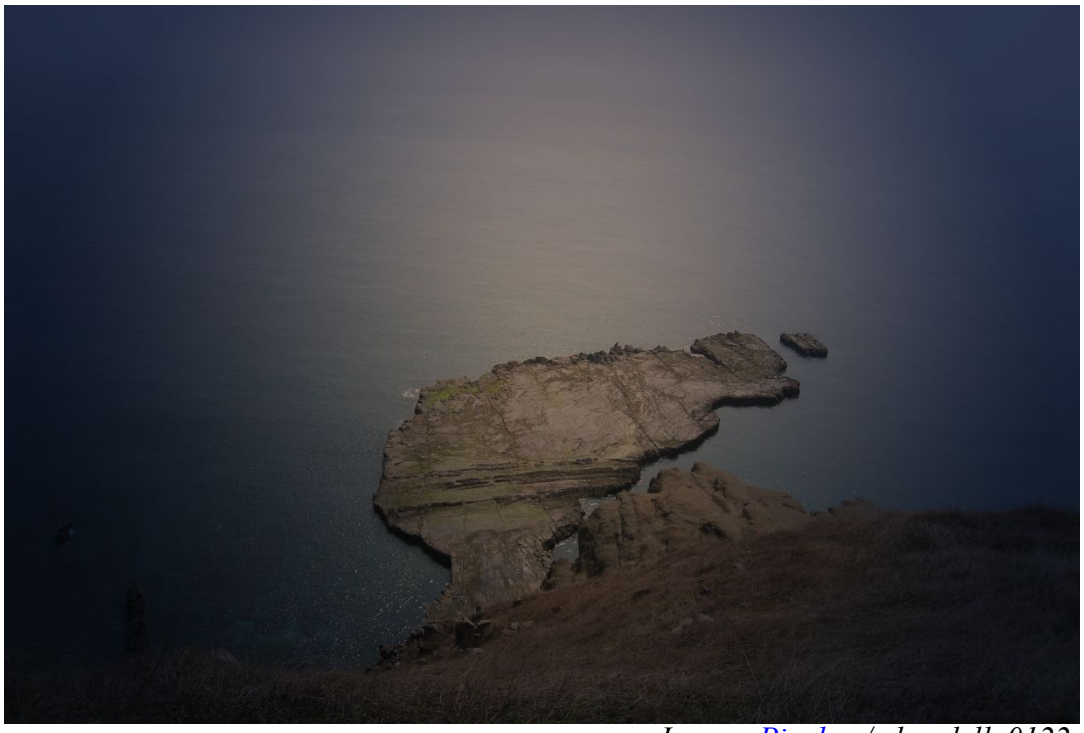

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AVOIDING NUCLEAR WAR IN THE TAIWAN STRAIT

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Abstract

China's improving nuclear arsenal, the United States' deteriorating "strategic ambiguity" policy, and Taiwan's increasing identification as independent polity raises the prospect of conflict over Taiwan. But the use of nuclear weapons in the Taiwan Straits would happen only under extreme circumstances. This paper argues Beijing is increasing its use of gray-zone tactics with conventional and non-military means below the level of nuclear provocation to tip the cross-straits military balance in its favor. This report first examines China's aim to achieve unification with Taiwan via its use of threat and use of force in both the nuclear and conventional domains through a close examination of the three historical cross-strait crises. Second, it outlines the geostrategic and geopolitical rationale for continued American support for Taiwan in an era of United States-China competition. Lastly, it explores the role of Taiwan's consolidating democracy and how Taipei responds to Beijing's coercion. The report concludes with consideration of how the Taiwan Straits case may affect the possibility of nuclear weapons use in Northeast Asia, including in Japan and on the Korean peninsula.

Keywords: Strategic ambiguity, Cross-Straits relations, Nuclear domino effect, US-China relations, Taiwanese Independence

Introduction

Since the unresolved ending of the Chinese Civil War (1949), the Communist Party of China's (CCP) unwavering view has been that the Republic of China (ROC, or Taiwan) is a part of China and must be unified with the mainland. The delicate status quo that resulted—Taiwan's de facto status as an independent state and the United States' informal role guaranteeing Taiwan's security—has led to varying approaches from Beijing to achieve unification by 2049 as a possible deadline.[1] Following the establishment of the People's Republic of China (PRC), the use of force was Beijing's strategy, but a military campaign by the PRC to invade and control Taiwan in the 1950s was derailed by the Korean War and the PRC's awareness that it did not have sufficient military capability to retake the island.[2] The two "offshore crises" in 1954/5 and 1958 when the PRC attacked ROC-controlled islands demonstrated Beijing's willingness to threaten force to open discussions with Washington. And Beijing's live-fire exercises during the third 1996/7 Taiwan Straits crisis in response[3] to then-President Lee Teng-hui's repudiation of the "1992 consensus" and his subsequent visit to the United States (US) showed China's willingness to curtail Taiwan's creeping democratization and oppose Lee's advocacy for Taiwan's independence.

