

CHAPTER 1

U.S.-CHINA GLOBAL COMPETITION

SECTION 1: A GLOBAL CONTEST FOR POWER AND INFLUENCE: CHINA'S VIEW OF STRATEGIC COMPETITION WITH THE UNITED STATES

Key Findings

- Beijing has long held the ambition to match the United States as the world's most powerful and influential nation. Over the past 15 years, as its economic and technological prowess, diplomatic influence, and military capabilities have grown, China has turned its focus toward surpassing the United States. Chinese leaders have grown increasingly aggressive in their pursuit of this goal following the 2008 global financial crisis and General Secretary of the Chinese Communist Party (CCP) Xi Jinping's ascent to power in 2012.
- Chinese leaders regard the United States as China's primary adversary and as the country most capable of preventing the CCP from achieving its goals. Over the nearly three decades of the post-Cold War era, Beijing has made concerted efforts to diminish the global strength and appeal of the United States. Chinese leaders have become increasingly active in seizing opportunities to present the CCP's one-party, authoritarian governance system and values as an alternative model to U.S. global leadership.
- China's approach to competition with the United States is based on the CCP's view of the United States as a dangerous ideological opponent that seeks to constrain its rise and undermine the legitimacy of its rule. In recent years, the CCP's perception of the threat posed by Washington's championing of liberal democratic ideals has intensified as the Party has reemphasized the ideological basis for its rule.
- Beijing views economic competition with the United States in the context of its broader economic development strategy. Beginning in 2006, the United States, as the global economic and technological leader, became a target to chase and surpass as the CCP fostered domestic production and innovation through successive waves of industrial plans.
- In China's most recent industrial policy wave, set by the 2016 Innovation-Driven Development Strategy, which includes the Made in China 2025 plan, policymakers have promoted the

development of China's digital ecosystem and accompanying regulatory architecture. The CCP believes China faces a rare historic opportunity to establish control over a cluster of revolutionary, networked technologies, including high-speed internet, sensors, telecommunications, artificial intelligence (AI), robotics, and smart city infrastructure. Doing so could allow Beijing to leapfrog the United States and other powerful competitors and lead in the next generation of global innovation.

- The People's Liberation Army (PLA) views the U.S. military as its primary strategic adversary and has engaged in long-term efforts to close the wide capability gap with U.S. military power since the mid-1990s. In 2004, the PLA shifted its focus to emphasize leapfrogging the United States in certain warfighting areas by introducing new concepts the PLA believed could enable it to defeat a conventionally superior opponent.
- The PLA's long-term strategy to gain advantage over the U.S. military includes developing "informationized" capabilities and exploiting ostensibly civilian information systems, likely including those built overseas by Chinese companies. The PLA is complementing these efforts by developing cyberattack, space and counterspace, and long-range precision-strike capabilities and expanding its capacity to delay and threaten U.S. military forces at increasing distances from China's shores.

Recommendations

The Commission recommends:

- Congress adopt the principle of reciprocity as foundational in all legislation bearing on U.S.-China relations. Issues to be considered in applying this principle should include but are not limited to the following:
 - The ability of journalists and online media to operate without undue restriction;
 - The ability of nongovernmental organizations to conduct meaningful engagement with civil society;
 - Access to information, including but not limited to financial and research data;
 - Access for social media and mobile apps from U.S. companies;
 - Access for diplomatic personnel, including but not limited to diplomats' freedom of travel and ability to meaningfully exchange views with the host country public; and
 - Market access and regulatory parity, including but not limited to companies' ability to participate in trade, investment, and financial market transactions, cross-border capital transfer, and protections of intellectual property.
- Congress direct the U.S. Department of State to produce an annual report detailing China's actions in the United Nations and its subordinate agencies that subvert the principles and purposes of the United Nations. Such a report would at a minimum document the following:

- China's actions violating United Nations treaties to which it is a party;
- China's actions to influence the votes of United Nations members, including through coercive means;
- China's actions to nominate or support candidates for United Nations leadership positions that do not adhere to United Nations standards for impartiality or are subject to the influence of the Chinese government;
- Actions by nationals of the People's Republic of China and others currently holding United Nations leadership positions that appear to support the interests of the Chinese government in violation of United Nations impartiality standards;
- Actions by nationals of the People's Republic of China serving in functional positions in United Nations organizations impacting hiring practices, internal policies, and other functions that appear to support the interests of the Chinese government in violation of United Nations impartiality standards;
- Actions by Chinese military and support personnel engaged in United Nations peacekeeping operations that are inconsistent with the principles governing these missions, including China's deployment of these personnel to protect its economic interests and improve the power projection capabilities of the People's Liberation Army; and
- The number and positions of United States personnel employed by the United Nations and its agencies.
- Congress expand the authority of the Federal Trade Commission (FTC) to monitor and take foreign government subsidies into account in premerger notification processes.
 - The FTC shall develop a process to determine to what extent proposed transactions are facilitated by the support of foreign government subsidies.
 - The definition of foreign government subsidies shall encompass direct subsidies, grants, loans, below-market loans, loan guarantees, tax concessions, governmental procurement policies, and other forms of government support.
 - Companies operating in the United States that benefit from the financial support of a foreign government must provide the FTC with a detailed accounting of these subsidies when undergoing FTC premerger procedures.
 - If the FTC finds foreign subsidies have facilitated the transaction, it can either propose a modification to remedy the distortion or prohibit the transaction under Section 7 of the Clayton Act, which prohibits mergers and acquisitions where the effect "may be substantially to lessen competition, or to tend to create a monopoly."
- Congress direct the Administration, when sanctioning an entity in the People's Republic of China for actions contrary to the economic and national security interests of the United States or for violations of human rights, to also sanction the parent entity.

- Congress amend the Immigration and Nationality Act to clarify that association with a foreign government’s technology transfer programs may be considered grounds to deny a nonimmigrant visa if the foreign government in question is deemed a strategic competitor of the United States, or if the applicant has engaged in violations of U.S. laws relating to espionage, sabotage, or export controls. Association with a foreign government’s technology transfer programs can include any of the following:
 - Participation in a foreign government-sponsored program designed to incentivize participants to transfer fundamental research to a foreign country via a talent recruitment program or in a foreign government-sponsored startup competition;
 - Acceptance of a government scholarship that facilitates coordination with talent programs or requires recipients to study specific strategic scientific and technological fields or to return to the foreign country for a government work requirement after the scholarship term ends;
 - Association with a university or a department of a university that the U.S. government has designated as a participant in the foreign government’s military-civil fusion efforts; or
 - Status (current or past) as a scientist, technician, or officer for a foreign military, if the applicant does not disclose such information when applying for a visa.

Introduction

In recent years, the U.S. government and public have increasingly viewed China as a strategic competitor of the United States. The Trump Administration’s 2017 national security strategy labeled China a “revisionist power” engaged in a “great power competition” with the United States, while opinion polls show unfavorable views toward China among the U.S. public reaching new historic highs.¹ These developments mark profound shifts in U.S. policy and perceptions that have broken with the historical approach to U.S.-China relations since the establishment of bilateral diplomatic ties over 40 years ago. During that time, successive administrations from both political parties called for policies of constructive engagement with China while welcoming and attempting to shape its emergence as a strong, peaceful, and prosperous country.² Diverse interest groups in the United States, including in the policymaking, business, and research communities, also perceived substantial benefits from deepening ties, the promised opening of the Chinese market, and opportunities to relocate production to China.

For Chinese leaders, however, the U.S.-China relationship has always been fundamentally competitive. Over the nearly three decades of the post-Cold War era, Chinese leaders have regarded the United States as China’s primary adversary and as the country most capable of preventing the CCP from achieving its goals, including what has become its sweeping ambitions for global leadership. In fact, the United States has occupied this position in Beijing’s worldview since the establishment of the People’s Republic of China (PRC) in 1949, excepting a nearly two-decade interregnum (1972–1989) of U.S.-Chi-

na cooperation during the most intense period of the Sino-Soviet split. China's view of the United States is based on the ideology of the ruling CCP, which regards the liberal democratic values championed by the United States as a fundamental impediment to its external ambitions and an existential threat to its domestic rule.

Beijing's view of the United States as a dangerous and firmly committed opponent has informed nearly every facet of China's diplomatic strategy, economic policy, and military planning in the post-Cold War era. Through its modernization efforts, China has emerged as an unprecedented economic rival and a growing military threat capable of inflicting grave harm on the United States and its allies and partners. China's economic engagement with the United States has proved to be a critical enabler of its rapid economic growth, steadily feeding Beijing's confidence in its ability to act on its long-standing ambition to match and ultimately displace the United States as the predominant global leader. Meanwhile, Beijing has intensified its diplomatic efforts to drive wedges between Washington and its allies and undermine the liberal democratic values that have underpinned the international order the United States has championed for 75 years.

This section examines China's view of the ideological, economic, and military dimensions of strategic competition with the United States. First, the section discusses the global dimension and adversarial nature of China's approach to competition with the United States. Next, it examines the ideological roots of Beijing's view of the United States, which have shaped the CCP's view of Washington as a dangerous and committed opponent. It then assesses the consequences of China's broader economic strategy for its economic and technological competition with the United States. Finally, the section surveys China's approach to military competition with the United States. It concludes with a discussion of the implications of China's competitive strategy for U.S. interests and policy. This section is based on the Commission's June 2020 hearing on the topic and open source research and analysis.

A Global Contest for Power and Influence

China views itself today as engaged in a global competition for power and influence with the United States. Beijing's ambition to match and ultimately surpass the United States as the world's most powerful and influential nation has been present to different degrees since the establishment of the PRC in 1949.³ Chinese leaders came to view the Soviet Union as China's primary competitor and threat for much of the Cold War and, at the outset of China's "reform and opening" era in the late 1970s, recognized the country had fallen far behind the United States in economic and technological terms.⁴ In the view of Chinese leaders, these developments necessitated a degree of economic, military, and other cooperation with the United States.⁵ As China's economic and technological prowess, diplomatic influence, and military power have grown during the post-Cold War period, however, Chinese leaders have shifted toward a more directly competitive approach to relations with the United States.⁶ Beijing has framed this approach both in terms of ideology and "comprehensive national power," a term adopted by CCP leaders

to describe the combination of a country's material strength and normative appeal.*⁷

Although U.S.-China economic, cultural, and educational ties expanded dramatically following the normalization of diplomatic relations in 1979, Beijing's view of its relationship with Washington remained deeply competitive. In public, Chinese leaders have routinely professed their desire for "win-win" and "mutually beneficial" cooperation.⁸ These claims are repeated during leader-level summits with U.S. presidents and cabinet officials.⁹ At the same time, however, Party documents and speeches articulate a much more competitive view of international relations whereby an increase in Chinese power and influence must come at the expense of others—particularly, and most significantly in Beijing's view, at the expense of the United States.¹⁰ According to Barry Naughton, So Kwanlok Chair of Chinese International Affairs at the University of California San Diego, Chinese policymakers "overwhelmingly see the global order as... being hierarchical," with the United States currently as the dominant power.¹¹

Planning for Competition: 1990s–2008

Beijing's preparations for a global strategic competition with the United States were apparent as China recalibrated its national strategy following the Soviet Union's disintegration. With the disappearance of the shared U.S. and Chinese perception of the Soviet threat, Beijing moved quickly to resume identifying Washington as its primary opponent.¹² According to Chinese leaders, as the sole remaining superpower, the United States was now attempting to create a unipolar world in which it could "control international affairs" and pursue a "global strategic expansion."¹³ In a speech to Chinese diplomats in 1993, then CCP General Secretary Jiang Zemin declared that the United States' position as the world's most powerful nation and its "posture of hegemonism and power politics" in its relationship with China, among other reasons, rendered it China's "main adversary in international dealings," a position it would occupy "for a relatively long time into the future."¹⁴

In the meantime, General Secretary Jiang urged, China should take advantage of the "best" security environment since the founding of the PRC to modernize and reorient its national strategy toward a "global competition in comprehensive national power."¹⁵ Bei-

*Huang Shuofeng, a researcher at the PLA Academy of Military Science who later held the rank of senior colonel, developed the concept of "comprehensive national power" that CCP leadership adopted in the early 1990s. Although the idea of an aggregate measurement for national strength had already been explored by multiple thinkers outside of China, Huang considered his formulation a new and distinct contribution to the field. Comprehensive national power is an aggregate measure of a country's material strength, latent potential, and international influence, illustrating that country's ability to survive, develop, and coordinate its internal and external relations. According to Huang, a measurement of comprehensive national power is constructed through the holistic assessment of a country's geographic, political, economic, technological, military, diplomatic, cultural, and other characteristics. In February 1990, *People's Daily* covered an interview with Huang detailing the concept and its significance. This coverage in the Party's official paper, combined with Deng Xiaoping's featuring of the term during his famed "Southern Tour" in 1992, likely indicated the CCP's official adoption of the concept. See Ming Zhang, "China's Military Great Leap Forward?" *Georgetown Journal of International Affairs* 2:1 (2001): 97–104, 100; Deng Xiaoping, "Deng Xiaoping's Remarks on the Southern Tour (邓小平南巡讲话)," January 18–February 21, 1992. Translation; Lu Mu, "Year of the Horse New Spring Conversation on National Power—Interviewing Chinese Comprehensive National Power Research Worker Huang Shuofeng (马年新春话国力——访我国综合国力研究工作黄硕风)," *People's Daily*, February 26, 1990. Translation.

