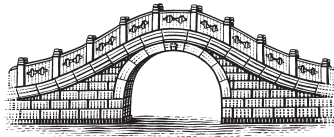


The Rising Security Challenge of East Asia’s “Dual Graying”: Implications for U.S.-Led Security Architecture in the Indo-Pacific

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EXECUTIVE SUMMARY

This article explains the impact of “dual graying”—the concurrent phenomena of rapid population aging and the proliferation of gray-zone conflicts—on the security planning and postures of Northeast Asian states and considers the implications of these trends in the broader context of Indo-Pacific demographics.

MAIN ARGUMENT

The major Northeast Asian powers (China, Japan, South Korea, and Taiwan) as well as Russia are at the leading edge of one of the most consequential challenges of the 21st century: the rapid aging of their populations at a rate unprecedented in human history that is resulting in a shrinkage of their total population sizes. In addition to the graying of their populations, these powers face a range of new “gray” conflicts—interactions residing somewhere between war and peace—that exacerbate long-standing military concerns. Contrary to predictions that rapid aging will diminish the likelihood of interstate war, security tensions are rising among graying rivals in this region of the world, and states are increasing both military spending and military development. This “dual graying” underscores the need for new approaches to the U.S. network of regional security partners.

POLICY IMPLICATIONS

- The rapid aging among regional powers does not so far suggest that an “aging peace” is likely to develop; rather, tensions are increasing over old and new areas of conflict.
- The escalation of regional gray-zone conflicts is taxing U.S. allies and partners with graying and shrinking populations. Demographic changes in several of these major partners may necessitate a re-examination of roles and commitments within the U.S. alliance network.
- Innovations in military and civilian technologies may eventually offset many of the challenges resulting from shrinking and rapidly aging populations, but in the meantime growing labor shortages will force many militaries to seek to adapt in other ways to maintain robust force postures.
- In the wider Indo-Pacific, differential aging and population growth among major security actors suggests a growing role for several middle-power states (such as India, Indonesia, the Philippines, and Vietnam) that may benefit from a “demographic dividend” over the next several decades.

Northwest Asia's traditional powers are together experiencing one of the most consequential challenges of the 21st century: the rapid aging of their populations at a rate unprecedented in human history. The median age in Japan, Taiwan, and South Korea has risen into the forties—with China and Russia close behind—and the share of the population at retirement age has skyrocketed by up to 50% in the past decade due to declining birth rates and longer life expectancies.¹ In addition to population graying, these states face a wide range of new “gray” security threats—interactions residing somewhere between war and peace—that threaten daily the tenuous military balance. Cyberattacks on government offices and critical infrastructure have become routine, as have threats to territorial sovereignty by nontraditional means, such as from maritime militias and militarized coast guards.² There is, therefore, a “dual graying” challenge in the Indo-Pacific today that affects not only these aging states but a key ally to several of them—the United States. Governments have begun to respond to these dual challenges in their national security planning in ways not anticipated by early postulations on the likely effect of these challenges a decade ago. These responses, by both U.S. security partners and U.S. security rivals, are affecting the structure and scope of the U.S.-led security architecture in the Indo-Pacific as well the planning of prominent U.S. security partners.

Population size, in particular a large number of younger men, has historically enhanced state power through military personnel and economic production. Although history shows that a large and growing population can be a burden and create conflict through territorial aspirations and competition over limited resources, in general for leading powers, past experience has shown that more people is better and fewer is worse.³ This experience sets the stage

¹ By default, all population statistics in this article are drawn from the UN Population Division's “World Population Prospects, 2022” using the “constant fertility” projections rather than the more traditional “medium variant.” Where a different source for statistics is used, such as national governments or other international organizations, it is indicated. “World Population Prospects 2022,” UN Department of Economic and Social Affairs, Population Division, 2022. ∞ <https://population.un.org/wpp>.

² As explained further below, the definition of “gray zone” challenges is itself a gray area. This article follows a definition employed in Japan's December 2010 National Defense Program Guidelines that gray-zone conflicts are “confrontations over territory, sovereignty and economic interests that are not escalate [sic] into wars.” Government of Japan, *National Defense Program Guidelines for FY 2011 and Beyond* (Tokyo, December 17, 2010), 3 ∞ https://japan.kantei.go.jp/kakugikettei/2010/ndpg_e.pdf.

³ As Jack Goldstone writes in his demographically centered history of interstate conflict, “Throughout history, competition among leading nations has been affected by the relative size of national populations, and their rate of growth.... Larger populations... have often been credited with giving countries major advantages in international competition.” Jack A. Goldstone, “Politics and Demography: A Summary of Critical Relationships,” in *Political Demography: How Population Changes Are Reshaping International Security and National Politics*, ed. Jack A. Goldstone, Eric P. Kaufmann, and Monica Duffy Toft (New York: Oxford University Press, 2012), 269.

for concern about the rapid aging and shrinking of populations currently underway in East Asia, as well as for debates that future transformational change in military technologies may make population size less relevant.

Managing the growing number of security concerns in the Indo-Pacific is another consequential challenge facing local and global security actors. Although major regional powers such as China, Japan, Russia, and others have enjoyed a “long peace” for over half a century, vexing old issues such as the division of the Korean Peninsula and between China and Taiwan and rising new challenges from a resurgent China and Russia, climate change, nefariously applied technologies, and numerous gray-zone issues, among others, present a troubling—and increasing—potential for conflict. The challenges of aging populations and the rise of gray-zone conflicts are interconnected through the increased labor and resources that addressing these conflicts require, exactly at the time when states are experiencing labor and resource shortages. Gray-zone concerns include a wider range of actors than traditional militaries, which could in principle reduce burdens on military forces but also could pose challenges to coordinated responses from government departments or the private sector.

Scholarly literature on the effect of rapid aging on the likelihood of interstate war is limited. But contrary to predictions,⁴ in Northeast Asia and Russia, the regions of the world experiencing the most significant aging among security rivals, tensions are rising and states are increasing both military spending and the development of new, more advanced weapons systems. Although war may not necessarily be the result, particularly when other types of conflict and competition are becoming more intense, it is still a significant concern.

More broadly, the Indo-Pacific region will experience differential demographic change by midcentury, a microcosm of worldwide population shifts already underway. Some states will rapidly age and shrink in population size, as noted above, while others will age more slowly and continue to grow.⁵ By contrast, numerous “middle” and rising powers are projected to enjoy a potential “demographic dividend” from possessing young and growing

⁴ For a recent examination of this linkage, with multiple references to pertinent prior literature, see Deborah Jordan Brooks, Stephen G. Brooks, Brian D. Greenhill, and Mark L. Haas, “The Demographic Transition Theory of War: Why Young Societies Are Conflict Prone and Old Societies Are the Most Peaceful,” *International Security* 43, no. 3 (2018/19): 53–95.

