BRIEF NO. 1 2024 SWEDISH NATIONAL CHINA CENTRE

Is a conflict over Taiwan drawing near? A review of available forecasts and scenarios

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Summary

- This report reviews forecasts of and scenarios for a conflict over Taiwan undertaken in the period 2013–2023. Forecasts support the impression that the risk of war has increased. A significant proportion of experts believe that some type of use of force by China (not necessarily an invasion) against Taiwan is likely to occur within the next ten years. Nonetheless, forecasters still rate the overall risk of war as low.
- Through its ongoing military modernization, China possesses increasingly credible means of accomplishing the goal of unification by force. If unchecked by US and allied balancing, the risk of conflict will continue its upward trend. Great power rivalry between the United States and China is also a growing risk factor, providing a structural reason to fear an outbreak of conflict.
- Assimilation of Taiwan is a long-standing goal of the Chinese Communist Party and experts are divided on whether its present leadership has become more determined to accomplish this. If intentions have changed, a more nationalist and revanchist orientation in domestic politics and a possible view that options for peaceful unification have been exhausted are seen as contributing to the risk of war.
- The most likely use-of-force scenario is some form of blockade of Taiwan, which would invite a
 military response from the US. The outcome of a blockade or limited warfare scenario cannot be
 predicted with any certainty, but both entail considerable risk of escalation and could involve the two
 great powers in a wider long-term struggle.
- Scenario writers are unconvinced that China yet possesses the capability to both accomplish an occupation and decisively defeat a US intervention. The great uncertainties involved probably mitigate the risk of an invasion in the short term. An invasion is universally seen as less likely than a blockade.
- Any conflict scenario would have catastrophic economic consequences. Supply chain disruptions
 would cripple the global economy and trade between China and the West would come to a halt.
 In most conflict scenarios, sanctions against China would ensue, with a considerable risk of a
 backlash for the sanctioning countries. It is as yet not known how such sanctions could be designed
 to achieve maximum desired effect.

Introduction

There is a marked sense that the risk of a war over the status of Taiwan has increased. Predictions of the breakout of such a war are made with some regularity. In 2021, US admiral Phil Davidson stated that the threat of a Chinese invasion attempt was "manifest...in the next six years",¹ while Chiu Kuo-cheng (邱國正), Taiwan's Minister of National Defense, estimated that China would possess the necessary capability for an invasion by 2025.² In 2022, US scholar Oriana Skylar Mastro predicted a "100% chance of some sort of use of force" within five years,³ while US Admiral Mike Gilday estimated that the window for an invasion could occur as early as 2022 or 2023.⁴ In 2023, former US National Security Adviser Robert O'Brien warned that an invasion could happen within two years, thereby revising his own prediction of two years from 2021,⁵ and General Mike Minihan spoke in a leaked memo of his "gut" feeling that the US would be at war with China in 2025,⁶ while a more cautious Matt Pottinger, also a former National Security Adviser, gave a "more than 50 per cent chance" of invasion within 10 years.⁷ Together, these claims suffice to show that a Chinese invasion of Taiwan is widely seen as imminent in policy and defence circles.

At stake in any potential Taiwan conflict is not merely the political future of the de facto independent island country, claimed as sovereign territory by China. A war over Taiwan is considered the most likely trigger for an armed confrontation between China and the United States, which would potentially have disastrous effects for the entire globe. It is also feared that a conflict over Taiwan would have catastrophic economic consequences, and cause worldwide destabilization and, depending on the outcome, a major reconfiguration of global power structures. To prevent such a war, it is essential to have an idea of the risk of conflict and the factors considered important in determining peace or war, as well as which conflict scenarios to watch out for.