China perceived additional opportunities to build its strength after the turn of the millennium. Speaking at the CCP's 16th National Congress in 2002, Jiang declared China would enjoy a "period of strategic opportunity" spanning the first two decades of the 21st century during which it would be able to rapidly develop its economy, political standing, and military power.¹⁶

Increasing Confidence and Concerns: 2008–2012

By the end of the first decade of the 2000s, Beijing had become increasingly confident in its growing power and global influence while remaining wary of the threat posed by Washington. Beijing's sense of opportunity heightened significantly after the 2008 global financial crisis, at which time China's assertiveness increased considerably due to its view of the weakening relative position of the United States and belief its economic model had managed to avoid many pitfalls of the crisis.¹⁷ In 2010, then General Secretary Hu Jintao declared that China had taken advantage of its "period of strategic opportunity" to grow its economy and comprehensive national power to unprecedented heights.¹⁸ Reflecting this growing confidence, he advised Chinese officials to be increasingly proactive in moving the international political and economic order away from its current, U.S.-dominated pattern and adopt more "offensive moves" to advance its interests as opportunities presented themselves.¹⁹

Nevertheless, Chinese leaders warned that as China's power grew, the threats posed by the United States and other foreign powers would also increase. In a speech to Chinese diplomats shortly before the global financial crisis, General Secretary Hu reiterated that the United States remained China's "primary adversary... in international dealings" and noted that, although the world was trending away from unipolarity, Washington—referred to as an unnamed "big country"—would continue its "struggle" to maintain its "hegemonic" status.²⁰ He further assessed that as China's economic development progressed, it would inevitably encounter increasing "obstruction and risks" and the "strategic containment... of outside enemy forces."²¹ In a second speech to Chinese diplomats in 2009, General Secretary Hu described the world as experiencing intensifying international strategic competition and "contests of strength" over comprehensive national power.²² To account for an additional expected increase in foreign pressure, he advised China to continue adhering to its relatively patient and low-profile approach to international affairs to avoid falling into a "vortex of conflict and confrontation" by establishing itself as the primary focal point of international competition.²³

An Open Bid for Global Leadership: 2012–Present

Under General Secretary Xi, a new generation of CCP leaders assumed power in 2012 and perceived even greater opportunities for displacing the United States from its position atop the global hierarchy. In his speech at the CCP's 19th National Congress in 2017, General Secretary Xi declared that China was moving closer to the "world's center stage" while its power relative to Washington's—a shift referred to obliquely as part of the global trend toward multipolarity—was "surging forward."²⁴ Chinese leaders began to speak

openly about Beijing's authority to "lead" revisions to the global governance system, reorganized as a Sinocentric "community of common human destiny," as the international balance of power underwent profound changes "not seen in a century."²⁵ Taking aim at the United States and its allies, Beijing declared in its 2019 white paper on China's foreign policy, "It is now impossible for one single country or bloc of countries to exercise dominance in world affairs."²⁶ Meanwhile, the Chinese government adopted a more openly confrontational approach to the United States, with state media variously labeling Washington as the "source of global unrest," a puppet master driving Hong Kong's prodemocracy protests, and "evil."²⁷ (For more on China's increasing confidence in its ability to reshape global governance, see Chapter 1, Section 2, "The China Model: Return of the Middle Kingdom.")

At the same time, Beijing viewed the risks and challenges it faced from the United States as multiplying. In his testimony before the Commission, John Pomfret, author and former Washington Post Beijing bureau chief, noted that while China's power had increased immeasurably by the time of General Secretary Xi's assumption of power, "if anything... the Communist Party has acted as though the threat posed by the United States is intensifying."²⁸ Official Chinese documents and leadership speeches reflect a similar view. In a thinly-veiled reference to the United States, China's 2015 defense white paper warned of the "new threats from hegemonism, power politics, and neo-interventionism" and an intensification of the "international competition for the redistribution of power."²⁹

In May 2019, amid growing tensions with the United States over technology and trade, General Secretary Xi declared China to be engaged in a "New Long March."³⁰ Later that year, he noted China's challenges were likely to become even more severe, warning the country to prepare for a wide-ranging struggle spanning the economic, political, cultural, foreign policy, and military domains that would last until at least the middle of the 21st century.³¹ A December 2019 address by Chinese State Councilor and Foreign Minister Wang Yi further typified China's simultaneous confidence and concern. In his remarks, he lauded China's growing international strength and influence while warning of the risks of increasing U.S. "suppression" of China and intensifying "great power games."³² Furthermore, Foreign Minister Wang cautioned, despite China's growing strength, the United States remained the "country with the greatest comprehensive national power" on earth.³³

Diplomacy in Key Regions and International Organizations as Tools to Displace the United States

Key to China's strategy for improving its relative position in the international balance of power are diplomatic efforts to drive wedg-

*In the original Long March, the CCP's Red Army—the predecessor of today's PLA—undertook a series of military retreats from 1934 to 1935 to evade encirclement by the Chinese Nationalist Army. The best known of these retreats began in Jiangxi Province in central China and involved a punishing journey over mountainous and remote terrain to Yan'an, a small town in northern China that became the CCP's wartime stronghold. It is estimated that only one tenth of the force that left Jiangxi arrived alive in Yan'an. The Long March, which also began the ascent of Mao Zedong to the CCP's top leadership position, remains an important CCP symbol of revolutionary determination in the face of hardship. For more, see Chapter 1, Section 2, "Year in Review: Security, Politics, and Foreign Affairs" in *2019 Annual Report to Congress*, November 2019, 84–85.

es between the United States and its most important allies and partners.* It also seeks to use international organizations, and particularly the UN, to gain advantage over Washington and its allies.

Beijing views East Asia and Europe as particularly important regions to succeed in these efforts.³⁴ As stated by Satu Limaye, vice president of the East-West Center, in testimony before the Commission, “East Asia is the only region where both the U.S. and China have identified core interests, and where failure or success could be a game changer for their respective global and regional roles and ambitions.”³⁵ Under General Secretary Xi, China has further emphasized the strategic importance of countries in the Indo-Pacific region, defining its periphery as “the anchor of China’s existence and survival, the foundation of its development and prosperity, and the starting point of great power diplomacy with Chinese characteristics.”³⁶

China’s relationships with the EU, Russia, Japan, and India have historically featured in its efforts to improve its global standing relative to the United States. Writing as early as 2003, current vice chairman of the Central Military Commission Zhang Youxia assessed Japan and the United Kingdom (UK) to be Washington’s “chief allies and strategic pillars in Asia and Europe, respectively,” while France, Germany, and Italy were basically aligned with the United States despite harboring conflicts of interest and political differences.³⁷ Nevertheless, he assessed, China would be able to “exploit the structural strategic void” between the United States and its allies, and especially differences between the United States and the EU, to improve its relative power and influence.³⁸ According to Hudson Institute visiting fellow Liselotte Odgaard, Europe’s position as a “leading global economic force with reservations about U.S. cooperation on key European priorities” makes it a potential “jewel in the crown” of Chinese strategic partners.³⁹ In 2019, Beijing reflected its aspiration to gain strategic advantage from its relationship with the EU, claiming that China-EU cooperation would “strengthen global governance, uphold multilateralism... and address global challenges.”⁴⁰

At the same time it has extolled the significance of its relationships with the EU, Japan, India, and other important U.S. partners, Beijing has demonstrated an increasing willingness to sacrifice those ties in pursuit of its own interests. Beijing’s altered approach to its relationships with these countries may derive in part from an assessment that it no longer requires their cooperation to counterbalance the United States.† In 1998, for example, then General Secretary Jiang noted the strategic importance of maintaining friendly

*In China’s view, countries are sorted into three primary categories, each able to support China’s diplomatic aims to different degrees and in different ways. The first category consists of “great powers,” typically including the United States, Russia, and the EU. Chinese leaders also included Japan and sometimes India in this category through the mid-2000s. The second category comprises China’s “neighboring countries,” whom Beijing aims to leverage as a “geostrategic support” for its broader diplomatic efforts. Finally, “developing countries” serve to “consolidate the political foundation and traditional advantages” of Chinese diplomacy. For example, see Hu Jintao, “The International Situation and Our Diplomatic Work (国际形势和外事工作),” August 21, 2006, in *Selected Works of Hu Jintao*, Volume II, Beijing: People’s Publishing House, 2016, 509–510. Translation.

†A key exception to this trend may be China’s relationship with Russia. Sino-Russian ties have deepened considerably in recent years, although enduring tensions in some areas continue to limit cooperation between the two countries. For more on the China-Russia relationship, see Chapter 4, Section 2, “An Uneasy Entente: China-Russia Relations in a New Era of Strategic Competition with the United States,” in *2019 Annual Report to Congress*, November 2019, 315–358.

ties with Japan and India.⁴¹ In contrast, since General Secretary Xi's ascent to power, China has steadily increased military pressure on both countries, leading to a significant deterioration in Sino-Japanese and Sino-Indian ties. (For more on China's increasingly confrontational approach to Japan and India, see Chapter 3, Section 1, "Year in Review: Security, Politics, and Foreign Affairs.")

China has viewed the UN as another key diplomatic forum to compete with the United States and diminish the influence of U.S. norms and values. In testimony before the Commission, Kristine Lee, associate fellow at the Center for a New American Security, argued Beijing has devoted "considerable resources" to presenting itself as a "nimble, more dynamic, and more reliable alternative" to U.S. leadership in the UN.⁴² In his 2003 article, General Zhang characterized China's approach in similarly strategic terms, urging China to use its UN Security Council membership and veto power to enhance the UN's role as an arena for "restricting and checking the United States."⁴³ In recent years, China has used its veto privilege more frequently, while ranking among the countries that converge the least with the United States on votes in the UN General Assembly defined by the U.S. Department of State as "directly affect[ing] important United States interests" and for which the United States had "lobbied extensively."⁴⁴ In 2018, China aligned with the United States only 5 percent of the time on these votes,* converging at the same frequency as Iran and Cuba and trailing both North Korea (which coincided with the United States on 6 percent of votes) and Russia (which overlapped with the United States on 13 percent of votes).⁴⁵

According to Ms. Lee, another key Chinese tactic in mobilizing support for its priorities is building influence among both G77 countries, which constitute a full 70 percent of UN member states, and countries participating in China's Belt and Road Initiative (BRI).†⁴⁶ China's effort to position itself as a champion of the developing world has long been a key feature of its foreign policy.⁴⁷ (For more on China's efforts to deepen its ties with African countries, see Chapter 1, Section 3, "China's Strategic Aims in Africa.")

Beijing Views Washington as a Dangerous Ideological Opponent

China's deeply competitive approach to its relationship with the United States is rooted in the CCP's view of Washington as a dangerous ideological opponent. This perception is informed both by the CCP's general sense of threat from universal values and liberal democratic governance and by its view of Washington as a particularly hostile adversary of its governance system.⁴⁸ Notably, China's

*Examples include votes on the promotion and protection of human rights and fundamental freedoms, the situation of human rights in Crimea, advancing responsible state behavior in cyberspace, and condemning the activities of Hamas and other militant groups in Gaza. Of the 20 resolutions adopted with a vote in 2018, China voted with the United States zero times, voted against it 18 times, and abstained twice (a country is considered to be in partial alignment with the United States on votes where one country, but not both, abstained on a resolution). For more, see U.S. Department of State, *Voting Practices in the United Nations in 2018: Report to Congress*, March 31, 2019.

