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U.S.-CHINA COMPETITION ENTERS THE DECADE OF MAXIMUM DANGER

Policy Ideas to Avoid Losing the 2020s

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Gabriel Collins, J.D. Andrew S. Erickson, Ph.D. U.S.-China Competition Enters the Decade of Maximum Danger: Policy Ideas to Avoid Losing the 2020s

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Executive Summary

- U.S. and allied policymakers now face a "decade of danger" through roughly 2030 emanating from the confluence of a peaking paramount leader (Chinese President Xi Jinping), a peaking Chinese Communist Party (CCP), and a peaking People's Republic of China (PRC) as the country begins to experience the "S-curved slowdown"¹ common to great powers.
- The PRC has achieved an extraordinary rise in power over the last two-plus decades and has succeeded in multiple regional coercion actions over the past decade; but its comprehensive national power will likely peak between 2030 and 2035—or, quite possibly, sooner.
- Within the next five years, PRC leaders are likely to privately conclude that China's deteriorating demographic profile, structural economic problems, and technological estrangement from global innovation centers are eroding its leverage vis-à-vis Taiwan and other strategic objectives. As Xi internalizes these challenges, his foreign policy is likely to become even more risk-embracing.
- Xi's risk appetite will likely be amplified by his nearly decade-long track record of successful revisionist actions against the rules-based order. Notable examples include the PRC perpetrating atrocities against humanity in Xinjiang,² coercively enveloping Hong Kong,³ occupying Bhutanese lands,⁴ violently challenging its borders with India, occupying and militarizing disputed features and zones in the South China Sea,⁵ ramping up air and maritime incursions against Japan and Taiwan,⁶ and seeking to illegally restrict or endanger foreign military activities in international waters and airspace even as it operates permissively—sometimes covertly, sometimes aggressively—around the world and across all domains.
- For the Party, these "victories" have substantively exhausted the "lower-cost, high-payoff" options for aggrandizement, while emboldening Beijing as it eyes the biggest single revisionist prize: Taiwan.
- Xi, the CCP he leads, and the PRC they control, are presently pursuing extremely ambitious strategic goals for China's "national rejuvenation." Addressed in the nation's five-year plans, these objectives are linked to key anniversaries, including two centenaries—the 100th anniversary of the CCP's founding in 2021 and that of the PRC in 2049.
- Unless deterred successfully, Xi likely seeks a major historical achievement regarding Taiwan by the end of this decade, his maximum expected window of personal health and political opportunity. The 68-year-old leader, whose personal abilities, preparations, and available national power are all coming to a peak, will likely be tempted to make his mark on history through a major move against Taiwan near a third key milestone goal year—2027, the 100th anniversary of the founding of the People's Liberation Army (PLA), with its "original mission" of defeating the Kuomintang. Indeed, China has advanced key PLA modernization goals from 2035 to 2027.

- Furthermore, the PRC's externally-facing aggression increasingly appears to be structural in nature. For instance, the lack of apparent pushback from within the CCP against danger-generators, like its increasingly hardline approaches toward Taiwan, suggests that the Party has internalized an aggressive approach to foreign and security policy. Key challenges could therefore outlive Xi if he lost influence, became incapacitated, or—in a less likely scenario—was removed from power.
- Beijing's actions during the past 10 years have triggered countermeasures, such as the Australia-United Kingdom-United States (AUKUS) trilateral security pact,⁷ but concrete constraints on China's strategic freedom of action are currently not on track to fully manifest until beyond 2030. Absent stronger diplomatic, economic, and military pushback, Beijing will likely conclude that the 2021-tolate-2020s timeframe still favors the PRC. It is quite remarkable, and dangerous, how little cost China has suffered from its actions over the last decade.
- While China's growth in national power is slowing, the United States and its allies cannot simply avoid the contest of the decade by "waiting Beijing out." The situation will get far worse before it gets better, and we will only avoid disaster if we "hold the line" at this critical time. Failure to do so would allow unacceptable consequences in the process, such as losing Taiwan and severely damaging or destroying regional alliances and partnerships—transformative debacles that would remove remaining guardrails to PRC aggression and give it a "second wind."
- Precisely when China will peak is uncertain, but it is very likely to do so within the next few years. Given the potential for irreversible catastrophe if near-term PRC aggression is not countered effectively, the United States and its allies should optimize planning and preparations to address maximum up-front threats, and accept corresponding tradeoffs and risks: the best directed-energy weapons in coming decades will matter little if we lose Taiwan on our watch.
- Accordingly, U.S. planners must urgently mobilize resources, effort, and risk acceptance to maximize capacity to deter PRC aggression throughout this decade—literally starting now.
- In athletic terms, the U.S. and its allies must now marshal their efforts and focus to "peak" near-term capabilities and maximize their strategic impact by innovatively employing assets that currently exist or can be operationally assembled and scaled within the next several years.
- Xi's repeated revisionist success indicates that to "hold the line," proactively push back, and preserve the rules-based order during the 2020s decade of danger, America and its allies must dramatically enhance the robustness and agility of their collective deterrence and warfighting posture. "Holding the line" is fundamentally about maintaining the status quo, but doing so in practice requires opposing the PRC's revisionist "slow boil" that has rendered Taiwan and the region less secure and will continue to do so absent concerted, impactful counter-actions.

- U.S. and allied efforts must emphasize to China that: (1) the window for action against Taiwan is closed tight; (2) PRC attempts at regional revisionism will be met robustly across the diplomatic, economic, technological, and operational spectrum—including intensified presence and operations vis-à-vis the East and South China Seas; and (3) the U.S. and its allies are jointly preparing, planning, and exercising to ensure maximum interoperability, coordination, and capacity to prevail should deterrence fail.
- The United States has taken too long to warm up to, and focus on, great power competition with China, but it retains formidable advantages and agility that will help it to prevail—provided that it goes all in now. This will require resourcing the mission commensurate with its importance. The U.S. consistently spent \$50 billion annually (and sometimes much more) in Afghanistan and Iraq for much of the past two decades.⁸ Yet the Fiscal Year 2022 defense budget recently approved by Congress only appropriates \$7.1 billion for the Pacific Deterrence Initiative serving the vast, vital Indo-Pacific region. To avoid "losing the 2020s"—and with it the 2030s and beyond—Washington must put its maximum money and effort where its mouth is, starting now.

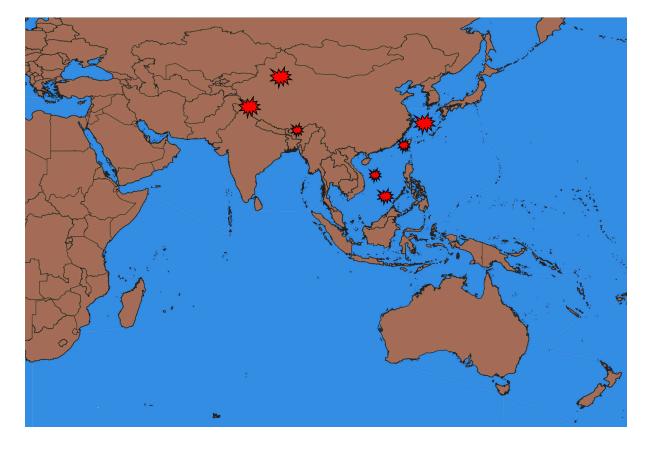
An Unforgiving Gauntlet to Run

Washington now has an unforgiving, but vital, "gauntlet" to run. This rough metaphor having no choice but to push through a hostile assembly in order to reach a critical goal, while being exposed to vituperation and danger—conveys the urgent, serious situation in which America must prevail over peaking PRC threats during this decade.

Beijing's tactical public actions and propaganda mask a growing private awareness that its power and latitude for irredentist action face looming constraints. Meteoric PRC achievements are likely to taper and level off in coming years. The closer China approaches leading-edge military capabilities, for instance, the more expensive, complicated, and difficult it will be for it to advance further. Moreover, China's erstwhile adversaries are not standing still. As Washington intensifies its strategic focus on China and the Indo-Pacific region, rallies a coalition of allies and like-minded states, and deploys new military hardware, Beijing will face a formidable combined economic and military mass backed by a strategic focus that was absent during most of the past 20 years as China rose to become a regional colossus.

Not knowing exactly when domestic and external constraints will bite conclusively but knowing that when Beijing sees the tipping point in its rearview mirror, major rivals will soon recognize it too—amplifies Xi's anxiousness and may impel him to act on a compressed timeline. This dynamic has likely helped to drive the dramatic acceleration in China's revisionist actions following Xi's ascension to power in 2012. These actions have occurred within and outside of the PRC's internationally recognized borders and encompass manifold activities. The PRC's malign actions against the rules-based order range from physical occupation of territory (South China Sea features and Bhutan) and physical assaults on neighboring states (India), to severe political (Hong Kong) and ethno-religious (Xinjiang) oppression, to political interference operations (Australia and New Zealand), to physical coercion of societies beyond de facto PRC control (Taiwan) and economic coercion of sovereign states (Australia), to illegal and dangerous military operations around the world and in all domains. Beijing also increasingly utilizes economic coercion to penalize freedom of thought and expression far from its borders—for instance, the blackout of NBA games on state television networks in 2019 after the Houston Rockets' then-general manager tweeted support for pro-democracy protesters in Hong Kong.

Figure 1: Indo-Pacific Locations of Selected PRC Assault on Rules-Based Order, 2010-2021



Sources: BBC, GADM, Reuters, authors' analysis.

The most dangerous single flashpoint is Taiwan, where U.S. and allied success, or failure, will be fundamental and could trigger consequences that reverberate for the remainder of the century. There is a growing chance of a major move against Taiwan by the late 2020s. This would likely happen after an extraordinary ramp-up in PLA capabilities, but before the power and grasp of Xi or the Party-state has ebbed or Washington and its allies have fully regrouped and rallied to the challenge.

Just as China is mustering its own comprehensive capacity, so too must America intensify its focus and deployment of resources. Conversely, if Washington fails to marshal its forces promptly, its achievements after 2030 or 2035 will matter little. Major revisionist actions consummated during the 2020s would enable Beijing to cripple the free and open rules-based order, and entrench its own position by economically subjugating regional neighbors (including key U.S. treaty allies) to a degree that could offset the strategic headwinds that China increasingly faces. Were that allowed to happen, the United States would face a degree of strategic disadvantage it has not seen in the Indo-Pacific region since Imperial Japan's regional apogee in 1942. China's "gray zone" coercion against Taiwan and regional neighbors including the Philippines is already underway and growing. Deterring invasion is critically important, but additionally the status quo has changed and continues to change because of Chinese coercion. Taiwan is worse off today internationally than last year, and will be worse off next year unless we demonstrate full awareness of the "slow boil" China has going and counter it concertedly. Figure 2 lays out sample future scenarios that Washington and its partners must seek to deter, lest they risk a cycle of escalation.

Action	Warning Timetable
Maritime Militia actions against Taiwan's outlying islands such as Pratas	Days
PLA blockade of Taiwan's outlying islands	Days
Invasion of Kinmen or other outlying Taiwanese islands	Weeks
Customs quarantine possibly escalating to maritime blockade of Taiwan	Days/Weeks
Missile/Air "exercises" to disrupt air and maritime traffic into Taiwan	Hours/Days
Full invasion of Taiwan	Weeks/Months

Figure 2: China's Potential Next Set of Revisionist Actions

Sources: David Lague and Maryanne Murray, "War Games—T-Day: The Battle for Taiwan," *Reuters*, November 5, 2021, <u>https://www.reuters.com/investigates/special-report/taiwan-china-wargames/</u>; authors' analysis.

Deterrence is never certain. But, backed by worst-case preparations, it offers the highest probability of avoiding the virtual certainty that an Indo-Pacific region dominated by a CCP-led China would imperil treaty allies, threaten the American homeland, and likely set the stage for worse to come. Accordingly, U.S. planners should immediately mobilize resources, intensify efforts, and accept greater risks in order to deter PRC action throughout this critical decade.