⁵ For an overview of the impacts of this projected differential growth globally, see Jennifer D. Sciubba, *Eight Billion and Counting: How Sex, Death, and Migration Shape Our World* (New York: W.W. Norton, 2022).

workforces in the coming decades.⁶ Planning for these shifts is a near and present necessity—not something far off that policymakers can wait to address. Asia's unprecedented demographic transition matters to regional and global security, in addition to the economic and sociological realms that have been studied in greater detail to date.

In sum, this article seeks to explain (1) how the Indo-Pacific region already has experienced important demographic shifts that are affecting security policy decisions, (2) why security outcomes generally have not conformed to predictions in existing scholarly literature about the effect of rapid aging on state behavior, in part due to the growth of gray-zone challenges, and (3) why future projected demographic change over the next several decades will likely have an even greater impact on security policy outcomes than the limited change we have seen to date.

By introducing demographic variation and projected future population changes into an analysis of the quickly evolving security environment of the Indo-Pacific, this article seeks to demonstrate that while “demographics isn't destiny” (at least in the short to medium term), it is an underappreciated driver of security policy decision-making as an increasing number of powerful states face a similar demographic future of rapid aging and overall population shrinkage. Although other, more traditional variables in the regional security environment, such as changing military technology and evolving threats (themselves partly a result of new technology), continue to be the major drivers of security policy change, demographic considerations are playing a new role not seen in the past 70 years of postwar security policymaking and are poised to only increase in importance based on demographic projections for Northeast Asia and Russia. Moreover, lessons from the graying frontier of Northeast Asia may also offer insights into future security challenges of other aging states in the world, the majority of which are in Europe.

The remainder of this article is structured as follows:

- ∞ pp. 80–85 identify three lessons from the concurrence of East Asia's rapid graying and an increase in gray-zone challenges.
- ∞ pp. 85–87 examine the wider context of demographic changes in the Indo-Pacific.
- ∞ pp. 88–91 consider technological and other policy offsets that might mitigate against the impacts of demographic change on security.

⁶ The concept of a demographic dividend has been well-studied, particularly in the area of developmental economics. It is by no means assured that a state will be able to realize this dividend. For a recent articulation and application of the term, see Sciubba, *Eight Billion and Counting*, 172–92.

- ≈ pp. 92–97 evaluate the U.S. security architecture in the region in the context of these demographic and security shifts.
- ≈ pp. 98–100 address how states and policymakers can plan now for future concerns arising from dual graying.

THREE LESSONS FROM EAST ASIA’S RAPID AGING AND RISING GRAY-ZONE CHALLENGES

Late-stage rapid aging began to emerge in advanced industrial countries in the 1970s, with several Asian countries at the leading edge of this change. The term “late-stage rapid aging” describes a stage of demographic development where there is decline of fertility rates below the replacement level, combined with longer life expectancies, resulting in the significant aging of generally stable population sizes. This stage occurred as a result of individual family decisions in Japan (and elsewhere in the world) in the early 1970s and as a result of a mandate of government policy in China (the one-child policy) in the late 1970s. In the early 2000s, Northeast Asian states began to enter a new demographic phase where the size of once-stable populations began to shrink—a process that will accelerate markedly over the next several decades.

The Aging and Shrinking of Populations Is Already Changing Asia’s Security Future

The likely impact of this demographic change is increasingly referenced in discussions of the region’s security future, but in fact it is already part of the region’s security present and recent past. States across the region already struggle to meet recruiting targets for their armed forces, even those with mandatory military service, accelerating a shift toward labor-saving technologies and new strategies that utilize such technologies. Moreover, the major Asian powers all have increased military spending to pay for these new technologies and the higher cost of labor to convey a position of strength despite their aging populations.

The Northeast Asian powers of China, Japan, South Korea, and Taiwan, as well as Eurasian power and Northeast Asian neighbor Russia, are at forefront of rapid aging worldwide. Japan became the world’s first “super-aged” global power in 2005 when over 20% of its population reached age 65 or older (by comparison, the equivalent figure for the U.S. population in 2005 was 12.4% and for the global population, 6.3%). Japan’s 65 or older population share is expected to exceed 30% in 2023 and is projected to rise to nearly 40% by 2050.

Numerous other regional states will become super-aged in this timeframe as well. Japan and Russia also began to experience a shrinking of their total population size around the turn of the century (Russia from 1995 to 2008 and again from 2021, and Japan from 2009), while population shrinkage began to occur in South Korea and China in the early 2020s. We now have nearly two decades of experience witnessing how rapidly aging states, in Asia and elsewhere, act to ensure their security and how they are planning for a future that will bring even more aged populations along with smaller workforces and total populations.

Rapid aging of Asia's traditional powers affects national security strategy and readiness through both direct and indirect means. The most direct effect is the declining number of young men available to join militaries. This can be addressed by widening recruitment pools (such as by attracting more women, accepting a wider age range, or lowering bars to entry) or by relying more on technology to minimize the need for human labor. Both such strategies already are well underway in aging states in Asia and elsewhere. Indirectly, the effects of a shrinking workforce and competing demands for government spending (such as on pensions and eldercare) challenge defense budgets and, perhaps, activist military strategies more broadly. In addition, the changing ratio of population size among generations and, in some countries, a growing gender imbalance are among other demographic factors that affect national and regional security dynamics.

One additional facet of regional demographic change also must be considered: security in the Indo-Pacific is not just about great-power competition or what happens in any particular subregion. Several middle-power states are projected to see their populations grow and age much more slowly than those in Northeast Asia, and thus are poised to benefit from a demographic dividend like that which Northeast Asian states experienced decades ago. These states—including India, Indonesia, the Philippines, and Vietnam—have become more enmeshed in the regional security discourse and have begun to deepen security partnerships with Asia's aging powers and beyond.

Rapid Aging in Asia Is Not Diminishing the Potential for Conflicts

Rapid aging in Asia so far suggests greater possibilities for conflict than predicted in the limited scholarly literature on this topic to date, particularly when viewed in concurrence with rising cases of gray-zone security challenges. Changes in technology and advances in health science and outcomes make even aging powers formidable, especially large-population states. These aging

powers—which also include the United States to a lesser degree—are likely to be the major security actors in the region for decades to come, despite their projected demographic transitions. Thus, understanding new security behaviors as a result of rapid aging and rising gray-zone conflicts is of paramount concern.

The conduct of Asia's aging powers also will affect security developments globally, setting precedents for how conflict is addressed in this century. Future conflict among the most advanced states in the Indo-Pacific will likely employ fewer human beings, relying more on autonomous systems, robotics, and artificial intelligence. Although this shift is due in part to technological innovation as well as to demographics, since people are still needed to design, produce, operate, and pay for such systems, demographic change is closely linked to the viability of new technological development and adoption. Note that this prediction does not mean that mobilization of large numbers of troops to fight directly was left behind in the twentieth century, however, as Russia's invasion of Ukraine has starkly illustrated. Indeed, this invasion illustrates how even aging powers with shrinking populations—like Russia—remain formidable, although the negative effects of Russia's shrinking combat-aged male population are becoming more apparent in the second year of direct fighting.