†The G77, or Group of 77 countries, is a UN non-governmental organization that allows developing countries to articulate and promote their collective economic interests. The BRI is one of China's most prominent foreign and economic policy initiatives and a signature project promoted by General Secretary Xi. For more on BRI, see U.S.-China Economic and Security Review Commission, Chapter 3, Section 1, "Belt and Road Initiative," in *2018 Annual Report to Congress*, November 2018, 259–303.

perception of the ideological threat from the United States has not fundamentally changed since the establishment of U.S.-China diplomatic ties in 1979. Even during periods when bilateral trade and investment and cultural, educational, and scientific exchanges expanded to unprecedented levels, Chinese leaders were not shaken from their belief in Washington's commitment to regime change through a combination of attempts at "peaceful evolution" and "Westernization," subversion, or the outright overthrow of the CCP.⁴⁹

An important consequence of China's assessment of the ideological threat posed by the United States has been Beijing's hardening view of a deeply adversarial competition between two incompatible political systems. According to Mr. Pomfret, CCP leaders have come to hold "profoundly tortured views on the United States" that influence every dimension of Beijing's interactions with Washington, while a "battle between two ideologies—China's version of Leninism versus Western liberalism" frames China's view of U.S.-China relations.⁵⁰ Mr. Pomfret argued that long before U.S. leaders and the public debated the strategic challenges posed by China, "China's government had already entered a new Cold War with the United States."⁵¹

Relations since Normalization: A Hostile Embrace

Beijing reinforced the ideological foundation for its more contentious relationship with the United States in the years following the Tiananmen Square massacre. In his oral testimony before the Commission, Mr. Pomfret identified 1989 as a key inflection point that allowed a "powerfully anti-Western, anti-liberal faction within the Communist Party to rise to prominence."⁵² In the ensuing years, at the same time some Chinese leaders continued debating the merits of allowing greater liberalization of China's governance system, a "paranoid, virulently anti-American view of the world took root" among other CCP leaders and the key centers of power within the Chinese state.⁵³ According to Anthony Saich, director of Harvard University's Ash Center for Democratic Governance and Innovation, Chinese leaders intensified "patriotic education" for Chinese students during this timeframe, promoting a selective and deeply problematic narrative that glorified China's imperial past and encouraged nationalism and public hostility toward Japan and the United States.⁵⁴

Deng Xiaoping, then China's paramount leader, was cognizant of the substantial material advantages of deepening relations with the United States. At the same time, he authorized and led Beijing's hardening approach to the United States, reverting to deeply ideological terms in describing the perils for the CCP of the U.S.-China

*Arguably, the CCP's basic political line had been firmly established at the outset of China's "reform and opening" period, long prior to the Tiananmen crackdown. In 1979, Deng Xiaoping established the CCP's "Four Cardinal Principles," a set of foundational ideological and political guidelines he viewed as preconditions for China's economic opening to the outside world. These included remaining committed to (1) the socialist path, (2) the dictatorship of the proletariat, (3) the leadership of the CCP, and (4) Marxism-Leninism and Mao Zedong Thought. While the 1980s saw a high-water mark of open political discussion within China, powerfully conservative figures generally retained control over China's political system. Even key CCP leaders perceived as reformers, such as then CCP General Secretary Hu Yaobang, exhorted Party members to remain faithful to Communist ideas and discipline while warning of "capitalist forces and other forces hostile to the socialist cause" seeking to "corrupt and harm" the PRC. Deng Xiaoping, "Persisting in the Four Cardinal Principles," March 30, 1979; Hu Yaobang, "Report to the 12th National Congress of the Communist Party of China: Create a New Situation in All Fields of Socialist Modernization," September 12, 1982.

relationship. In 1992, he warned CCP cadres, “The imperialists are pushing for peaceful evolution toward capitalism in China, placing their hopes in the generation that comes after us.... Hostile forces realize that so long as we of the older generation are still alive and carry weight, no change is possible.”⁵⁵ To guard against this risk, Deng concluded the CCP needed to properly educate a new generation of “revolutionary” leaders and cadres working in the “organs of the dictatorship.”⁵⁶ This cynical view of the United States was apparent in the speeches of General Secretary Jiang, Deng’s chosen successor. “The long-term objective of some Americans has been to promote peaceful evolution toward capitalism in China,” he argued in 1993. “Basically, they are not willing to let China unite, develop and become strong.”⁵⁷

Chinese leaders’ view of the United States as an ideological adversary persisted through the 1990s. In a speech to Chinese diplomats in 1998, then General Secretary Jiang claimed that influential voices in Washington were refusing to abandon their “political plot” to work with other countries to “Westernize and divide China” and ultimately carry out regime change.⁵⁸ In response, he urged Chinese diplomats to prepare for a “long and complex struggle” in which China “must always remain clearheaded and not lose [its] vigilance.”⁵⁹ Neither China’s World Trade Organization (WTO) accession nor its deepening ties with the United States throughout the 2000s ameliorated Beijing’s cynical view of the bilateral relationship. In then General Secretary Hu’s 2006 address to Chinese diplomats, he emphasized that “outside enemy forces” remained determined to Westernize and divide China, stir up domestic social unrest, and infiltrate and instigate rebellion among CCP cadres.⁶⁰

Toward an All-Encompassing Threat

Under General Secretary Xi, Chinese leaders’ views of the dangers posed by perceived U.S. ideological hostility toward China have hardened further and expanded to encompass nearly every dimension of China’s interactions with the United States. Shortly after rising to the CCP’s top post, General Secretary Xi oversaw the publication of “Document Number 9,” an internal Party communique ordering heightened vigilance against seven “false ideological trends, positions, and activities” purportedly inspired by U.S. ideals.⁶¹ Pro-

*The views expressed by Deng and Jiang were hardly new to the CCP. In the eras before and during the process of normalization of U.S.-China diplomatic ties, Mao Zedong and Zhou Enlai portrayed the United States in even more vivid terms. Mao charged Washington in the 1940s with carrying out a purported “imperialist policy of world-wide aggression” to “destroy the Communists” and turn China into a U.S. colony,” mocking these efforts as a U.S. attempt to “fulfil its ‘international responsibilities’ and carry out its ‘traditional policy of friendship for China.’” Later, speaking at the outset of U.S.-China rapprochement in 1973, Zhou quoted Lenin in arguing for a temporary period of cooperation with the United States at a time of Chinese weakness so as to eventually return to the CCP’s original goal: the defeat of their erstwhile U.S. partners. “There are compromises and compromises,” he said. “One must learn to distinguish between a man who gave the bandits money and firearms to lessen the damage they can do and *facilitate their [ultimate] capture and execution*, and a man who gives bandits money and firearms in order to share in the loot” [emphasis added]. In Zhou’s estimation, China’s cooperation with the United States belonged to the former category. In 1993, Jiang extolled this foreign policy approach, urging China’s diplomats to “carry forward the fine traditions and work style of our country’s diplomatic corps” initiated by Mao and Zhou. For more, see Mao Zedong, “Farewell, Leighton Stuart!” August 18, 1949; Zhou En-Lai, “Report to the Tenth National Congress of the Communist Party of China,” August 24, 1973; and Jiang Zemin, “Our Diplomatic Work Must Unswervingly Safeguard the Highest Interests of the State and the Nation,” July 12, 1993, in *Selected Works of Jiang Zemin*, Volume I, Beijing: Foreign Languages Press, 2011, 307.

scribed beliefs included constitutional democracy, universal values, “Western”-inspired notions of media independence and civil society, pro-market neoliberalism, “nihilistic” views of the CCP’s history, and the “questioning [of] . . . the socialist nature of socialism with Chinese characteristics.”⁶² The document further described China’s ideological situation as a “complicated, intense struggle” and framed the proponents of its proscribed ideals as enemies.⁶³

Chinese leaders described the U.S. ideological threat in increasingly urgent terms as concerns mounted in the United States about the consequences of China’s authoritarian governance system for Chinese citizens and U.S. interests. In June 2019, China’s vice minister of public security issued a notice to security bureaus across the country warning that “U.S. suppression” had become the greatest external factor affecting China’s “political security.”⁶⁴ In a July 2019 speech, a senior CCP official relayed General Secretary Xi’s instructions to China’s influence apparatus to step up efforts to “win the ideological war” in the face of “increasingly severe challenges by the West to contain China.”⁶⁵

In his December 2019 speech, Foreign Minister Wang charged the United States with taking advantage of international forums to “vilify China’s social system and development path” and deliberately “attacking and defaming” China on the issues of Hong Kong, Taiwan, Xinjiang, Tibet, and human rights.⁶⁶ At the core of U.S.-China tension, he concluded, was the fact that some in the United States could not accept the success of “socialism with Chinese characteristics” or that China’s political system demonstrated that the world had other paths to modernization besides the “Western model.”⁶⁷ In his testimony before the Commission, Mr. Pomfret similarly described Chinese leaders’ sense of a ubiquitous threat: “Across a vast array of fields, including ideology, diplomacy, standards-setting in the technological realm, the military, and the media,” he argued, China is now engaged in a “full-scale strategic competition with the United States.”⁶⁸ (For more on recent assessments of U.S.-China relations by Chinese leaders, see Chapter 3, Section 1, “Year in Review: Security, Politics, and Foreign Affairs.”)

Catch Up and Surpass: Beijing’s Economic Strategy

The Chinese government has viewed economic competition with the United States in the context of its broader economic strategy, which evolved from aiming to “catch up” with the United States to “surpassing” it in key technologies. According to Dr. Naughton, whereas China’s traditional approach to growth was exemplified by iterative five-year plans that targeted broad economic development, in the first decade of the 2000s, the Chinese government shifted toward “a more directly competitive approach” vis-à-vis the United States.⁶⁹ Overtaking the United States would fulfill twin strategic and economic imperatives: to maintain and secure the power of the CCP and to avoid a “middle income trap”* that could hobble China’s

*The “middle income trap” is a popular term referring to an economy whose growth has stagnated—often due to an aging population and rising labor costs for labor-intensive industries—before per capita income converges with that of advanced economies. Colloquially, the middle income trap is referred to as “growing old before getting rich.” These economies may be at a competitive disadvantage relative to both low-wage labor-intensive economies and high-wage economies boosting their productivity through technological advancement. Indermit S. Gill and Homi Kharas, “The Middle-Income Trap Turns Ten,” *World Bank*, August 2015, 7.

development. In the CCP's view, the United States, as the global economic and technological leader, became a target to chase and, ultimately, surpass. Dr. Naughton asserted that as Chinese policy-makers steered China's economic development, they benchmarked progress "almost exclusively" against the United States.*

To achieve its stated development targets, the Chinese government has undertaken three successive waves of industrial policy planning that ultimately put China on a "collision course with the United States and the world."⁷⁰ The first wave, embodied by the National Medium- and Long-Term Plan for Science and Technology Development (2006–2020), constituted a "concerted effort" to invest in domestic production and master certain "core technologies."[†] After 2010, technologies targeted by the government were specified in the promulgation of the Strategic and Emerging Industries (SEI) program. The chosen technologies represented potentially "revolutionary" new industries in emerging fields, which could allow Chinese companies to "surpass" rather than simply "catch up" to the international technological frontier.⁷¹ Finally, beginning in 2016, Chinese economic planners instituted the Innovation-Driven Development Strategy (IDDS), which promoted "mastery of a wide range of interrelated and economically significant technologies" capable of altering a country's economic trajectory and the international balance of power.⁷²

First Wave: The National Medium- and Long-Term Plan for Science and Technology Development

The Medium- and Long-Term Plan, introduced in 2006, recognized the need for technological catch-up with "developed" countries, including the United States. The plan introduced key themes echoed in later Chinese industrial policies.⁷³ It made clear that China faced "enormous pressure from developed nations who possess economic and [science and technology] superiority."⁷⁴ Relative to these countries, it argued, China's advancements in science and technology had a "fairly big gap to close."⁷⁵ The plan made a direct link between economic development and scientific innovation, assessing that China was "not yet an economic power" due to its "weak innovative capacity."⁷⁶ The CCP believed this weakness derived from several critical problem areas, among them insufficient investment, a talent shortage, and low self-sufficiency in key technologies.⁷⁷

To address these shortcomings, the plan argued for "indigenous innovation," defined as the "assimilation and absorption of imported technology" to develop China's innovation capacity.⁷⁸ This innovation should play to China's advantages, including China's openness to the outside world "allowing the country to share the fruits of new

*According to Dr. Naughton, Beijing's efforts to "catch up and surpass" advanced economies have formed a "near constant" in Chinese policymaking. In 1958, Beijing determined it needed to catch up to U.S. steel production levels and embarked on the Great Leap Forward. After the turmoil of the Great Leap Forward and the Cultural Revolution, policymakers found the Chinese economy had fallen far behind advanced economies and de-emphasized rhetoric about surpassing in favor of "catching up." Barry Naughton, written testimony for U.S. China Economic and Security Review Commission, *Hearing on Chinese Views of Strategic Competition with the United States*, June 24, 2020, 1.