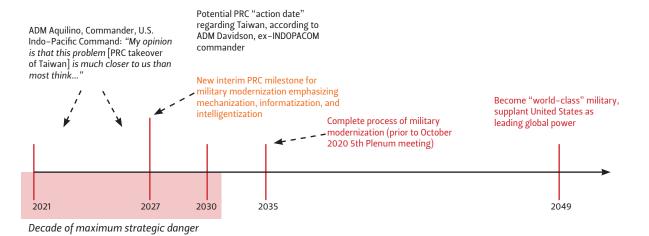
Peaking PRC, Peaking CCP, Peaking Xi

The triune relationship between PRC national power, the Party's security, and Xi's position will come into full relief during the decade of danger. As Beijing aggressively seeks to undermine the very international order that facilitated its rise, intensifies coercion of Taiwan, and promotes a narrative of inevitable PRC strategic domination in Asia and beyond, it creates a dangerous contradiction between its goals and the sustainability of its means to achieve them. A range of demographic, economic, and other data, coupled with key dynamics, suggest that the PRC is in fact likely nearing the apogee of its relative power. By the late 2020s on the front end, to 2035 on the back end, the PRC will likely cross a tipping point from which it may never recover strategically. Intensifying headwinds constraining PRC growth, while not publicly acknowledged by Beijing, help to explain Xi's high—and apparently increasing—risk tolerance.⁹

PRC statecraft now disfavors strategic patience not merely because Xi is ambitious due to his own personal and political timeline as he nears the potential zenith of his power, but also because the macro environment (and by extension, time) is now sliding shut China's window of strategic opportunity. Pressures are especially acute on the debt, demographic, and economic growth fronts, as well as resource insecurity—which, for great superpowers, can induce costly financial and security investments and precipitate ruinous foreign policy entanglements nonetheless believed necessary by their leaders.

Economic power is especially foundational. It is an irreplaceable prerequisite for creating and sustaining military power over the multi-decade timeframe necessary to prevail in a great power competition. To paraphrase Napoleon, an army marches on its stomach but is built on its nation's economy. Technologically advanced equipment, maintenance, world-class personnel, and their collective operation at near-or-full superpower scale costs on an annual basis more than most countries' entire gross domestic product (GDP). Maintaining—or even setting—the cutting edge and projecting force beyond one's territorial boundaries costs more still. Accordingly, China's economic trajectory will be a key enabler—or constraint—on Xi's increasingly clear ambitions for regional supremacy, near-or-full peer global influence, and force projection capabilities.

Figure 3: The China Strategic Danger Window – PRC milestone dates in red font, U.S. assessments in black



Sources: Andrew S. Erickson, "Make China Great Again: Xi's Truly Grand Strategy," War on the Rocks,

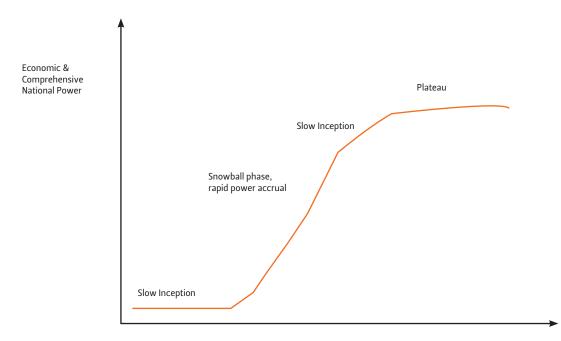
October 30, 2019, <u>https://warontherocks.com/2019/10/make-china-great-again-xis-truly-grand-strategy/;</u> Erickson and Collins, "A Dangerous Decade of Chinese Power Is Here."

> Xi likely seeks a major historical achievement regarding Taiwan by the end of this decade, his maximum expected window of personal health and political opportunity. ... near a ... key milestone goal year—2027, the 100th anniversary of the founding of the ... PLA ... with its "original mission" of defeating the Kuomintang. Indeed, China has advanced key PLA modernization goals from 2035 to 2027.

Economic Trajectory: Implications for China's Military-Strategic Prospects

China's economy appears to be well into the flattening phase of the "S-curve" trajectory often used to describe the stages of a nation's economic growth lifecycle.¹⁰ By extension, that position also strongly correlates with comprehensive national power. Most fundamentally, the S-curve is a conceptual lens that, while shaped somewhat by a country's specific circumstances, follows a common succession of contours: (1) slow growth at a polity's inception, (2) more rapid expansion as growth begets growth and available resources snowball, (3) a downshift in rate of growth as countervailing forces increasingly coalesce, and (4) slower growth and eventual plateau or even decline (Figure 4).

Figure 4: The S-Curve of Economic and Comprehensive National Power



Multiple economic activity signals suggest that China's economy is now doing one of two fundamental things: (1) entering the early phase of another "bricks and mortar" growth super-cycle like it experienced from the early 2000s to the early 2010s, or (2) doubling down on a "steel and cement" economic model, but with diminishing returns as each successive round of investment struggles to inflate a larger balloon. If the first explanation is more accurate, then our strategic economic assessment requires recalibration. But the body of empirical evidence increasingly points to the second explanation being the more likely trend in practice.

To begin with, consider the trajectory of key economic activity indicators since 1985. We use the production of electricity, cement, sulfuric acid; the consumption of diesel fuel and steel; and the volume of rail freight, because they are likely more indicative of actual happenings in the economy than the heavily massaged official GDP numbers. This set of indicators is an expanded version of the "Li Keqiang Index" that the now-premier used to track economic activity when he was Party secretary in Liaoning Province in the mid-2000s.¹¹ Readers should note that for cement and sulfuric acid, production offers a useful proxy for demand, as these bulk commodities are primarily

produced for domestic consumption, and data are more accessible and reliable for dozens or hundreds of major producers than they are for potentially hundreds of thousands of consumers spread across China's sprawling economy.

During Phase 1 (1985–early 2000s), the indicators all increased, with electricity, cement, diesel fuel, and sulfuric acid most closely tracking the "official" GDP number. Rail cargo volumes grew, albeit on a flatter trajectory, as did steel (Figure 5). Phase 2 (early 2000s–early 2010s) saw demand and production rise significantly across the board, with electricity, diesel fuel, steel, cement, and sulfuric acid all accelerating. Phase 3 (2013–2016) marked a transitional phase in which many key building-block commodities took a growth breather in a fairly synchronized fashion. This started with a demand plateau for The United States and its allies cannot simply avoid the contest of the decade by "waiting Beijing out." The situation will get far worse before it gets better, and we will only avoid disaster if we "hold the line" at this critical time. Failure to do so would allow unacceptable consequences in the process ... that would remove remaining guardrails to PRC aggression and give it a "second wind."

diesel fuel beginning in 2012, a near-term peak in steel use in 2013, and a potentially more structural peak in cement production in 2014—the high-water mark to date for that material. Rail freight followed with down years in 2015 and 2016. Divergences between production and consumption of vital input materials and the uncannily smooth continued rise of official GDP numbers during the mid-2010s increase our confidence that the tangible metrics we are using provide a more "honest" assessment of actual economic activity.

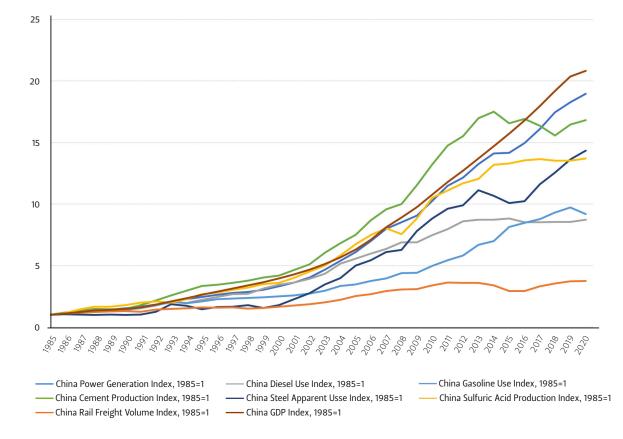


Figure 5: Trajectory of Critical Economic Indicators in China (Index, 1985=1)

Sources: National Bureau of Statistics of China; U.S. Geological Survey; World Steel Association; authors' analysis.

Phase 4 (post 2016) displays a combination of plateauing/slight decline for certain inputs (diesel fuel and sulfuric acid) and renewed demand increases for others (steel, cement, and electricity). The "breather" period in the mid-2010s, followed by substantial activity growth in steel and cement (plus the electricity used to produce both and run many other heavy industrial assets), coincides with a blip in China's gross fixed capital formation data (Figure 6).

Gross fixed capital formation represents "the value of producers' acquisitions of new and existing non-financial assets less the value of their disposals of non-financial assets" and includes machinery and equipment, buildings, homes, and other structures.¹² For this report, it offers an approximate yardstick for measuring China's ongoing investments in physical infrastructure. While the U.S. and PRC economies are in many ways quite different, it is striking that, despite remaining a major (and underappreciated) global industrial and manufacturing player, the U.S. ratio of gross fixed capital formation to GDP remained remarkably consistent through five decades of economic "superpowerdom."¹³ China's ratio, in contrast, reflects not only the slug of investment that supercharged its economic rise beginning in the late 1980s, but also, more recently, the fact that fixed asset investment appears to be the country's only dependable growth engine and continues to increase in relative terms, even as the overall economy has become the world's second largest in real terms. China's economic growth monoculture and increasing pressure from domestic distortions—debt and capital controls prominent among them—raise pointed questions not only about this model's durability moving forward, but also about the deadweight tax it will likely increasingly impose over the next decade, just as China promulgates a narrative of inevitable global economic dominance.

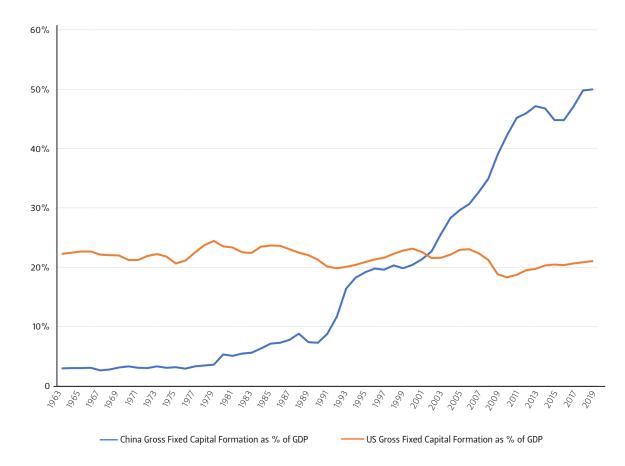


Figure 6: Gross Fixed Capital Formation as a Percentage of GDP in the U.S. and PRC Economies

Sources: Federal Reserve Bank of St. Louis; authors' analysis.

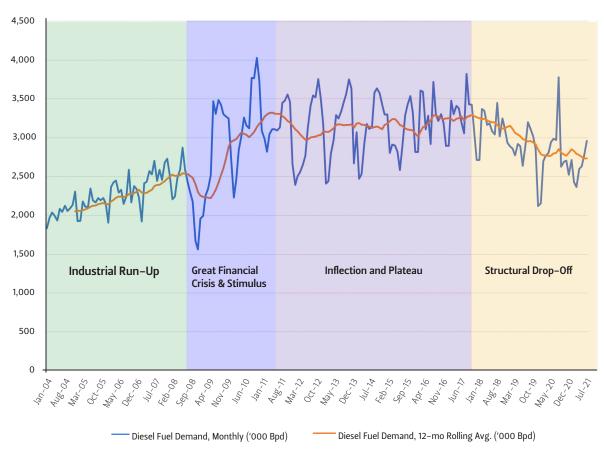
With nearly five years of retrospective data now available since 2016, the most probable explanation for the upswing in some basic materials and stagnation in others is that Beijing is struggling to unleash the transition to a more consumer-centric economy that multiple senior leaders (including Premier Li Keqiang and General Secretary Xi himself) have emphasized. Instead, the PRC may be renewing its emphasis on the "traditional" construction-oriented model that propelled the country's economic rise over the past 40 years.

On the consumer front, the Chinese equivalents of Gen-Xers and millennials, who generally bought into a consumption mindset and the "996" work ethic (and consumer debt) needed to sustain it, appear to be giving way to a PRC version of Gen-Z with a distinct subculture of "lying flat" (躺乎). As the Brookings Institution's David Bandurski recently pointed out, a core ideal of the lying flat movement is "don't buy property; don't buy a car; don't get married; don't have children; and don't consume."¹⁴ As we discuss later, while the lie-flatters still only constitute a minority

Washington now has an unforgiving, but vital, "gauntlet" to run. This rough metaphor—having no choice but to push through a hostile assembly in order to reach a critical goal, while being exposed to vituperation and danger conveys the urgent, serious situation in which America must prevail over peaking PRC threats during this decade. of PRC society, they will become a more important constituency as the society ages rapidly and imposes precisely the types of pension and other burdens that can only be sustained readily by an industrious (and numerous) younger set. The leading-edge effects of an anticonsumerist mindset already seem to be manifesting themselves, with both diesel fuel and passenger car sales downshifting significantly since 2018 (Figures 7, 8).