Another important aspect of the impact of rapid aging on national security is considering change relationally as opposed to examining each country's policy responses individually. As realist international relations theory has long posited, if one country's power is growing and another's is shrinking, that is a bigger challenge for the shrinking country than if both countries were shrinking: power is a relational variable.⁷ This theoretical insight is significant for security dynamics in the Indo-Pacific because all the current major powers face a similar demographic future of substantial aging and workforce shrinking. Asia's great powers are simultaneously its aging powers.

That said, some internal demographics may also contribute to changes in state behavior apart from the relational component, as suggested by some schools of constructivist and liberal thought in the field of international relations. These might include, for example, changes in state identity, securitization (for constructivists), or the relative power of different domestic

⁷ Joseph Grieco is among the prominent realists who advocate this position. See Joseph Grieco, "Anarchy and the Limits of Cooperation: A Realist Critique of the Newest Liberal Institutionalism," *International Organization* 42, no. 3 (1998): 485–507. For a robust exchange of different perspectives on this question, see Joseph Grieco, Robert Powell, and Duncan Snidal, "The Relative-Gains Problem for International Cooperation," *American Political Science Review* 87, no. 3 (1993): 727–43.

interest groups due to demographic change (for liberals).⁸ Thus, it remains important to look at how each country individually is adjusting to its internal demographic shifts.

Given that Japan is the world's first super-aged state, it is not surprising that two book-length studies have been published recently on Japan's shift in security posture as a result of rapid aging.⁹ One central argument both make is that Japanese attitudes about security will change as Japan ages further. Tom Phuong Le focuses on the impact of generational change, noting that generations of peace activists will pass away and thus different security attitudes may take root among the population.¹⁰ Brad Glosserman posits a future where Japan looks further inward, adjusting its regional security posture commensurately. Neither study, however, incorporates the changing demographics of other states nor examines the changing regional security environment as central to their arguments. Responding to rising threats perceived from other regional states (themselves aging powers) was of critical importance in Japan's December 2022 revision of its National Security Strategy to greatly increase its capabilities and double defense spending over the next five years. Thus, for security planning, both internal demographic change and relational change are relevant.

The Simultaneous Graying of Conflict and Graying of Populations Requires Security Planning to Adapt

Intensifying and expanding security concerns, both gray and "traditional," create urgency to adapt regional security architectures and strategies for maintaining peace and stability. As Russia's two-stage invasion of Ukraine has shown, both gray-zone and traditional military invasion tactics coexist as challenges in the 21st century; it is not either/or. Still, there are numerous

⁸ The literature on how shifts in power and/or persuasion among domestic actors can lead to different international priorities is vast. From a constructivist/securitization perspective, the so-called Copenhagen School is a good starting point. See for example, Barry Buzan, Ole Waever, and Jaap de Wilde, *Security: A New Framework for Analysis* (London: Lynne Rienner Publishers, 1998); and Michael C. Williams, "Words, Images, Enemies: Securitization and International Politics," *International Studies Quarterly* 47, no. 4 (2003): 511–31. From a liberal theory perspective, see Andrew Moravcsik, "Taking Preferences Seriously: A Liberal Theory of International Politics," *International Organization* 51, no. 4 (1997): 513–53; and Robert O. Keohane and Helen V. Milner, eds., *Internationalization and Domestic Politics* (Cambridge: Cambridge University Press, 1996).

⁹ Brad Glosserman, *Peak Japan: The End of Great Ambitions* (Washington, D.C.: Georgetown University Press, 2019); and Tom Phuong Le, *Japan's Aging Peace: Pacifism and Militarism in the Twenty-First Century* (New York: Columbia University Press, 2021).

¹⁰ For a more in-depth discussion of Le's argument and findings, see the book review roundtable on *Japan's Aging Peace* in this issue of *Asia Policy*.

reasons to examine, as Nora Bensahel has posed, “why gray zone conflicts will become more frequent and complex.”¹¹ Referring to a 1999 Chinese study that anticipated the evolving nature of 21st-century conflict, Bensahel observes a principal challenge facing defense planners today:

In 1999, the ability to assault all elements of an opponent’s society seemed to require the resources or sponsorship of a powerful nation state. Now, an increasingly interconnected world allows adversaries at keyboards—not only states, but also disgruntled individuals and terrorist groups—to render geography irrelevant and strike at nearly any facet of another society without ever using or encountering military forces.¹²

In this new era of dual graying, the age (and gender and physical location) of military—or even nonmilitary—personnel, among other factors, appears to matter less. As a result, as Bensahel argues: “We need to start thinking about conflict and warfare in a far more holistic way than simply as primarily military in nature.”¹³ Such an observation is readily apparent in a recent Japanese government-sponsored publication on security concerns with China, which focuses on China’s aim to control the cognitive domain and gray-zone events.¹⁴ As the report argues, it is not only Japan that is devoting increased attention and resources to address gray-zone situations but also the Philippines, South Korea, Taiwan, and Vietnam, among others. Thus, the graying of Asia’s existing great powers and the differential growth and aging of other regional states will intersect with the graying of conflict itself in ways that can be anticipated from recent experience and that must be more forcefully considered while creating the security architecture and strategies for the coming decades.

In sum, a close examination of dual graying in Asia reveals three important lessons for regional and global security:

¹¹ Nora Bensahel, “Darker Shades of Gray: Why Gray Zone Conflicts Will Become More Frequent and Complex,” Foreign Policy Research Institute, E-Notes, February 13, 2017 ~ <https://www.fpri.org/article/2017/02/darker-shades-gray-gray-zone-conflicts-will-become-frequent-complex>.

¹² *Ibid.* Note, however, that many would characterize some of the activities suggested in this quotation as more indicative of “hybrid” warfare as opposed to gray-zone conflict. On this distinction, see Frank G. Hoffman, “The Contemporary Spectrum of Conflict: Protracted, Gray Zone, Ambiguous, and Hybrid Modes of War,” Heritage Foundation, October 5, 2015 ~ <https://www.heritage.org/military-strength-topical-essays/2016-essays/the-contemporary-spectrum-conflict-protracted-gray>.

¹³ Bensahel, “Darker Shades of Gray.”

¹⁴ Yamaguchi Shinji, Yatsuzuka Masaaki, and Momma Rira, eds., “NIDS China Security Report 2023: China’s Quest for Control of the Cognitive Domain and Gray Zone Situations,” National Institute for Defense Studies, 2022.