†According to Dr. Naughton, in the 2006 Medium- and Long-Term Plan, the types of technology to be targeted were "ill defined" relative to highly specific targets set in later industrial policies. Barry Naughton, written testimony for U.S. China Economic and Security Review Commission, *Hearing on Chinese Views of Strategic Competition with the United States*, June 24, 2020, 3.

science and technology innovation,” and China’s “political advantage” of resource mobilization.⁷⁹ It noted that countries like the United States, Japan, and South Korea had used major defense targets to further scientific breakthroughs. The plan stated that “major special projects” were “an important measure in raising [these countries’] national competitiveness.”⁸⁰ To promote technological advancement, the plan defined seven categories of international “frontier” technologies spanning biotech, information technology, advanced manufacturing and materials, energy technologies, and marine and laser technology.⁸¹ It also served as the basis for 16 “megaprojects” to receive funding for applied research in industries where Beijing identified a competitive advantage.⁸²

China’s high-speed rail network represents an early, clear example of the Chinese government’s predatory “indigenous innovation” strategy.* In 2004, the Chinese government released the first Medium- to Long-Term Railway Plan, which aimed to extend China’s railway network by 120,000 km (over 74,500 miles) and foster an internationally competitive Chinese high-speed rail industry.⁸³ China’s Ministry of Railways signed contracts with foreign companies, including Alstom,⁸⁴ Siemens,⁸⁵ Bombardier,⁸⁶ and Kawasaki Heavy Industries,⁸⁷ to create a complete line of high-speed rail technologies.⁸⁸ China introduced the country’s first high-speed rail line in 2007, followed by the first ostensibly Chinese-designed high-speed rail train in 2010.⁸⁹ The extent of “indigenous” design in trains sold by Chinese companies is questionable, since foreign rail executives estimated that “roughly 90 percent of high-speed [rail] technology” in China is attributed to partnerships with international corporations.⁹⁰ Yet by 2014 these international corporations found themselves competing with Chinese railway companies in third markets.⁹¹ High-speed rail exports now form a part of BRI.⁹² (For more on how China uses BRI to promote its interests globally, see Chapter 1, Section 2, “The China Model: Return of the Middle Kingdom.”)

Crisis as Opportunity: The 2008 Global Financial Crisis

The 2008 financial crisis convinced Chinese policymakers of both the validity of their approach to governance and the necessity to capitalize on a perceived pivotal moment of relative strength vis-à-vis the United States when the U.S. economy struggled to recover.⁹³ Chinese policymakers had already witnessed the devastating impact of capital flight on the South Korean and Southeast Asian economies during the 1997 Asian financial crisis, while the Chinese economy—with strict capital controls, a relatively closed financial system, and minimal external debt†—remained comparatively unscathed.⁹⁴ According to Julian Gruin, professor at the

*For more information about China’s promotion of its high-speed rail technology internationally, see Michelle Ker, “China’s High Speed Rail Diplomacy,” *U.S.-China Economic and Security Review Commission*, February 21, 2017.

†At the time of the Asian financial crisis in 1997, China’s external debt only accounted for 15 percent of gross domestic product, compared to 28 percent for Korea, 38 percent for Malaysia, 51 percent for Indonesia, and 60 percent for Thailand. In addition, China’s external debt was primarily composed of foreign direct investment and other funds with long-term time horizons, rather than short-term loans. Andrew Sheng, *From Asian to Global Financial Crisis: An Asian Regulator’s View of Unfettered Finance in the 1990s and 2000s*, Cambridge University Press: New York, 2009, 282.

Crisis as Opportunity: The 2008 Global Financial Crisis— *Continued*

University of Amsterdam, the 2008 financial crisis further “underscored for the Chinese leadership at an ideological level the necessity and the correctness of China’s socialist market economy.”⁹⁵

To chart China’s path after 2008, now Vice Premier Liu He (then executive deputy director of the State Information Center), whom Dr. Naughton described as the “crucial brains” behind Chinese economic policy,⁹⁶ convened a working group of financial and economic regulators to compare the fallout from 2008 with shifts in the global economy after the Great Depression.⁹⁷ In a 2014 retrospective from this working group, Vice Premier Liu observed that financial crises create “a strong redistribution effect,” causing “shifts of power among large countries and major changes in the international economic order.”⁹⁸ The piece argued that China’s policies following the 2008 financial crisis should mirror U.S. actions in the wake of the Great Depression. Using the strength of its economic and technological competitiveness, China should act as a cautious creditor nation, working to shape global institutions around its interests. In Dr. Naughton’s assessment, while Vice Premier Liu’s report did not mention a final step, it “clearly implicate[d] displacing the [United States] as the world’s dominant power.”⁹⁹

Second Wave: The Strategic and Emerging Industries Program

Dr. Naughton identified the formation of the SEI program in 2009–2010 as a coalescence of industrial policy trends begun in 2006. With this program, Beijing saw an opportunity to surpass rather than simply catch up to the United States and other global leaders by focusing on technologies without entrenched market incumbents where Chinese entrants could develop a first-mover advantage.¹⁰⁰ A popular slogan described this opportunity as “[seizing] the commanding heights of the new information economy.”¹⁰¹ The program targeted seven industries: energy-efficient technologies, next-generation information technology, biotechnology, high-end equipment manufacturing, new energy, new materials, and new-energy vehicles.¹⁰² Advancements in these industries would be supported by state financial backing for corporate “national champions,” targets in research and development (R&D), patents produced, and compulsory* and high school educational attainment.¹⁰³

From the start, the SEI program focused on the use of foreign technology, obtained legally or through illicit means, to develop local industries and intellectual property.† For example, it directed

* Compulsory education denotes the years of education required under government law. In China, nine years of education are compulsory, from kindergarten to middle school. High school education is not compulsory, though it has become much more common. In 2005, China’s National Bureau of Statistics reported only about 40 percent of middle school graduates attended high school. By 2015, 95 percent of middle school graduates attended high school. Organization for Economic Co-operation and Development, “Education in China: A Snapshot,” October 2016, 10.

† In practice, this transfer occurred through a variety of legal and illicit means, ranging from forced technology transfer from foreign companies using the Chinese market as leverage to acquisitions of foreign technology and talent to commercial espionage by Chinese government actors.

domestic companies to “digest and absorb” new technologies,¹⁰⁴ making “better use of global [science and technology] achievements” and supporting Chinese firms’ expansion abroad.¹⁰⁵ Despite the emphasis on cooperation, U.S. and other foreign companies pointed out these policies appeared only to benefit Chinese companies, with foreign participation constrained by regulatory barriers like technology catalogues, localization requirements, and local intellectual property requirements.¹⁰⁶ In 2013, the U.S.-China Business Council expressed concern that U.S. and other foreign companies faced “significant challenges in finding reliable information” on SEI program policies and implementation due to “the opaque manner in which policies are being developed.”¹⁰⁷ Foreign companies with operations in China began to question the degree to which they might be allowed to participate in SEI-related developments.¹⁰⁸

Defend, Expand, Surpass: Emergence of China’s National Champions

In an effort to surpass the United States and other technological leaders, the Chinese government provides subsidies and government “guidance” to “national champions,” or companies it selects for special development and advancement.¹⁰⁹ Chosen companies may be state-owned or private. For example, Jack Ma, founder and former CEO of Alibaba, has spoken about the important role of “big enterprises” in furthering the Chinese government’s goal of achieving self-sufficiency in technology.¹¹⁰ Dr. Naughton argued Beijing initiates private companies into the “national team” through purchasing contracts and regulatory support.¹¹¹ As R. Evan Ellis, professor at the U.S. Army War College, noted in testimony before the Commission, Beijing works to advance the position of these companies “both at home and in global markets.”¹¹² For example, in November 2017, the China Ministry of Science and Technology identified the private tech giants Alibaba, Baidu, Tencent, and iFlytek as the first members of an AI “national team,” a designation that entails central and local government support.¹¹³ Each company was chosen to build specific platforms in support of new technologies: autonomous vehicles (Baidu), smart city infrastructure (Alibaba), medical imaging (Tencent), and natural language processing (iFlytek).¹¹⁴

The Chinese government’s approach for selecting, fostering, and promoting national champions follows an established pattern. First, Beijing protects and defends China’s domestic companies and market by limiting U.S. and other foreign companies’ access and encouraging technology transfer. Next, as domestic companies’ capabilities grow, Beijing pushes them to expand beyond China’s borders, including into the United States, to pursue new markets and technological know-how. This process assists Chinese national champions in surpassing and supplanting global market leaders.

For more information, see Sean O’Connor, “How Chinese Companies Facilitate Technology Transfer from the United States,” *U.S.-China Economic and Security Review Commission*, May 6, 2019.

Third Wave: Innovation-Driven Development Strategy

Despite decades of investment into technological development, the CCP remained deeply troubled by persistent weaknesses in China's innovation system. In 2013, General Secretary Xi stated that gaps in China's technological know-how represented China's "root cause of backwardness."¹¹⁵ The promulgation of the IDDS was precipitated by Chinese leadership's conviction that "technological changes were coming together in a distinctive pattern that constituted a new technological revolution."¹¹⁶ While the United States is not mentioned by name in the IDDS, the strategy compared progress in China to the innovation environment in unnamed advanced countries. The strategy reiterated that "for many countries," innovation formed the "core strategy for pursuing competitive advantage."¹¹⁷ The strategy also noted some critical core technologies were "controlled by others," as advanced countries were "still clearly ahead" in cutting-edge science and technology.¹¹⁸

Overseas Chinese Students and Scholars in China's Drive for Innovation

China's government has a long history of seeking to harness the intellect of overseas Chinese nationals and ethnic Chinese citizens of other countries to overcome China's shortfalls in technological know-how and innovative capacity.*¹¹⁹ General Secretary Xi has continued in his predecessors' footsteps by making clear that Chinese students and scholars studying overseas in the United States and other technologically-advanced countries are key to his plans to transform China into an innovative and militarily formidable world power. "In the final analysis, competition for comprehensive national strength is competition for talents," he declared in a 2013 speech. "Whoever can cultivate and attract more outstanding talents will have an advantage in the competition."¹²⁰

China's government has built a sprawling ecosystem of structures, programs, and policies to coopt and exploit Chinese students and scholars for the scientific and technological (S&T) expertise they acquire abroad.¹²¹ This ecosystem selects and sponsors promising Chinese students and scholars at U.S. and other foreign universities, incentivizes their return to China for the long term, and employs transnational organizations to channel S&T know-how from those remaining abroad back to China.¹²² Broadly speaking, Beijing targets foreign-educated Chinese students and scholars with expertise in fields and technologies identified in China's plans for industrial policy and military-civil fusion.† These areas of expertise range from mobile communica-

* Deng Xiaoping revived China's study abroad programs after the Cultural Revolution to accelerate the transfer of S&T that could support his "reform and opening up" strategy. Following the Tiananmen Square massacre, which led many Chinese students to seek asylum in the United States, the CCP began to articulate in internal documents the global competition for talent as a "struggle of life and death" for the regime. In the early 1990s, Chinese leaders introduced a series of policies designed to ensure that those trained in S&T disciplines served the CCP's needs regardless of where they physically resided. Increasingly, these efforts now target non-Chinese foreign experts as well. For more information, see Anastasya Lloyd-Damjanovic and Alexander Bowe, "Overseas Chinese Students and Scholars in China's Drive for Innovation," *U.S.-China Economic and Security Review Commission*, October 7, 2020.

† For more on the military-civil fusion, see Chapter 3, Section 2, "Emerging Technologies and Military-Civil Fusion: Artificial Intelligence, New Materials, and New Energy" in *2019 Annual*

Overseas Chinese Students and Scholars in China's Drive for Innovation—*Continued*

tion and aviation to biotechnology and new materials.¹²³ A notable element of the ecosystem is its focus on acquiring unclassified fundamental research,* the transfer of which is not prohibited by U.S. export controls or intellectual property laws.¹²⁴

In the United States, the overall population of Chinese students and research scholars has risen dramatically over time from around 68,000 in the 2006–2007 school year to about 370,000 in January 2020, a trend driven by China's modernization policies, U.S. policy decisions, and U.S. universities' need for funding after the global financial crisis.¹²⁵ Chinese students and scholars now constitute roughly a third of all foreign students in the United States, with approximately 130,000 pursuing graduate degrees in science, technology, engineering, and mathematics fields.¹²⁶

The Chinese government's exploitation of overseas Chinese students and scholars with S&T expertise has concerning implications for the United States. When Chinese students and scholars trained at U.S. universities return to China to commercialize research they developed overseas, U.S. firms that would have employed them lose a first-mover advantage. More worryingly, because Beijing has promulgated a strategy of military-civil fusion and called for those with S&T expertise to serve state goals, state-affiliated institutions will seek to absorb and leverage this expertise to improve China's military capabilities and further the interests of the CCP.¹²⁷

Under IDDS, legal and illicit channels for foreign technology acquisition gained a new significance. Weaving together a series of plans, including the SEI plan, the Made in China 2025 plan, the Internet Plus plan, military-civil fusion, and the AI plan,¹²⁸ the IDDS emphasized attracting global talent and foreign investment and innovation.¹²⁹ It mandated encouraging “foreign investment in strategic emerging industries” and the “establishment of [multinational companies'] R&D centers in China.”¹³⁰ This would allow local industry to master core technologies and rise to compete internationally as well as in the domestic market.