A large and diverse body of literature treats the subject of a possible Taiwan conflict from various angles. Until now, however, no effort has been made to summarize the main findings of that literature on the level of risk that a conflict might break out. This Brief examines the forecasts and scenarios concerning a conflict over Taiwan that exist in open sources, and how they have developed in recent years. It studies works published since 2013 and has sought to include all the major English-language forecasts and scenarios published in this ten-year period. All these English-language works were published in the United States, where the Taiwan issue has great military relevance and is studied with particular intensity. Where available, the report also uses Chinese-language works from the same period, all of which originate from Taiwan. Despite searches of academic journal databases and for think tank reports from mainland China, I have not been able to locate any forecasts or scenarios from the People's Republic. The forecasts are evaluated from a methodological and empirical point of view and the major scenarios envisaged in case of conflict are described. The objective is not chiefly to arrive at an independent assessment of the risk of conflict or of the various scenarios, but rather to outline the general direction of expert opinion, while also identifying possible weaknesses and omissions. The report also discusses the conclusions from the more limited literature on the economic consequences of such a conflict.

Thinking about the future

Forecasts and scenarios are distinct approaches to thinking about the future. To forecast is to calculate the likelihood of something happening.⁸ To be formally complete, a forecast should state unambiguously the outcome predicted, a likelihood (e.g. as a percentage) and a timeframe.⁹ The most reliable forecasts are based on quantitative methods.¹⁰ Much modern conflict forecasting uses statistical tools and advanced data coding to construct models for predicting the outbreak of conflict.¹¹ However, this is a resource-intensive endeavour that may require access to costly proprietary models and classified data. Forecasting on the basis of expert judgment – judgmental forecasting – is more common, but also more unreliable and inconsistent,¹² in the worst cases to the point of being indistinguishable from guesswork.¹³ Judgmental forecasts can be improved using methods for eliminating bias and inconsistency.¹⁴ Their accuracy is also improved significantly by aggregating, since average forecasts are more reliable than the majority of the individual forecasts that make up the average.¹⁵

In contrast to forecasts, scenarios do not seek to state the likelihood of an event occurring. Scenarios aim to envisage plausible rather than probable futures.¹⁶ They are widely used in planning. Some possible futures, while unlikely, are considered important enough to merit highly detailed consideration. This is particularly the case in the field of defence and national security. The general idea is to identify key uncertainties and then imagine or calculate the results they could lead to, in order to be prepared for important contingencies.¹⁷ Taiwan scenarios are encountered in a number of methodological settings. Most scenarios are historically and qualitatively oriented, but scenarios are also used in quantitative settings to model conflict. This study does not include all the works in which a conflict scenario is simply posited, as these are legion. Instead, it is the use of scenarios to model a future chain of events that is relevant here.

Some of the most publicized predictions concerning a Taiwan conflict are based on wargames. Wargames are neither forecasts nor scenarios, but contain elements of both. Their essential characteristic is that outcomes are affected by the decisions made by the players. Nonetheless, there can be a predictive element to wargaming, as a wargame can be played repeatedly in order to study the likely outcomes given the game's assumptions.¹⁸

Forecasts: the increased likelihood of conflict

Two recent surveys have gauged US expert opinion on the risk of a conflict over Taiwan. In 2022, the Center for Strategic and International Studies (CSIS) measured responses from 64 China experts. Of these, 9 per cent believed that China would seek to unify Taiwan coercively or militarily by 2027.¹⁹ Over a 10-year horizon, 52 per cent thought it "likely" or "very likely" that China would use force short of invasion, while 8 per cent thought an invasion "likely" or "very likely".²⁰ The other survey asked 354 International Relations experts in 2023 whether China would use force against Taiwan in the next year. The median answer was a probability of 10–19 per cent. 22 out of 363 respondents (6 per cent) thought China would use force against Taiwan in the next year.²¹ While these forecasts lack precision – in that it is unclear what probability corresponds to the word "likely" – they give a valuable general indication of expert opinion and can be used as a starting point.

In the open domain, works that specifically aim to provide a forecast of the risk of conflict over Taiwan are conspicuous by their absence. Many contain statements on the likelihood of conflict but avoid stating numerical probabilities and almost no scholarly work attempts to fix a timeframe for an invasion. No study available in open sources uses formal statistical models to numerically estimate the likelihood of conflict, although it may be assumed that such forecasts exist in classified formats.²²

