Dusk, Dawn, and High Noon
Demographic Trends Forecast Next Phases for China, India, and the United States
—By Martin C. Libicki and Julie DaVanzo

Midnight in Munich: All European Union Countries Face Declining and Aging Populations
—By Stijn Hoorens

Life Spans of Today’s Humans Will Transform the Nations

Peace Prospects in Afghanistan • Health Spending in America • Released Prisoners in California • New Leadership for RAND
Message from the Editor

2030 Is Now

Our “Window on the World” map on pages 28 and 29 portrays how the nations of the world in 2030 will be very different from what they are today in one highly predictable respect: whether their working-age populations will shrink or grow.

Three things jump out from the map. The first is the vast tier of northern nations—from Portugal to Japan, including China—that will be losing or even hemorrhaging workers in the decades ahead. The second is the heavy concentration of explosive growth in central Africa, covering most of the continent. The third is the relative homeostasis of the United States and Canada, whose working-age populations will continue to grow at a modest pace, if only because of immigration.

For some people, this future looks scary. They see much of the developed world in decline and the continent of greatest need growing even more needy. In contrast, optimistic readers might envision smaller carbon footprints for Europe and East Asia, less militarism from the aging populations of the developed world, and an opportunity for immigrants from the south to the north.

Our cover story and sidebar focus on the implications of major demographic trends for China, India, the United States, and Europe. As a complement to these stories and the world map, an interactive graphic at RAND Review online illustrates four major global demographic trends through 2050: the shifts in working-age populations, the rise of the oldest old (those at least 85 years of age), elderly dependency ratios, and youth dependency ratios. It is clear that the world has been reborn in ways that are only starting to become recognized.

RAND itself is experiencing a new dawn with the rise of Michael Rich as the new RAND president and chief executive officer. His initial ideas for where he hopes to take RAND appear in question-and-answer format on his inaugural Publisher’s Page in this issue.

—John Godges

On the Cover
Newborns begin to stir at a women’s hospital in Allahabad in India’s most populous state of Uttar Pradesh on October 22, 2011.
AFIMAGESRAJESH KUMAR SINGH
News

Providing Best Mental Health Treatments for All Veterans Could Save Money as Well as Lives

Growing numbers of U.S. veterans return with post-traumatic stress disorder (PTSD) and major depression, but there is some encouraging news: Providing high-quality treatments to all veterans with these conditions could generate substantial social cost savings, according to a RAND study published in the journal Psychological Trauma: Theory, Research, Practice, and Policy.

In the study, researchers predicted that more than 22 percent of the servicemembers who were deployed in support of Operation Enduring Freedom (OEF) or Operation Iraqi Freedom (OIF) on June 30, 2008, would suffer from PTSD or major depression within two years of returning home. Of those with the disorders, just slightly more than half would be treated within these two years, and only 30 percent of those treated would receive evidence-based treatments (treatments that research has demonstrated promote recovery). The resulting social costs (which include treatment costs, lost productivity, and the costs associated with lives lost to suicide) would be $923 million (see the figure). These estimates of treatments and costs reflect standard practices in 2008.

But what if all veterans suffering from PTSD or major depression would immediately receive the recommended treatments in the first three months of onset? Researchers found that although the cost of treatment would be higher, the total two-year social costs would be only $785 million—for a savings of $138 million, or 15 percent (the lower bar in the figure).

“The findings suggest that, from a societal perspective, evidence-based treatment for PTSD and major depression would pay for itself in two years,” said Beau Kilmer, a RAND senior policy researcher who led the study. “Although evidence-based care costs more than the treatment usually provided to veterans, it increases the probability of recovering from mental illness, which ultimately increases productivity and reduces the risk of suicide.”

“These estimated benefits of evidence-based treatment are likely to be conservative because they focus on only the two years after return and do not consider the potential costs from other consequences of PTSD and major depression, such as substance use, domestic violence, and homelessness.”

