

UN Volunteers

China's one child policy has increased dependency ratio of elderly to youth

By MATT ISLER

China appears to be at the edge of an historic demographic transition, setting the country on a path to grow old before it becomes prosperous.

—Global economist
Cliff Waldman¹

GRAYING PANDA SHRINKING DRAGON

The Impact of Chinese Demographic Changes on Northeast Asian Security

Since 1980, China's "one child" policy has successfully slowed its population growth and facilitated stable economic growth. By curtailing over 250 million births since its inception, however, the one child policy also induced significant long-term consequences. According to China's National Committee of Population and Planned Birth, China faces three major demographic events during the next 30 years: a peak of workers entering the labor market, a reversal of population growth, and a rapid increase in the age of the Chinese population.² Furthermore, China's one child policy also created a significant and growing gender imbalance.³ These demographic changes promise to undermine China's long-term stability by inducing labor shortages, slowing economic growth, and increasing pressure for internal migration and immigration. Conversely, continued U.S. demographic

strength and increased Chinese risk aversion will constrain China's belligerence and stabilize its demographic transformation. Together, these forces foretell an aging, constrained, and less belligerent nation after the mid-2030s.

United Nations (UN) population forecasters expect China's population to grow only marginally until 2030, plateau at 1.46 billion until 2035, and then fall slightly to 1.41 billion by 2050.⁴ Perhaps more significant than population growth reversal will be rapid aging, as the median age will likely increase from 30 to 41 by 2030, and to 45 by 2050.⁵ During this period, seniors will represent the most rapidly growing demographic group, as the proportion over age 60 triples from 10.9 percent to 35.8 percent by 2050,

while the over-80 population quadruples from 1.8 percent to 6.8 percent.⁶

Long-term Labor Shortages

One of the most immediate economic consequences of the one child policy will be decreasing numbers of laborers entering the workforce, which threatens to increase labor costs, constrain economic growth, and increase immigration pressures. The UN forecasts that China's working-age population, defined as those 15 to 59 years of age, will fall after 2010 as a percent of the total population, and the absolute working-age population will decline after 2015.⁷ The shrinking labor pool will likely increase labor costs and could slow or even reverse China's economic growth.⁸

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Shrinking labor pool could slow or even reverse China's economic growth

A shrinking labor force is likely to fuel internal demand for migration to meet the country's labor needs, which could further destabilize China. Currently, the rural provinces account for virtually all of Chinese population growth, while the wealthy provinces of Shanghai and Beijing effectively produce zero population growth.⁹ As poorer regions such as Tibet produce excess laborers and more wealthy coastal areas fail to produce enough laborers, China faces long-term pressure for internal migration.¹⁰ However, social benefits for migrant laborers are tied to their rural households, most lack insurance, and the government considers the displaced laborers the primary source of crime and a threat to public order.¹¹

In addition to increasing pressure for internal migration, China's labor shortage will likely fuel demand for immigrant labor after 2015. Among China's neighbors, Japan and South Korea face similar workforce declines. Meanwhile, China's less-developed neighbors—Vietnam, Mongolia, and Burma—should continue steady population growth past 2050.¹² These three countries should offer a more favorable working-age (15–59) cohort in 2020, and may be able to meet some of China's labor needs.¹³ Regardless of how China's labor needs are met, labor shortages promise to constrain economic growth after 2020 and increase migration and immigration pressures.

Transitions

Furthermore, the simultaneous nature of China's economic and demographic transitions presents a further source of internal instability. "Normal" demographic transitions generally follow a path from a high fertility rate, high mortality rate, and low income to a state of low

fertility,¹⁴ low mortality, and high income characterized by industrialized nations.¹⁵ Contrary to such a normal demographic transition, China faces the challenges of economic growth, industrialization, and urban assimilation of a large rural populace simultaneous with its rapid demographic transitions in the age and size of its workforce.