Despite this lack of systematic forecasting, most of the works studied here support the impression that the risk of a conflict over the future of Taiwan has increased in recent years. In 2013, analysts saw "the Taiwan issue" as "a key factor which might lead to military confrontation between [China and the US]^{"23} and did not dismiss the risk of negative developments.²⁴ However, they did not view conflict as imminent. For example, Richard Bush, forecasting the next few years around the transition to Xi Jinping's presidency, considered use of force by China "the least likely of the negative scenarios".²⁵ In a 2016 study of a future blockade scenario, Stephen Biddle and Ivan Oelrich stated categorically that China was still unable to impose a blockade on Taiwan.²⁶ In 2017, in his seminal study on the Chinese invasion threat, lan Easton wrote that "a war of nerves that played out over the course of years or even decades" was more probable than outright invasion,²⁷ and that invasion and occupation was Beijing's "least probable" option for pressuring Taiwan, in contrast to "symbolic gestures" and "small-scale acts of aggression".²⁸

More recent commentary is markedly more uneasy about the prospects for long-term peace. Starting around 2020, many works have taken on a new urgency. The Council on Foreign Relations (CFR) in 2021 talked about "a crisis building over Taiwan" and "the most dangerous flashpoint in the world",²⁹ describing China's behaviour as "actions that a country would do if it were moving into a prewar mode".³⁰ In 2022, commenting on developments in the preceding five years, Easton marvelled at the "remarkable" and "worrisome" rate of improvement in the Chinese military.³¹ John Culver, while sceptical that China consciously intended to start a war, stated in 2021 that "factors that tended to preserve the status quo [...] have eroded and are likely to continue to erode".³² Despite the urgency, however, war was not taken for granted. In 2021, Linda Jakobson called military conflict "highly unlikely", highlighting Beijing's non-military options for pressuring Taiwan into unification.³³ A 2022 CSIS report concludes that China is "more likely to continue its gray zone campaign against Taiwan than it is to launch a fait accompli, short-notice invasion".³⁴ Finally, a recently published interview study characterizes mainland Chinese expert opinion as that a war over Taiwan is "for the time being [...] improbable".³⁵

Main risk factors

China's military build-up is the single most prominent driver of the risk of conflict mentioned in the literature. All seem to agree that China's military strength has grown surprisingly rapidly, creating unprecedented challenges and dangers.³⁶ For many years, an invasion of Taiwan was considered safely beyond China's basic military capabilities. This is no longer the case.³⁷ The strengthening of China's military continues and proceeds according to declared milestone targets for 2027, 2035 and 2049.³⁸ The target for 2027 (the centenary of the People's Liberation Army, PLA) is occasionally assumed to entail the capacity to undertake a Taiwan unification campaign.³⁹ The same date has been mentioned as the earliest conceivable date for an attack.⁴⁰

A second risk factor mentioned by most authors is the general US-China rivalry, where the great power dynamic of "a rising power and an existing hegemon"⁴¹ (the so-called Thucydides trap) provides a structural reason for fearing conflict. For example, Chih-yuan Hsieh in 2018 feared that the new US Indo-Pacific strategy, which focused on China, would lead to "tighter strategic encirclement" of Taiwan by the PRC.⁴² In addition, in 2020, Chun-wei Ma thought that the US-China relationship faced a series of traps that could possibly lead to war, such as the conflict spiralling trap and an "alliance trap" over Taiwan, as a consequence of their ongoing trade war.⁴³ The two factors of a changing military balance and great power rivalry are unambiguously seen as present by practically all analysts.

A more difficult question is whether changing Chinese intentions, which includes Xi Jinping's alleged personal determination to force through a unification, have increased the risk of war. In the 2022 CSIS survey, 44 per cent of the experts believed that China had an internal "hard deadline" for achieving unification by 2049.44 This presumably relates to the goal, repeatedly voiced by Xi, of achieving "national rejuvenation" by this date, as he explicitly ties Taiwan to this goal: "Realizing China's complete reunification is a shared aspiration of all the sons and daughters of the Chinese nation as well as the essence of national rejuvenation".⁴⁵ At the same time, there is recognition that unification is a decades-old objective of the PRC, and thus could be seen as a static rather than a growing risk factor.⁴⁶ Even if growing, it might not be decisive - in 2019 Yi Chen, while acknowledging the danger of growing Chinese nationalism, thought that China would still not start "unnecessary wars" and "even less" try to capture Taiwan by force.⁴⁷ However, some analysts stress ideological change as a factor. China is seen as having "doubled down on xenophobic nationalism and repression",⁴⁸ while Xi Jinping is "on a mission to reunify [...] sooner rather than later".⁴⁹ It has also been claimed that China already sees Taiwanese attitudes and its identity as precluding peaceful unification.⁵⁰ Overall, however, Taiwan's increasingly negative attitude to unification is less prominently cited as a direct risk factor for conflict. Another minor risk factor mentioned is the impression that the US has been distracted from its security commitments in the region.⁵¹