China's improving nuclear arsenal, the United States' deteriorating "strategic ambiguity" policy, and Taiwan's increasing identification as an independent polity raises the prospect of conflict over Taiwan. This paper argues that the use of nuclear weapons in the Taiwan Straits would happen only under extreme circumstances. Beijing is increasing its use of gray-zone tactics with conventional and non-military means below the level of nuclear provocation to tip the cross-straits military balance in its favor. Its tactical nuclear weapons are coercive—to prevent Taiwanese political support for a declaration of de jure independence. While Washington has not ruled out "first use," the risk of nuclear escalation inhibits both the United States and China. For most observers, the threat of nuclear escalation serves as a deterrent to large-scale conventional war or the use of weapons of mass destruction.[4]

This report will first examine China's aim to achieve unification with Taiwan via its use of threat and use of force in both the nuclear and conventional domains with a close examination of the three cross-strait crises. Second, it will outline the geostrategic and geopolitical rationale for continued American support for democratic Taiwan in an era of United States-China competition. Lastly, it will examine the role of Taiwan's consolidating democracy and how Taipei responds to Beijing's coercion. It will then conclude with how the Taiwan Straits case may affect the possibility of nuclear weapons use in Northeast Asia, including in Japan and on the Korean peninsula.

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[1] David Sacks, "What Xi Jinping's Major Speech Means for Taiwan," *CFR Asia Unbound,* 6 July 2021, https://www.cfr.org/blog/what-xi-jinpings-major-speech-means-taiwan [accessed 18 August 2021].
[2] Alan M. Wachman, *Why Taiwan?: Geostrategic Rationales for China's Territorial Integrity* (Stanford: Stanford University Press, 2007), 3.
[3] Andrew Scobell, "Show of Force: Chinese Soldiers, Statesmen, and the 1995-96 Taiwan Straits Crisis," *Political Science Quarterly* 115:2 (2000) 231.
[4] Amy F. Woolf, "U.S. Nuclear Weapons Policy: Considering "No First Use,"" Congressional Research Service IN10553 (Washington DC: Library of Congress, 13 October 2021), 2.

China's Unification Goals

The CCP's consistent policy has been to unify the mainland with Taiwan and complete its integration of Hong Kong, Macau, and Xinjiang as parts of "one China." This is part of Beijing's campaign of national rejuvenation, which aims to rectify what the CCP considers a weak and divided China. Current President Xi Jinping views this as realizing "the Chinese Dream" and to achieve this he has consolidated a striking amount of political control over the CCP and the Central Military Commission (CMC).[5] Xi considers unifying China's claimed territories, especially democratic Taiwan with the mainland, as an "unswerving historical task" for the Party.[6] "To oppose and contain 'Taiwan independence'" is ranked third in a list of national defense priorities in China's *2019 Defense White Paper.*[7] Any less would weaken Xi and the CCP's mandate of national sovereignty, as well as weakening China's other territorial claims in the East and South China Seas, including the Senkaku/Diaoyu islands.

President Xi views the unification of Taiwan with the mainland to cementing his authority and consolidate his power over the CCP. The previous failures of the CCP to annex Taiwan and prevent American intervention in three Taiwan Straits crises (September 1954-April 1955, August to October 1958, July 1995 to March 1996) have added to China's sense of national humiliation. In the first crisis, Washington's attempted nuclear intimidation of Beijing, its weak conventional forces, and worsening relations with the Soviet Union led Mao to develop China's atomic capability.[8] The PRC's bombardment of one of Taiwan's offshore islands, Kinmen, aimed to show Washington and Chiang Kai-shek that ROC-occupied islands in the Strait risked war.[9] In response, then-US President Eisenhower and Secretary of States Dulles publicly alluded to the possibility of the United States using nuclear weapons to defend the islands.[10] The new Soviet leaders of Nikita Khrushchev and Nikolai Bulganin—eager for better relations with the West—offered no support to Mao. China was left without a nuclear deterrent and its prime minister, Zhou Enlai, abruptly declared an end to the crisis by declaring China's willingness to ease tensions.[11]

In the second crisis, military action resumed via air clashes over the Taiwan Strait and Chinese mainland, and the PRC's artillery bombardment of Kinmen and Mazu islands resumed. In

[5] Timothy R. Heath, "The Consolidation of Political Power in China Under Xi Jinping: Implications for the PLA and Domestic Security Forces," Testimony presented before the US-China Economic and Security Review Commission, 7 February 2019 (Santa Monica: RAND, 2019), 1.
[6] The National People's Congress of the People's Republic of China, "Xi rallies Party for "unstoppable" pursuit to national rejuvenation as CCP celebrates centenary,"2 July 2021, http://www.npc.gov.cn/englishnpc/c23934/202107/6ff93d39da7548fbae37cbed01184c34.shtml [accessed 2 August 2021].
[7] Quoted in Office of the Secretary of Defense, *Military and security developments involving the People's Republic of China 2020,* Annual Report to Congress (Washington DC: Department of Defense), 25.
[8] Nancy Bernkopf Tucker, *Strait Talk: United States-Taiwan relations and the crisis with China* (Cambridge: Harvard University Press, 2011), 14.
[9]Office of the Historian, "The Taiwan Straits Crises: 1954-55 and 1958," Foreign Services Institute, United States Department of State, 2017, https://history.state.gov/milestones/1953-1960/taiwan-strait-crises
[10] Saki Dockrill, *Eisenhower's National Security Policy, 1953-61* (London: Macmillan Press, 1996), 110.
[11] Gordon Chang and He Di, "The Absence of War in the US-China Confrontation over Quemoy and Matsu in 1954-55: Contingency, Luck and Deterrence," *American Historical Review* 98:5 (1993), 1500-1524.