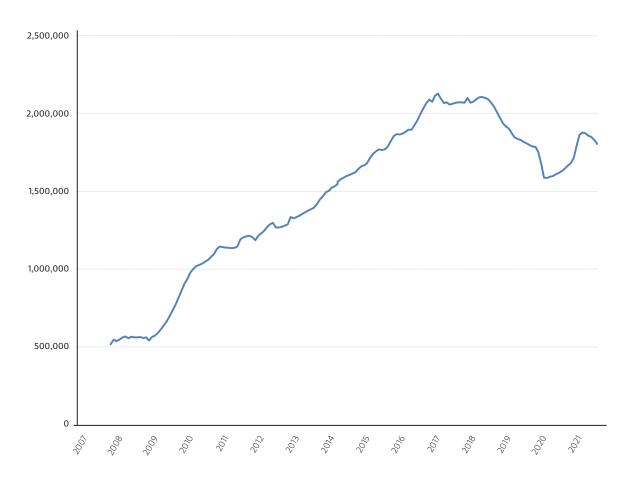
Measured as a rolling 12-month average of monthly demand, China's diesel fuel consumption peaked in mid-2011. Since that time, diesel use stabilized for about five years and then actually declined beginning in late 2018 (Figure 7). China's truck fleet composition is increasingly bifurcated, with substantial growth since

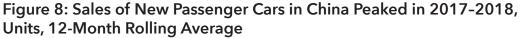
2015 in the light and heavy truck categories, while the number of medium trucks has been nearly halved, and "mini" trucks have been driven almost entirely out of the fleet by modernization and fuel efficiency efforts. Road freight accounts for about 80% of the cargo movement in China (with 73% of total volume trucked), and much of that is moved by diesel-engine vehicles.¹⁵





Sources: Joint Organisations Data Initiative; authors' analysis





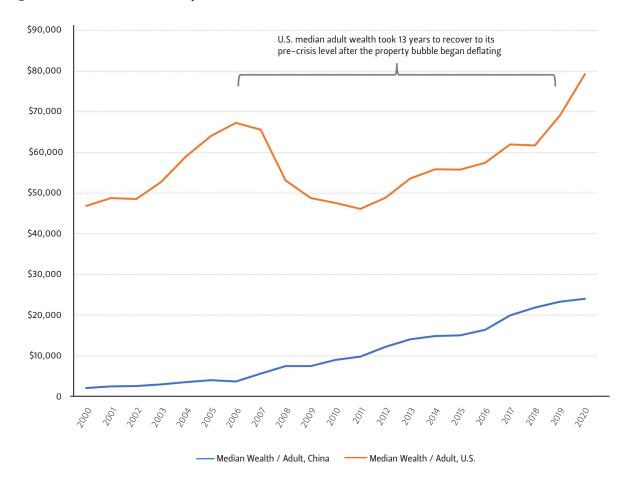
Sources: China Association of Automobile Manufacturers; authors' analysis.

Passenger car sales reflect consumer sentiment, since the purchase of a vehicle is one of the biggest personal outlays typically made in China other than buying a home. Measured on a 12-month rolling average basis to adjust for seasonality and episodic intramonth variation caused by implementation or removal of government incentives, new car sales in China rose for a decade (2007–early 2017). They then plateaued for approximately 18 months and subsequently declined, with a near-term nadir during the spring 2020 coronavirus lockdowns and subsequent relative recovery, but at a structurally lower level than before (Figure 8).

With consumption falling short and innovation still waiting to bear its primary fruits in the future,¹⁶ the remaining leg of China's economic growth triad reverts to the longstanding approach of "building to generate growth." On this path, Beijing faces the fixed asset investment trap. Investment delivers diminishing returns over time, because projects are often built to court or create growth, rather than in response to it, as would be the case in a more strictly market-oriented context. If projects are built and demand fails to materialize at the necessary level (e.g., thereby creating "ghost cities"), a growing mountain of debt risks becoming hostage to an increasingly non/ under-performing collateral asset base.¹⁷

As the present travails of Evergrande and other PRC property developers illustrate, resets of such imbalances are massively fraught. Rationalization rarely goes smoothly because even in a heavily state-influenced economy, the loss of confidence on the part of investors (and the hundreds of millions of PRC citizens with large proportions of their wealth tied up in property assets) can trigger panic and spread with unpredictable cascading effects. Deleveraging events also often reveal hidden risk pockets and linkages among assets, classes, and institutions that regulators may not fully realize until the boulder is already rolling fast downhill—as American officials learned during the 2007–2008 subprime mortgage crisis.

Explosive deleveraging is intensely disruptive even in the most resilient societies with electoral pressure release valves. It could well prove catastrophic in a "controlocracy" with a demonstrated fear of market shocks. Xi clamped down hard during the 2015 stock market turbulence, imposing restrictions on trading and deploying the "national team" to help ensure market stability.¹⁸ But a bubble burst in China's fixed infrastructure and real estate base—which, at this point, is likely worth seven to eight times the value of China's stock market capitalization in the summer of 2015, and is much more systemically integral to the economy and society—could rapidly expand beyond even Beijing's formidable political-economic containment capacity.





Sources: Credit Suisse Wealth Report 2021; authors' analysis.

The financial crisis of 2008 hobbled the American economy for years afterward. Our analysis of wealth data disclosed by Credit Suisse between 2000 and 2020 shows the deep impacts of the subprime mortgage crisis: Median wealth per adult in the United States reached a near-term peak of approximately \$67,000 in 2006, plunged thereafter, and did not regain the 2006 level until 2019 (Figure 9).

A property downturn in China would likely have much harsher impacts. First, the scale of China's fixed asset base—dominated by real estate—is much larger than America's. China's property market is likely worth more than \$50 trillion, according to Goldman Sachs—about twice of what America's was valued at prior to the financial crisis of 2008. Second, housing and related items presently account for about 29% of China's GDP, a far larger share than the 19% of U.S. GDP that came from housing services and residential investment at the sector's 2005 peak.¹⁹ Third, in relative terms, people in China hold far more of their wealth in non-financial forms (primarily, real estate) than

Americans do. In 2006, 36% of the wealth held per adult in the United States fell into the category of "non-financial." That share declined to 27% by 2020. China presents an entirely different situation, with 56% of wealth held in non-financial assets (down from 62% in 2006). Accordingly, as bad as the 2006–2008 property crash was in the United States, it would likely be proportionally worse in China.

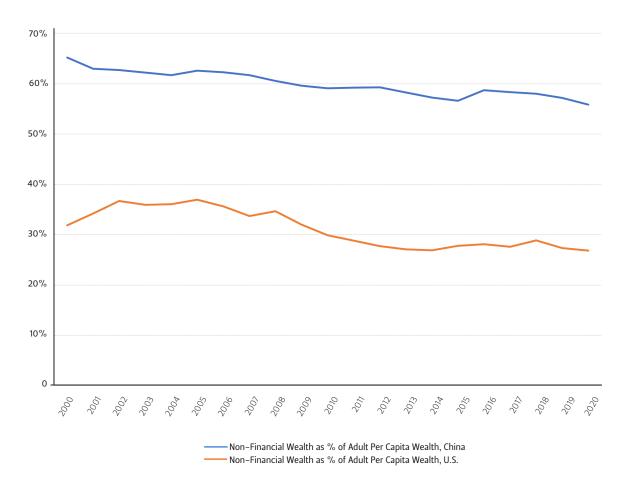


Figure 10: Non-Financial Wealth as a Percentage of Total Adult Per Capita Wealth, 2000-2020

Sources: Credit Suisse Wealth Report 2021; authors' analysis.

Xi and his advisors almost certainly realize that they would not be able to close this Pandora's box if a cascade of defaults ripped it open by triggering broader panic and contagion. They probably also realize that the "lying flat" movement and its broader resonance is immune to most of the standard policy intervention options because: (1) it is a passive act for which participants cannot be punished in the typical ways, (2) people cannot be compelled to consume even if the economy requires it, and (3) if a large segment of the population is sapped of its will to compete and strive, the scale of resources needed to incentivize a mindset change is likely not feasible or sustainable, especially given current debt burdens at both the consumer level and economy-wide. Currently preferred Party tools involving surveillance and social credit scores are far more effective at channeling citizens away from behaviors the Party fears than channeling them toward the patterns of consumption it desires.

Aware of these constraints, Xi appears to have chosen a third course of action: deploying China's coercive economic guidance machinery to continue plugging Evergrande-type holes in the fixed-asset dike, and playing for time as policymakers search for ways to deflate the bubble rather than burst it. One example would be the property taxes proposed in October 2021, which could theoretically offer one pathway to avoid a crisis, but have thus far aroused staunch opposition given their linkage to many fraught political, societal, and economic issues. Whether alleviatory measures can actually set the stage for renewed future growth is another question entirely, and while relevant to this report's analysis, is beyond its scope. What does seem increasingly clear in the interim is that bubble containment and aversion of crisis comes increasingly at further cost to growth. On a geopolitical level, the shift from a roughly 6% compounding growth rate a decade ago to something closer to 4% now, and likely lower in the next two to three years, will be profound.

Economic power is often translated into military hard power on a lagging and slowing basis, in part because program decisions take years to yield physical, deployable products; and personnel recruitment and retention often hinges on promised retirement benefits and other costly back-loaded future entitlements. Large-scale production of military platforms and employment of sufficiently sophisticated individuals to operate them is easiest in an economy growing substantially faster than inflation. This is particularly true for a military still rapidly climbing the global technological ladder, within a society in which individuals' willingness to contribute collectively significantly exceeds their expectations of individual compensation. But these advantages tend to dissipate inexorably with a great power's S-curved slowdown, as seen clearly in the struggle to maintain force numbers already conceded by most advanced industrial economies' navies and currently convulsing the U.S. Navy.²⁰

Here China faces the diminishing returns that nations developing increasingly advanced militaries have long confronted. Among the most dramatic historical dynamics, a combination of rapid GDP growth and shipbuilding prowess puts a country in an enviable sweet spot. Between the world wars, for instance, Japan's rapid economic growth enabled it to bear ever-increasing ship development costs at a constant defense burden. World naval powers throughout modern history, including the Netherlands, United Kingdom, and United States, have likewise enjoyed such conditions in their peak growth years. But maintaining a leading military in general, or navy in particular, grows increasingly expensive—particularly as it approaches the ever-advancing technological frontier and can benefit progressively less from copying, adopting, or emulating others' innovations.

The naval example is both particularly amenable to diachronic analysis and reasonably illustrative: military shipbuilding cost escalation approximates that of other weapons systems, such as military aircraft. Today's warships and the conditions under which they are produced and operated are far more complex than their predecessors. Together with relatively small production numbers in the best of cases, this increases expenses. Drawing on considerable historical data, Philip Pugh's unsurpassed study finds that while nations tend to spend a constant percentage of their economy on defense over time, the cost of ships and weapons increases faster than inflation, typically at 9%. At 2% inflation, this would compound to costs doubling each decade. Pugh calculates that even 2% per annum naval budget growth—excessively optimistic for most developed Western nations—would tend to require an annual average of 3.5% reduction in fleet numbers.²¹ A 2006 RAND study prepared for the U.S. Navy similarly concludes that the cost growth rate for U.S. Navy vessels over the past half-century was 7% to 11%, with economy-related factors approximating inflation and customer-driven demands accounting for the remaining majority. Of these, ship weight, power density, and sophistication were the largest cost drivers.²² Navies strive for countervailing innovation and cost savings, particularly by downshifting missions to smaller vessels. Ultimately, however, navies typically find the cost growth challenge unrelenting, necessitating major numerical reductions over time.

China has recently enjoyed an enviable combination of factors, but this is dissipating—even as large waves of its warships begin to face mounting mid-life overhaul and modernization costs. A warship's initial procurement price is typically only one-third of its total lifetime cost. This rule of thumb most dramatically came home to haunt the sprawling Soviet Navy after its mammoth buildout under Fleet Admiral Sergey Gorshkov's three-decade tenure as commander-in-chief of the Soviet Navy,²³ but all navies face some version of this challenge.

Maintaining anything close to China's heretofore rapid rate of naval force structure growth amid a mounting maintenance burden would require a major increase in workhours. The corresponding increased capital investment would have to be provided from a PRC economy that is growing at an ever-slowing rate even as labor costs continue to rise. Using a comprehensive model that considers a PLA Navy surface combatant's outfit density, corresponding historical U.S. information, and labor-hours to analyze a widely-cited specific order of battle growth estimate, a pioneering study by retired U.S. Navy Captain Chris Carlson concludes: "Given the fiscal challenges facing China today and in the near future, this very robust force structure projection is questionable."²⁴

For all these reasons, the proliferation of new PRC weapons platforms today, especially the naval shipbuilding program, missile developments, and nuclear force expansion, may at a basic level actually reflect China's economic situation five or even 10 years ago. While undeniably impressive to observers today, the results of those past investments are not necessarily indicative of future waves of energy, power, or leverage. Systems bought in "yesterday's economy" but paid for and delivered under contemporary conditions, maintained with today's funds, and augmented or replaced with systems chosen today and paid for over future years, make a country's forward-looking economic trajectory enormously important for allies and partners seeking to judge its future protective capacity and for adversaries seeking to assess weaknesses. The United States has faced these problems for many years, but the PRC is about to join that costly club much sooner than Beijing's "inevitable-ist" rhetoric would suggest.

