2: 326-343. <https://gking.harvard.edu/files/censored.pdf>.