anticipation of CCP attempts to invade the offshore islands, Taiwan's ruling Kuomintang party urged Washington to publicly commit to Taiwan's defence.[12] According to recently unclassified documents, Washington decided that it was necessary to rely on nuclear weapons to deter China from invading Kinmen but that the United States would limit itself to using conventional force.[13] The US operational plan's third phase was to "to destroy the war-making capability of Communist China … The attack would be carried out in conditions short of total war; atomic weapons would be employed by the United States and probably by the enemy." Such a plan would deter China's attempts to achieve air superiority over Taiwan and a beach landing on Taiwan's west coast.[14] Eisenhower also arranged the re-supply of Kuomintang garrisons on Kinmen and Mazu, which ended the PRC's bombardment and led to the arrangement in which China and Taiwan shelled each other's garrisons on alternate days.[15]

In the third crisis, the threat of nuclear force became a crucial element in Beijing's coercion of Taiwan and the United States. The deputy chief of the People's Liberation Army (PLA) General Staff at the time stated,

> In the 1950s, you three times threatened nuclear strikes on China, and you could do that because we couldn't hit back. Now we can. So you are not going to threaten us again because, in the end, you care a lot more about the Los Angeles than Taipei.[16]

A visit to Cornell University by then-Taiwanese President Lee in June 1995 precipitated a dramatic escalation between China and Taiwan as the PLA conducted war games, live fire exercises, and missile tests in the vicinity of Taiwan to signal Beijing's displeasure. Additional manoeuvres and tests in March 1996 were intended to intimidate Taiwan before its presidential election, chasten Lee, and deter the ROC from declaring independence. Beijing subsequently made gains in influencing US policy. Eager to de-escalate tensions and build relations, then-President Bill Clinton became the first US leader to publicly say the United States would not support Taiwan's move towards independence and Clinton assured the then-PRC leader Jiang Zemin that the United States remained committed to the "one China policy."[17]

The CCP certainly learned from the United States through these three crises how to use conventional forces to favorably shape the situation in its near seas whilst, after the third crisis, simultaneously using the threat of assured nuclear retaliation to deter nuclear attack and prevent

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[12] Tang Tsou, "The Quemoy Imbroglio: Chiang Kai-Shek and the United States," *The Western Political Quarterly* 12:4 (December 1959), 1075.

[13] M. H. Halperin, *The 1958 Taiwan Straits Crisis: A Documented History,* RM-4900-ISA (Washington DC: RAND, December 1966), 10-11.

[14] See declassified papers here https://int.nyt.com/data/documenttools/quemoy-study-significant-redactions/764a87f870d1eba9/full.pdf from Charlie Savage, "Risk of Nuclear War Over Taiwan in 1958 Said to be Greater Than Publicly Known," *The New York Times,* 22 May 2021, https://www.nytimes.com/2021/05/22/us/politics/nuclear-war-risk-1958-us-china.html, accessed 2 February 2022.

[15] Office of the Historian, "The Taiwan Straits Crises: 1954-55 and 1958," *Milestones in the History of US Foreign Relations,* 2017, https://history.state.gov/milestones/1953-1960/taiwan-strait-crises [accessed 4 August 2021].

[16] Quoted in Andrew Scobell, "Show of Force: Chinese Soldiers, Statesmen, and the 1995-1996 Taiwan Straits Crisis," *Political Science Quarterly* 115:2 (2000), 241.

[17] Robert S. Ross, "The 1995-96 Taiwan Strait Confrontation: Coercion, Credibility, and the Use of Force," *International Security* 25:2 (Fall 2000), 116.

nuclear coercion.[18] To this end, the PLA, the principal military wing serving the CCP, is developing capabilities to "dissuade, deter, or if ordered, defeat third-party intervention during a large-scale theatre campaign"[19] particularly for a Taiwan contingency. And the PLA's assertive military activities in the Taiwan Strait suggests a willingness to threaten force to compel Taiwan to unify peacefully with the mainland and restrain any moves towards independence.

Should compellence fail, the PLA is preparing for contingencies to unify Taiwan by force. The PLA regularly holds military exercises in the vicinity of Taiwan and releases footage of such drills, including the practice of an amphibious assault to invade Taiwan via its west coast.[20] To this end, China's Eastern Theatre Command is oriented towards Taiwan and the East China Sea and includes three group armies, a naval fleet, two marine brigades, two Air Force bases and one missile base.[21] The CCP also relies on the PLA's associated militias to perform maritime gray-zone operations (defined here as activities that lie between statecraft and open warfare) around Taiwan, with its navy providing overwatch in the event of an armed escalation.[22] As well, the PLA's air force play a role by conducting regular circumnavigation flights. These flights are exhausting the ROC's air force, who have to respond to defend Taiwan's sovereign air space.[23]