Arithmetically, sooner-than-expected economic slowdowns thus compound on themselves with profound future consequences for the internal tradeoffs needed to build, fund, and sustain military forces commensurate with superpower aspirations. Using financiers' "Rule of 72," 8% annual GDP growth means that an economy doubles in size every nine years, while 4% growth takes that to approximately 18 years, and 2% growth all the way out to 36 years.

These dynamics influence how potential rivals—especially neighboring states trying to hedge against an uncertain future—will interpret data points from the recent past and the present as they try to extrapolate forward and make policy decisions. Economic growth trajectories thus potentially exert enormous influence on other countries'

decisions to "settle today," fence-sit, or perhaps harden their stance and hold the line if they think the adversary has reached an inflection point after which its national power will expand more slowly or even flatline.

China is not entirely without options to try to escape "middle income trap" stagnation,²⁵ but these options are generally drastic from the perspective of a controloriented and increasingly personalized CCP leadership. For instance, a true transition from fixed asset investment and manufacturing toward an innovative service economy would require reforms that powerful vested interests steadfastly oppose. For the Party under Xi, breaking this policy logjam is too politically risky. China's leaders know what is required from an economic standpoint, but acting accordingly would undermine their authority. Faced with this dilemma, they pursue short-term stability to preserve existing power structures at the cost of further slowdown and mounting pent-up problems.²⁶

China's skyrocketing household debt levels exemplify structural economic constraints that, for the PRC, are emerging much earlier than they did for the United States when it had similar per capita GDP and income levels. Debt is typically a wet blanket upon consumption growth. A 2017 analysis published by the Bank for International Settlements found that once the household debt-to-GDP ratio in a sample of 54 countries exceeded 60%, "[t]he negative longrun effects on consumption tend to intensify."27 China's household debt-to-GDP ratio surpassed that empirical danger threshold in late 2020 (Figure 11). Rising debt service burdens thus threaten Chinese consumers' capacity to sustain the domestic consumption-focused "dual circulation" economic model that Xi and his advisers seek to build. China's growth record

Falling fertility rates in China, and its key markets—which include the economies of its potential adversaries—are thus conspiring to close the window on Xi's gargantuan goals faster and more conclusively than many realize. In this sense, perhaps more than any other, Xi is a man running out of time.

over the past 30 years has been remarkable, but past exceptionalism does not confer future immunity from fundamental demographic and economic headwinds.

Beijing's boosters, propagandists,²⁸ and other exponents of PRC exceptionalism have argued that debt dynamics simply work differently in China than elsewhere because of limits on capital movement and state control over the banking system. They point to pessimists' years of incorrect (or premature) predictions that the debt bubble will pop. By assuming increasing debt loads, China has indeed avoided short-term crises but has simultaneously stored up mounting liabilities that, at a minimum, will exacerbate its slowdown.²⁹ Notably, Vice Premier Liu He, the Xi government's economic "Mr. Fixit," is now trying to "de-risk" the debt pile, but the Evergrande fiasco shows this effort risks triggering the very crisis it seeks to avoid. Perhaps even a bigger risk than debt for China is an asset price bubble, since it so intimately tied up with real estate, and could bring households down with it if prices tumble. Since most of China's growth over the past decade has been driven by borrowing using real estate as collateral, this also means China would need to find a new driver to continue even a semblance of its current rate of growth—a tall order indeed.

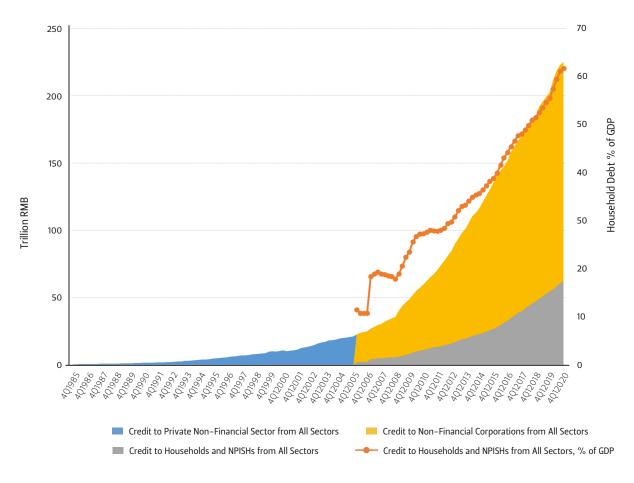


Figure 11: Credit to Households and Corporations in China, 1985-2020

Sources: Bank for International Settlements; authors' analysis.

Another key dynamic to note is that China's consumer class has accumulated the lion's share of its debt during the period of global quantitative easing ("cheap, easy money") after the financial crisis of 2008 (Figure 12). With inflation now rising globally—in no small part due to demographic and other structural changes in China discussed in this report—a corresponding rise in interest rates in the United States and other key markets will have several potentially impactful effects on debt-burdened Chinese consumers—none of them pro-growth. First, the ability to refinance or otherwise ameliorate the burden of personal debt will be attenuated by the fact that new finance will cost more. Relatedly, the parts of consumer life built upon credit cards and consumer loan products underpinned by historically low interest rates will become increasingly unsustainable if interest rates rise. To be sure, this is a global challenge, not just a PRC issue, but for an economy trying to reduce a lopsided reliance on real estate, it may prove difficult indeed.

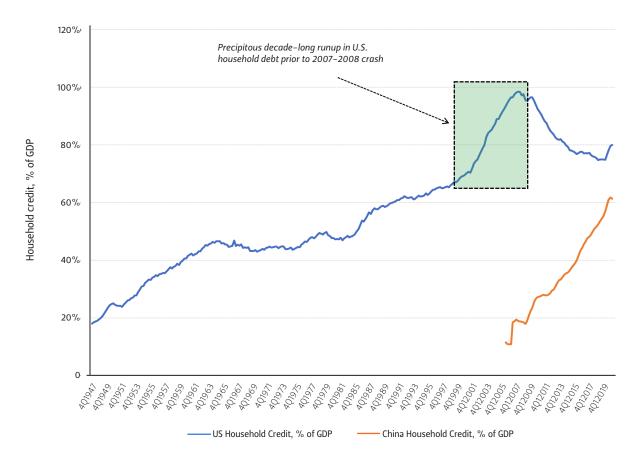


Figure 12: Chinese Consumers Levered Up During a Period of Historically Low Interest Rates

Sources: Bank for International Settlements; Federal Reserve; authors' analysis.

Unprecedented Demographic Decline: The Ultimate Source of Slowdown

As debt levels continue to rise at an absolute level that has accelerated almost continuously for the past decade, population decline is a key headwind bearing down on Xi's China.³⁰ Demographics matter because people matter. Accordingly, demography is one of the most consequential, predictable factors influencing national power and priorities. Here China's prospects are bleak: Fertility fell below the replacement level in the early 1990s; the working-age population peaked in 2015; the total population will peak at no more than 1.44 billion no later than 2028; new entrants into the workforce will halve by 2030; and typical-marriage-aged males may outnumber females by 30 million by 2040. Also, by 2040, China's population will be diminishing by 4 million annually—a catastrophic compression. Accordingly, by 2040, China is projected to have 340 million people over age 65—more senior citizens than the total current population of the United States. China will soon have more retirees than any society in history, and the working population supporting them will continue to contract. No great power has ever risen with such an inverted population pyramid.

China's one-child policy, which ended in 2015, prematurely and permanently depressed birth rates below the replacement level. And it has resulted in a growing proportion of "kinless families" of single children with no aunts, uncles, or cousins—only ancestors and a child or two of their own at most. With potentially sole responsibility for as many as four parents and eight grandparents with unprecedented potential for longevity and correspondingly for proliferation of all-consuming geriatric illnesses such as Alzheimer's disease, couples will face unprecedented eldercare obligations. Shrinking family networks will likely also severely undermine entrepreneurship and resilience, as the Confucian system underpinned by blood ties for millennia helped compensate for the lack of rule of law and consequent trust deficit between biologically-unrelated parties. Accordingly, China's dramatically aging, shrinking society represents uncharted waters.

Perhaps most significantly at present, China faces a hollowing out of its workingage population (ages 15–64). This critical segment peaked in 2010 and has since declined, with the rate from 2015 to 2020 nearing 0.6% annually—nearly twice the respective pace in the United States (Figure 13). This, in turn, suggests that China has already reached a Lewis turning point, a momentous milestone at which surplus rural/agricultural labor is fully absorbed into the manufacturing sector, causing wages in both to rise significantly, and a developing economy's stage of rapid growth to end.³¹ While America faces demographic challenges of its own, the disparity between the respective paces of decline highlights its relative advantage compared to its chief geopolitical competitor.³² Moreover, the United States can choose to access a global demographic and talent dividend via immigration in a manner that is simply impracticable for China.

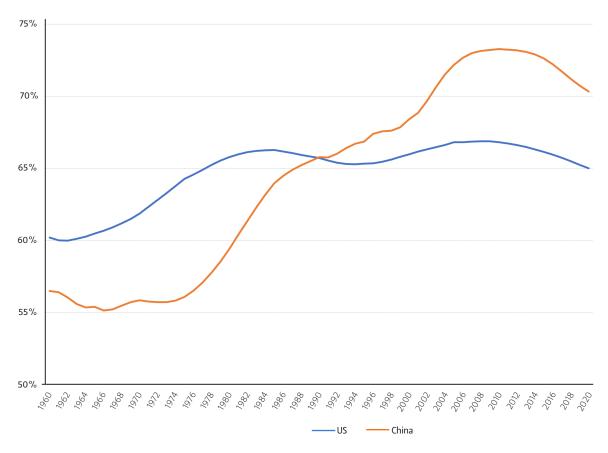


Figure 13: Working-Age Individuals as a Percentage of Total Population in China and the U.S.

Sources: World Bank; authors' analysis.

Japan's own S-curved experience offers a dire illustration of how demographic decline in a country with little or no immigration offset can short-circuit a world-class industrial power's economic potential, and, by extension, its comprehensive national power.³³ Masaaki Shirakawa, the governor of the Bank of Japan from 2008–2013, underscores that the underappreciated economic impact of demographic shifts is not simply a Japanese phenomenon, but a global one: "While demographics is not the sole explanation for low growth of the global economy," he concludes, "it is among the crucial factors."³⁴

Like Japan, China has a strikingly low number of foreign immigrants and is poised to remain that way. Japan, South Korea, and Taiwan are also aging rapidly and have seen slowing productivity growth drag their GDP growth rates rapidly downward.³⁵ In all cases, a key causal mechanism is that retirements pull productive workers out of the workforce.

The extent to which China might be able to use technology to compensate for a stagnant/declining population base remains unclear, but the prospects appear limited—particularly because restrictions on technology transfer and collaboration with China are likely to become an increasingly pronounced component of U.S. and allied policies.

Chinese writings on military-civil fusion (MCF) emphasize that comprehensive national power stems from economic and military power, both of which rely on dominance of cutting-edge technologies within the technological revolution that is now underway. By this logic, if China dominated this technology revolution, for the first time since the Opium Wars it would be a technologically-dominant economic and military power. This decade is key for China's MCF approach, because the technology revolution underway will drive an economic revolution and a revolution in military affairs. This makes today's technology competition essential to Beijing's current sprint, because whoever achieves dominance therein will enjoy tremendous economic and military advantages. For the United States and its allies, China's MCF push in this decade incentivizes near-total decoupling in apex and emerging technologies, which are typically and inherently dual-use. Semiconductors are finally receiving the attention they deserve, but are in fact just one of dozens of technology sectors of grave concern, requiring focus across the board.

Concerted technology export restrictions could potentially help keep China a generation behind on cutting-edge semiconductors and other technological goods, a severe competitive disadvantage.³⁶ As one of this report's authors put it in 2018, advanced technology is very nearly a "winner-take-all world" in which "the country (or company) that establishes technological dominance does not just get the prime corner of the sandbox. It also determines the box's shape, the type of sand and, at a basic level, the terms that others must meet if they wish to enter the box and play."³⁷ Modern efforts to restrict transfers of apex and emerging technologies to China can find relevant historical references. For instance, the Coordinating Committee for Multilateral Export Controls (CoCOM) system, while dating from the Cold War era, would offer useful institutional "DNA" to inform multi-agency coordination on technology export controls and oversight of sensitive technology collaboration within the U.S. government. Externally-facing efforts to create multilateral technology control alignment(s) would likely prove much more challenging today than in the early days of the Cold War due to the deep interests that American, German, Japanese, South Korean, and other key country firms have in trade with China. Nonetheless, the idea merits consideration given its potential to serve as an enforcer that gives "teeth" to diplomatic initiatives from the high-tech democracies the Biden administration now seeks to coalesce.