The future health-related costs for the more than 2.25 million U.S. troops who have deployed to OEF and OIF will undoubtedly be high because of physical and mental health injuries. “But we can mitigate those costs and reduce suffering at the same time by providing high-quality behavioral health care for all veterans who need it,” said Kilmer.
U.S. Should Drive Highway Funding Toward Projects—and Benefits—of “National Significance,” Says Study

In restructuring U.S. transportation policy, Congress should steer funding toward projects of “national significance,” RAND researchers suggest. In other words, federal transportation aid should go to those projects promising large positive aggregate benefits, either nationwide or across a multi-state region, and for which sufficient funding and coordination from smaller jurisdictions might not be forthcoming.

Currently, federal highway spending goes to a large variety of projects, including those that may have only local or even net negative effects. Federal policy has become more fragmented over time, with a proliferation of programs that are often considered to act as “stovepipes,” each focusing on one set of issues, preventing rational, integrated, comprehensive planning and stymieing innovation. A secondary problem has been the increasing number of earmarks—from only 8 in the 1978 transportation bill to 6,371 in the latest, 2005 bill, which originally expired in October 2009 before being extended.

“Changing highway-investment priorities could involve many difficult decisions,” said Howard Shatz, a RAND senior economist who led the study. “These might include redrafting federal programs, changing the congressional committees through which transportation authorizations pass, or severely limiting earmarks, which undermine efforts to develop national networks that optimize investments.”

Previous research reviewed by RAND found positive effects of highway-infrastructure spending on economic productivity and output. The RAND researchers point to investments in the U.S. interstate highway system as examples of federal transportation spending that brought widespread productivity gains to the U.S. economy.

But highway infrastructure varies greatly in its economic effects, depending on a wide variety of local and regional factors. Better targeting of federal highway investments could lead to better economic outcomes, the researchers suggest.

“With the United States facing fiscal constraints, federal highway spending can continue to provide economic benefits to the nation by focusing on those projects that have positive net benefits dispersed over large geographic areas,” said Shatz.


Better targeting of federal highway investments could lead to better economic outcomes.
Pay-for-Performance Fails to Improve NYC Student Achievement

A New York City program to boost student performance by offering bonuses to schools that met annual schoolwide performance targets failed to improve student achievement at any grade level or to affect school progress reports, researchers from RAND and Vanderbilt University have found. As a result of the research, published in July, the city has discontinued the program.

Overall, the researchers found no statistically significant difference in average mathematics and English language test scores between elementary school, middle school, and K–8 students in schools randomly selected to participate in the program and students in similar schools not selected (the control schools). The researchers also found no statistically significant differences between the overall scores of schools assigned to the program and the overall scores of the control schools. And there were no differences between the reported practices, effort, and attitudes of teachers in schools selected for participation and those in the control group.

The New York City Department of Education and the United Federation of Teachers jointly implemented the Schoolwide Performance Bonus Program for the first time in the 2007–08 school year. Schools meeting their targets received bonuses equal to $3,000 for each full-time, union-represented staff member (teachers, counselors, secretaries); at each school, a four-person committee determined how to distribute the bonus among staff. About 200 schools participated in the program over a three-year period. The researchers used test scores, surveys, and interviews to assess the performance of the program.

“Bonuses alone have not proven to be the answer to bettering student achievement,” said Julie Marsh, an adjunct researcher at RAND and visiting associate professor at the University of Southern California, who led the study. “Some educators didn’t understand how the program worked, while others did not perceive the bonus as having tremendous value. Still others felt the bonus criteria relied too heavily on test scores. Many also reported that other factors, such as accountability pressures and intrinsic motivators, were more salient than financial bonuses.” The figure shows examples of these other motivators.

The researchers suggested that the lack of improvement might also have resulted from a lack of capacity or resources, such as school leadership, expertise, instructional materials, or time to bring about improvement. It is also possible, as suggested by a 2010 RAND and Vanderbilt University study of a pay-for-performance program for teachers in Nashville, that the theory underlying such programs may be flawed. Even though teachers in New York reported that the bonus was desirable and motivating, they also reported not changing their teaching practices in response to the program. “Thus, a desirable award might not be enough to change behavior,” said Marsh.