And at the nuclear level, while China's nuclear policy follows the principle of No First Use (NFU), its growing strategic deterrence capabilities suggest this might change.[24] Historically, Chinese leaders asserted that a credible second-strike capability would be sufficient to deter an attack on China and emphasized protecting China's nuclear arsenal.[25] But given the island's political importance to Xi's China—and that no political leadership would want to lose a war over Taiwan—it's not inconceivable that Beijing will engage in limited nuclear use against military targets for coercion and military denial. As the United States-China Economic and Security Review Commission reported, "the scale of China's nuclear build-up suggests it could also be intended to support a new strategy of limited nuclear first use."[26] The PLA Rocket Force is prepared to conduct missile attacks against high-value targets in Taiwan and the PLA Navy is

[18] Fiona S. Cunningham and M. Taylor Fravel, "Assuring Assured Retaliation: China's Nuclear Posture and US-China Strategic Stability," *International Security* 40:2 (Fall 2015), 7.
[19] Office of the Secretary of Defense, *Military and security developments involving the People's Republic of China 2020,* Annual Report to Congress (Washington DC: Department of Defense), ix.
[20] For instance, Reuters, "Chinese warships and fighter jets conduct drills off Taiwan in what Beijing says is response to 'provocations'," *ABC News,* 17 August 2021, https://www.abc.net.au/news/2021-08-18/china-conducts-military-drills-off-taiwan/100385616 [accessed 17 August 2021].
[21] Office of the Secretary of Defense, *Military and security developments involving the People's Republic of China 2020,* Annual Report to Congress (Washington DC: Department of Defense), 95.
[22] Office of the Secretary of Defense, *Military and security developments involving the People's Republic of China 2020*, 71.
[23] Eric Chan, "Escalating Clarity without Fighting: Countering Gray Zone Warfare against Taiwan (Part 2)," *Global Taiwan Brief* 6:11 (2021), 1.
[24] Michael S. Chase, "China's Transition to a More Credible Nuclear Deterrent: Implications and Challenges for the United States," *Asia Policy* 16 (2013), 53.
[25] Hans M. Kristensen and Matt Korda, "Chinese nuclear forces, 2020," *Bulletin of Atomic Scientists* 76:6 (2020): 446.
[26] See US-China Economic and Security Review Commission, "Section 2: China's Nuclear Forces: Moving Beyond a Minimal Deterrent," *2021 Annual Report to Congress* (Washington DC, 2021).

developing and at-sea nuclear deterrent.[27] Beijing also doesn't want a repeat of the Taiwan Straits crises of the Cold War where Washington responded to conventional challenges by threatening to cross the nuclear threshold early on.[28] It fears US attacks on theater nuclear forces and supporting bases, launch sites, infrastructure, and command and control would outright disable China's ability for second-strike.[29]

The Drivers of American Support

China aims to deter both third-party intervention in the Taiwan Strait and support to Taiwan from the United States and its allies. As evidenced by its propaganda, Beijing views any support from Washington to Taipei as ensuring the island remains a base to threaten China.[30] Beijing's fear has become more acute since the uptick in United States–Taiwan relations during the Donald Trump administration. Although conditional support for Taipei—which views Taiwan's status as unsettled and opposes unilateral changes to the status quo—remains the foundation of US policy, American policymakers were given greater latitude in developing ties to Taiwan, including through the lifting of restrictions on contacts between US officials and their counterparts. And the Biden administration has not attempted to soften the Trump-era legislation.

Taiwan has a valuable geostrategic location along China's "first island chain" in the East China Sea, and it controls the archipelagos of Penghu, Kinmen, and Mazu in the Taiwan Strait. Taiwan also lays claim to disputed islands in the East and South China Seas, including Senkaku/Diaoyu and Taiping. In 1950, General Douglas Macarthur stated that "the strategic interests of the United States will be in serious jeopardy if Formosa [then the name for Taiwan in the West] is allowed to be dominated by a power hostile to the United States."[31] The military, political, and economic significance in US thinking of an independent Taiwan and the offshore islands it controls hasn't changed. A forceful unification between mainland China and Taiwan and its archipelago would give China considerable naval freedom in its first island chain while also denying others access. The United States' key ally of Japan would be left vulnerable should the United States abandon Taiwan. Should China occupy Taiwan, Japan would be outflanked and its own offshore islands left vulnerable.[32] Japan's island groupings of Yaeyama and Miyako

[27] Office of the Secretary of Defense, *Military and security developments involving the People's Republic of China 2020*, 117-118.
[28] Christopher P. Twomey, "China's Nuclear Forces," Testimony before the US-China Economic and Security Review Commission, Washington DC, 10 June 2021, 5.
[29] Caitlin Talmadge, "The US-China Nuclear Relationship: Growing Escalation Risks and Implications for the Future," Testimony before the US-China Economic and Security Review Commission, Washington DC, 7 June 2021, 5-7.
[30] Andrew J. Nathan, "China's goals in in the Taiwan Strait," *The China Journal* 36 (July 1996), 87-88.
[31] Office of the Historian, "Memorandum on Formosa, by General of the Army Douglas MacArthur, Commander in Chief, Far East, and Supreme Commander, Allied Powers, Japan, Tokyo, 14 June 1950," *Foreign Relations of the United States*, eds. Daniel J. Lawler and Erin R. Mahan, 1950, Korea, Volume VII (Washington DC: Government Printing Office, 2010), Document 86.
[32] Nancy Bernkopf Tucker and Bonnie Glaser, "Should the United States Abandon Taiwan," *The Washington Quarterly* 34:4 (2011), 32. See also

connect Okinawa to Taiwan, and Taiwan's military-controlled offshore island of Pengjiayu is just 140 km from the Senkaku/Diaoyu islands.[33]