The takeaway from forecasts

Applying methodological standards for good forecasting, the reliability of the individual forecasts studied is not high. The studies do not try to establish a base rate of likelihood for the event studied, let alone apply quantitative models shown to be reliable. Authors should

not be faulted too much for this, as the works studied do not aim for such a standard, and a case could be made that the event itself is so unprecedented as to confound any method that rests on historical data. On the positive side, aggregating forecasts increases reliability and there is enough general agreement to characterize a tentative consensus.

Overall, and in contrast to the media hype, experts are not in fact forecasting war. The sense that the risk of war has increased stems more from the fact that the US-China military balance is evening out rather than any strong agreement that China intends to make an aggressive move. Experts agree that China credibly could start a conflict, not that it will do so. Nonetheless, it is possible to conclude from this that the risk of war will continue to increase if China's military capabilities continue to grow in a trend unmatched by US and allied counterbalancing. Expert opinion varies most on the question of China's true intentions in the medium to long term. It is a reasonable conclusion that the increasingly personalized Chinese regime under Xi Jinping has become an important source of uncertainty. Depending on the view taken on the question of intent, the risk of war could be seen as rising dramatically in ten years, or as remaining at the current low level.

A possible weakness of the studies surveyed is that they are almost exclusively based on military capabilities and political attitudes. Scholars are aware that China's calculations on the use of force are set in a wider strategic context, which includes considerations on achieving comprehensive national strength along the simultaneous pathways of domestic economic and scientific development, as well as international diplomacy and military modernization.⁵² Despite this, there is little discussion of China's economic and diplomatic incentives and disincentives to wage war and how these interact with the changing military balance. In short, no publicly available work considers as a whole all the major factors that might be assumed to affect China's decision on the use of force. This therefore constitutes a clear opportunity for future research.

Year	Author	Title of work	Forecast on risk of war	
2013	Sheryn Lee & Benjamin Schreer	The Taiwan Strait: Still Dangerous	Situation will deteriorate because of changing military balance and US– China rivalry. ⁵³	
2013	To-Hai Liou	台海兩岸關係發展之軌跡	Optimistic observers hope for Xi- Ma Nobel Peace Price. ⁵⁴	
2013	Richard C. Bush	Uncharted Strait	Use of force "least likely" scenario.55	
2015	Chao-Hsiang Lu	中共對臺軍事武力發展對我防衛作戰之影響	Most peaceful time ever, but worsening military balance means higher risk. ⁵⁶	
2015	Chen Weiliang	中共反介入區域拒止戰略兼論犯臺模式	No Chinese capacity for invasion now, but might be successfully accomplished in the future. ⁵⁷	
2016	Scott L. Kastner	Is the Taiwan Strait Still a Flash Point? Rethinking the Prospects for Armed Conflict between China and Taiwan	Overall low risk, but degree of future Chinese pessimism on unification is the decisive factor. ⁵⁸	
2017	lan Easton	The Chinese Invasion Threat	Continued pressure campaign more probable than invasion. ⁵⁹	
2019	Yi Chen	現實政治民族主義:中共解決港臺問題比較與兩 岸關係前瞻	Unification cannot happen in 20– 30 years. ⁶⁰	