The success of this strategy is reflected, in part, in the rapid rise in R&D expenditures by U.S. multinational enterprises (MNE) in China. In 2000, the year before China's accession to the WTO, R&D expenditure by U.S. MNEs in China was the tenth highest globally, at \$506 million.¹³¹ By 2017, it increased 631.2 percent to \$3.7 billion, making China the fourth-largest destination for U.S. MNE

Report to Congress, November 2019.

*The Reagan Administration's National Security Decision Directive 189 defined fundamental research as “basic and applied research in science and engineering, the results of which ordinarily are published and shared broadly within the scientific community,” as distinguished from proprietary and industrial information protected for national security or commercial reasons. The policy asserted that fundamental research should remain unrestricted “to the maximum extent possible” in order to preserve the creativity and collaboration necessary for healthy innovation, while proprietary or national security-related research should be restricted. For further information, see Anastasya Lloyd-Damjanovic and Alexander Bowe, “Overseas Chinese Students and Scholars in China's Drive for Innovation,” *U.S.-China Economic and Security Review Commission*, October 7, 2020, 16.

R&D expenditure abroad.* In the pharmaceutical industry, for instance, a 2017 joint report by the European Commission and World Health Organization noted both Chinese government support for the sector as well as “substantial foreign direct investment in R&D,” whereby foreign companies would license technology to local firms and research centers.¹³² By 2011, the top 20 pharmaceutical MNEs had already established R&D facilities and research centers in China.¹³³ As of 2017, China had at least 400 local- and national-level biotechnology parks.¹³⁴

For the Chinese Government, Economic Security Is National Security

For the Chinese government, the goal of advancing technological development responds to economic and national security imperatives. While China benefitted tremendously from its integration into global value chains and access to foreign technology, China’s leaders have come to view its dependence on foreign technology imports as creating untenable security vulnerabilities, particularly in relation to the United States. Harvard scholar Julian Gewirtz argued General Secretary Xi holds an “expansive” concept of “big security” that extends to the security of key industries “related to the lifeline of the national economy.”†¹³⁵ One key sector is the semiconductor industry, the foundation of the digital economy, for which Chinese policymakers established a goal of indigenously meeting 40 percent of Chinese market demand by the end of 2020 and 70 percent by 2025.‡¹³⁶ General Secretary Xi’s push to end China’s dependence on foreign semiconductors prompted Chinese entities to spend more than \$30 billion in unsuccessful attempts to acquire U.S. and European semiconductor technology between 2015 and 2017.¹³⁷

General Secretary Xi has pointed to advanced technology as a crucial reason “Western countries were able to hold sway over the world in modern times.”¹³⁸ This view has gained prominence among Chinese policymakers as U.S.-China tensions related to access to technology began to escalate in 2018, when the United

* In 2017, the top five destinations for U.S. MNE R&D expenditure abroad were Germany (\$8.2 billion), the UK (\$6.4 billion), Switzerland (\$4.7 billion), China (\$3.7 billion), and India (\$3.6 billion). U.S. Department of Commerce, Bureau of Economic Analysis, *Activities of U.S. Multinational Enterprises*, August 23, 2019. For in-depth analysis of U.S. MNE operations in China, see Kaj Malden and Ann Listerud, “Trends in U.S. Multinational Enterprise Activity in China, 2000–2017,” *U.S.-China Economic and Security Review Commission*, July 1, 2020.

† As stated in the *People’s Daily*, “Economic security is the foundation of national security.” *People’s Daily*, “14, Resolutely Defending National Sovereignty, Security, and Development Interests (Xi Jinping New Era Socialism with Chinese Characteristics Thought Study Outline (15)) (十四、坚决维护国家主权、安全、发展利益 (习近平新时代中国特色社会主义思想学习纲要 (15)),” August 9, 2019. Translation.

‡ Analysis by IC Insights, a U.S. market research firm, suggests China is likely to achieve only one third of its self-sufficiency goal for semiconductors given the current trends. Chinese chip-makers have so far been unsuccessful at mastering the intricate production processes required to fabricate the most cutting-edge chips widely used in consumer electronics, with the Semiconductor Industry of America estimating China as being at least two generations behind as of 2018. Translating theory and design into manufacturing requires a combination of engineering and scientific expertise, managerial talent, trade secrets, and multibillion-dollar production facilities that only a few companies located in Taiwan, South Korea, the United States, and Japan have achieved. The pace of innovation makes market leaders constantly vulnerable. IC Insights, “China to Fall Far Short of its ‘Made-in-China 2025’ Goal for IC Devices,” May 21, 2020; John VerWey, “Chinese Semiconductor Industrial Policy: Past and Present,” *United States International Trade Commission, Journal of International Commerce and Economics*, July 2019; Deloitte, “China Inside: Chinese Semiconductors Will Power Artificial Intelligence,” December 11, 2018.

For the Chinese Government, Economic Security Is National Security—*Continued*

States published the results of its Section 301 investigation that found China to engage in forced technology transfer, among other practices.* The Chinese government is working to reduce this technological “stranglehold,” as General Secretary Xi has termed it, by cutting U.S. firms out of local companies’ procurement and supply chains in certain sectors.¹³⁹ (For more on U.S.-China tech tensions, see Chapter 2, Section 1, “Year in Review: Economics and Trade.”)

In addition to securing local supply chains, national champions may help China’s military and internal security forces to develop advanced capabilities.¹⁴⁰ Through the Chinese government’s military-civil fusion policy, the Chinese defense sector leverages innovation in the commercial sphere to improve its technological know-how. Consequently, China benefits economically and strategically from economic interdependence with the United States and other foreign countries while also working to mitigate the vulnerabilities that interdependence creates for China’s economy and national security.¹⁴¹

The recent iteration of China’s industrial policies is predicated on the assumption that a “cluster of revolutionary new technologies” will reshape “the global competitive landscape and [change] the relative strength of nations.”¹⁴² This cluster incorporates high-speed internet and 5G telecommunications networks, AI and robotics, and interconnected sensors, with applications spanning economic and military realms.¹⁴³ Beijing views mastery of this integrated suite of technologies as Chinese companies’ chance to overtake U.S. and other market incumbents in the global hierarchy, while failure to do so would represent a major setback.¹⁴⁴

The Chinese government believes China’s unified regulatory and standards architecture,† supported by investments in physical infrastructure, may give China an advantage over the United States in creating a digital ecosystem even if it lacks an absolute leadership in any individual sector.¹⁴⁵ According to Dr. Naughton, Chinese policymakers believe the United States may retain leadership in each individual digital technology, but that “the prospect for the [United States] combining [unified] management and control” of networks such as the internet, telecommunications, networked sensors, and AI is “virtually zero.”¹⁴⁶ Leveraging these advantages, China aims to become a “cyber superpower” capable of information control, cybersecurity, infrastructure for the digital economy, and influence in global internet governance and standards.¹⁴⁷ China’s comprehensive

*In March 2018, the Office of the U.S. Trade Representative released a report detailing the findings of its Section 301 investigation into China’s acts, policies, and practices related to technology transfer, intellectual property, and innovation. This report served as the impetus for the Trump Administration to impose tariffs on U.S. imports of Chinese goods.

† Coordinated by the Cyberspace Administration of China, an overarching legal framework was first established in the 2017 Cybersecurity Law and expanded through subsequent laws (e.g., the National Intelligence Law and the Data Security Law). Graham Webster, written testimony for U.S.-China Economic and Security Review Commission, *Hearing on U.S. Tools to Address Chinese Market Distortions*, June 8, 2018, 3.

approach to technological development and infrastructure can ultimately be exported through channels such as BRI's Digital Silk Road, where loan signatories may be required to adopt Chinese technical standards as part of the terms of agreement.¹⁴⁸

U.S. policymakers' moves to mitigate predatory, trade distorting practices and national security concerns raised by Chinese companies within the U.S. market have sent Chinese companies scrambling to protect alternative markets. In Commission testimony, Jan-ka Oertel, director of the Asia program at the European Council on Foreign Relations, said, "For China, Europe has become a key battleground in the strategic competition with the United States for economic and technological supremacy."¹⁴⁹ For example, Chinese telecommunications providers Huawei and ZTE account for a large share of existing EU third-generation and fourth-generation infrastructure, making up more than half of radio access networks (RAN).^{* 150}

As the United States, the UK, Australia, and Japan, among others, remove Chinese equipment from their telecommunications infrastructure due to network security concerns, EU member states are debating whether and how to do the same. Seeking to forestall the emergence of an EU-wide decision, Beijing has engaged individual EU member states at the bilateral level, where it can employ more leverage.¹⁵¹ Dr. Oertel argued that Germany, which boasts the largest European telecommunications market, may ultimately affect considerations for other EU members. ZTE and Huawei have already established a large presence in Germany's local infrastructure, and Germany has maintained a special economic relationship with China.^{† 152} By contrast, in July 2020 France implemented rules to gradually phase Huawei equipment out of its 5G infrastructure¹⁵³ and Telecom Italia excluded Huawei from bidding on 5G tenders.[‡] Poland, Estonia, Romania, Latvia, Slovenia, and the Czech Republic have also signed agreements with the United States confirming their 5G suppliers would not be subject to control by a foreign government, a de facto exclusion of Huawei.¹⁵⁴

China's Perception of Military Competition against the United States

U.S.-China military competition constitutes the hard power underpinnings of the two countries' broader competition to shape the regional and international order. As CNA Vice President David Finkelstein testified to the Commission, the U.S.-China relationship has

*RAN are a key part of telecommunications infrastructure, managing the transmission of signals from core networks to endpoints such as mobile devices. The evolution of RAN from largely physical to increasingly digitized, software-based solutions is a key component in the development of 5G. For more, see Department of Homeland Security Cyber and Infrastructure Security Agency, "5G Wireless Networks: Market Penetration and Risk Factors," July 2019.

†As Sino-European relations expert Noah Barkin stated, Berlin and Beijing established close trade and investment ties through the 2000s which assisted Germany's management of the 2008 financial crisis. According to media reporting in September 2020, however, the German government plans to impose new restrictions on telecommunications equipment which, while stopping short of a ban on Huawei, will include significant requirements Huawei would not be able to meet. These restrictions would effectively lock Huawei out of the German market. Guy Chazan and Nic Fildes, "Germany Crackdown Set to Exclude Huawei from 5G Rollout," *Financial Times*, September 30, 2020; Noah Barkin, "Germany's Strategic Gray Zone with China," *Carnegie Endowment for International Peace*, March 25, 2020.

‡Although Huawei did not participate in building Telecom Italia's core 5G network, it provided equipment to build part of its current RAN. *Reuters*, "Huawei Says It's Working with Telecom Italia despite 5G Exclusion: Paper," July 20, 2020.

always featured military tension.¹⁵⁵ The CCP was preoccupied with domestic security and a hostile regional environment in the first decades of the PRC and focused the PLA's early strategies on repelling perceived military threats from the United States and, later, from the Soviet Union. By the mid-1990s, following the collapse of the Soviet Union, China refocused the PLA on long-term military competition with the United States.* Chinese strategic planning considered the United States as a likely opponent in any regional conflict and was supported by substantial increases in military spending beginning in 1996.†¹⁵⁶ Meanwhile, a series of debates over China's external security environment throughout the 1990s and first decade of the 2000s continued to inject urgency into Beijing's preparations for a potential future conflict.¹⁵⁷

The CCP considers the U.S. military an existential threat looming behind U.S. regional allies and partners. In Beijing's view, the United States militarily threatened China from the Korean Peninsula just one year after the PRC's founding, waged a war in Vietnam and other Southeast Asian nations, and deployed military forces during Taiwan Strait crises in 1954, 1958, and 1996.¹⁵⁸ In each of these instances, the CCP's most pressing threat was the presence of U.S. military forces in neighboring countries. Moreover, the CCP believed these conflicts occurred in theaters where U.S. core security interests were not at stake, so U.S. actions reflected hegemonic interests.¹⁵⁹

This account of U.S. antagonism has endured in Beijing and was recently exhibited in a 2013 propaganda video (referred to by Chinese state media as a "documentary") produced by the PLA's National Defense University, which asserted the United States had a longstanding objective of destroying China despite superficial U.S. efforts at cooperation.‡¹⁶⁰ According to Dr. Finkelstein, in 2013, the PLA claimed that "hostile foreign forces," presumably including the U.S. military, threatened Chinese sovereignty, PLA modernization processes, and CCP regime security.¹⁶¹ As such, the PLA has consistently echoed the CCP line in portraying the United States as having "fundamentally malevolent intentions."¹⁶² At times, the PLA can be even more bellicose than China's civilian leaders in its rhetoric.§ In May 2020, for instance, PLA commentators accused the United States of burying its head in "the sand of arrogance and self-conceit"

* In comparison, U.S. government planning for long-term military competition against China began years later with the 2001 Defense Strategy Review and 2004 Global Posture Review. Although the U.S. focus on military conflicts in the Middle East limited the implementation of these plans, they constituted the first in several shifts within the U.S. Department of Defense to focus on Asia as a key region for military competition. These steps included the 2011 "Pivot to Asia" and the Defense Department's 2018 designation of China as a "strategic competitor." See U.S. Department of Defense, "Summary of the National Defense Strategy of the United States of America: Sharpening the American Military's Competitive Edge," 2018; Nina Silove, "The Pivot before the Pivot: U.S. Strategy to Preserve the Power Balance in Asia," *International Security* 40:4 (Spring 2016): 45–88.