The control of Taiwan and its territories would also allow the PLA to project power with greater ease into its "second island chain" through to maritime Southeast Asia in order to enforce the CCP's territorial claims over the South China Sea.[34] Taiwan is the largest landmass between Japan and the Philippines. It also controls the largest natural island, Taiping, in the Spratly group in the South China Sea. The airstrip on Taiping could accommodate Taiwan's F-16 fighter aircraft and host P-3 maritime patrol craft—the latter could give Taiwan the largest maritime surveillance range in the South China Sea of an approximately 2492 km radius.[35] Should China control Taiwan and Taiping, it could more aggressively deny the United States and its partners access to the South China Sea and the PLA could more actively assert China's territorial and maritime claims against the Philippines, Vietnam, Malaysia, and Brunei.

Additionally in an era of United States-China competition, the geopolitical rationales of supporting a democratic and capitalist Taiwan came to the fore in 2020. Ideologically and politically, the island is in stark contrast to the communist autocracy of mainland China. Consequently, the sharpening ideological dimension of United States–China strategic competition has led to American bipartisan political support of Taiwan, in particular declaratory statements on "being tough on China" frame US officials' support for Taiwan.[36] This became more acute with Beijing's subjugation of Hong Kong. Last year, China's attacks on Hong Kong's civil society and its dismantling of the "one country, two systems" framework that gave Hong Kong institutional autonomy affirmed Taiwan's beliefs about how unification with an authoritarian-controlled China would eventuate. Hong Kong's fate influenced Taiwan's 2020 presidential elections in which President Tsai Ing-wen won re-election in a landslide despite intense political interference from China.[37] Tsai then took steps to burnish Taiwan's democratic, liberal, and human rights credentials to ideologically place Taiwan into the US-led "liberal international order" and capitalize on the United States' commitment to democratic resilience as part of its Indo-Pacific engagement.[38]

Such geopolitical and ideological concerns are tied to concerns about technological and supply chain dependencies. China's desire to unify Taiwan in the same manner as Hong Kong has led to US concerns about the vulnerability of Taiwan's key sectors—first, the impact to global markets in the scenario of a military attack and, second, the impact to global markets should those sectors

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[33] Masahiro Akiyama, "Geopolitical Considerations of the Senkaku Islands," *Sasakawa Peace Foundation Review of Island Studies,* 7 August 2013, https://www.spf.org/islandstudies/research/a00007.html [accessed 11 August 2021].

[34] Andrew S. Erickson and Joel Wuthnow, "Why Islands Still Matter," *The National Interest,* 5 February 2016, https://nationalinterest.org/feature/why-islands-still-matter-asia-15121 [accessed 11 August 2021].

[35] CSIS Asia Maritime Transparency Initiative, "Airpower in the South China Sea," *Asia Maritime Transparency Initiative,* 29 July 2015, https://amti.csis.org/airstrips-scs/ [accessed 11 August 2021]. s

[36] Ryan Hass, "The path to protecting bipartisan US support for Taiwan," *Brookings,* 25 January 2021, https://www.brookings.edu/blog/order-from-chaos/2021/01/25/the-path-to-protecting-bipartisan-us-support-for-taiwan/, accessed 2 February 2022.

[37] US-China Economic and Security Review Commission, "Chapter 4—Taiwan," *2020 Annual Report to Congress* (Washington DC: USCC, 2020), 433-434.

[38] See for instance, Antony J. Blinken, "A Free and Open Indo-Pacific," Speech at Universitas Indonesia, Jakarta, 14 December 2021, https://www.state.gov/a-free-and-open-indo-pacific/, accessed 2 February 2021.

be absorbed into the mainland. Protecting the supply of critical technologies will likely increase the geopolitical need for Taiwan to remain an independent manufacturer of ICT (information and communications technologies) and of medical supplies, and for those Taiwanese firms with close ties to the United States to reduce dependence on mainland China.[39] Of particular significance is Taiwan Semiconductor Manufacturing Company (TSMC)—the world's largest semiconductor manufacturer, with 54 percent of the global market share and a near monopoly on the most advanced chips smaller than 10nm.[40]

TSMC's chips underpin a range of technologies, including 5G telecommunications infrastructure and military satellites. With the blacklisting of China's largest chipmaker on the entity list by the Trump administration—which cut off access to American technology and machinery—TSMC was projected to gain a 56-58 percent market share by the end of 2021.[41] And due to Taiwan's upholding of open-market values, major economies, in particular the United States and the EU, will continue to depend on open, stable, and fair access to such technology. [42] Consequently, part of the United States' calculus in shoring up Taiwan's self-defense needs is so that the ROC armed forces can deter and defend these sectors. Moreover, as will be discussed in the next section, Taiwan's near monopoly on a critical enabling technology might deter China from a military attack—nuclear and conventional—that could damage Taiwan's critical industry due to China's own dependency on supply from Taiwan's foundries.[43]