Table 1 Overview of available forecasts

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2021	Kuo-cheng Chang	兩岸爆發軍事衝突的可能與台灣因應作為之分析	Unlikely if Beijing believes the US will intervene. ⁶¹	
2021	Linda Jakobson	Why should Australia be concerned about rising tensions in the Taiwan Straits?	"Highly unlikely" ⁶²	
2021	Libby Lange & Doowan Lee	Disinformation, Annexation, & Deterrence: Why the CCP is More Likely to Subvert Taiwan than Invade	Political campaign more likely than military invasion.63	
2022	Li Peishan	美中臺關係的戰爭邏輯:中美必有一戰或兩岸必 有一戰?	"Daily growing" ⁶⁴	
2022	Heng-Chung Hsiao	台灣在美中戰略競爭下的地緣角色與策略選擇	Greatly increased risk of military conflict from US-China rivalry.65	
2022	Zeng Xiangying	2030年戰略情勢之判斷 – 臺海危機可能性	Steadily rising, but earliest in 2027. Taiwan's political development important factor. ⁶⁶	
2022	Andrew Scobell	China's Calculus on the Use of Force: Futures, Costs, Benefits, Risks, and Goals	Low as long as China's strategic outlook is advantageous.67	
2022	Benjamin Jensen et al.	Shadow Risk: What Crisis Simulations Reveal about the Dangers of Deferring US Responses to China's Gray Zone Campaign against Taiwan	Gray zone campaign more likely than invasion. ⁶⁸	
2022	US Department of Defense	Military and Security Developments Involving the People's Republic of China	China will defer use of force as long as unification could be negotiated.69	
2023	Jason M. Kuo	戰略模糊或清晰?戰爭議價理論與美國台海兩岸政 策的理性基礎	Higher risk from Chinese growth and US strategic clarity. ⁷⁰	
2023	Chih-lung Lin	印太戰略下的兩岸關係	Higher risk because of Chinese military pressure. ⁷¹	
2023	Alicja Bachulska & Mark Leonard	China and Ukraine: The Chinese debate about Russia's war	"Improbable" ⁷²	

Blockade scenarios

A commonly studied category of conflict scenario is various types of blockade. Taiwan is dependent on external supplies of food and energy,⁷³ and its geography makes it vulnerable to siege operations. The literature describes a number of such scenarios, which vary greatly in intensity. What they have in common is that China refrains from occupying Taiwanese territory but instead interferes with Taiwan's inbound and outbound traffic of goods and persons, with the aim of coercing Taiwan into concessions. All blockades would focus on Taiwan's main geographic weakness: its dependence on a small number of west coast ports for the overwhelming majority of its international transport.⁷⁴

At the "lighter" end of the spectrum, a 2022 RAND report describes a "coercive quarantine" scenario, where China asserts control over Taiwan's sea and air borders but limits its operations to screening and diverting sensitive traffic, without attacking Taiwan's economic viability.⁷⁵ From China's perspective, this could be seen as a lower-risk option for asserting sovereignty.⁷⁶ Such action would essentially involve a bet that the US would not intervene, as it otherwise grants the adversary a time window to prepare an intervention, reducing the chance of success. A key tactic would be to keep actions below the military threshold, justifying them with reference to Taiwan's ambiguous legal status and putting the burden of escalation on Taiwan or the US.⁷⁷ RAND finds that Taiwan could be very vulnerable in such a scenario, and that the logic of protecting Taiwan might quickly compel the US and allies to escalate.⁷⁸

At the other end of the spectrum, the "Joint Blockade Operations" (联合封锁作战) campaign described in PLA texts is a significantly more aggressive option that includes missile strikes

and airstrikes, naval raids and cyberattacks,⁷⁹ blurring the line between blockade and outright attack. Michael O'Hanlon's detailed study of a blockade scenario also supposes escalation to direct hostilities between US and Chinese forces, including one sub-scenario involving expanded regional warfare.⁸⁰ A crucial dividing line between lighter and heavier blockade scenarios is whether they would be considered an act of war according to international law, primarily because this affects the possibility of justifying foreign intervention.

Several writers strongly affirm a high likelihood of some form of blockade scenario in case of conflict. According to Drew Thompson, Taiwanese military planners presume that a blockade would be the first stage of a Chinese campaign.⁸¹ Easton, based on leaked PLA sources, also calls a blockade the first operational phase of any invasion of Taiwan.⁸² Lonnie D. Henley believes that overcoming a protracted Chinese blockade will be the crucial task in winning any Taiwan conflict.⁸³ Thus, it should be noted that even a less strict blockade entails significant risk of escalation, and that a blockade must be considered an integral part of every invasion scenario.