1. Even a close grouping of aging states does not necessarily lead to lessened tensions or lower threat perceptions. The idea of a “geriatric peace” may be aspirational rather than a result of rapid aging.¹⁵
2. Old assumptions about the effect of aging on security need to be revised due to new technologies, new sorts of security threats (including gray-zone conflict), and actual experiences with rapid aging worldwide.
3. Aging and other projected demographic shifts in the Indo-Pacific suggest changes in the security landscape to come. Some of these are already beginning to be seen in the rise of middle-power states, the implementation and development of new technologies, and the security planning documents published by multiple actors in the region.

These three lessons also intersect with the United States’ efforts to reconceptualize and reinvigorate its network of security alliances and partnerships in the region. There are multiple, overlapping logics for why the United States needs to do so. Several recent studies have made this case cogently.¹⁶ But each of these studies neglects another important justification: not only is the security architecture itself showing its age, but many U.S. allies and partners are themselves rapidly aging. In some cases, this is leading to a decline in their relative power as well as to competing future priorities in a broadening conception of national security.

A SHIFTING REGIONAL BALANCE DUE TO DIFFERENTIAL AGING IN AN EXPANDED INDO-PACIFIC

Demographic change in the Indo-Pacific will challenge each state differently and will interact with technological change to create both new security challenges and new opportunities to enhance security. Some change

¹⁵ This lesson is in contrast to earlier predictions by Mark L. Haas, “A Geriatric Peace? The Future of U.S. Power in a World of Aging Populations,” *International Security* 32, no. 1 (2007): 112–47; and Seongho Sheen, “Northeast Asia’s Aging Population and Regional Security: ‘Demographic Peace?’” *Asian Survey* 53, no. 2 (2013): 292–318.

¹⁶ A noncomprehensive list includes Abraham M. Denmark, *U.S. Strategy in the Asian Century: Empowering Allies and Partners* (New York: Columbia University Press, 2020); Mira Rapp-Hooper, *Shields of the Republic: The Triumph and Peril of America’s Alliances* (Cambridge: Harvard University Press, 2020); Andrew Yeo, *Asia’s Regional Architecture: Alliances and Institutions in the Pacific Century* (Stanford: Stanford University Press, 2019); Michael J. Green, ed., *Ironclad: Forging a New Future for America’s Alliances* (Boulder: Rowman and Littlefield, 2019); Scott W. Harold et al., *The Thickening Web of Asian Security Cooperation: Deepening Defense Ties among U.S. Allies and Partners in the Indo-Pacific* (Santa Monica: RAND Corporation, 2019); and Michael J. Green, Kathleen J. Hicks, and Zack Cooper, *Federated Defense in Asia* (Washington, D.C.: Center for Strategic and International Studies, 2014).

already is underway—Japan already is super-aged, and the other major states of Northeast Asia are projected to join Japan in that category this decade. Overall, the median age in the Indo-Pacific will rise in every state in the region, with substantial increases in many key security actors, including six projected to reach median ages over 50 years old by 2050: China, Japan, Singapore, South Korea, Taiwan, and Thailand—the “leading edge” of aging in Asia.¹⁷

The timing of regional demographic change varies, which affects regional security dynamics, but a commonality among the states of Northeast Asia is population shrinkage and rapid aging in the near term. Based on current fertility rates, China’s total population is projected to shrink by 140 million by 2050, Japan’s by 21.8 million, Russia’s by 14.6 million, and South Korea’s by 6.9 million. Perhaps more importantly, the percentage of the total population 65 or older will increase in all these states, while working-age populations will shrink. South Korea’s 20- to 64-year-old population is projected to shrink by almost 35% by 2050, down nearly 12 million potential workers. While China’s projected decline will be smaller in percentage terms at just over 20%, given China’s huge population this equates to a drop of over 186 million people in the 20- to 64-year-old age group compared to 2022.

Beyond Northeast Asia, and important for Indo-Pacific security dynamics and the U.S. security posture in the region, the demographic story of the Indo-Pacific is not defined entirely by rapid aging and shrinking. India’s population is expected to grow by 256 million by 2050, Indonesia’s by 42 million, and Asia’s as a whole by 582 million (including Western Asia). Numerous states are projecting population growth through 2050 and beyond, while others will see shrinkage of their total populations. What can be expected from this demographic change is a further shift in regional attention away from the traditional powers located in Northeast Asia toward a multipolar security and economic environment in the Indo-Pacific, as population sizes change and economic growth and economic size also shift as a result.

Working-age populations, which are the military-age populations to a large extent, also will grow in much of the region where total populations are still increasing. Politics and policy will affect how well states might benefit from a forthcoming demographic dividend. They will not all see the same

¹⁷ For a set of interactive maps that visually illustrate and provide detailed demographic data for 30 Indo-Pacific states and island groupings from 2020 to 2050, see Andrew L. Oros and Bailey Brya, “New Census Results Underscore Security Challenges of Aging in the Indo-Pacific,” *Asia Dispatches*, June 3, 2021 ~ <https://www.wilsoncenter.org/blog-post/new-census-results-underscore-security-challenges-aging-indo-pacific>.

gains, despite similar age structures due to variations in policy decisions over health and education—and military security—among others.

Regional demographic shifts also have contributed to change in how the region itself is viewed. Multiple states in the region, led by U.S. allies Japan and Australia, began to describe the region as the “Indo-Pacific” rather than “Asia-Pacific” or “East Asia” in the mid-2010s. The United States, India, and the Association of Southeast Asian Nations (ASEAN), among others, followed suit in the late 2010s.¹⁸ Although this nomenclature change was not only due to demographic shifts—economic and military growth as well as military strategy also were important factors—it is one factor driving a new conception of the region that now includes the world’s soon-to-be most populous state, India.

The United States has been the demographic exception in the developed world and among the existing great powers,¹⁹ with a predicted population increase of about 38 million people by 2050 and slower aging. But it must adjust to the demographic stresses on its traditional allies while also eyeing the security posture changes of its aging adversaries. All the other large states of the developed world (including the United Kingdom, France, Germany, Italy, and Japan) as well as China and Russia will see more rapid aging, and most will see outright population shrinkage within the next few decades, with most already experiencing these effects. The United States may also need to adjust to less robust population growth than it expected just a decade ago, a trend seen in the latest U.S. census data from 2020 and one certain to deepen due to the longer-term effects of the Covid-19 pandemic and if recent restrictions on immigration remain in place. These developments underscore the political choices that lead both to shifting demographics themselves and to how states respond to demographic change.

Thus, the coming demographic change will create new political dynamics as well as challenge existing cultural norms. The ability of governments to respond to new political and cultural imperatives will play a key role in how successfully states adjust to their unique demographic transitions. Demographic change in some states will lead to a transfer of political power across generations with different political beliefs and worldviews. Evolution in gender relations and the roles of immigrants in society are two examples of cultural pressures that may arise from demographic imperatives.

¹⁸ China and Russia, by contrast, explicitly reject the Indo-Pacific conceptualization, in part because they seek to delegitimize the long-term U.S. presence in the region.