Taiwan's Response

Taiwan's status as a de facto independent state with a standing military, consolidating democracy, and open market values poses a public challenge to the unification goals of the CCP. Taiwan's public response to unification with mainland China will likely become increasingly hostile, particularly due to China's dismantling of civil liberties in Hong Kong, its human rights abuses in Xinjiang, and its blatant interference in Taiwanese politics. According to the Election Study Center at the National Chengchi University, in 2020 the public's identification as solely Taiwanese rose to a high of 64.3 percent, and those that identified as both Taiwanese and

[39] Shirley A. Kan and Wayne M. Morrison, "US-Taiwan Relationship: Overview of Policy Issues," *Congressional Research Service,* R41952 (Washington DC: Library of Congress, 11 December 2014), 45.
[40] Yen Nee Lee, "Two charts show how much the world depends on Taiwan for semiconductors," *CNBC,* 15 March 2021, https://www.cnbc.com/2021/03/16/2-charts-show-how-much-the-world-depends-on-taiwan-for-semiconductors.html [accessed 11 August 2021]. 10 nm (nanometer) refers to the production process used to make semiconductor chips, with processes with smaller "nm" designations generally packing more transistors into a unit area of each chip, although the terminology tends to vary across the electronics industry.
[41] Thomas Alsop, "Leading semiconductor foundries revenue worldwide from 2019-2021," *Statista,* 26 July 2021, https://www.statista.com/statistics/867223/worldwide-semiconductor-foundries-by-market-share/ [accessed 13 August 2021].
[42] Taiwan External Trade Development Council, *Roadmap to Resilient Supply Chains* (Taipei: American Institute of Taiwan, 2021), 25.
[43] Jared M. McKinney and Peter Harris, "Broken Nest: Deterring China From Invading Taiwan," *Parameters* 51:4 (November 2021), 30.

Chinese dropped to 29.9 percent.[44] By 2021, the wish to maintain the status quo and move toward independence reached a high of 25.8 percent, with 27.5 percent wishing to maintain the status quo indefinitely and 28.2 percent wishing to maintain the status quo and decide at a later date. Only 7.2 percent supported unification.[45]

These trends diminish the PRC's hopes to retake Taiwan without military action and through "peaceful reunification." Indeed, its attempts to co-opt Taiwan through preferential trade and economic agreements as a way to build trust in the "one country two systems" framework have been unsuccessful. For example, the 2014 negotiation of trade services under the 2010 cross-strait free trade agreement, the Economic Framework Cooperation Agreement (ECFA), sparked political protests in Taiwan. Known as the Sunflower Student Movement, hundreds of protesters occupied Taiwan's national legislature for almost a month.[46] The agreement officially expired in 2021, though neither side have officially terminated it. Even Beijing's smaller experimental projects, such as its attempt to transform Pingtan island (the closest Chinese territory to Taiwan) into a "special economic zone" and "common homeland," was spurned by Taipei for not reflecting the Taiwanese government's stance.[47]

The high level of economic interdependence between China and Taiwan has also not translated into political leverage. Beijing's high-profile and high-pressure economic coercive acts have tended to backfire, creating powerful opposition in Taipei and undermining the credibility of those with political stakes in closer cross-strait ties.[48] This inability to establish political leverage over Taiwan leaves China with limited options to unify the island. Although the CCP has never renounced the use of force against Taiwan, any military campaign to retake the island would likely do irreparable damage to the critical high-tech industries the CCP depends on, especially advanced semi-conductors. Several economically influential industrial sectors and geographic regions such as Guangdong, Fujian, Jiangsu, and, most importantly, Shanghai—rely heavily upon capital, managerial expertise, technology, parts, and intellectual property from Taiwan.[49]

But overt military action to attempt unification by force remains too costly for China to contemplate as its second preference. And as Taiwan's identification as an independent polity with its own ethnic identity grows, the likelihood of mutual reconciliation decreases. Consequently, Beijing is using gray-zone tactics—remaining below the threshold justifying military escalation by Taiwan and the United States and its allies—in the Taiwan Strait and the East China Sea to incrementally change the status quo. For instance, when the PLA conducts live

[44] Election Study Center, "Changes in the Taiwanese/Chinese Identity of Taiwanese as Tracked in Surveys (1999-2021.06)," *Trends of Core Political Attitudes*, National Chengchi University, https://esc.nccu.edu.tw/PageDoc/Detail?fid=7800&id=6961 [accessed 14 August 2021].
[45] Election Study Center, "Changes in the Unification-Independence Stances of Taiwanese as Tracked in Surveys (1994-2021.06)," *Trends of Core Political Attitudes*, National Chengchi University, https://esc.nccu.edu.tw/PageDoc/Detail?fid=7801&id=6963 [accessed 14 August 2021].
[46] Ming Sho Ho, "The Activist Legacy of Taiwan's Sunflower Movement," *Carnegie Endowment for International Peace: Civic Research Network,* 2 August 2018, https://carnegieendowment.org/2018/08/02/activist-legacy-of-taiwan-s-sunflower-movement-pub-76966 [accessed 14 August 2018].
[47] Rich Chang and Chris Wang, "Pingtan 'somewhat' political: spy chief," *Taipei Times,* 27 March 2012, http://www.taipeitimes.com/News/front/archives/2012/03/27/2003528795 [accessed 14 August 2021].
[48] Murray S. Tanner, *China's Economic Coercion Against Taiwan: A Tricky Weapon to Use* (Santa Monica: RAND, 2007), xvi.
[49] Murray S. Tanner, *China's Economic Coercion Against Taiwan: A Tricky Weapon to Use,* 141.