Moreover, even without comprehensive technological restrictions, history disfavors the demographically-challenged: No country has ever become a superpower after its population plateaued or declined. Furthermore, Japan's "bubble economy," subsequent "*lost decade*," and related stagnation present a worrisome premonition of factors now conspiring against PRC growth—a concern expressed widely in some

PRC circles.³⁸ The welfare programs the state develops to fill this growing void will consume considerable resources that might otherwise have fueled economic growth, defense, and foreign policy efforts. And specific to China, the prospect of single-child soldiers' deaths causing widespread patrilineage extinction could well influence military planning.

China is on the cusp of a demographic decline of unprecedented scale, which could see today's population of just over 1.4 billion (the world's largest) cut in half by 2100-i.e., within the lifetime of children born today. A plummeting population and a proportional increase in the share of elderly (less economically productive) citizens is likely to significantly impede the Party's efforts to re-orient China's economy toward domestic consumption, both as a means of reducing structural distortions and alleviating reliance on foreign export markets whose politics are in many cases taking an anti-CCP turn. In the meantime, most of those markets themselves (aside from America's) are in the throes of rapid population aging and some of the same negative consequences Beijing is beginning to face now.

The other elements of PRC national power are following a similar trajectory to the acute cross-strait military ramp-up and consequent temporal risk window that Admirals Davidson and Aquilino have rightly underscored. ... across the entire ... spectrum, peak PRC-under-Xi capabilities and intentions are all "coming to a head" in a striking convergence, producing an acute threat to Taiwan, and to vital U.S. and allied interests.

At a fundamental level, not only is the PRC at the tail end of a golden few decades of domestic growth, turbocharged by favorable demographics and farm-to-factory migration, but a broader era of demographically-driven growth in the middle- and upper-income world also appears to be concluding. Such a structural macro evolution bodes poorly for a PRC economy that built massive capacity in so many industries to serve domestic and export needs, but faces stagnant or shrinking markets in many of those sectors. Atop that, China's economy has, through mercantilistic and heavyhanded geoeconomic behavior, stimulated a backlash against PRC-origin items. A pathbreaking study in *Nature* posits a declining world societal context: Recently, some macroeconomists have argued that the twentieth century's rapid economic growth—much like the twentieth century's rapid population growth—may be a historical anomaly for structural reasons, ending soonest in developed countries. Population growth is slowing and populations are ageing, thus reducing the relative size of workforces and increasing public debt from social welfare programmes for elderly citizens, as has happened recently in Japan. Endogenous growth models—which emphasize innovation as a key driver of growth—suggest that population stagnation could stifle innovation. Gains from physical capital accumulation are limited with a finite population. ... Inventions of the nineteenth and twentieth centuries revolutionized nearly every sector of the economy simultaneously. Some argue that this feat will unlikely be repeated, even by ongoing advances in high-technology sectors, which so far have not returned productivity growth to pre-1970 levels in either the United States or other developed democracies at the technological frontier. ... most leading macroeconomists in a recent survey projected slowing per-capita GDP growth across the world throughout the twenty-first century and disagreed only about the expected magnitude. Their median projection of average twentyfirst-century U.S. per-capita GDP growth was 1.5% per year, compared with the 2% per year average from the twentieth century. Their median per-capita GDP growth projection for China was less than 3% per year compared with more than 7% per year from 2000 to 2010. Only in low-income countries did respondents project twenty-first-century growth comparable to twentieth-century growth. Indeed, exogenous growth models predict declining growth with increasing affluence, consistent with historical data.³⁹

This unforgiving global demographic downturn undeniably imposes strong headwinds on the economic growth, societal priorities, military funding, and overall national power development and employment of U.S. allies and partners across Europe and Asia—which are generally poised to lose population, or are already in the process of doing so. This demographic downturn will even impact the United States itself, which, uniquely among developed countries, is projected to have roughly the same population in 2100 as now,⁴⁰ but will increasingly have to rely on immigration to at least partially offset growing domestic fertility shortfalls that are now below replacement levels.

For the United States and its allies and partners, a demographic decline makes it more difficult to maintain their current domestic and international priorities and objectives, and the challenges will be formidable indeed. But for China under Xi, which seeks to achieve the rapid, revolutionary gains historically necessitating a burgeoning population with a society instead aging on an unprecedented scale and about to shrink precipitously, the challenges appear increasingly insuperable. Falling fertility rates in China, and its key markets—which include the economies of its potential adversaries—are thus conspiring to close the window on Xi's gargantuan goals faster and more

conclusively than many realize. In this sense, perhaps more than any other, Xi is a man running out of time, and his awareness of this emerging reality itself will likely amplify strategic risk across the Indo-Pacific region.

Atop surging debt and worsening demographics, China also faces something the United States in particular does not: resource insecurity. China's dependence on imported food and energy has grown steadily over the past two decades (see Figures 14 and 15). Projections from Tsinghua University make a compelling case that PRC oil and gas imports will peak between 2030 and 2035.⁴¹ As China grapples with power shortages,⁴² Beijing is reminded that supply shortfalls equal to even a few percentage points of total demand can have outsized negative impacts. Food security assumes an

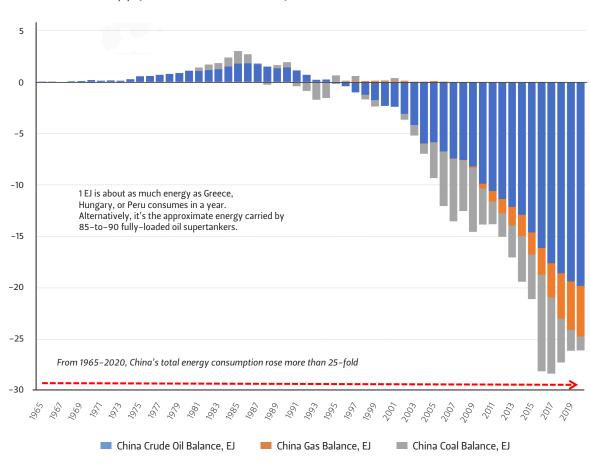


Figure 14: China Increasingly Relies on Imported Oil, Gas, and Even Coal Domestic Supply – Total Demand, Exajoules (EJ)

Sources: BP Statistical Review of World Energy; authors' analysis.

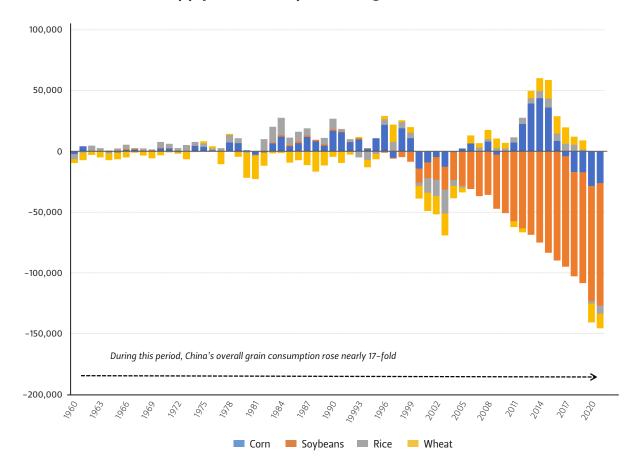


Figure 15: China's Grain Supply Deficit Keeps Growing ('000 Tonnes)

Sources: USDA; authors' analysis.

even higher level of importance in a country where famine has killed at least 50 million people in the past two centuries alone—most recently, because of fatal Party policies under Mao; and toppled multiple dynasties throughout recorded history.⁴³

Domestic resource insufficiency by itself does not hinder economic growth—as the Asian Tigers' multi-decade boom attests. But China is in a different position. In the post-World War II era, Japan and South Korea have never had to worry about the U.S. Navy interdicting inbound tankers or grain ships. Conversely, the United States has been willing to use military force to protect energy flows from the Gulf region to its allies.⁴⁴ Operation Earnest Will offers a significant example of the United States using force to protect energy flows. During the "Tanker War" phase of the Iran–Iraq War, from July 24, 1987 to September 26, 1988, the U.S. military protected Kuwaiti-owned tankers from Iranian attacks. As part of the largest naval convoy operation since World War II, the United States reflagged Kuwaiti tankers and used naval units to escort them.⁴⁵ Now, as an increasingly energy-secure America pivots away from the Middle

East toward Asia, there is a substantial probability that protection of energy shipping routes could be viewed in much more differentiated terms—with oil and liquified natural gas cargoes sailing under the PRC flag viewed very differently than cargoes headed to buyers in other regional countries.⁴⁶

Each of these dynamics—the PRC's demographic downshift, rising debts, and resource supply insecurity—either imminently threatens or is already actively interfering with the CCP's long-cherished goal of achieving a "moderately prosperous society."⁴⁷ Electricity blackouts, real estate sector travails such as those of Evergrande (which show just how many Chinese investors' financial eggs now sit in an unstable basket, with \$50 trillion in value at risk across China),⁴⁸ and a solidifying alignment of countries abroad concerned by aggressive PRC behavior—all raise questions about Xi's ability to deliver. The fact that this confluence of adverse events is happening less than a year before the next (20th) Party Congress—where personal ambition and survival imperatives may drive Xi to seek anointment as the only PRC "leader for life" aside from Mao—likely fuels Xi's sense of insecurity. Xi's anti-corruption campaigns and ruthless removal of potential rivals and their supporters solidified his power, but likely also created a quiet corps of opponents who may prove willing to move against him if events create the perception that he's lost "the mandate of heaven." Accordingly, the baseline assumption should be that, for all his power and publicly projected confidence, Xi feels insecure in political power and even physical safety, and this insecurity should be viewed as sufficient to drive high-stakes, high-consequence posturing and action.

Insecure Powers Take Bigger Risks ... Especially If Early Revisionism Succeeds

As Hal Brands and Michael Beckley cogently argue,

Over the past 150 years, peaking powers—great powers that had been growing dramatically faster than the world average and then suffered a severe, prolonged slowdown—usually don't fade away quietly. Rather, they become brash and aggressive. They suppress dissent at home and try to regain economic momentum by creating exclusive spheres of influence abroad. They pour money into their militaries and use force to expand their influence. This behavior commonly provokes great-power tensions. In some cases, it touches [off] disastrous wars. ... This is the real trap the United States should worry about regarding China today—the trap in which an aspiring superpower peaks and then refuses to bear the painful consequences of descent.⁴⁹

A further driver of Xi's risk tolerance is that, to date, he has made significant advances through assertiveness and aggression, yet there have been few negative consequences for China's actions. While Xi is under pressure to act, the external risks are magnified, because so far, he has largely gotten away with taking actions on which his predecessors would likely never have gambled. Even the reaction to Party predations in Xinjiang and Hong Kong has been restricted to diplomatic signaling pinpricks such as sanctioning responsible PRC officials and entities,⁵⁰ most of whom lack substantial economic ties to the United States. Whether American restraint results from fear of losing market access or a belief that China's goals are ultimately limited remains unclear. There is thus a cost-free, or at least cost-limited, element to Xi's calculus, partly because of other nations' fears of retaliation as well as the coercive power of PRC economic leverage. This is emboldening Beijing to leverage the power it has accrued over the past 30+ years. Arguably, the CCP has long held these ambitions in some form but now finally has the power, clout, and supreme leadership focus to pursue them concertedly under Xi.

At the same time, however, PRC leaders may also be misreading the likely strategic trajectory of the United States—and Washington's capacity for dynamic adaptation. The Indo-Pacific region thus finds itself on "dangerous ground." A peaking Xi, peaking CCP, and peaking PRC reinforce each other and appear to be amplifying Beijing's risk tolerance—and the maximization of multiple coercive capabilities (including nuclear force buildup) to underwrite such risk-taking to a historically unprecedented degree. This paradigm shift, which moves almost inversely to China's actual (and internally assessed) capacity to grow and sustain its comprehensive national power for a decades-long competition of systems, poses challenges to American competitive strategy, operations, and tactics that arguably exceed those encountered during the Cold War. The strategic stakes are commensurately existential.