† Using constant prices and including military spending that China does not report in its official defense budget reveals patterns in Chinese spending. On average, the PLA's budget contracted by 3 percent each year from 1993 to 1995. In contrast, the PLA budget from 1996 to 1998 grew by an average of 10 percent each year. Shaoguang Wang, "The Military Expenditure of China, 1989–98," in *SIPRI Yearbook 1999: Armaments, Disarmaments and International Security*, 1999, 348.

‡ The propaganda video's producers included then President Wang Xibin of the National Defense University and Political Commissar Liu Yazhou.

§ PLA officers often issue belligerent statements to attract both domestic and international attention. These statements are typically part of a broader ecosystem of CCP propaganda and reflect the interests and direction of China's top leaders. For more, see Andrew Chubb, "Propaganda, Not Policy: Explaining the PLA's 'Hawkish Faction' (Part One)," *China Brief*, July 25, 2013.

and threatened U.S. Secretary of State Michael Pompeo as being “doomed to a pathetic end” because “good and evil will meet their karma.”¹⁶³

Meanwhile, the PLA has benchmarked its capabilities against those of the United States. According to Dr. Finkelstein, China’s preparations for a military competition with the United States have driven the PLA’s “force modernization decisions, deployment decisions, organizational and doctrinal developments, technological innovation, [and] regional military diplomacy.”¹⁶⁴

Defining and Refining Strategies for Military Competition with the United States

The chaotic security environment in the PRC’s early years prevented Beijing from developing a coherent policy for competing with the U.S. military until the early 1990s. Beijing also lacked a strategy to prosecute this competition until the first decade of the 2000s. From the PRC’s founding until Mao Zedong’s death in 1976, the PLA’s strategy was to employ protracted campaigns of attrition to repel invasions from at least one of two militarily superior adversaries.¹⁶⁵ The record of China’s military strategic guidelines, the authoritative planning guidance periodically issued to the PLA, identified the United States as the PLA’s primary opponent in the 1950s and 1960s following the Korean War.¹⁶⁶ It identified the Soviet Union as the PLA’s primary opponent beginning in the late 1960s following the Soviet military buildup along the Sino-Soviet border.¹⁶⁷ After the CCP determined in 1985 that a Soviet invasion of China was unlikely, the PLA began turning its strategic attention away from defending against invasion and toward resolving territorial and maritime disputes and long-term preparation for local conflicts.¹⁶⁸

Easing security pressures into the 1990s also provided the PLA its first opportunity to reconsider a long-term competitive strategy toward the United States. Then General Secretary Jiang’s 1993 declaration that the PRC enjoyed its “best” regional security environment since 1949 occurred simultaneously with Beijing’s issuance of its first military strategic guidelines for building long-term competitive capabilities rather than preparing for U.S. or Soviet attacks on China’s borders.¹⁶⁹ The 1993 military strategic guidelines were also Beijing’s response to U.S. technological capabilities exhibited in the 1990–1991 Gulf War, which some PLA strategists believe triggered a revolution in military affairs, revealing a new model of war.¹⁷⁰

In his speech on the 1993 guidelines, then General Secretary Jiang identified the focal point of China’s strategy as deterring Taiwan from declaring independence.¹⁷¹ While the guidelines did not specify China’s primary strategic opponent, they revealed this opponent was no longer the Soviet Union and had changed based on “major changes in the strategic threat.”¹⁷² The guidelines also noted that the most important geographic focus for China’s military planning, known as the “primary strategic direction,” would be China’s southeast, toward Taiwan.¹⁷³ By leaving unstated the new strategic opponent the PLA would likely face, Chinese leaders avoided naming the United States directly, while tacitly acknowledging that a

conflict over Taiwan would likely require the PLA to also fight the United States.*¹⁷⁴

The 1993 military strategic guidelines reflected a strategic urgency to catch up to but no urgency to fight the United States; while PRC defense budgets nearly quadrupled between 1989 and 1998, the PLA Army, Navy, and Air Force each faced double-digit force reductions during this time.¹⁷⁵ The PLA considered the United States to be an adversary it would not likely face until the distant future, and one that until then could be considered a benchmark for military development.¹⁷⁶ The 1993 military strategic guidelines were also poorly specified, offering little conceptual understanding of the supposed revolution in military affairs other than that future wars would be fought involving joint service operations using capabilities offered by technological advances.

In the first decade of the 2000s, Beijing refined its blueprint for military competition, responding to a series of crises in the bilateral relationship throughout the mid- to late-1990s. Several events during this period, including the 1995–1996 Taiwan Strait Crisis, 1999 accidental U.S. bombing of the Chinese Embassy in Belgrade, and Tokyo's and Washington's respective announcements of plans to establish a ballistic missile defense system covering East Asia, prompted urgency and some panic in Beijing regarding U.S. strategic intentions.¹⁷⁷ In 1999, then General Secretary Jiang revealed a new official assessment of the international environment, concluding the debate. Beijing now assessed that U.S. "hegemonism" and military interventions were growing challenges to China's development, contradicting earlier assessments that portrayed the U.S. challenge as declining.¹⁷⁸ Specifically, top Chinese leaders were convinced the United States was preparing for military interference or intervention in East Asia by prosecuting an "anti-China containment policy."¹⁷⁹

As a result, the PLA focused its approach with a new set of military strategic guidelines, issued in 2004, that shaped China's approach to military competition around two key concepts: "informationization," a key operational concept aiming to digitally link discrete military elements, and "systems destruction warfare," the PLA's theory of victory, which envisions the coordination of combat, logistics, and intelligence systems constituting a force multiplier to challenge superior opponents.¹⁸⁰ The CCP considered informationization a concept for the societal and technological revolutions defining the information age, akin to what mechanization was to the industrial age. PLA strategists describe informationization as the still-ongoing revolution in military affairs that began with the Gulf War, and they envision its potential as a force multiplier enabling the PLA to prevail against militarily superior foes, including the United States.¹⁸¹

* Chinese leaders' likely identification of the United States in 1993 as the PLA's primary strategic opponent is reinforced by General Secretary Jiang's speech to Chinese diplomats that same year in which he described the United States as China's "main adversary in international dealings." In the 1993 military strategic guidelines, the PLA's primary strategic opponent is distinct from its "main target of operations," which is likely the Taiwan military. See Jiang Zemin, "Our Diplomatic Work Must Unswervingly Safeguard the Highest Interests of the State and the Nation," July 12, 1993, in *Selected Works of Jiang Zemin*, Volume I, Beijing: Foreign Languages Press, 2011, 303 and Shou Xiaosong, ed., *The Science of Military Strategy* (战略学), Military Science Press, 2013, 47.

Waging Informationized War through Systems Destruction Warfare

The current Chinese strategy to surpass the U.S. military is to informationize the PLA and adopt asymmetric concepts targeting an opponent's perceived weaknesses. Informationization describes full combat, communications, and sensor integration under a single command network. Then General Secretary Hu summarized the practice of informationized warfare as confrontation between "systems of systems" instead of between discrete forces, hence "systems confrontation."¹⁸² PLA strategists believe an integrated system of systems is a military's force multiplier as well as its critical vulnerability.¹⁸³ In turn, the PLA approach depends on the integrated systems being a force multiplier for Chinese forces while creating vulnerabilities for the PLA's opponents.¹⁸⁴ In 2018, PLA National Defense University Vice President Xiao Tianliang defined systems confrontation as the "essential character of informationized war" and the core metric by which a great power's military capabilities should be assessed.¹⁸⁵

Since 2006, PLA literature has also discussed leveraging integrated forces for the purpose of destroying key nodes in an enemy's system of systems to paralyze and thus defeat an opponent, hence "systems destruction warfare."¹⁸⁶ Where systems confrontation generally describes informationized war, systems destruction warfare is how the PLA anticipates applying systems confrontation to defeat superior opponents such as the United States.*¹⁸⁷ PLA strategists also envision these concepts as a way to take advantage of civilian assets for warfighting, for example by targeting civilian critical infrastructure. In this scenario, interstate conflict becomes a whole-of-society matter† determined by comprehensive national power rather than by military power alone, where the United States has an advantage.¹⁸⁸

The significance of these concepts cannot be overstated. In a 2014 speech, General Secretary Xi reaffirmed deepening PLA informationization as continuing a revolution in military affairs by which the PLA can "narrow the gap" and "leapfrog" the status quo, clearly indicating informationization is the way to catch up with and surpass the U.S. military.¹⁸⁹ The 2013 edition of the *Science of Military Strategy*, an authoritative PLA publication, describes the focus on informationization in the 2004 military strategic guidelines as a

*Systems confrontation and systems destruction are distinct operational concepts. Systems confrontation describes a force's ability to face an opponent while maintaining the operational integrity of an integrated system of combat, surveillance, communication, and sensor platforms. Systems destruction entails a higher level of capability, describing that system's ability to then destroy linkages integrating the same components in an opponent's system.

†PLA military planning may account for civilian contributions, particularly in surveillance and intelligence gathering before or in the early stages of conflict. For instance, Chinese nationals in service to PLA intelligence operations may potentially assist the PLA in achieving military objectives. For example, from 2018 to 2020, four Chinese nationals were arrested for illegally photographing parts of the U.S. naval air station at Key West where access is restricted to those with U.S. military identification. In 2020, the U.S. Federal Bureau of Investigation charged three Chinese graduate students conducting research in the United States with lying about their PLA affiliations in their visa applications. See Elizabeth Redden, "Scholars Charged with Lying about Chinese Military Ties," *Inside Higher Ed*, July 28, 2020; Geoff Ziezulewicz, "Three Chinese Nationals Sentenced for Taking Photos on Navy Base," *Navy Times*, June 10, 2020.

“strategic choice that had decisive significance.”¹⁹⁰ The concept features prominently in the PLA’s latest military strategic guidelines, issued in 2014, and China’s latest defense white papers, issued in 2015 and 2019.¹⁹¹

Preparing for Informationized War with the United States

The PLA envisions military competition against the United States as being regional in focus but global in scope.¹⁹² As CNA principal research scientist Alison Kaufman testified, CCP leaders are keenly aware the PLA may not yet be able to prevail in a large-scale kinetic conflict against the United States, such as in a campaign to blockade or invade Taiwan.¹⁹³ Despite significant advancements in power projection capabilities over the past 20 years, the 2019 defense white paper noted PLA capabilities still lag behind those of other leading militaries.¹⁹⁴

As such, the need and opportunity identified in the 1993 military strategic guidelines remain intact: the PLA needs to develop the capabilities to pose a credible threat to the United States in and beyond the Indo-Pacific, and it must do so without provoking a major armed conflict or counterstrategy that would threaten China’s economic development or progress toward informationization. The PLA develops these capabilities with parallel lines of effort. First, the PLA modernizes to develop capabilities necessary for informationized war, which includes operationalizing systems destruction warfare. Second, it contests the United States by extending the PLA’s reach throughout and beyond the Indo-Pacific with power projection capabilities and international access agreements. China’s modernizing capabilities demonstrate Beijing’s operational vision for the Indo-Pacific theater, where U.S.-China military competition is most intense.

Operationalize Systems Destruction Warfare

The PLA has made significant progress toward waging informationized war, featuring modernizing command and control networks able to rapidly transfer complex information, new space jamming and antijamming weapons, and increasingly sophisticated cyberattack capabilities.¹⁹⁵ To further operationalize systems destruction warfare, a growing portion of PLA training events simulate systems confrontations, which involve red force-blue force* exercises with constant electromagnetic interference on both sides’ communications and sensor networks. For example, PLA Air Force airmen conducting these exercises attempt to gain situational awareness and develop new approaches to break through an adversary’s defenses to strike its central command network.¹⁹⁶

PLA documents only describe the PLA Air Force as consistently and successfully executing systems confrontation training events. The 2019 defense white paper singles out the air force as conducting system-vs.-system exercises while characterizing PLA

*In these exercises the PLA plays the “red force” while the “blue force” represents the PLA’s opponent. In PLA training, the blue force often uses U.S. military doctrine and sometimes U.S. uniforms or equipment. Conversely, U.S. and allied militaries commonly refer to themselves as the “blue force” and represent adversaries as the “red force” in their force-on-force training. See David C. Logan, “The Evolution of the PLA’s Red-Blue Exercises,” *China Brief*, March 14, 2017; Gary Li, “The Wolves of Zhurhi: China’s OPFOR Comes of Age,” *China Brief*, February 20, 2015.