Invasion scenarios

In judging the overall military balance in the Taiwan Strait, the central question is naturally whether China possesses credible means of accomplishing an actual invasion, including the capability to counter US intervention. Today, China is considered the "pacing" challenge for the US military,⁸⁴ and a Chinese full-scale invasion is the most frequently studied Taiwan scenario. Compared to the various forms of blockade, invasion is a high-risk course of action.⁸⁵ From a Chinese perspective, however, if successful it has the advantage of permanently resolving the Taiwan issue. Easton maintains that China views campaigns other than invasion as "sub-optimal solutions that cannot be expected to get at the root problem".⁸⁶ At some point, boots on the ground would be necessary to achieve PRC control over the island.⁸⁷ In contrast to the blockade scenario, however, Taiwan's geography inherently favours the defenders in the case of an invasion. Virtually all authors agree that China cannot expect a swift and easy victory if it decides to invade.⁸⁸

Amphibious landing is considered by all to be an extremely complex military operation.⁸⁹ China would have to ferry large amounts of troops, vehicles and supplies over a contested body of water notorious for its challenging weather. PLA planning includes a preliminary phase of establishing sea and air superiority.⁹⁰ If that fails, attrition could be enormous even before the first vessels reach the shore.⁹¹ On the Taiwanese side, there are only a small number of beaches suitable for amphibious landing, all of which are strongly fortified. After breaking through Taiwanese fortifications, invaders would have to overcome obstacles inland,⁹² including mountainous terrain and complicated urban warfare.⁹³ While Taiwan is overall considered dependent on US support in the case of invasion, these geographic advantages translate into Taiwanese capability to prevent a fait accompli occupation, which would enable the timely intervention of US forces.⁹⁴

US security commitments to Taiwan mean that many Taiwan scenarios are constructed to study the progress and outcome of US-China combat operations rather than the question of Chinese aggression and Taiwanese resistance. Scenario writers generally do not attempt

to model such a comprehensive conflict in its entirety. For example, RAND's detailed "US-China Military Scorecard" declines to model such an "immensely complex affair".⁹⁵ It favours detailed quantitative models of specific missions, such US air attacks on Chinese airbases or naval ships. A recent CSIS wargame models the initial stages of an entire conflict, but specifically excludes nuclear decision making,⁹⁶ and assumes only limited US attacks on the Chinese mainland.⁹⁷ This turns the action primarily into a subregional air and sea battle. Other conflict aspects studied using the scenario planning method include, for example, submarine warfare during a blockade,⁹⁸ and strategic considerations following a fait accompli seizure of outlying island territories.⁹⁹

Other scenarios

The blockade and invasion of Taiwan's main island are not the only scenarios studied. Some works deal with the possibility that China might attack and occupy Taiwan's outlying territories, such as the Kinmen, Matsu or Penghu islands in the Taiwan Strait.¹⁰⁰ In general, however, such scenarios are mostly seen either as part of a wider campaign, including blockade, or as preliminary moves before a full-scale invasion. While such actions are clearly within China's capabilities, on their own they entail "possibly prohibitive" political risk while granting doubtful strategic advantage.¹⁰¹ There are also scenarios on political pressure campaigns, economic coercion and cyberattacks. These are not treated here as such actions can arguably be seen as part of the current (and in itself dynamic) status quo rather than a future scenario.

Relative likelihoods and outcomes of scenarios

Where authors assess the relative likelihood of different conflict scenarios, they invariably downplay the risk of outright invasion. For example, O'Hanlon believes that a blockade is more likely than other contingencies, including amphibious invasion.¹⁰² Easton also says that a blockade and bombing campaigns are "more probable than all-out invasion".¹⁰³ Biddle and Oelrich, extrapolating towards 2040, think that current technological trends will make a blockade an increasingly attractive option for China, compared to invasion.¹⁰⁴ Patrick Porter and Michael Mazarr, while assuming a Chinese invasion in their scenario of Chinese supremacy, also believe that a blockade or other forms of coercion are more likely than invasion.¹⁰⁵