¹⁹ Nicholas Eberstadt, “With Great Demographics Comes Great Power: Why Population Will Drive Geopolitics,” *Foreign Affairs*, July/August 2019, 146–57.

TECHNOLOGICAL AND OTHER POLICY OFFSETS
FOR DEMOGRAPHIC CHANGE

Not too long ago the great fears about Asia's demography were of populations growing too quickly to allow for sufficient economic development or millions of soldiers invading across a border. Yet in fact these ballooning populations, correctly predicted by demographers in the 1960s, instead were largely directed toward factories that fueled unprecedented economic growth, rather than languishing in rural areas or invading other countries. Japan's notable strengthening of its defense capabilities shortly after it became a super-aged state and began to experience outright population shrinkage also underscores how demographic indicators alone do not determine decisions about security.²⁰ In each of these cases, the critical factor was not changing demographics alone but political choices based on a broader security strategy.

A key takeaway is that there are numerous potential policies to mitigate the coming demographic challenges facing aging and shrinking states and that new technologies also can play an important role.²¹ Beyond new technologies, there are other ways as well to address a shrinking labor pool and the prospect of lower economic growth, including greater female workforce participation, wider employment age ranges, lower bars to workforce entry to bring in those with different skills or ability levels, and the introduction of foreign guest workers and more open immigration policies. In the area of military security, establishing new partnerships and alliances is another way to boost the capabilities of aging states. All these approaches are currently being employed in Northeast Asia, with varying degrees of success. In Japan, for example, female participation in the workforce now exceeds both the Organisation for Economic Co-operation and Development average and U.S. levels.²²

²⁰ Japan's significant development of military capabilities in the 2010s is the subject of my previous book. See Andrew L. Oros, *Japan's Security Renaissance: New Policies and Politics for the 21st Century* (New York: Columbia University Press, 2017).

²¹ Thus, beyond raw demographic data, the analysis presented here relies on publicly available government policy documents, supplemented by additional nonclassified materials and interview data. Some of this material relates to national security planning broadly, some to policies to address past and future projected demographic change, and some to works that explicitly consider the intersection of these two areas.

²² Jay Shambaugh, Ryan Nunn, and Becca Portman, "Lessons from the Rise of Women's Labor Force Participation in Japan," Brookings Institution, November 2017 ~ https://www.brookings.edu/wp-content/uploads/2017/10/es_110117_lessons_from_rise_womens_labor_force_participation_japan_economic_analysis.pdf.

Workers in Japan and South Korea also tend to work several years beyond the traditional retirement age for those states.²³

Still, the scale of the projected population change suggests that difficult policy trade-offs lie ahead. Prime Minister Fumio Kishida warned in his 2023 opening speech to the Diet that Japan's low birthrate puts the country "on the brink of being unable to maintain social functions" and stated that his government places "child-rearing support as our most important policy."²⁴ He offered these remarks in the context of both Japan's birthrate in 2022 dropping below 800,000 births for the first time since modern record-keeping began and his simultaneous proposal to double defense spending over the next five years—showing that, at least in the short term, it is possible for aging states to pursue multiple approaches to security challenges broadly defined. Relatedly, as an effort to address what is perceived as one of the root causes of a low birthrate, Tokyo's city government plans to boost spending on childcare in 2023 by nearly \$13 billion, an amount roughly equal to one-third of Japan's current defense spending.²⁵ While such large fiscal outlays may be possible in the short term, the scale of the population shifts on the horizon may not allow new spending to offset the oncoming problems.

The decline is even more striking when looking at the cohort of 20-year-old men, those of prime interest for military service. In South Korea, the number of 20-year-old men peaked at 503,000 in 1989; by 2021, the number had fallen to 311,000. In 2041, the number is expected to be 153,000, less than half that of 2021. Moreover, because these young men already have been born, these are not projections based on a future birthrate. Japan and Taiwan also will see their numbers of 20-year-old men in 2041 decline to below half their 1990s peaks. For China, given the later timing of its demographic shift, combined with its much larger population size, the change in the number of 20-year-old men is less striking, with a projected decline from almost 8.7 million in 2021 to just over 6 million in 2041. Thus, regarding the supply of future military personnel, China's Northeast Asian neighbors concerned about the country's growing military assertiveness appear to face a bigger challenge in the next several decades. At the same time, however, there are reasons to believe that

²³ Tomohiko Moriyama, "Why Does the Older Population in Japan Work So Much?" *Japan Labor Issues* 6, no. 39 (2022): 20–26 ~ <https://www.jil.go.jp/english/jli/documents/2022/039-04.pdf>.

²⁴ Quoted in Kentaro Iwamoto, "Kishida Says Japan on 'Brink' of Social Dysfunction as Births Fall," *Nikkei Asia*, January 23, 2023.

²⁵ Tomoya Ushiyama, "Japan's Capital Pours \$13b into Childcare Support as Births Fall," *Nikkei Asia*, January 28, 2023.

several decades from now new technologies will dramatically reduce the military need for human labor.

In nonmilitary fields, technology has been widely employed to replace human labor, even to the extent that there is widespread concern in advanced industrial countries about a future without adequate employment for the existing labor pool.²⁶ Other studies, by contrast, have focused on the challenges states may face from not having a sufficiently large labor pool to both sustain the economy and provide military security. This concern was especially apparent in many countries and sectors during the Covid-19 pandemic where automation was rapidly introduced to offset labor shortages. Looking ahead, as numerous Asian states seek to enhance domestic production of military equipment, potential shortages of skilled workers in the defense sector is a concern. This is particularly the case for Japan and South Korea, where large increases in defense spending are planned in part to acquire new weapons systems that are envisioned to be (at least to some degree) domestically produced. Note in this context that the median age in South Korea is projected to rise from 43.9 in 2022 to 57.4 in 2050, which will be the highest in the region.

Looking out toward 2050, there is a great deal of uncertainty related to the future of labor and technology, in both the civilian and military sectors. James Feyrer has summed up this uncertainty, suggesting that “the aging of the higher-income Asian nations will exert a downward pull on productivity over the next thirty years.”²⁷ Still, he concludes that “these predictions are very uncertain” in part “because the older workers of the past were much different from those of today and of the future, due to better healthcare, nutrition, and conditions during childhood,” and because “the estimates of the impact of demographics on productivity were performed on data that does not include the sorts of demographic configurations that we will see over the next 30 years.” He offers as one example that “in 1975 the highest median age in the world was 35. By 2050 the higher-income nations of Asia will all have median ages above 50.”²⁸

²⁶ See, for example, Daniel Susskind, *A World Without Work: Technology, Automation, and How We Should Respond* (New York: Metropolitan Books, 2020); and James Manyika and Kevin Sneider, “AI, Automation, and the Future of Work: Ten Things to Solve For,” McKinsey Global Institute, Executive Briefing, June 1, 2018.