In particular, China's rapid rise in old-age dependency during a sudden decline in the workforce

"could trigger an economic and political crisis."¹⁶ In 2025, China's purchasing power parity will surpass that of the United States just as its last large "pre-one child" generation, born in the 1960s, begins to retire. This generation's retirement will rapidly increase China's old-age dependency burden just as

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China becomes a middle-income country.¹⁷ Because these economic and demographic transitions will occur simultaneously, China "will face a developed country's level of old-age dependency with only a developing country's income,"¹⁸ and may face social instability beginning in the mid-2020s.¹⁹

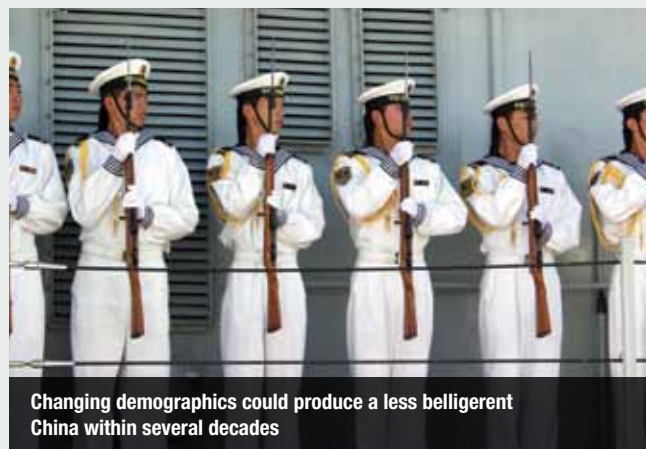
Growing Gender Imbalance

China's family planning policy also induced a significant gender imbalance that will likely exacerbate migration and immigration pressures. China's sex ratio balance, the number of males per 100 females,²⁰ grew from a healthy 106.3 in 1975 to an imbalanced 120.5 in 2005.²¹ The imbalance is worse in rural areas, where individual provinces have reported sex ratios over 137.²² This significant population (20–21 percent) of excess

males will likely increase competition for the small pool of females, intensify internal migration pressures, foster demand for immigrant brides,²³ and fuel demand for criminal networks that recruit and traffic brides. If this demand is not met, there is broad consensus that China could face increased levels of "antisocial behavior and violence [that] will ultimately present a threat to long-term stability and the sustainable development of Chinese society."²⁴

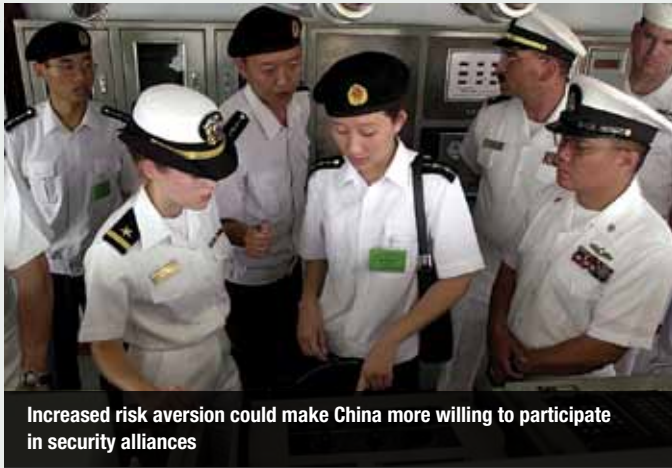
Long-term Growth in U.S. Power

While China's demographics threaten to constrain its economic growth, American demographics promise to support long-term U.S. economic health. The UN forecasts that the U.S. population will grow strongly from 285 million in 2000 to 409 million in 2050, largely due to immigration.²⁵ Meanwhile, other major economic powers such as Japan, the European Union, and Russia face decreasing workforce populations and increasing dependency ratios. According to a 2008 report from the Center for Strategic and International Studies, the United States "is the only developed nation whose population ranking among all nations—third—will remain unchanged from 1950 to 2050. . . . [The United States] is also the only developed economy whose aggregate economic size will nearly keep pace with that of the entire world's economy." As the U.S. gross domestic product will likely expand steadily as a share of the developed-world totals, China, Russia, Japan, and the European Union will see their economic power relatively decreased.²⁶ This will strengthen the relative power of the United States in the developed world to a situation mirroring its relative position immediately following World War II.²⁷ The net effect of these changes will be increased U.S. influence



Changing demographics could produce a less belligerent China within several decades

U.S. Navy (David Rush)



Increased risk aversion could make China more willing to participate in security alliances

that will constrain China's dominance of Northeast Asia.

Increased Risk Aversion Likely

In addition to looming labor shortages and long-term economic challenges, the effects of China's one child policy include long-term social consequences that will increase Beijing's risk aversion and constrain regional belligerence. As the policy effectively curtailed the number of children in each family, it also increased the relative *value* of each child to the family.²⁸ As China's population ages and begins to shrink, each young citizen faces the burden of caring for his or her two parents and four grandparents.²⁹ This increasing dependency, coupled with an inadequate public pension system, increases each child's value to the family and

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makes risk-laden military activities inherently threatening to the long-term interests of families.