Cross-Strait Threat Peaking by 2027–Full-Spectrum Indicators

Admiral Philip Davidson (U.S. Navy, ret.) attracted global attention in March 2021 when, as outgoing commander of the U.S. Indo-Pacific Command, he testified before the Senate that he believed the PRC might well attempt to absorb Taiwan militarily by 2027.⁵¹ He clarified those remarks in September, explaining that his thinking was influenced by Xi's potential need to bolster his legitimacy and support in advance of the 21st Party Congress in 2027.⁵² Davidson's successor, Admiral John Aquilino, testified during his confirmation hearing (also in March 2021) that with respect to Taiwan, "My opinion is this problem is much closer to us than most think."⁵³ Xi himself has declared a new "centennial" goal: that by 2027, the 100th anniversary of the PLA, it would finally be ready to achieve its foundational "original mission" (i.e., the conclusive defeat of the Kuomintang, or in 2027 terms, the conquest of Taiwan).⁵⁴

The recent focus by Admiral Davidson and other American officials on relentlessly mounting PRC military threats to Taiwan potentially "coming to a head" by 2027 is substantively based on timelines that Beijing reveals in its own public documents. The Pentagon's 2021 China Military Power Report (CMPR) offers a battery of content emphasizing both the 2027 timeframe's significance and the manifold new military capabilities that Beijing is rushing into service by then.⁵⁵

The CMPR offers a bottom-line up front: "In 2020, the Chinese Communist Party (CCP) announced a new milestone for PLA modernization in 2027 broadly understood as the modernization of the PLA's capabilities to be networked into a system of systems for 'intelligentized' warfare. If realized, the PLA's 2027 modernization goals could provide Beijing with more credible military options in a Taiwan contingency." Citing Beijing's 2019 defense white paper and an updated 2020 communiqué following the 5th Plenum of the 19th Central Committee in October 2020, the CMPR states that by 2027, the PLA aims to "[a]ccelerate the integrated development of mechanization, informatization, and intelligentization, while boosting the speed of modernization in military theories, organizations, personnel and weapons and equipment." The 2020 communiqué "added a new milestone for PLA modernization in 2027."

These factors suggest that Xi will press forward with determination to annex Taiwan if the prospects look sufficiently promising, but that he can be deterred if the United States continues to persuade him that the conditions for a readily achievable victory have yet to arrive.

Specifically, the new 2027 goals likely shifted the PLA's development of certain capabilities within the combined categories of mechanization, informatization, and intelligentization. The CMPR explains: "PLA spokespeople have stressed that the 2027 goal means that the Chinese military should 'comprehensively push forward the modernization of military theories, military organizational form, military personnel, and weapons and equipment.'" It elaborates: "PRC media, citing a military source, connected the PLA's 2027 goals to developing the capabilities to counter the U.S. military in the Indo-Pacific region, and compel Taiwan's leadership to the negotiation table on Beijing's terms."

The CMPR likewise showcases a concerning convergence of PRC capabilities that could help to operationalize the new 2027 goals. The unexpectedly rapid buildup of nuclear and conventional weapons systems the report documents further underscores the timing of this threat. By 2027, for instance, it projects that China may have up to 700 deliverable nuclear warheads—a shocking increase even from the 2020 CMPR's own projection and yet another sign of threats converging.

Moreover, the PRC threat to Taiwan could well come to a head even before 2027. David Sauer, a retired senior CIA officer with experience as chief and deputy chief of station in multiple overseas command positions in East and South Asia, sees a significant threat of Beijing attempting to use force against Taipei as early as 2023:

Time is not on our side ... Xi Jinping has been focused on annexing Taiwan. He likely will achieve an unprecedented third five-year term as president during the fall 2022 Party Congress, allowing him the internal political freedom to use force to achieve his unification goal. Xi will strive to ease tensions in Sino-American relations to ensure a successful Winter Olympics in Beijing in early 2022 and through his selection again as the head of the party in fall 2022. Once his position is secured, Xi will ratchet up pressure on Taiwan in advance of the Taiwan presidential election in early 2024, leaving 2023 as a potentially dangerous year. Beijing does not want Taiwan President Tsai Ing-wen to be succeeded in early 2024 by her vice president, [William] Lai Qing-te. Lai is a popular politician who is deeply committed to human rights and Taiwan sovereignty and nationhood. The prospect of his succeeding Tsai undoubtedly would cause Beijing to accelerate its efforts to take Taiwan.⁵⁶

Our research suggests an even broader, more sweeping conclusion: that the other elements of PRC national power are following a similar trajectory to the acute cross-strait military ramp-up and consequent temporal risk window that Admirals Davidson and Aquilino have rightly underscored. In fact, across the entire diplomatic, information, military, and economic spectrum, peak PRC-under-Xi capabilities and intentions are all "coming to a head" in a striking convergence, producing an acute threat to Taiwan, and to vital U.S. and allied interests.

The PRC's growing capabilities reflect its desire to enhance its strategic options under a range of scenarios, a preponderance of which would be precipitated by offensive—not defensive—actions by Beijing. The advancement of military modernization and capability timetables also suggests PRC leaders may increasingly conclude that the country's ability to mobilize resources for repression at home and abroad could come as soon as the late 2020s. While top PRC leaders likely recognize signs of a potential power peak—as seen with the heavy massaging of 2020 census results—Xi himself will not know precisely when China's power has "peaked" until after it has already happened.

There is no pre-existing trajectory map, and when the indicia of PRC comprehensive national power decisively turn over—perhaps in very short succession relative to each other—the outside world will also notice quickly and will surely begin reassessing China's promises, its threats, and its previous 25 years of promoting its "inevitable" ascent as the world's next superpower.

Taken together, these realities may drive the PRC to act on a much shorter timetable and cement geopolitical gains before the passage of time and amalgamation of diverse data streams begin to reveal China as more likely to evolve into a supersized "persistent" power to be managed, as opposed to an "ascendant" superpower demanding accommodation.

Here it bears noting that even a PRC that only partially achieves its lofty economic and military goals will still likely be the second-largest economy and second-most-capable single military force on the planet, capable of dominating East Asia by threatening to impose unacceptable economic and military costs on its neighbors—absent sustained American involvement and support of its regional allies and partners. In blunt contemporary terms, whatever security problems Moscow can manufacture through brandishing military force, Beijing could potentially replicate on a much larger scale. And the still-formidable economic heft of a partially-fulfilled PRC would nonetheless create strategic challenges that, while not as sharp as those likely to arise during the unfolding decade of danger, will nonetheless be sufficient to—without continual vigilance and proactive efforts by the United States and allied countries—reshape various alignments in ways highly inimical to American interests and the broader rules-based order.

U.S. and Allies Must Intensify Efforts Immediately and "Peak" Them ca. 2025

Just as China accelerates its own timeline for decisive strategic actions, so the U.S. must also intensify its focus and mustering of resources to an unprecedented degree. Mere months in completion, deployment, and upgrading of force postures—all actions that can steel allied countries' resolve—can mean the difference between tense but successful deterrence or ruinous warfare. In historical terms, imagine the stakes and dynamics of 1938 and early 1939, albeit amplified by more immediate and potentially even further-reaching consequences in today's real-time-connected world.

In the case of great power competition with China, the United States has taken too long to warm up and focus on the central challenge, but it retains formidable advantages and agility that will help it to prevail—provided that it goes all in now. Conversely, if Washington fails to marshal its forces promptly, its achievements after 2030 or 2035 will matter little. "Losing the 2020s" would enable Beijing to cripple the free and open rules-based order, and entrench its position by mercantilistically and militaristically subjugating its regional neighbors (including key U.S. treaty allies) to a degree that could offset the strategic headwinds that increasingly slow PRC progress.

Critical American national interests would suffer commensurately, with multitrilliondollar long-term losses of economic opportunity and a likely PRC cyber siege ricocheting unpredictably through the U.S. domestic scene. Overturning that dark but highly plausible—future scenario would likely require protracted warfare on a par with efforts undertaken to roll back Imperial Japan's early World War II conquests.

Deterrence by no means offers a certain pathway ahead, but it offers the best prospect of thwarting otherwise almost certain PRC damage to regional security, the international rules-based order, and vital American interests. Accordingly, the United States should immediately mobilize resources, intensify its efforts, and dial its risk acceptance way up to deter PRC aggression in the critical 10 years ahead. This will be a decade-long sprint. There is no time to wait for new platforms, alignments, and so forth—"holding the line" and selectively rolling back revisionist gains begins today and must maximally and creatively leverage existing hardware through rewiring of thought processes and risk tolerance.

One example is the U.S. Air Force's QUICKSINK program to use Joint Direct Attack Munitions (JDAMs) against ships. Another is the U.S. Marine Corps' strategic decision to adopt a light and lethal island-hopping expeditionary warfare approach in the Indo-Pacific. Yet another would be creating an expanded and more coherently managed 6,000+ mile "arc of uncertainty" for the PRC through rotational bomber and strike aircraft deployments at multiple bases spanning Diego Garcia to northern Australia, and through Palau, the Marianas (Guam, Saipan, Tinian), Wake Island, and the Aleutian Islands (especially Shemya) and Alaska proper.⁵⁷

U.S. planners should also more creatively consider a range of Central Pacific islands that, while not capable of hosting modern tactical and bomber aircraft without major upgrades, could nonetheless offer potential bases for long-range strike systems. Many of these would mirror the general path of the U.S. amphibious "island hopping" campaign of World War II and could include Kwajalein (home to extensive U.S. military facilities), multiple islands elsewhere in the Marshalls, the Gilberts (Tarawa), Chuuk, Midway, and some of the outlying islets of Palau such as Angaur and Peleliu.

Additional promising initiatives likewise entail using China's potent anti-access/area denial (A2/AD) playbook against it.⁵⁸ The U.S. should finally give mine warfare the emphasis it deserves and rapidly ramp up capabilities, including using Quickstrike-ERs (extended range). Amphibious logistics are a critical vulnerability for PLA operations against Taiwan and should be targeted accordingly. Mine warfare is a tremendous equalizer for Taiwan; capabilities should be maximized within several miles of Taiwan's coastline. Counter-landing mines, specifically designed against PRC air-cushioned landing craft, could be seeded or delivered by unmanned aerial vehicles (UAVs). Mobile anti-ship cruise missiles are another important area of emphasis. Landing fields, assault bases, and other invasion nodes could be targeted with rapidly deployable road-mobile ballistic missile batteries with decent warhead and blast radius. Affecting and diverting PRC logistics farther afield is likewise important. While "distant blockade" efforts are no panacea, they may nevertheless be employed to significantly restrict the volume of PRC energy and strategic materials imports, forcing the PLA to divert/disperse forces to escort and convoy, and thereby precluding their use against Taiwan itself.

The United States should also emphasize joint strike weapons for aircraft. The Naval Strike Missile is a placeholder; a long-range supersonic missile is also needed. In a wartime environment, vertical launch systems on ships exhaust missiles extremely rapidly; missile numbers should be increased substantially. Platform numbers may be hard to greatly increase by 2027, but munitions and logistics/supply chains are ripe for bolstering. Container ships may be modified to transport needed supplies, and expeditionary basing ships may be employed as mobile hubs for replenishment.

Another way to muster existing capabilities within the required timeframe is to leverage those of allies and partners. Japan and Australia, in particular, have important capabilities that could be applied to a range of scenarios. Japan, for instance, has growing land-based strike capabilities. Figure 16 highlights a sample of initiatives that could be used for near-term intensification of the U.S. deterrence posture in the Indo-Pacific. Many of these could be funded and scaled up within months. They can be further accelerated if the United States or its allies and partners detected warning indicators of major pending PRC revisionist actions—for instance, preparations to move militarily against Taiwan.

Figure 16: Rapidly Scalable Initiatives to Bolster Strategic Posture in Indo-Pacific

Action	Cost	Implementation Time	
Ongoing, Needs to be Accelerated			
Keep PRC forces off Taiwan beaches: Substantially increase sales to Taipei of Javelin missiles, mobile Harpoon anti-ship missiles, HIMARS mobile rocket systems, mobile artillery, and sufficient ammunition to sustain 45+ days' intense combat.	millions-low billions (direct U.S.), low billions (Taiwan)	Ongoing, months to accelerate	
Strengthen Taiwan's air and missile defenses through substantial improvements in surface-to-air missile and Ballistic Missile Defense systems and related infrastructure.	millions-low billions (direct U.S.), low billions (Taiwan)	Ongoing, months to accelerate	
Accelerate basing infrastructure improvements in Australia, Wake Island, Tinian/Saipan, Aleutians, and others. Build under assumption that PRC will target each place with precision- guided munitions and incorporate commensurate hardening and networked regeneration capacity.	low billions	Ongoing, quarters/year to accelerate efforts	
Rapidly Implementable at Manageable Cost			
More robustly challenge PRC Maritime Militia operations, including through U.S. Coast Guard counter-operations with regional partner navies and maritime law enforcement.	Millions	Weeks	
Create a "Plan B" infrastructure for obtaining and using imagery from allied/partner/commercial satellite constellations in case PRC attempts to destroy or blind U.S. government reconnaissance satellites.	Millions	Weeks	
Prepare the necessary organizational infrastructure to rapidly reflag tankers and other merchant vessels as American and provide hull insurance in case of PRC blockade actions against Taiwan.	Millions	Weeks	
Pre-position converted high-speed container ships and other fast vessels as floating munitions stockpiles and logistics support, disperse throughout Central Pacific and Oceania.	Hundreds of millions/low billions	Months	
If possible, double or triple DoD procurement rate for existing standoff land attack and anti-ship munitions such as JASSM-ER/ XR, LRASM and Maritime Strike Tomahawk, and SM-6. Stockpile key materials for wartime surge production, consider DoD payments for manufacturers to keep spare production capacity "hot and ready."	Tens of Billions	Months (commencement), multiple years thereafter	

Valuable, But Potentially Facing Greater Diplomatic, Economic, Domestic Political Complexity

Offer Japanese, South Korean, and ASEAN firms U.S. financial assistance in the event of geoeconomic retaliation by PRC.	Tens of Billions	Weeks (activated during crisis)
Pursue robust, comprehensive American economic statecraft across Indo-Pacific, including pursuit of supply chain hardening/ diversification and trade agreement(s).	Unknown	Years

Source: Authors' analysis.