drills and exercises targeted at Taiwan, Beijing simultaneously disseminates disinformation and propaganda of those activities in Taiwan's media to sow public distrust and foment feelings of hopelessness. The PLA's military intimidation is coupled with paramilitary harassment of Taiwan's coastguard. [50] Such activities suggest the PLA has high confidence in confronting Taiwan's armed forces. Beijing likely judges that such activities do not justify Taipei invoking US intervention and that Washington can't threaten the use of nuclear force to deter gray-zone tactics. In particular, China's coast guards and maritime militias assertive behaviour—and its legal codification for these services to use of force to enforce maritime and territorial claims—has led to Taiwan and Japan bolstering their own conventional coast guard and maritime surveillance capabilities, and for the United States to send its own coast guard patrols to the East China Sea.

Thus, China's attempts to incrementally change the status quo in its favor—below that of nuclear escalation and the use of conventional forces in a limited war—is working. This trend has been aided by what Taiwan's 2021 *Quadrennial Defence Review* called a "significant gap in defence resources" between the ROC and the PRC. As such a "conventional warfare of attrition or [an] arms race" is no longer a viable option for Taipei, which is instead developing asymmetric capabilities "to make the PRC face unacceptable consequences if it were to initiate military conflict and thus deter its intention to wage a war."[51] Taiwan is increasing its missile programs to improve its ability to intercept Chinese cruise missiles and counter fighter aircraft. Taiwan is also investing in unmanned aerial vehicles (UAVs), which could be equipped with heavyweight torpedoes from an approved US arms sale. This capability could counter China's conventional maritime advantages and improve the Taiwan navy's ability to sink PLA nuclear-powered submarines and surface combatants.[52]

But the cross-strait military balance will likely continue to tip in Beijing's favor. The PLA's qualitative capabilities for an assault on Taiwan are improving, especially in shipbuilding, land-based ballistic and cruise missiles, and air defense.[53] And China will continue to use non-physical means such as cyber warfare and coercive diplomacy to attempt to alter Taiwan's standing as a de facto independent nation. In response Taipei will likely double down on its ties to the United States by emphasising its credentials as a stable liberal partner that can play a significant role in supply chain security. To place the onus on the United States and its partners to hold true to their commitments to a liberal-based order, President Tsai will likely also remain disciplined in her responses to Beijing's provocations and focus on strengthening Taiwan's identity as distinct from mainland China.[54]

[50] US-China Economic and Security Review Commission, "Chapter 4—Taiwan," 462.
[51] Ministry of National Defence, *2021 Quadrennial Defense Review* (Taipei: MND Republic of China, 2021), 26
[52] US-China Economic and Security Review Commission, "Chapter 4—Taiwan," 467.
[53] Meia Nouwens and Henry Boyd, "Taiwan in the Pentagon report's spotlight," *IISS Military Balance Blog,* 18 September 2020, https://www.iiss.org/blogs/military-balance/2020/09/taiwan-pentagon-report-2020 [accessed 17 August 2021].
[54] For instance, see President Tsai's *Twitter* feed: https://twitter.com/iingwen?ref_src=twsrc%5Egoogle%7Ctwcamp%5Eserp%7Ctwgr%5Eauthor [accessed 18 August 2021]

Implications

The PRC's historical lack of ability to deter US support of Taiwan and to compel the Taiwanese people to accept unification is increasing the likelihood that China will continue its unilateral attempts to enforce its interpretation of "one China" on Taiwan. Beijing will continue to appeal to the Taiwanese people that the best-case scenario is a "peaceful unification" under the "one country two systems" framework while adopting a tougher line towards Taipei and Washington. China will also aim to prevent a response from Washington and its allies that would involve the threat of the use of tactical nuclear weapons and deterring US conventional strikes.

But "peaceful unification" on Beijing's terms is unlikely to occur—such a scenario is largely dependent on Taiwan's right for self-determination. And should President Xi maintain his desire to unify Taiwan with mainland China by 2049, it is unlikely military conflict will be avoided. China's military preparedness, Taiwan's incremental trends towards political independence, and the sharpening US-China strategic competition across multiple domains suggests that China will unilaterally attempt to unify Taiwan by force. The unresolved conflict between the PRC and the ROC will continue to involve the threat of nuclear weapons by the United States and China to deter each other, and the use of conventional military force by China and Taiwan to enforce sovereign claims. But due to the costs of nuclear weapons use, this is leading to increased amounts of conventional and asymmetric arms in the Taiwan Strait, which is increasing the likelihood of miscalculation and misadventure.