Further exacerbating China's risk aversion will be macro-level aging, which will likely force a reallocation of resources toward health care and social programs required to sustain an aging population.³⁰ Together, family-level risk aversion and resource demands for social programs will likely make China less willing to risk the future generation in war.³¹ To sustain its strength while

minimizing manpower demands, the military may be forced to outsource nonvital activities, invest in high-tech capital such as robotics and unmanned systems, and find labor through offers of citizenship for service. China may also be more willing to participate in security alliances with friendly developing countries.³²

China's simultaneous industrialization and demographic transformation pose risks and opportunities for Northeast Asian security. While an aging population, shrinking workforce, and large gender imbalance threaten to undermine internal stability by inducing labor shortages, slowing economic growth, and increasing pressure for internal migration and immigration, continued U.S. demographic strength and increased Chinese risk aversion will constrain China's belligerence and act to stabilize its demographic transformation. The net effect of these competing forces promises to be an aging, less powerful, and less belligerent China after the mid-2030s. **JFQ**

NOTES

¹ Cliff Waldman, "China's Demographic Destiny and Its Economic Implications," *Business Economics*, October 2005, available at <http://findarticles.com/p/articles/mi_m1094/is_4_40/ai_n15969911>.

² Men Kepei, Guan Linlin, and Jia Lingyun, "China's Future Population: Predictions and Prospects," *Population Review* 44, no. 1 (2005), 9.

³ "China steps up 'one child' policy," BBC News, September 25, 2000, available at <<http://news.bbc.co.uk/2/hi/asia-pacific/941511.stm>>; Clay Chandler, "Little Emperors," *Fortune* 150, no. 7 (2004), 138–140, 143–144, 148.

⁴ Somnath Chatterji et al., "The Health of Aging Populations in China and India," *Health Affairs* 27, no. 4 (2008), 1052–1063. See also United Nations (UN) World Population Forecast, 2006 revision, available at <<http://esa.un.org/unpp/>>. Population numbers published in this article reflect the "medium variant" of the UN population forecast; the assumptions and methodology are listed at <<http://esa.un.org/unpp/index.asp?panel=4>>.

⁵ Richard Johnson, "Economic Policy Implications of World Demographic Change," *Economic Review* 25 (January 1, 2004), available at <www.allbusiness.com/north-america/united-states-missouri-metro-areas/1013315-1.html>. See also UN World Population Forecast.

⁶ Chatterji et al.

⁷ Waldman, 6.

⁸ Richard Jackson and Neil Howe, "The Graying of the Great Powers: Demography and Geopolitics in the 21st Century—Major Findings of the Report" (Washington, DC: Center for Strategic and International Studies, May 2008), 4, available at <www.csis.org/component?option=com_csis_pubs/task/view/id,4453/>.

⁹ Waldman, 8.

¹⁰ *Ibid.*, 8–11.

¹¹ Alexandra Harney, "The Chinese Migrant's Mindset," *The Wall Street Journal*, March 12, 2009, available at <<http://online.wsj.com/article/SB123680436558899933.html>>.

¹² UN World Population Forecast.

¹³ Waldman, 8.

¹⁴ *Ibid.*, 4. The fertility rate is the number of children born per woman over her lifetime; an average fertility rate of 2.1 births is typically required for population replacement.

¹⁵ *Ibid.*, 2.

¹⁶ Jackson and Howe, 11.

¹⁷ *Ibid.*, 10.

¹⁸ *Ibid.*, 5.

¹⁹ *Ibid.*, 4–5.

²⁰ Marc Feldman, "Gender Imbalance in China," Morrison Institute for Population and Resource Studies, Stanford University, October 2008, available at <http://aparc.stanford.edu/events/sexratio_imbalance_and_gender_studies_in_china/>.

²¹ *Ibid.*, 4; Shuzhuo Li, "Imbalanced Sex Ratio at Birth and Comprehensive Intervention in China," 4th Asia Pacific Conference on Reproductive and Sexual Health and Rights, Institute for Population and Development Studies, Xi'an Jiaotong University, October 29, 2007, 1, available at <www.unfpa.org/gender/docs/studies/china.pdf>.

²² *Ibid.*

²³ *Ibid.*

²⁴ Shuzhou, 1.

²⁵ UN World Population Forecast.

²⁶ Jackson and Howe, 7–11.

²⁷ *Ibid.*, 8.

²⁸ *Ibid.*

²⁹ *Ibid.*

³⁰ Chatterji et al.

³¹ Jackson and Howe, 4.

³² *Ibid.*, 12.