Navy and Rocket Force exercises as force-on-force, implying only the PLA Air Force is able to consistently realize force-multiplying effects through systems integration in training.¹⁹⁷ While all PLA services demonstrate conventional capabilities to degrade or destroy enemy infrastructure, Chinese state media have not indicated that any PLA service has exhibited capabilities to do so in an integrated fashion descriptive of systems destruction warfare. PLA strategists have also begun considering the impact of AI on informationization.¹⁹⁸

Leveraging Military-Civil Fusion for Whole-of-Society Systems Destruction Warfare

Due to the increasing integration between civilian and military information systems, informationization casts systems destruction warfare in a whole-of-society light. As such, Chinese commercial endeavors are key enablers of its military strategy. Beijing's ostensibly commercial endeavors abroad include constructing and purchasing soft infrastructure networks such as communications, computational, AI, cloud computing, and space systems.¹⁹⁹ These investments position countries receiving Chinese investment as battlegrounds for U.S.-China military competition. This is particularly the case in cyberwarfare, where Chinese-built civilian telecommunications networks are almost certain to feed China's intelligence operations.* These networks additionally offer the PLA avenues to impact foreign civilians directly through cyberattacks on communication, banking, and other widespread services using these networks.²⁰⁰ Chinese control over these systems constitutes latent military power the PLA intends to harness. As Dr. Ellis testified, China's vast resources and disregard for privacy or individual rights also offer it a likely advantage in fusing communication and other technologies for societal control.²⁰¹ These advantages likely translate to the PLA's ability to exploit ostensibly civilian networks for military purposes.

PLA strategists' intent to use civilian networks under Chinese control to augment China's military capabilities presents an asymmetric challenge to the U.S. military. The PLA considers civilian networks to be inherently dual-use and along with military networks comprise the "network domain," which facilitates PLA cyber warfare and creates linkages for systems destruction warfare.²⁰² The PLA's approach to cyber warfare mirrors systems destruction warfare: it is an effort to employ military or undirected civilian "forces" to destroy or cripple an opponent's information networks while maintaining one's own.²⁰³ The 2013 edition of the *Science of Military Strategy*

* Examples of such civilian networks include the Pacific Light Cable Network, a project to boost digital transmissions between the United States, Hong Kong, Taiwan, and the Philippines by building a massive undersea fiber-optic cable between them. The project, announced in 2017, temporarily held the support of U.S. firms, including Google and Facebook. On July 17, 2020, Team Telecom, a multiagency panel within the U.S. Department of Justice, recommended that the Federal Communications Commission prohibit the network's link to Hong Kong due to concerns that link would "expose U.S. communications traffic to collection by the PRC." By August 2020, with the cable already laid but not yet operational, Google and Facebook formally withdrew their prior plans and submitted a revised proposal linking only the United States, Taiwan, and the Philippines. See Todd Shields, "Google, Facebook Dump Plans for U.S.-Hong Kong Undersea Cable," *Bloomberg*, August 28, 2020; U.S. Department of Justice, *Team Telecom Recommends that the FCC Deny Pacific Light Cable Network System's Hong Kong Undersea Cable Connection to the United States*, June 17, 2020; Kate O'Keefe, Drew FitzGerald, and Jeremy Page, "National Security Concerns Threaten Undersea Data Link Backed by Google, Facebook," *Wall Street Journal*, August 28, 2019.

explicitly describes “military-civilian joint integrated attack” and encourages compounding kinetic strikes with cyberattacks on civilian targets to maximize “psychological shock” and force a more powerful enemy into submission.*²⁰⁴ PLA strategists argue these joint attacks could target an adversary’s infrastructure and upend its transportation grid, interrupt its communications networks, and paralyze its financial system.²⁰⁵ One potential scenario U.S. analysts have envisioned involves Chinese cyberforces employing these concepts to target U.S. critical infrastructure, such as by disrupting the flow of natural gas pipelines and restricting public access to energy, in attempts to deter U.S. intervention into a regional conflict or undermine the U.S. public’s will to continue an ongoing conflict.²⁰⁶ The PLA Strategic Support Force, established in 2015, institutionalizes these concepts by coordinating the PLA’s cyber, electronic, and psychological warfare.†

The PLA’s concept of one cohesive network domain indicates it understands informationization to be a whole-of-society operational concept by which it will use any network—military or civilian—of any country to carry out network and systems destruction warfare.²⁰⁷ As such, ostensibly nonmilitary investments by Chinese companies, particularly state-owned enterprises, in the soft infrastructure of other countries provides the PLA additional opportunities to exploit foreign civilian resources for military use. While the PLA’s process for weaponizing civilian telecommunications networks in other countries remains unclear, the CCP’s culture of strategic opportunism suggests these investments may turn out to be useful even if exactly how is not immediately apparent.²⁰⁸

Potential Military Use of Commercial State-Owned Sensors in China’s Near and Far Seas

One example of an ostensibly commercial network the PLA could exploit for military purposes is China’s Blue Ocean Information Network, which is a network of sensors designed to improve monitoring of maritime information, such as ship movement and weather conditions, in China’s near seas‡ and the world’s oceans. Between 2016 and 2019, the Chinese state-owned enterprise China Electronics Technology Group Corporation (CETC) built its first network of sensors in the South China Sea with the endorsement of the National People’s Congress.²⁰⁹ According to Johns Hopkins University Applied Physics Laboratory

*Some PLA analysts view the 2003 Iraq War as an early case study of how the U.S. military leverages psychological shock to achieve operational effects. These analysts argue the United States coordinated computer network attacks with conventional military operations to undermine the Iraqi will to fight. Dean Cheng, “The Chinese People’s Liberation Army and Special Operations,” *Special Warfare* 25:3 (July–September 2012).

†China established the Strategic Support Force to improve the PLA’s joint warfighting and information operations capabilities as part of the PLA’s broader reorganization in late 2015. The new force combined the PLA’s previously disparate cyber, electronic, and psychological warfare units under a unified command structure. The Strategic Support Force is responsible for collecting and managing technical intelligence, including from cyber and space assets; supporting joint operations; and carrying out attacks against an adversary’s command network. See John Costello and Joe McReynolds, *China’s Strategic Support Force: A Force for a New Era*, National Defense University Press, 2018, 28–29.

‡Beijing refers to the Bohai, Yellow, East China, and South China seas as well as the waters east of Taiwan as its near seas. See China Ministry of Natural Resources, First Institute of Oceanography, “Which Seas Comprise China’s Near Seas?” (我国的近海都包括哪些海?), May 4, 2017. Translation.

Potential Military Use of Commercial State-Owned Sensors in China's Near and Far Seas—*Continued*

senior researcher J. Michael Dahm, this network was an early demonstration for CETC's broader campaign to build a network of permanent maritime sensors with hydrographic sensing, radar, and communication functions in and beyond China's near seas.²¹⁰ CETC has developed features in these maritime sensors to improve situational awareness, underwater surveillance, and China Coast Guard response.²¹¹ A 2019 *PLA Daily* article reported the segment of the network already built in the South China Sea will "play an important role in the construction on China's [Spratly] and [Paracel] Islands, defending the islands and reefs, and continuous monitoring of targeted waters."²¹² CETC intends to cover China's Maritime Silk Road* with these sensors by 2035 and extend them to the Arctic and Antarctic oceans by 2050.²¹³

Contesting the United States through and beyond the Indo-Pacific

A second key component of the PLA's strategy for competition with the United States is to extend the PLA's reach through advancements in conventional missile, naval, and combat aviation capabilities that can hold distant U.S. forces at risk and so deter or delay U.S. military efforts to threaten the Chinese mainland. As Dr. Finkelstein testified, the PLA appears to aspire to prevent any potentially hostile military, especially that of the United States, from operating with impunity near China's shores.²¹⁴ The CCP reinforced this message on July 4, 2020, stipulating in state media that "any U.S. aircraft carrier movement in the region is solely at the pleasure of the PLA."²¹⁵ As the PLA's reach extends outside of the theater, Beijing's operational vision threatens U.S. military influence and navigation in any place the CCP feels it threatens China's interests. The PLA complements investments in conventional platforms capable of long-range precision strikes with an evolving doctrine to station and deploy forces farther from China's shores. China's military strategy is also limited by PLA power projection capabilities, however, which do not yet extend through the full Indo-Pacific and diminish sharply beyond East and Southeast Asia. (For more on PLA power projection capabilities, see Chapter 3, Section 2, "China's Growing Power Projection and Expeditionary Capabilities.")

Extending the PLA's Reach in the Indo-Pacific

Since the mid-1990s, the PLA's strategy, doctrine, and force development have focused on extending the reach of its strike capabilities farther from China's shores. These changes align with the 1993 military strategic guidelines' shift in threat perceptions from China's continental borders to maritime East Asia, which required significant improvements in the PLA's maritime and air power. Substantial cuts to ground force personnel and investments in naval, air, missile, space, and cyber capabilities reflect a force posture that emphasized

*The Maritime Silk Road describes investments to boost maritime connectivity between China, Southeast Asia and Oceania, the Indian Ocean region, the Persian Gulf, and the Mediterranean Sea.

engaging distant maritime powers, such as the United States, while also improving the PLA's ability to prevail in a conflict with China's continental neighbors.²¹⁶ In 2004, then General Secretary Hu unveiled the "new historic missions" for the PLA, which called for the PLA to extend its reach by (among other tasks) defending China's national interests abroad, including in the maritime, space, and cyber domains.²¹⁷ Reflecting this new charge, China's 2006 defense white paper explicitly identified PLA Navy and Air Force objectives to increase the PLA's reach and transition from territorial defense to offshore defensive operations. All subsequent defense white papers have similarly reflected the new historic missions' call for the PLA to project power farther from China's shores.²¹⁸ By 2013, the PLA's *Science of Military Strategy* called for establishing an "arc-shaped strategic zone that covers the Western Pacific Ocean and the northern Indian Ocean" to enable the PLA to "strike the enemy from as far a range as possible" from China's shores.²¹⁹

PLA strategists envision long-range strike capabilities as an asymmetric advantage to prevent the U.S. military from leveraging its overwhelming technological advantage close to China's shores and interests. As a recourse, these strategists have called for using the Chinese landmass to secure spatial security, projecting PLA activities farther abroad under the belief that in any confrontation, the U.S. military would have superior technology but comparatively sparse basing options.²²⁰ From this, the PLA produced capabilities the Pentagon calls anti-access and area denial, which emphasizes using land-based assets to deny U.S. forces a permissive operating environment with hopes of deterring, delaying, or defeating U.S. power projection into a given denied area or to the region more broadly.²²¹

Critical to China's anti-access and area denial capabilities are ground-launched antiship missiles, primarily operated by the PLA Rocket Force.²²² These missiles, along with weapons systems operated by the PLA Navy, are well-tailored for a high-end kinetic conflict against the U.S. Navy. PLA analysts commonly discuss the PLA Rocket Force's ability to strike and sink U.S. aircraft carriers and Arleigh Burke-class destroyers, and PLA Rocket Force doctrinal publications describe procedures to strike links in the U.S. Aegis radar system used on U.S. and allied ships.²²³ The PLA Navy also invested heavily in anti-air naval capabilities suited to counter U.S. carrier aviation and by building a flotilla of ships with area air defense capabilities.*²²⁴

PLA Air Force modernization has also emphasized building strategic depth with long-range strike and territorial air defense capabilities. Weapons systems introduced into the force in the early 2010s are able to reach over and beyond Taiwan to interdict U.S. military aircraft and strike back at U.S. ships and bases.²²⁵ State-sponsored research invests heavily in building jet engines with supercruise—or sustained supersonic flight—capabilities that offer advantages

*The PLA Navy has consistently added warships with area air defense capabilities, starting from 0 in 1996 and boasting 20 in 2018, including 14 Type 052D destroyers with extended-range anti-air capabilities. See Sina, "The PLA's First Lengthened 052D Enters Service Equipped with Prominent Meter-Wave Radar Anti-Stealth Capabilities" (我军首艘加长版052D入役 换装米波雷达反隐性能突出), January 20, 2020. Translation; U.S. Defense Intelligence Agency, *China Military Power: Modernizing a Force to Fight and Win*, November 2018, 70.

for long-range strikes and defending larger swathes of airspace.²²⁶ The PLA Air Force has also developed long-range PL-15 air-to-air missiles and is exploring increasing its fifth-generation combat aircraft's weapons bay to carry more of these missiles.²²⁷

Broker International Access beyond the Indo-Pacific

U.S.-China military competition beyond the Indo-Pacific will be largely political-military insofar as PLA power projection depends on access agreements to foreign bases. The PLA Navy has significantly increased its military diplomacy with other countries since the early 2000s.²²⁸ Further, it has secured access and potential naval basing facilities in Pakistan and Cambodia, in addition to its naval base in Djibouti. In conjunction with Chinese-invested ports in the Indian Ocean region, these facilities may provide sufficient support for current PLA Navy operations.²²⁹ While commercial facilities might offer stopgap basing services to PLA Navy vessels in peacetime, these facilities lack the munitions storage, warship maintenance infrastructure, and security needed to replace military bases and may constitute a liability for Beijing in a high-intensity kinetic conflict.²³⁰

Gray Zone Activities and Risk Acceptance Heighten Prospects for Conflict

China employs gray zone* operations and paramilitary forces to coerce its neighbors, accomplishing objectives such as seizing territory or restricting maritime access in the South China Sea.† In these operations, Chinese forces calibrate their coercion to areas and levels of intensity where PLA strategists believe the United States considers responsive actions too costly.²³¹ CCP leaders believe gray zone activities may help the PLA maintain or even improve the regional security environment for China.²³²

The risk of unintended escalation rises when gray zone tactics are combined with increased risk tolerance and potential misperception of U.S. intentions.‡ Chinese strategists believe conflict between two nuclear powers has a natural escalation ceiling insofar as a nuclear threat necessarily precludes total war. Yet the threshold for nuclear war, as with Chinese strategic thresholds for armed escalation in general, remains poorly defined.²³³ PLA strategists seem certain that so long as a credible nuclear threat exists, the PLA can safely initiate or otherwise employ carefully controlled conflict, escalated

* Gray zone operations are akin to military activities that leverage largely nonmilitary tools to achieve competitive objectives through activities falling below the threshold for open war. Gray zone activities often creep incrementally toward their objectives. For more on gray zone operations, see Michael J. Mazarr, "Struggle in the Gray Zone and World Order," *War on the Rocks*, December 22, 2015.