²⁷ James Feyrer, “Demographics and Productivity in Asia,” in *Demographics and Innovation in the Asia-Pacific*, ed. Karen Eggleston, Joon-Shik Park, and Gi-Wook Shin (Stanford: Walter H. Shorenstein Asia-Pacific Research Center, 2021), 36.

²⁸ *Ibid.*, 37–38.

While new technologies will help address the effects of rapid aging and population shrinkage to some degree, their use in the security realm also presents new challenges for states to manage. As just one example, “uncrewed” drones may involve less human labor and protect aviators’ lives, but they also create new security concerns for both military and civilian populations. Methods of warfare have continually adapted to and employed new technologies since the beginning of organized human conflicts. This era of renewed great-power competition, shaped by a growing U.S.-China rivalry, renewed concerns about Russia, a proliferating number of regional security actors, and a rise in gray-zone conflicts, is no different in that respect. But it is different in that the major global security actors are rapidly aging states, with few more youthful potential challenger states being likely to rise to great-power status by 2050.

As with Feyrer’s past data in the economic sphere, earlier studies examining the effects of aging on military conflict in the twentieth century also may need to be re-evaluated based on the different security challenges the region faces in this new era of dual graying, and particularly when imagining future technologies to come. There may well be a time in the not-so-distant future when artificial intelligence capabilities become more important than the size of military forces. However, the current conflict in Ukraine involving the aging power Russia and the increasingly feared conflict over Taiwan between aging powers Taiwan and China both suggest that “boots on the ground” will continue to be a decisive factor in conflicts for many years to come.

While it is not possible—nor very productive—to seek to disentangle the contributory incentives for employing new technology due to demographic imperatives versus other security concerns, the correlation between many new technologies (both military and civilian) and their labor-saving potential is striking. Consequently, as we imagine great-power military competition in the coming decades, it seems increasingly certain that such competition will involve fewer soldiers in a traditional sense, more machines (including artificial intelligence for decision-making), and a wider range of personnel to build and support those machines (in terms of military and nonmilitary personnel, gender, age, and nationality, even if the workers are fewer in number). Again, this likely evolution in the face of great-power conflict is driven not solely by demographics, but also by the fact that the region’s rapidly aging and shrinking working-age populations will further incentivize, and in some cases require, this shift.

AN AGING U.S. SECURITY ARCHITECTURE FACING
GEOPOLITICAL AND DEMOGRAPHIC CHANGE

U.S. approaches to managing its security interests in the Indo-Pacific have evolved with shifting geopolitics, but not as much as past and future projected demographic shifts would predict. The core approach of maintaining a small number of formal alliances that are supplemented with ad hoc security partnerships and multilateral institutions has continued for over 70 years across many different security challenges and demographic changes, a system that many see as also showing its age and being ripe for revitalization.²⁹ Former deputy assistant secretary of defense Abraham Denmark cast a positive spin on this challenge: “The United States has an opportunity to revitalize its alliances and partnerships across the region, to harness their growing capabilities, and to empower them to play a more significant role in sustaining the liberal regional order.”³⁰ Undergirding this call to action, however, is a reality that the aging alliance network needs this revitalization, both to address new security concerns—including rapidly proliferating gray-zone challenges—and to create efficiencies that can withstand the demographic pressures many U.S. allies will face in the years to come.

The creation of the U.S. hub-and-spoke alliance model—with its seven spokes of Australia, Japan, the Philippines, New Zealand, South Korea, Taiwan (not a formal ally now), and Thailand—took place within the context of growing populations and the Cold War. However, although several important Cold War-era legacies remain, such as the divided Korean Peninsula and the standoff between China and Taiwan, the international security landscape has evolved over the years into the current era of strategic competition with China and a shifting distribution of power related to population demographics and different regional economic growth rates. Like worldwide population growth in the postwar period, the United States and its allies saw large population growth from 1950 to 2000, with the U.S. population nearly doubling and the populations of U.S. Indo-Pacific allies on average more than doubling (with Japan as the notable exception—its population increased by only about 50%). As a result, the ratio of population between the United States and its Indo-Pacific allies shifted from an almost fifty-fifty split in 1950 to U.S. allies accounting for about 56% of the combined population of the alliances

²⁹ Rapp-Hooper writes, for instance, in *Shields of the Republic*: “This remarkable alliance system, however, does not meet the trials of our time. Detached from its original goals, the system and its logics have not been updated for the contemporary world.” Rapp-Hooper, *Shields of the Republic*, 5.

³⁰ Denmark, *U.S. Strategy in the Asian Century*, 87.

by 2000. This level of growth of the United States' Asian allies is not projected to continue in the 21st century, however, as indicated by the greatly declining total fertility rates (TFR) shown in **Table 1**. The average TFR of the United States and its allies in the Indo-Pacific fell from 4.88 in 1950, to 2.85 in 1975, to the below-replacement-level of 1.86 in 2000.³¹ Among these allies today, only the Philippines continues to maintain an above-replacement-level TFR, and only Australia and New Zealand are anticipated to make up their replacement shortfalls with robust immigration.

Important differences in how the alliances were established and maintained over time continue to resonate today. Several were notably weakened. Taiwan is no longer a formal U.S. ally as a result of the U.S. shift of diplomatic recognition to the People's Republic of China in 1979, though the island remains an important regional security partner. The Philippines and the United States closed U.S. bases in the Philippines, which had provided a crucial logistical hub for U.S. military operations in the Vietnam War, in the

TABLE 1
*Population Demographics of the United States and
Seven U.S. Treaty Allies, 1950–2000*

	1950		1975		2000	
	Population	TFR	Population	TFR	Population	TFR
United States	158.80	3.31	219.08	1.77	281.71	2.04
Japan	82.80	2.96	112.41	1.83	127.52	1.30
Philippines	18.58	7.42	41.29	5.46	77.99	3.70
Thailand	20.71	6.14	42.33	3.92	62.95	1.60
South Korea	19.21	5.65	35.38	2.92	48.00	1.21
Taiwan*	7.60	6.72	16.47	2.74	21.97	1.33
Australia	8.18	3.18	13.77	1.99	18.99	1.77
New Zealand	1.91	3.69	3.04	2.18	3.86	1.95
Total/average	317.79	4.88	483.77	2.85	642.99	1.86

Source: "World Population Prospects 2019," UN Department of Economic and Social Affairs, Population Division, 2019.

Note: Population is measured in millions. TFR indicates total fertility rate. Asterisk indicates that Taiwan ceased being a U.S. treaty ally in 1979, though it remains a close security partner.