"Peaking" Efforts Now Essential to Deter War in Decade of Danger

Beijing's war of perception is already well underway. The PRC will continue to unveil pockets of world-class progress to project images of military superiority. This literally represents a page out of the leading publicly available textbook for senior PLA officers, China's National Defense University's 2020 version of its *Science of Military Strategy*. The section on "Revealing Advanced Weapons" states:

Weapons that have mass destruction might, long-distance precision strike capability, and other special lethal and destructive effects, such as nuclear weapons, precision-guided munitions [PGM], space weapons, and newconcept weaponry, can generate enormous destruction once they are used. Possessing such weapons systems and strike means signifies having the capability to inflict enormous sabotage on the enemy. [We] can adopt methods such as troop reviews, weapons display, weapons testing and firing, and actual explosion to reveal the performance and might of advanced weapons so as to make the adversary recognize that we possess advanced defensive and counterattack means and to generate a psychology of fear that we will execute retaliatory strikes. Display of advanced weapons not only can carry out general display of military strength to unspecific objects but also can be implemented in a goal-driven, planned fashion with a focus on specific threat objects; and it not only can be combined with display of major military activities such as weapons tests, strength disposition, and military exercises, but also can be implemented by military exchange activity, such as observation during high-level exchange visits and warship visits.⁵⁹

Contemporary examples of mammoth PLA development and attempts at deterrence through demonstrating capabilities include its world-leading naval shipbuilding programs, massive expansion and modernization of both advanced conventional missiles and nuclear forces, rapid unmanned aerial systems development, and burgeoning air and maritime pressure operations in the South and East China Seas and as far afield as the Aleutian Islands. China buttresses military actions through geoeconomic initiatives such as the Belt and Road project and the Asian Infrastructure Investment Bank, as well as through implementing economic sanctions (formal and informal), seeking control over technical standards setting, recruiting (bordering on suborning) Western financial firms, and investing in strategic "control" infrastructure abroad, especially undersea cables and other linchpin telecommunications infrastructure.⁶⁰

China's signaling aims to (1) create a sense of inevitability in Taiwan, regional nations, and even America itself that China is destined to dominate Asia while (2) masking the reality that the PRC approximately occupies the global strategic position of a 1921-era United States, but with many—and arguably more—of the structural problems America grapples with circa 2021. As noted above, Beijing seeks to compensate for the power-sapping effects of demographic decline, as well as economic imbalance and stagnation, and works to implement a digitized

Precisely when China will peak is uncertain, but it is very likely to do so within the next few years. Given the potential for irreversible catastrophe if near-term PRC aggression is not countered effectively, the United States and its allies should optimize planning and preparations to address maximum up-front threats, and accept corresponding tradeoffs and risks. "controlocracy" throughout its dominion, as exemplified by the ongoing repression in Xinjiang, Hong Kong, and elsewhere.

PRC advances went largely uncontested through much of the 2010s, corroding the rules-based order to the non-authoritarian world's significant detriment. Shortly after Xi came to power in 2012, PRC forces reclaimed subtidal features in the South China Sea and militarized them, and Xinjiang became a virtual (and, in over a million individual instances, physical) prison camp for its Uighur and ethnic minority populations. The momentum from these revisionist gains continued despite pushback efforts that began in the 2017–2018 timeframe, with Hong Kong coercively enveloped in violation of a binding international treaty, accelerated air and naval infringement operations in the

East and South China Seas, a concerted campaign of geoeconomic bullying directed against Australia and other nations, and unprecedented and dangerous activities across all domains.

With more spots of resistance emerging—the recent AUKUS security pact among them—the time has come to coalesce them into a broader campaign of actively checking PRC actions aimed at advancing aggressively and undermining the rulesbased order. The United States and its allies and partners should firmly resist yielding strategic principles and position to a PRC that is facing increasing constraints on its economic potential, national power growth, and prioritization of competition over citizens' welfare—a common historical path heightened by CCP policies. Instead, Washington and a coalition of the committed should accept greater strategic risk to hold the line against PRC revanchism in the Indo-Pacific through 2035.⁶¹

Flashpoint Taiwan

Higher American and allied risk tolerance is an essential prerequisite because the strategic climax is likely to come before 2030—at the apogee of Xi, the CCP, and the PRC's relative power—in the form of the maximum threat of a kinetic conflict over Taiwan. The most central, unforgiving, and consequential arena of Sino-American competition is likely to be confrontation and/or conflict over Taiwan's status and future. The stakes are not only political and military but, most importantly, technological—given Taiwan's dominance of cutting-edge semiconductors and their irreplaceable role in our big data world and the zero-sum contest to shape it. Beijing desperately seeks to overcome this chokepoint vulnerability.

Indeed, the PLA's meteoric rise in capabilities to coerce Taiwan—both absolute and relative to its Taiwanese and American counterparts—represents an extreme microcosm of the decade of danger. Here U.S. and allied success, or failure, will be fundamental and reverberate for the remainder of the century. Given the ambitious goals of Xi, the CCP he leads, and the PRC they control, their default impulse will be to make a major move against Taiwan by the late 2020s—following an extraordinary ramp-up in PLA capabilities, and before the power and grasp of Xi or the Party-state has ebbed or Washington and its allies have fully regrouped and rallied to the challenge.

Dramatic revelations of world-class PLA progress and selective superiority over the next few years will shock and awe citizens and influencers in Taiwan, America's allies, and America itself. Recent public revelations about a paradigm-shifting buildup of nuclear weapons and associated hardening and delivery systems—in extreme contrast to prior PRC history, doctrine, and messaging—is but one manifestation of this sudden, sweeping, and startling development.⁶² This is arguably the most massive sustained arms buildup in the post-Cold War world. Only well-prepared and -explained U.S. government responses will stem a riptide of stunned defeatism and prevent Xi, his Party, and their army from achieving a fait accompli by moving swiftly and decisively before Washington and its allies and partners have time to react effectively.

While it is difficult if not impossible for outsiders to know Xi's thoughts, his background and known impulses⁶⁴ suggest that he has a deep feel for issues regarding Taiwan and takes personal responsibility for related decision-making. Xi knows the Taiwan issue, including its complexities and challenges, particularly well both because of his father's experience and the nature of some of his own previous bureaucratic positions. The elder Xi, first-generation PRC official Xi Zhongxun, played a prominent role in managing the United Front throughout his career, particularly during the 1980s, when it was targeted to achieve "reunification." For his part, Xi served in Fujian province from 1985–2002. He became vice governor in 1999, then governor in 2000, and was involved in encouraging investment from Taiwan. Xi clearly has a deep personal interest in "reunification," and achieving it as his own historic legacy is likely his greatest dream. During a meeting with former Taiwan President Ma Ying-jeou, for instance, Xi described a conversation with former German Chancellor Angela Merkel in which he told her that, unlike Germans, Chinese people could never give up territory bequeathed to them by their ancestors. Collectively, combined with Xi's personal combination of "toughness, idealism, pragmatism, and caution,"⁶⁵ these factors suggest that Xi will press forward with determination to annex Taiwan if the prospects look sufficiently promising, but that he can be deterred if the United States continues to persuade him that the conditions for a readily achievable victory have yet to arrive, and he does not have his back to the wall in a way that makes him uncharacteristically risk-acceptant. In short, there are ways to keep deterrence working during the decade of danger, provided that U.S. leaders make it a top priority starting now.

Potential Non-Military Warning Indicators

China has the world's second-largest economy and defense budget. It boasts the world's largest conventional missile force, the world's largest coast guard, and virtually the world's only maritime militia charged with advancing sovereignty claims. The Pentagon's 2020 annual report to Congress contends that China's recent meteoric military modernization has not only narrowed the U.S. lead across the board to varying degrees, but that China has even, broadly speaking, surpassed the United States in shipbuilding, land-based conventional ballistic and cruise missiles, and integrated air defense systems.⁶⁶ Admiral Charles Richard, Commander, U.S. Strategic Command, upon public news of China's fractional orbital bombardment system test, stated, "It almost seems like we can't go through a month without some new revelation coming about China. I am not surprised at reports like this. I won't be surprised when another report comes next month."⁶⁷

So how should policymakers assess the potential risk of PRC action against Taiwan reaching dangerous levels by 2027, or possibly even earlier—as emphasized in the testimonies of Admirals Philip Davidson and John Aquilino? Chairman of the Joint Chiefs General Mark Milley testified to the House in June 2021 that while he believed that the PRC did not currently have the combination of capabilities and intentions to conduct an all-out, high-end invasion of mainland Taiwan, Xi had "challenged the People's Liberation Army to accelerate their modernization programs to develop capabilities to seize Taiwan and move it from 2035 to 2027."⁶⁸ Regardless of the exact thinking behind them, Milley's words are clearly no cause for comfort: *Moving this PLA planning milestone from 2035 to 2027 indicates that China is actually ahead of its expected and projected targets.* Any substantive disparities in senior American officials' precise timelines and their appraisals of corresponding PRC capabilities and

intentions are offset by the *relative consensus that the timeframe is now shorter than previously assessed publicly—perhaps by nearly a decade.* In sum, the PRC's threat to Taiwan has already reached a dangerous level, continues to rise rapidly, and is on track to reach maximum intensity within five to six years.

Public testimonies by Admirals Aquilino and Davidson and General Milley also rest atop uncomfortable but relevant questions about PRC intent and end-state objectives. For decades Taiwan has posed no offensive military threat to the PRC, so how can the PLA's intensive preparations over the past 25 years be plausibly interpreted as reflecting *any intent other than* the subjugation and control of Taiwan? Relatedly, if the PRC were to successfully invade Taiwan, would it subsequently disband the PLA's mass offensive bombardment and amphibious invasion capabilities, or could those then be turned against other areas of interest along China's maritime periphery? This line of thought could well explain Japanese Defense Minister Nobuo Kishi's blunt June 2021 statement that "[t]he peace and stability of Taiwan is directly connected to Japan."⁶⁹

U.S. military leaders' assessments are informed by some of the world's most extensive and sophisticated internal information flows. But what's striking is that open-source information available to the broader public suggests similar things. And moving forward, a number of open-source indicators can help policymakers more accurately calibrate both potential timeframes and assessments as risk levels ramp up. Specifically, these "early warning indicators" can help policymakers more accurately situate both potential timetables and risk readings with respect to a Taiwan scenario (or other aggressive PRC actions):

- Semiconductor supply self-sufficiency. Taiwan is the "OPEC+" of semiconductors, accounting for approximately two-thirds of global chip foundry capacity. A kinetic crisis would almost certainly disrupt—and potentially even completely curtail—semiconductor supplies. China presently spends even more each year on semiconductor imports (approximately \$380 billion)⁷⁰ than it does on oil,⁷¹ but much of the final products are destined for markets abroad. The most advanced chips are critical, but the electronics that run key civilian and military systems also require the lower-end chips in large numbers. Accordingly, the closer China comes to being able to secure sufficient quantities of chips that are "good enough" for "inside China-only" needs, the more likely it is that semiconductor supply disruptions would lose their present restraining force on PRC conduct toward Taiwan and its "silicon shield."⁷²
- **Crude oil, grain, strategic metals stockpiles.** The commercial community (Planet Labs, Ursa Space Systems, etc.) has developed substantial expertise in cost-effectively tracking inventory changes for key input commodities of the kind needed to prepare for war.⁷³
- **Electric vehicle (EV) fleet size.** The amount of oil demand displaced by EVs varies depending on distance driven, but the more of China's car fleet that can

be connected to the grid (and thus powered by blockade-resistant coal), the less political burden Beijing would face if it had to weather a maritime oil blockade imposed in response to actions it took against Taiwan or other major revisionist adventurism.⁷⁴ China's passenger vehicle fleet, now approximately 225 million units strong, counts nearly 6.5 million EVs among its ranks, the lion's share of which are full-battery electrics. The State Council seeks to have EVs account for 20% of new vehicles sold in China by 2025. This target has already tentatively been achieved over the last few months, meaning at least 3.5 to 4 million (and eventually many more) new EVs will enter China's car fleet annually from now on.