Such a scenario would have a detrimental impact on Japan and the Korean peninsula. First, Japan is studying possible responses of its Self-Defence Forces in the event of US–China military conflict over Taiwan.[55] If the United States doesn't come to Taiwan's aid in the event of an attack from China, American credibility in Japan would be irreparably damaged. If the United States does come to Taiwan's aid, Washington would certainly request Japan to use its facilities and areas as bases for combat operations.[56] But regardless of the US role, it is likely that a PRC military invasion of Taiwan would involve strikes on US bases in south-western Japan and a simultaneous attempt to take the Senkaku/Diaoyu islands. Supporting this, a former deputy director general of Japan's National Security Secretariat stated that "a Taiwan contingency is a Japan contingency" as Japan's Sakishima islands, consisting of Yonaguni, Iriomote, Miyako, Ishigaki, and the Senkaku/Diaoyu islands would be physically involved in any attempt at unilateral unification by Beijing.[57] And if the PRC were to control Taiwan and US credibility in extended deterrence diminished, it is not inconceivable that Tokyo—feeling abandoned and isolated—would develop its own nuclear capability.

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[55] Kyodo, "Japan gov't studies SDF response in event of Taiwan Strait conflict," *Kyodo News,* 24 April 2021, https://english.kyodonews.net/news/2021/04/983deef11264-japan-govt-studies-sdf-response-in-event-of-taiwan-strait-conflict.html [accessed 18 August 2021].

[56] Jeffrey W. Hornung, "What the United States Wants from Japan in Taiwan," *The RAND Blog,* 10 May 2021, https://www.rand.org/blog/2021/05/what-the-united-states-wants-from-japan-in-taiwan.html [accessed 18 August 2021].

[57] Nobukatsu Kanehara, "台湾有事阻止のために日米で万全の抑止力を：防衛力増強など新たな政策が必要," *Nippon.com,* 13 May 2021, https://www.nippon.com/ja/in-depth/a07402/?cx_recs_click=true

Second, there remains interesting parallels between the unresolved conflicts of the ROC-PRC and Republic of Korea (ROK)-Democratic People's Republic of Korea (DPRK). Both Taiwan and the ROK were colonized by Japan, have historic ties with China, and are products of US democratization. As a partner of the United States, the ROK also relies on American extended deterrence, and the American security guarantee would lose its credibility should US forces fail to defend Taiwan from a PRC unilateral invasion. Both scenarios of a reunified Korean peninsula or a unified Taiwan with the mainland would likely change the nuclear balance in Northeast Asia. In the first case, should a unified Korea maintain the North's nuclear program, it would change the calculus of China and Japan. China would likely rebalance its nuclear posture to contend with a neighboring country no longer dependent on American extended deterrence.[58] It could also be emboldened with less forward-deployed American forces in Northeast Asia to change Taiwan Strait's status quo. Consequently, there would likely be growing calls in Japan for nuclearization to provide an indigenous and credible deterrent.[59] In the second case, should mainland China and Taiwan unify, the PLA would likely station nuclear submarines at Taiwan's deep-water ports.[60] Such a scenario would complicate American and allied operations and freedom of movement in Northeast and Southeast Asia. With a no longer credible American nuclear deterrent, this could also increase calls in Japan to develop its own nuclear program.[61]

The overall Northeast Asian dynamics—and any future conflict scenarios—would leave Taiwan in a vulnerable position. With lessening resources for its own defenses, Taiwan will continue its dependence on the United States' forward-deployed forces in Japan and the ROK, on Washington's reassurances that it will continue to support Taiwan's self-defence needs, and on the commitments by the United States and its partners to upholding the liberal order. But the more Taiwan's democracy consolidates, and its ties deepen with the United States and its partners to guarantee its survival, the more China retaliates. Consequently, the likelihood of a scenario where conventional and nuclear conflict might be avoided will continue to decrease over the long-term. This is because such a scenario depends on having a binding political agreement on hotly contested unification terms between the PRC and the ROC governments. And both Washington and Tokyo would have to be amenable to such an agreement and the forces that would control Taiwan and its offshore territories.

[58] See Bruce W. Bennett and Diana Y. Meyers, "North Korean Nuclear Weapons Pose an Existential Threat to China," *RAND: Commentary,* 13 July 2021, https://www.rand.org/blog/2021/07/north-korean-nuclear-weapons-pose-an-existential-threat.html [accessed 4 February 2022].
[59] See David E. Sanger, Choe Sang-Hun and Motoko Rich, "North Korea Rouses Neighbours to Reconsider Nuclear Weapons," *The New York Times,* https://www.nytimes.com/2017/10/28/world/asia/north-korea-nuclear-weapons-japan-south-korea.html [accessed 4 February 2022].
[60] Michael O'Hanlon, Lyle Goldstein and William Murray, "Correspondence: Damn the Torpedoes: Debating Possible US Navy Losses in a Taiwan Scenario," *International Security* 29:2 (2002): 202-206.
[61] Mark Fitzpatrick, *Asia's Latent Nuclear Powers: Japan, South Korea and Taiwan,* Adelphi Paper 455 (London: IISS and Routledge, 2016), pp.61-62.