³¹ A "replacement birthrate" is generally seen as 2.1 TRF, though statistically it is likely to be a bit less in developed countries where more females live through childbearing age.

early 1990s. The U.S.-Thailand alliance lost prominence at the conclusion of the Vietnam War in 1975, and further suffered after a military coup in Thailand in 2006.³² Finally, the United States declared a suspension in its obligations to New Zealand under the ANZUS Treaty in 1985 over New Zealand's nuclear-free-zone policies. The United States and New Zealand continue to cooperate militarily, however, and in 1997 New Zealand was designated as a "major non-NATO ally" by the United States, a status held by seventeen non-NATO allies (and informally by Taiwan) as of June 2021.³³

By contrast, the U.S. alliance relationships with the region's two population-shrinking and rapidly aging U.S. allies, Japan and South Korea, have deepened over time. The security guarantee to Japan provided under Article 5 of the 1960 U.S.-Japan security treaty has been repeatedly restated and the regional aspect of the alliance substantially deepened. While the alliance initially may have been as much about containing a former enemy as it rebuilt in the postwar era, in recent decades Japanese military forces, not just the bases located on Japanese territory, have become an essential component of U.S. Indo-Pacific military strategy.³⁴ Recent reporting has especially underscored this reliance for a possible China-Taiwan contingency, and Japan's 2022 National Security Strategy envisions substantial defense spending increases and capability enhancements that will further deepen its alliance coordination. The U.S. alliance relationship with South Korea also has deepened in recent decades, with Seoul substantially building up the country's military capabilities and taking steps toward greater security engagement in the region.³⁵ Future U.S. military strategy in Asia is clearly rooted in these deepening alliances, and thus the challenging demographic futures of these two core allies is a cause for concern. In addition, these two states themselves have begun to consider in greater depth how to adjust their security strategies to meet their graying security futures.³⁶

³² Despite this, Thailand and the United States continue to cohost Cobra Gold, the Indo-Pacific region's largest annual multinational military exercise.

³³ U.S. Department of State, "Fact Sheet: Major Non-NATO Ally Status," January 20, 2021 ≈ <https://www.state.gov/major-non-nato-ally-status>.

³⁴ For a broad overview of this deepening over time, see James L. Schoff, "Uncommon Alliance for the Common Good: The United States and Japan after the Cold War," Carnegie Endowment for International Peace, 2017. For an authoritative report on an ambitious future agenda for the alliance, see "The U.S.-Japan Alliance in 2020: An Equal Alliance with a Global Agenda," Center for Strategic and International Studies, December 2020.

³⁵ For further information on this trend, see Scott A. Snyder, *South Korea at the Crossroads: Autonomy and Alliance in an Era of Rival Powers* (New York: Columbia University Press, 2018). For a provocative view of potential alliance deepening in an era of political polarization in South Korea, see Robert Dohner et al., *The Future of the U.S.-ROK Alliance* (Washington, D.C.: Atlantic Council, 2021).

³⁶ Early examples of such considerations are provided in Andrew L. Oros, "Addressing America's Aging Allies in Asia," *Global Asia* 16, no. 2 (2021): 76–84.

Since the beginning of the post-Cold War period, and especially more recently in the context of China's regional and global resurgence, the United States and its now six formal treaty allies in the Pacific have come to recognize that the alliance system faces a much-changed landscape from a half century ago when most regional states were poor and only a few states largely determined the security environment. Even challenges that have carried over from the Cold War need to be approached differently due to the changed regional balance of power, which in part is due to demographic factors. In addition, new security challenges have emerged, including many gray-zone concerns, such as maritime and territorial disputes in the East and South China Seas.

The regional distribution of power also is affected by the expanded notion of the region to the larger "Indo-Pacific" conception, which includes a much wider range of demographic trends among its territories. The United States and its allies and partners are making renewed efforts to adapt the "hub-and-spoke plus security partners" system that was established under different demographic and geopolitical realities. These efforts began decades ago but have taken on new urgency in this current era of proliferating security concerns combined with growing worries about the credibility of the United States and its security architecture to deliver security to allies and partners.

A first round of regional security architecture-building in the post-Cold War era created several large multilateral institutions where a wide range of states could interact and express security concerns. These forums continue to find a place annually on the calendars of government officials, such as the ASEAN Regional Forum, the East Asia Summit, and the Shangri-La Dialogue.³⁷ More recently, the United States and its major security allies and partners have developed smaller, "minilateral" forms of cooperation to supplement the long-standing hub-and-spoke network, such as institutionalized trilaterals (for example, Australia, Japan, and the United States; Japan, South Korea, and the United States; and the AUKUS grouping of Australia, the United Kingdom, and the United States) as well as one prominent quadrilateral grouping (the so-called Quad of Australia, India, Japan, and the United States).³⁸

³⁷ For a contemporary overview of this early period, see Yeo, *Asia's Regional Architecture*, chap. 3 and 4.

³⁸ Yeo provides an excellent overview of this evolution up through 2019 in *Asia's Regional Architecture*. Substantial media reporting has been devoted to recent developments with AUKUS and the Quad.

Through this evolution of the regional security architecture, a few countries have emerged as especially important U.S. security partners, though not allies in a traditional sense. The United States and numerous other regional states have formal security partnerships, but not all of these signal deep or significantly expanding security cooperation.³⁹ In the Indo-Pacific, five middle-power states in particular—India, Indonesia, Malaysia, Singapore, and Vietnam—have deepened their security partnerships with the United States and with U.S. allies. These five states merit special attention when considering the evolving security environment in the expanded Indo-Pacific region because all five have projected growing populations through 2050 (and, in most cases, well beyond).

Table 2 summarizes projected population trends related to aging and total population size for the United States and fifteen important regional security actors by contrasting the situation in 2020 with projections for 2035 and 2050. Especially notable is the projected demographic change among the six U.S. treaty allies. Only one of the six was super-aged in 2020 (Japan), but five of the six (all but the Philippines) will be super-aged by 2035—within the next twelve years. Japan and South Korea are presently experiencing population shrinkages, and fully half of the six will see their populations shrink by 2029 when Thailand joins this group. Underscoring the relational importance of demographic change, projections for the three principal regional U.S. adversaries, China, North Korea, and Russia, are also important. None were super-aged in 2020, but two of three are projected to be by 2035 (China and Russia), and likely much before then. Moreover, China and Russia are also each experiencing decreasing total population size.

In sum, the United States has been a major security actor in what is now often called the Indo-Pacific region for nearly a century and has consistently expressed its intention to remain so. Thus, the regional security implications of the coming regional demographic change are as relevant for the United States as they are for Asia's aging powers.

³⁹ For a discussion of the Australian and Japanese cases, see Richard Fontaine, "Networking Alliances and Deepening Multilateral Security Cooperation in the Indo-Pacific," in Green, *Ironclad*, 156. For the South Korea case, see Andrew Yeo, "South Korea's New Southern Policy and the United States Indo-Pacific Strategy: Implications for the U.S.-ROK Alliance," Mansfield Foundation, July 22, 2021.