Where the outcomes of scenarios are estimated, they vary widely, even within the same simulation. For example, O'Hanlon's 2022 quantitative modelling of a blockade scenario shows Chinese and Taiwanese/US forces to be matched in such a way that slight changes in variables might determine victory for either side. He concludes that the outcome of a conflict is "inherently unknowable" in advance.¹⁰⁶ This uncertainty increasingly extends to invasion scenarios. Recent analyses are not confident, as RAND was in 2016, that "China could not win, and might lose, a severe war with the United States in 2025".¹⁰⁷ Several recent classified wargames have even been reported to result in Chinese victory.¹⁰⁸ Others result in a "pyrrhic US victory",¹⁰⁹ or no clear victory for either side.¹¹⁰ The methodologies and assumptions of these wargames are unknown. The only published wargame study to reveal its methods, by CSIS, mostly resulted in Chinese defeat, although with high losses

on both sides.¹¹¹ The writers of that study deem that "China is unlikely to succeed if Taiwan resists and the United States intervenes".¹¹² This conclusion is typical of today's analysts – no author studied here is convinced that China would win a war against the US over Taiwan in the short to medium term. Most seem to think that China, despite its impressive military build-up, "still has shortfalls in key operational areas" for a Taiwan invasion.¹¹³ The logistics of an invasion have been raised in particular as one such shortfall, a problem which Chieh Chung thinks China is "extremely unlikely" to have resolved even by 2027.¹¹⁴ Nonetheless, a general theme in all the published scenarios is the "receding frontier of US dominance", which RAND was already warning about in 2015.¹¹⁵

Few of the scenarios studied here mention the possibility of long-term conflict. Reading them, one might get the impression that a crucial military outcome will result within days or weeks of the commencement of conflict. If a Taiwan contingency leads to confrontation between the world's two foremost economic and military powers, however, that conflict might just as easily last for years. For example, Lonnie Henley thinks that even a failed Chinese landing attempt would be the beginning of a longer conflict, including a prolonged blockade against Taiwan.¹¹⁶ In the case of a prolonged US-China conflict, developments necessarily escape the horizon of reasonable predictability. A possible important factor neglected by the scenarios studied here could be belligerents' industrial capacity to support a prolonged war. To take the most pressing of parallels, the Ukraine war is already, by many accounts, an industrial war, which in no small part will be decided by belligerents' commitments and access to military industrial production.¹¹⁷ US defence analysts today highlight deficiencies in the US industrial ecosystem, including an eroding manufacturing base and even dependencies on China for both components and raw materials.¹¹⁸ There is a pressing need to model a protracted conflict, factoring in projected capacity for the resupply of munitions and equipment, and assuming a situation of trade disruption, in order to calibrate the likely outcome of the scenarios envisaged.

Year	Author	Work	Scenarios studied	Method	Outcomes
2015	Eric Heginbotham et al.	The US-China Military Scorecard ¹¹⁹	Taiwan invasion, Spratly islands takeover	Quantitative d modelling	Challenges for US military grow particularly pressing in Taiwan case for 2017 scenarios
2016	Stephen Biddle & Ivan Oelrich	Future Warfare in the Western Pacific: From Command of the Commons to Spheres of Influence ¹²⁰	Blockade in 2040	Qualitative	US will not be able to lift blockade with air-sea battle
2017	lan Easton	The Chinese Invasion Threat ¹²¹	Taiwan invasion: blockade/bombing, amphibious landing, combat on land	Qualitative	-
2021	Robert D. Blackwell & Philip Zelikow	The United States, China, and Taiwan: A Strategy to Prevent War ¹²²	Invasion of periphery, Quarantine, Invasion of main island	Qualitative	-
2021	Kuo-cheng Chang	兩岸爆發軍事衝突的可 能與台灣因應作為之 分析 ¹²³	Limited force, Gray zone tactics, Invasion	Qualitative	-