• Local concentration of maritime vessels capable of transporting troops and materials across the Taiwan Strait. Snap exercises with warships, circumnavigations, and mid-line tests with swarms of aircraft hammer home the threat PRC forces pose to Taiwan. But these assets alone cannot invade the island—for that Beijing would need not only air, missile, naval, and special operations forces (SOF), but also the ability to move tremendous amounts of equipment and personnel (in the tens of thousands, at a minimum) across the strait.⁷⁵ As such, U.S. planners must consider the possibility of the PRC improvising in a "just-good-enough-for-just-long-enough" fashion to attempt to pursue basic political objectives, particularly if events or trendlines "force" Xi's hand.

Accordingly, Beijing would have to amass its maritime transport assets—and given the scale required, this would almost certainly alter ship patterns elsewhere along China's coast in ways that would be detectable in advance with AI analysis of imagery from firms like Planet Labs (or national assets). For example, to attempt a major invasion today, China would likely rely heavily on civilian assets—maritime militia forces might operate mobilized civilian shipping as a makeshift logistical backbone.⁷⁶

Type and tempo of malign cyber activities. In advance of a move against Taiwan, the PRC would likely flood cyberspace for Taiwan, the United States, and U.S. partners with dis- and mis-information designed to confuse, sow uncertainty and division, and otherwise delay an external military response. In addition to targeting U.S., allied, and partner military logistics, it is also likely that PRC-linked cyberwarriors would attempt to disrupt the functioning of critical infrastructure, such as power grids, water systems, and fuel supply pipelines in Taiwan and potentially also in the United States, again to foment chaos and disrupt/slow the political and military response to PRC actions. We would expect a special PRC cyber focus on America's Northeast Corridor given its physical proximity and psychological importance to policymakers based in Washington, D.C., as well as actions against infrastructure near or associated with mobilization and basing points such as the Norfolk area, Mayport, San Diego, Kitsap, Hawaii, and Guam. Key supply chain nodes like Los Angeles and Long Beach (containers); as well as Corpus Christi, Houston, and the Louisiana Gulf Coast (refined fuels and chemicals); would also be areas to expect cyber interference perpetrated by PRClinked actors in advance of a strategic offensive against Taiwan.

- Physical interference with logistics routes. Conjunctively with cyberattacks, PRC actors might also seek to physically impede U.S. and allied movements responding to an attack on Taiwan or other serious PRC revanchist action. As just one potential example, ships could be scuttled in the approaches to key military and civilian harbors. Removing even a floating ship that has become disabled or stuck can take many days. Consider the Ever Given, a large container ship that became wedged in the Suez Canal, blocking it for nearly a week in March 2021.⁷⁷ A sunken vessel might impede flows for much longer. Likewise, airliners from China's large state-controlled fleet could be landed or even potentially crashed on runways to disrupt traffic, especially at military airfields collocated with, or near, civilian airports where the offending aircraft could approach very near before raising alarms.
- "January 6" and the "Crimea Model." Severe internal turmoil within the United States could serve as an opportunistic trigger event for Beijing to take action against Taiwan. The relatively spontaneous emergence of such circumstances likely would not provide the PLA with sufficient time to mobilize a full invasion force in anticipation. However, sufficient perception of distraction on the American home front could create an opening for intensified PRC actions against Taiwan, potentially including "gray zone" activities leading up to a blockade (perhaps in the form of an undeclared but coordinated interference with ship traffic by maritime militia assets), seizure of an outlying Taiwanese island (such as Pratas, Jinmen, or Quemoy), 1996-style missile fire in shipping lanes, or actions against key infrastructure or leadership in Taiwan by PLA SOF.

The latter action could potentially set the stage for Beijing to take a "Crimea Model" approach. This would involve using political chaos in Taiwan as a pretext for a sequential intervention beginning with pursuit of airspace and maritime area control and additional SOF operations to test allied response capacity, while the PLA mobilizes for a full invasion and then launches it if the United States and allied countries fail to respond decisively.

Holding the Line: Beijing's Frustration Confirms Viability of Proactive Action

Only the most formidable, agile American and allied deterrence can kick the can down the road long enough for the PRC slowdown to shut the window of vulnerability in the decade of danger. Holding the line is likely to require frequent and sustained proactive enforcement actions to disincentivize full-frontal PRC assaults on the rulesbased order in the Indo-Pacific. PRC probing behavior and provocations must be met with a range of symmetric and asymmetric responses that impose real costs, such as the measures outlined in Figure 16, as well as publicizing of assets owned by PRC officials abroad; cyber interference with China's technological social control apparatus; "hands on" U.S. Navy and Coast Guard enforcement measures against maritime militia-affiliated PRC vessels in the South China Sea;⁷⁸ intensified air and maritime surveillance of PRC naval bases; and offering visas and resettlement options to people in Hong Kong,⁷⁹ Uyghurs, and other threatened PRC citizens—including CCP officials (and their families) who seek to defect/leave China. American policymakers must make crystal clear to their counterparts in China that the "engagement-above-all" policies that dominated much of the past 25 years are over and that the risks and costs of ongoing—and future—adventurism will fall heaviest on the PRC.

Bombastic PRC reactions to emerging hold-the-line actions suggest the approach can indeed work to halt—and with sufficient intensity of action, perhaps even reverse—the revisionist tide that Beijing has unleashed across the Asian region. The recent trilateral security pact between Australia, the United States, and the United Kingdom stimulated a strong public reaction from the PRC (including toleration of nuclear threats made by the state media-affiliated *Global Times*).⁸⁰ Beijing's sensitivity highlights the gap between its global information war touting China's irresistible power and a deeply insecure internal self-perception. Eight nuclear submarines procured through AUKUS will ultimately represent formidable military capacity, but for a *bona fide* superpower that believes in its own capabilities, they would not be a game-changer. Consider the actual example of the U.S.-NATO reaction to the Soviet Union's commissioning of eight *Oscar I/II*-class cruise missile subs during the late Cold War. These formidable boats each carried 24 SS-N-19 *Granit* missiles, specifically designed to kill U.S. carrier battle groups, and yet NATO never stooped to public threats.

Gauntlet over Gizmos: Protecting Taiwan from Peak PRC Pressure through Early 2030s

The flexibility and resilience of America and its advanced-economy allies represent the polar opposite of China's state-directed planning and implementation model. Their openness to people, ideas, and capital flows makes them creative dynamos, as well as fuels world-class research universities and yields demographic dividends by

attracting talented and motivated people from all over the world. These qualities underpin their long-term comprehensive national power and the bloc's global competitiveness. It also makes their responses to an assault formidable and favors their odds the longer a major cold or hot war continues. But free-wheeling systems also complicate near-term proactive preparation to head off conflicts.

Fortunately, Beijing's belligerent behavior has helped solidify multiple allied diplomatic and military initiatives that, while presently insufficient to defend the rules-based order, nonetheless constitute a solid foundation on which to build. Diplomatic proofs of concept such as the Quadrilateral Security Dialogue ("Quad"),⁸¹ security alignments such as AUKUS, and hard security actions such as the Pacific Deterrence Initiative⁸² are now falling into place. The stage is set for follow-up measures to comprehensively "peak" the non-authoritarian world's protective actions to hold the line in the Indo-Pacific.⁸³

Throughout this decade of danger, American policymakers must understand that under Xi's

The decade of danger is upon us. With existential stakes for American interests and values looming, there is no left time to waste. Washington and its allies must push to maximize their competitive edge as rapidly as possible to avoid an outcome they cannot afford—"losing the 2020s" ... [which] would also mean losing the 2030s and beyond. Ultimately, the best directed-energy weapons in coming decades will matter little if we lose Taiwan on our watch.

strongman rule, personal political survival will dictate PRC behavior. For Washington and its allies, the struggle centers on preserving and expanding the type of human well-being yielded by a system oriented toward freedom and rules-based governance that emphasizes reason and fair process over coercion and force. Conversely, Xi (like fellow authoritarian leaders such as Vladimir Putin and Kim Jong-un) uses a totally different operating system: rule for life, non-transparency, a ruthless "ends-justify-anymeans" mindset, and policies that ultimately tend to be one-way, high-leverage bets on continued successful (and lightly opposed) revisionist actions abroad and nearabsolute control domestically. Xi's personalist leadership and nearly comprehensive suppression of dissenting voices in the Party's senior ranks simultaneously raises the chances of making policy mistakes while reducing the flexibility to deal with them early. In such an embrittled system, the proverbial "leverage" that would have left Xi with outsized returns on a successful bet instead amplifies the downside, all for which he personally and exclusively signed. The "best-case" scenario entails continued stagnation and rot within the Party along the lines of what Minxin Pei has articulated.⁸⁴ The "intermediate case" is an accelerated version of that, with Xi suffering a loss of status and authority on the heels of a policy disaster, internal challengers rising within the PRC, and internecine strife leading to accelerated weakening of the Party. The "bad case" scenario—which, in practice, would likely be interrelated with the intermediate one—is that Xi would double down on a mistaken course of action to prioritize political self-preservation. If such mistakes led to—or were made in the course of—a kinetic conflict, personal survival measures could rapidly transmute into regional or even global (i.e., nuclear, space, cyber) threats.

If Xi triggered a "margin call" on his personal political account through a failed highstakes gamble, it would likely be paid in blood. Washington must thus prepare the American electorate and its institutional and physical infrastructure, as well as that of allies and partners abroad, for the likelihood that tensions will periodically ratchet up to uncomfortable levels—and that, despite the promise of determined deterrence, actual conflict cannot be ruled out. *Si vis pacem, para bellum* ("If you want peace, prepare for war") must unfortunately serve as a central organizing principle for a range of U.S. and allied decisions during the next decade with respect to China under Xi.⁸⁵

Given these unforgiving dynamics, the implications for U.S. leaders and planners are stark:

- 1. Do whatever remains possible to reach "peak" preparedness for deterrent competition against China by the mid-to-late 2020s and accept the tradeoffs.⁸⁶
- 2. Nothing the U.S and its allies might theoretically achieve after 2035 is worth pursuing at the expense of capabilities that might be "better" than those in service now, but that could not be realistically fielded at scale until five years or more from now.
- 3. Much will be decided by the end of this decade. If America falters at this critical time—whether through creeping corrosion of the rules-based order at Beijing's hands or the shocking impact of failing to defend Taiwan against military attack—many aspects of the world and future will be determined at the expense of U.S. interests and values.

The decade of danger is upon us. With existential stakes for American interests and values looming, there is no time left to waste. Washington and its allies must push to maximize their competitive edge as rapidly as possible to avoid an outcome they cannot afford—"losing the 2020s." At what point the PRC reaches its peak may

ultimately defy precise prediction, but the strong possibility of it occurring over the next few years should front-load America's bottom-line planning and preparations, given the potential for irreversible linchpin effects. Near-term preparation to run this decade's unforgiving gauntlet justifies any corresponding long-term tradeoffs and risks: "losing the 2020s" would also mean losing the 2030s and beyond. Ultimately, the best achievements in coming decades will matter little if we lose Taiwan on our watch. More broadly, allowing PRC revisionism to run as rampant in the 2020s as it did in the 2010s would risk negatively reshaping the world order for decades to come and could actually set the stage for even worse conflicts by destabilizing the planet's most populous region. Alternatively, proactive deterrence actions now can sow the seeds for a more peaceful and prosperous future that would benefit all Indo-Pacific countries, China included. The mission is vital, the stakes are high, and the clock is ticking.

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about achieving the Military-Civil Fusion objective of "national strategic system and capabilities" (国家战略去体系和能力)—pursuing the PLA's "original mission" logically entails finally and fully conquering the KMT. Certainly, such a linkage remains under-considered, is debated by some scholars, and merits much further research. But skeptics should consider the logical premise that the "original mission" of the PLA could not be simply its own technological modernization, most recently expressed in the form of mechanization, informatization, and intelligization. PLA milestones and metrics have evolved with the nature of warfare, but "People's War" concepts grounding PLA identity and strategy in the Maoist markers of geography and population did not yield as guiding ethos to technological modernization until the 1990–91 Gulf War, 1995–96 Taiwan crisis, and 1999 Belgrade Embassy Bombing catalyzed a wrenching PLA reorientation as Jiang Zemin came into his own as paramount leader and brought an unprecedented technologically-informed perspective to bear. A PLA primary mission of technological modernization is at most a 30-year goal from 1997, not the PLA's overriding hundred-year goal. For further details, see Andrew S. Erickson, "China's Pursuit under Xi of 2027 'Centennial Military Building Goal' (建军一百年奋斗目标): Sources & Analysis," China Analysis from Original Sources 以第一手资料研究中国, December 19, 2021, https://www. and rewerickson.com/2021/12/prc-pursuit-of-2027-centennial-military-building-goalsources-analysis/.

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