TABLE 2

Demographic Change of the United States and Allies, Adversaries, and Select Partners in the Indo-Pacific, 2020–50

	Total population decreasing			Population of 20–64 year-olds decreasing			Super-aged		
	2020	2035	2050	2020	2035	2050	2020	2035	2050
United States	○	○	○	○	○	○	○	✓	✓
<i>U.S. allies</i>									
Australia	○	○	○	○	○	○	○	✓	✓
Japan	✓	✓	✓	✓	✓	✓	✓	✓	✓
New Zealand	○	○	○	○	○	○	○	✓	✓
Philippines	○	○	○	○	○	○	○	○	○
South Korea	2021 ^a	✓	✓	✓	✓	✓	○	✓	✓
Thailand	○	✓	✓	○	✓	✓	○	✓	✓
<i>U.S. adversaries</i>									
China	2022 ^b	✓	✓	○	✓	✓	○	✓	✓
North Korea	○	2036 ^c	✓	○	✓	✓	○	○	✓
Russia	✓	✓	✓	✓	✓	✓	○	✓	✓
<i>U.S. partners</i>									
India	○	○	○	○	○	○	○	○	○
Indonesia	○	○	○	○	○	○	○	○	○
Malaysia	○	○	○	○	○	○	○	○	○
Singapore	○	○	✓	○	✓	✓	○	✓	✓
Taiwan	✓	✓	✓	○	✓	✓	○	✓	✓
Vietnam	○	○	○	○	○	○	○	○	✓

Source: “World Population Prospects 2022,” UN Department of Economic and Social Affairs, Population Division, 2022 ≈ <https://population.un.org/wpp>.

Note: *a* indicates South Korea’s total population began decreasing in 2021 based on media reporting since the publication of the UN Population Division’s “World Population Prospects 2022”; *b* indicates China’s total population began decreasing in 2022 based on media reporting since the publication of “World Population Prospects 2022”; and *c* indicates North Korea’s population is predicted to peak in 2035 at 26.67 million. Super-aged is defined as over 20% of the total population being 65 or older. Projections use the “constant fertility” scenario in “World Population Prospects 2022.”

PLANNING NOW FOR FUTURE GRAYING SECURITY CONCERNS

The projected graying of Northeast Asia's populations for the coming three decades and beyond, combined with the region's graying conflict flashpoints, will exert new pressures on the United States and its allies and partners vis-à-vis regional security architecture and approaches. Few governments are able to plan effectively for 2050—as starkly seen in the debates over global climate change—but in the case of dual graying, dramatic shifts already have begun and will become even more apparent in this decade. These shifts will affect how the United States and its allies and partners will address military security concerns in the region moving forward.

Among these Northeast Asian states, demographic changes will further push militaries to employ high-tech solutions to offset the effects of costlier labor and, in many cases, recruitment shortfalls. The marked rise of gray-zone conflicts, particularly in the East and South China Seas and in the cyber domain, creates significantly added burdens to already taxed militaries, as well as to a growing range of nonmilitary actors.⁴⁰ In Japan, despite new plans to double defense spending over the next five years, in part to acquire new equipment and capabilities, no additional military personnel are planned to address these challenges; instead, a wider range of civilians and technological offsets are envisioned. Indeed, Japan's new national defense strategy seeks to address the growing challenge of even maintaining the current number of military personnel.⁴¹ For South Korea, greatly increased defense spending is planned to fund a transition away from reliance on underpaid young men conscripted into the armed forces, since simply there will no longer be enough young men to fill the ranks. To be clear, conscription is likely to continue, but the number of forces provided by conscription will significantly decrease as fewer men of conscription age emerge. Taiwan is planning an expansion of its reserve forces (an approach also being studied by Japan and South Korea) as well as lengthening its conscription period for young men to address personnel shortfalls. All these policies are politically challenging for these democracies, and these challenges will only increase as demographic pressures further mount. On the positive side, a growing urgency to both achieve fiscal and operational efficiencies and bolster capabilities has resulted

⁴⁰ Note that cyber conflict is a gray-zone and a hybrid or traditional arena of conflict. Governments must expend resources to prepare for a traditional military conflict involving cyberoperations as well as to respond to day-to-day conflict below the threshold of war in this domain.

⁴¹ Ministry of Defense (Japan), *National Defense Strategy* (Tokyo, December 2022), 35–36. ≈ https://www.mod.go.jp/j/approach/agenda/guideline/strategy/pdf/strategy_en.pdf.

in a high level of enhanced cooperation with the United States through formal alliances and partnerships as well as new areas of strategic cooperation.

States taking additional moves to acquire and employ next-generation military technology is a natural result of increasingly intense competition to respond to China's military spending increases and modernization, but the demographic aspect adds urgency and a political imperative to establish effective policies to recruit, train, and maintain adequate force numbers to staff a technologically advanced military (including support personnel). In the short term, China will experience less of a pinch as it continues a long-term trend of slimming its force size in favor of a better-trained, leaner force, but similar shortfalls will begin to hit China in the 2030s and worsen in the following decade.⁴²

As Chinese leaders become more attuned to the military, economic, and social challenges of a shrinking workforce and greater numbers of elderly citizens (many with few relatives due to the now-abandoned one-child policy), concerns arise that China may seek to resolve outstanding security concerns before the larger demographic squeeze occurs. Thus, the demographic reality adds yet another level to the oft-heard theory of China's urgency to take control over Taiwan in the 2020s, for example.

Further south in the Indo-Pacific, states with already large populations such as India, Indonesia, and the Philippines will experience youth bulges in the coming decades that will offer wider military options for these states and potentially make them even more attractive security partners. For the United States and its allies, recognizing that these growing states generally have different security priorities and showing a willingness to cooperate on a wider range of security concerns could help build a lasting foundation for expanded regional security cooperation.

Already there has been a notable post-Cold War shift toward adding security partners and encouraging "networking" among U.S. allies and partners. The predicted intensification of demographic changes and gray-zone competitions already underway gives greater urgency to this strategic shift, with population-growing partners being especially attractive candidates for security cooperation (though even smaller, aging states can provide useful security cooperation, as Singapore has shown). Moreover, looking beyond the region, other aging powers have shown fresh interest in bolstering their own security profiles through new partnerships, as demonstrated by the recently

⁴² Nicholas Eberstadt, ed., "China's Changing Family Structure: Dimensions and Implications," American Enterprise Institute, September 2019.

signed enhanced security relationship between Japan and the UK as well as by new joint fighter development among Japan, the UK, and Italy.

The future challenges and effects of Asia's dual graying are still unclear when projecting out decades from now. The modern world has never experienced such a demographic transition nor the expansion of security competition across so many domains. The more distant future of military technologies empowered by artificial intelligence and uncrewed systems also introduces great uncertainty to the security landscape over the horizon, including to the utility of large numbers of military personnel. In the short to medium term, however, current gray-zone conflicts and the demographic pinch that Northeast Asian states are presently facing create an evolving situation requiring additional attention from states in the region and the United States. ◆