Table 2 Overview of available scenario

2021	Christ Dougherty et al.	The Poison Frog Strategy: Preventing a Chinese Fait Accompli Against Taiwanese Islands ¹²⁴	Seizure of outlying islands	Wargame	US/Taiwan focus on avoiding escalation
2021	Lonnie D. Henley	PLA Operational Concepts and Centers of Gravity in a Taiwan Conflict ¹²⁵	Blockade after failed landing	Qualitative	Situation problematic for US/allies
2021	Chih-Yuan Hsieh	中共2021年對我國軍事 威脅研析 ¹²⁶	Amphibious invasion, Blockade, Limited force option, Air and missile attacks	Qualitative	-
2022	Stacie Pettyjohn et al.	Dangerous Straits: Wargaming a Future Conflict over Taiwan ¹²⁷	Invasion	Wargame	No decisive outcome
2022	Michael E. O'Hanlon	Can China Take Taiwan? Why no one Really Knows ¹²⁸	Blockade with two sub-scenarios: Submarine fight and Broader subregional war	Quantitative	Indeterminate – varies greatly with small variable adjustments
2022	Mathieu Duchâtel	An Assessment of China's Options for Military Coercion of Taiwan ¹²⁹	Operations in territorial waters, Seizure of offshore island, Cyber campaign	Qualitative	-
2022	Michael Casey	Firepower Strike, Blockade, Landing: PLA Campaigns for a Cross- Strait Conflict ¹³⁰	Firepower strike, Blockade, Amphibious landing	Qualitative	-
2022	Benjamin Jensen et al.	Shadow Risk: What Crisis Simulations Reveal About the Dangers of Deferring US Responses to China's Gray Zone Campaign Against Taiwan ¹³¹	Gray zone campaign	Wargame	US/Taiwan avoid escalation but create greater appetite for aggression
2022	Bradley Martin et al.	Implications of a Coercive Quarantine of Taiwan by the People's Republic of China ¹³²	Coercive quarantine	Qualitative	US/Taiwan must use military force to break quarantine
2023	Mark F. Cancian et al.	The First Battle of the Next War: Wargaming a Chinese Invasion of Taiwan ¹³³	Invasion	Wargame	US/Taiwan advantage in most iterations
2023	Lonnie D. Henley	Beyond the First Battle: Overcoming a Protracted Blockade of Taiwan ¹³⁴	Protracted blockade	Qualitative	Depends on US preparedness for the scenario

Economic consequences of a conflict

There are few estimates of the economic consequences of a Taiwan conflict. All agree that the disruption to the world economy would be immense.¹³⁵ One estimate by the Institute for Economics & Peace is that a blockade of Taiwan would result in the loss of global economic activity worth US\$ 2.7 trillion in the first year – an effect almost twice that of the 2008 financial crisis.¹³⁶ The same report estimates output falls of 7 per cent of gross domestic product for China and 40 per cent for Taiwan.¹³⁷ A central factor is Taiwan's dominance in

the semiconductor industry. Analysis by the Rhodium Group estimates a global cost of US\$ 1.6 trillion annually, resulting from disrupted semiconductor supply chains in the event of a blockade.¹³⁸ China's trade would also be severely affected – in one estimate losing 15–20 per cent of its trade with the rest of the world.¹³⁹

The above impacts only concern the effects of supply chain disruption. The likely imposition of sanctions in the case of Chinese aggression make the economic consequences even more difficult to assess.¹⁴⁰ China is so integrated into the world economy that punitive sanctions risk creating equally adverse effects on the sanctioning countries. Another Rhodium Group report, co-written with the Atlantic Council, notes that large-scale sanctions on China would be extremely costly for all parties, in some cases prohibitively so. In particular, large-scale financial sanctions would risk unsustainable costs for the rest of the world economy, making their "long-term strategic benefit [...] unclear".¹⁴¹ The report sees more promise in export controls on strategic Chinese industries, In one "maximalist" scenario, US\$ 225 billion in Chinese manufacturing and 15 million Chinese jobs would be at risk – but the "impacts on sanctioning countries would also be extremely high",¹⁴² reducing feasibility except in the most extreme circumstances. The report notes a general lack of understanding of the economic asymmetries vis-à-vis China,¹⁴³ which makes it hard to design sanctions that impose damage without causing an equally destructive backlash. This is another important area for future research.



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About the Swedish National China Centre

The Swedish National China Centre was established in 2021 as an independent unit at the Swedish Institute of International Affairs (UI). The Centre conducts policy-relevant research and aims to contribute to a long-term improvement in the state of China-related knowledge in Sweden. Any views expressed in this publication are those of the author. They should not be interpreted as reflecting the views of the Swedish National China Centre or UI.



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