† China has used gray zone tactics against the Philippines to wrest away control of Scarborough Shoal in 2012 and deter militarization of Thitu Island in 2019. See Asia Maritime Transparency Initiative, "The Long Patrol: Staredown at Thitu Island Enters Its Sixteenth Month," *Center for Strategic and International Studies*, March 5, 2020; Michael Green et al., "Counter-Coercion Series: Scarborough Shoal Standoff," *Asia Maritime Transparency Initiative*, May 22, 2017.

‡ Escalation control is distinct from deterrence in PLA strategic literature. PLA strategists describe military deterrence as preventing a war and halting its escalation, while they describe escalation control as managing the speed and intensity at which an armed conflict progresses to maximize the CCP's ability to shape events and benefit from the conflict. The PLA conception of escalation control is not inherently de-escalatory, and the strategic literature often describes controlling conflict by broadening the theater or intensifying the conflict. For more on this topic, see Alison A. Kaufman and Daniel M. Hartnett, "Managing Conflict: Examining Recent PLA Writings on Escalation Control," *CNA*, February 2016.

even to the level of a regional war, in the service of CCP political objectives.²³⁴ Moreover, PLA strategists appear to believe that coercive activities carry low risk and assume that Chinese intentions are clear to others.²³⁵

Yet Chinese beliefs regarding which actions are escalatory do not necessarily align with those of other countries. As Dr. Kaufman testified, some Chinese analysts suggest the PLA can probe an opponent's intentions by carrying out direct kinetic strikes on that country's vessels, while U.S. military operators are more likely to view such actions as the very conflict that escalation control should avoid.²³⁶ These beliefs regarding escalation control foster bellicose PLA doctrine: the 2001 edition of the *Science of Military Strategy* stipulates that China may take a "tactical" first shot to instigate war in response to any country that takes a "strategic" first shot by challenging Beijing's perceived sovereignty.²³⁷ Additionally, CCP officials' inclination to sweepingly ascribe nefarious, anti-China intentions to U.S. activities predisposes PLA operators to misperceive the intentions behind U.S. military actions. This misperception is particularly pronounced in the Indo-Pacific, where the CCP believes it has core interests and thus justification for its actions, while the United States does not.*²³⁸

The PLA's risk of escalation is particularly high in the maritime domain, where the PLA attempts to discourage the U.S. military from operating near China's shores by employing confrontational tactics that fall below the threshold for open conflict. These tactics reflect an apparent belief among Chinese leaders that aggressively confronting U.S. military activity in the region will raise the costs to the United States of such activity and could convince U.S. leaders to limit operations near China to avoid escalation to a kinetic exchange. The PLA demonstrated this approach as early as 2001, when a PLA Navy F-8II collided with a U.S. EP-3 surveillance plane, forcing the U.S. crew into an emergency landing on Hainan Island.²³⁹

The PLA has increased the aggressiveness of its tactics in recent years. In 2009, Chinese vessels surrounded the unarmed ocean surveillance vessel USNS *Impeccable* as it transited the South China Sea, ordering it to leave the area or "suffer the consequences," then obstructing *Impeccable's* path as it attempted to withdraw.²⁴⁰ In 2016, Chinese forces seized a U.S. Navy undersea drone, with state media boasting, "If the U.S. military can send the drone, surely China can seize it."²⁴¹ In 2018, a PLA Navy destroyer aggressively maneuvered near a U.S. Navy destroyer, nearly forcing a collision.²⁴² In 2020, a PLA Navy destroyer shined a military-grade laser at a U.S. Navy P-8A Poseidon maritime patrol aircraft flying over international waters west of Guam, threatening to damage aircraft sensors and blind U.S. Navy personnel conducting vehicle maneu-

*Despite the apparent belief in its ability to manage escalation, the PLA's response to recent U.S.-China tensions in the South China Sea suggests some level of awareness that exchanging fire with the United States could lead to uncontrolled escalation between the two sides. In August 2020, a source close to the PLA described the dynamic between U.S. and Chinese forces in the South China Sea as "highly tense and very dangerous." The source claimed that in this situation, PLA leaders had ordered frontline forces "not to fire the first shot" for fear the PLA would be unable to "control the consequences." See Wendy Wu and Minnie Chan, "South China Sea: Chinese Military Told Not to Fire First Shot in Stand-Off with U.S. Forces," *South China Morning Post*, August 11, 2020.

vers.²⁴³ Chinese state media subsequently praised the action and encouraged future electromagnetic attacks on the U.S. military.²⁴⁴

The PLA may apply similar or even more confrontational tactics to test U.S. resolve to enforce its new South China Sea policy, which rejects much of China's claims to offshore resources in the South China Sea and describes China's efforts to secure them as "unlawful."²⁴⁵ In August 2020, a month after two U.S. aircraft carriers conducted exercises in the South China Sea, the PLA tested the limits of gray zone activities by firing at least two antiship ballistic missiles into the area.²⁴⁶ The PLA may use gray zone or other similarly confrontational tactics targeting U.S. allies and partners in the region in an attempt to undermine support for the new U.S. position. (For more on the new U.S. policy and the region's response, see Chapter 3, Section 1, "Year in Review: Security, Politics, and Foreign Affairs.")

As the local military balance shifts in China's favor, PLA officers may become increasingly tempted to employ offensive tactics or even instigate a limited war against its neighbors. The PLA may test U.S. resolve by engaging in limited conflict with a U.S. treaty ally such as Japan or the Philippines.²⁴⁷ While a Taiwan conflict is increasingly likely given unification's paramount political importance to Beijing, the political costs of failure are prohibitive. As such, while the risks of the PLA instigating conflict over Taiwan may grow as PLA capabilities increase and as prospects for a mutually agreed upon unification arrangement diminish, Beijing's continued concerns over the PLA's inability to prevail against the U.S. military may convince the CCP to defer a conflict until it considers the PLA advantageously positioned.²⁴⁸

Implications for the United States

U.S. policy since the inception of U.S.-China diplomatic ties may have underestimated the consistency and degree of the Chinese government's adversarial views toward the United States. After more than 40 years of deepening bilateral ties, China has grown increasingly competitive and confrontational in its relationship with the United States. Meanwhile, as Chinese leaders have perceived the power gap between the two countries as steadily closing, they have become increasingly confident in their ability to expand the CCP's authoritarian values and repression to U.S. citizens, businesses, and allies.

The stakes of U.S.-China competition are high. In the economic realm, the flood of Chinese imports—buttressed by state subsidies and other unfair trade policies—has devastated U.S. industries and communities since China's WTO accession. The impact of China's trade-distorting practices on U.S. small businesses has been particularly severe. U.S. workers and companies, no matter how innovative and efficient, struggle to compete when the Chinese government so decisively tilts the playing field in favor of Chinese companies through a variety of legal, regulatory, and financial mechanisms, and when U.S. companies are granted access to the Chinese market, it is at the cost of transferring valuable intellectual property to their Chinese counterparts. As Chinese leaders turn their attention to emerging technologies, their goal is not merely to achieve parity

with the United States—it is to surpass and displace the United States altogether. Failure to appreciate the gravity of this challenge and defend U.S. competitiveness would be dire. Because these emerging technologies are the drivers of future growth and the building blocks of future innovation, a loss of leadership today risks setting back U.S. economic and technological progress for decades.

Should the Chinese government achieve some of its goals in the political and informational domain, the consequences for the United States would be similarly dire. Politically, the long arm of Chinese censorship would intrude further into the United States, silencing free speech and punishing business decisions that Chinese leaders judge to run counter to the interests of the Chinese government. U.S. policymakers would be complicit in their silence as the CCP continued to crush aspirations for freedom of speech and of religion, representative government, and rule of law in China and in the formerly autonomous Hong Kong. Similarly, the United States would stand by as China continued its campaign of cultural genocide against the millions of Uyghurs, Tibetans, and other non-Han Chinese populations living under its rule. Within the United States, Chinese censorship is already corrupting the arts, sports, and the political process. An increasingly influential China could see Hollywood and the National Basketball Association, among others, expand their self-censorship to stay in the good graces of the CCP.

An ascendant China may also constrain U.S. foreign policy and is already seeking to drive wedges between the United States and its allies. Meanwhile, it would exploit U.S. economic dependency on China to enforce acquiescence to Chinese government policies. In the military sphere, a PLA trained and equipped to defeat the U.S. armed forces could forestall U.S. assistance from reaching U.S. allies and partners in the Indo-Pacific. With its regional presence diminished, the United States could prove unable to prevent China from forcibly annexing Taiwan and subjugating its 23 million citizens to the CCP's authoritarian rule. Meanwhile, autocrats and dictators around the world are being emboldened by China's support and encouragement.

On the other hand, a more overtly competitive U.S. strategy toward China could come with its own consequences. In the near term, U.S. companies could face substantial economic disruption as they untangle critical supply chains from China. Friction with U.S. allies could increase as joint efforts are made to reduce the more harmful aspects of economic interdependence with China, a competitor more economically formidable than the Soviet Union ever was. Militarily, the United States could risk armed confrontation with an increasingly capable PLA devoted to the Chinese government's openly expansionist aims to gain control over key portions of its neighbors' territory. U.S. defense treaties or other requirements to aid its allies and partners could force a decision to invoke the mutual defense clauses of those pledges, bringing U.S. and Chinese forces into direct conflict over opposing vital interests. Finally, the U.S. public could be called upon to support a generational commitment of resources and energy to this competition, defending the United States and the rules-based international order from an opponent dedicated to subverting the core principles and values of that order.

China's increasingly open antagonism toward the United States and U.S. allies and partners demands a new and more competitive U.S. approach. Although China's increasing strength cannot be overlooked, the United States enjoys its own significant advantages. U.S. values and good governance have inspired countries around the world and underpinned a global order upholding the rule of law, peaceful settlement of disputes, and respect for sovereignty and self-determination. Due in large part to these values, today the United States counts nearly every one of the world's largest economies and strongest militaries among its closest allies.

China's brand of authoritarianism may hold sway with the world's autocrats and interest groups benefitting from Beijing's economic largesse, but its values hold little inspirational appeal for publics around the globe. The spread of liberal democracy and accountable, transparent governance has been particularly notable in countries in the Indo-Pacific, the very region Beijing identifies as most important for achieving its goals. These countries, while deeply connected to Beijing economically, are clear-eyed about the threat China poses to their democratic freedoms and independence. As Dr. Limaye of the East-West Center testified, the region's elites and publics have no interest in returning to a regional order dominated by "China's demands for obeisance and hierarchy."²⁴⁹

Strategic competition with China presents an increasing challenge for the United States. The United States' ability to retain its economic dynamism, ensure its military edge, and continue to champion its values and diplomacy is not yet certain. But it has much to draw from its ability to inspire and its tools of national power. If approached with bipartisan commitment and creativity, this competition may ultimately prove an opportunity for the United States to rededicate itself to its core values and strengths. Absent these competitive advantages, it will face a far more challenging future.

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