Teachers Report That Factors Other Than Bonuses Motivated Them to Work Hard

<table>
<thead>
<tr>
<th>Factor</th>
<th>Percentage Reporting</th>
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<tbody>
<tr>
<td>Seeing students learn new skills and knowledge</td>
<td>99</td>
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<tr>
<td>Seeing students improve performance</td>
<td>99</td>
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<tr>
<td>Seeing myself improve as a teacher</td>
<td>99</td>
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<tr>
<td>Meeting Adequate Yearly Progress target</td>
<td>77</td>
</tr>
<tr>
<td>Achieving a high progress report score</td>
<td>75</td>
</tr>
<tr>
<td>Avoiding designation of school for district or state intervention</td>
<td>64</td>
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<tr>
<td>Receiving a financial bonus for meeting school goals</td>
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Percentage of teachers reporting that each factor motivated them to work hard “to a moderate or great extent”

Few Differences Between New Orleans Charter, Traditional Schools

The large-scale expansion of charter schools in New Orleans in the wake of Hurricane Katrina has generated few differences in educational practice between traditional and charter schools. One difference that did emerge in a RAND study was this: Parents of kids in charter schools perceived a greater sense of choice and greater satisfaction with those schools, on average, than did their counterparts in traditional schools.

The New Orleans public schools underwent a dramatic overhaul following the 2005 hurricane. The school system, which had been struggling with poor student performance and financial mismanagement, was reorganized into two districts: a state-run Recovery School District and a locally administered Orleans Parish School Board. Each authorizes a large number of charter schools, which served 61 percent of the city’s public school students in the spring of 2010. New Orleans is the first city in the nation to carry out a charter-based reform at this scale.

Within the Recovery School District, which consists of schools that had been failing before the reorganization, charter schools showed higher school-performance scores in 2008–09 than traditional schools did. Nevertheless, both charter and traditional schools in the Recovery School District underperformed charter and traditional schools of the Orleans Parish School Board. Neither charter status nor district status nor information from teacher surveys about school policies, staffing, and instruction reliably predicted improvement in a school’s performance during the 2008–09 academic year.

The most critical difference in educational contexts was in the perceived challenges to raising student achievement. Principals and teachers rated such challenges as parent involvement, student discipline, and student transfers as more serious in traditional schools than in charter schools. Charter-school principals also reported having greater control over many instructional and administrative functions of their schools than did their traditional-school counterparts.

But in other ways, the operations of charter and traditional schools remained similar. Principals at both types of schools reported nearly equal lengths of the average school year and average school day. Teachers at charter schools were as likely as those at traditional schools to report that their schools had a strong sense of mission. They reported devoting almost identical shares of instructional time to activities that promoted higher-order thinking skills, that were based on real-life situations, or that required students to work independently. Teachers’ career plans and expected tenures were also similar at both types of schools.

Charter-school parents were most likely to choose a school because of its curriculum, achievement record, and discipline policies. Traditional-school parents were most likely to choose a school because of its proximity, transportation availability, or a sense that it was the only school available.

“This raises the question of whether school choice in New Orleans is equally accessible and navigable by all,” said Jennifer Steele, a RAND education policy researcher who co-led the study with RAND senior behavioral scientist Georges Vernez.


Student Terielle Brown walks with a food tray to serve guests visiting the Samuel J. Green Charter schoolyard that has been transformed into a learning garden where New Orleans students plant, weed, and harvest their produce.
DISCUSSIONS OF LATIN AMERICA often lament its inequality, but few attempt to quantify the impact of such inequality while also recognizing the unquantifiable harm caused by its intergenerational nature across the region.

These issues were at the heart of a talk given at RAND by Heraldo Muñoz, UN Assistant Secretary General and Regional Director for Latin America and the Caribbean at the United Nations Development Programme (UNDP). Muñoz highlighted the results of the UNDP’s first-ever human development report for the region, “Acting on the Future: Breaking the Intergenerational Cycle of Inequality.” That report documented regional inequalities and proposed policies to deal with them.

Beyond Conventional Wisdom
Muñoz challenged the conventional view of tackling inequality, which emphasizes upward mobility (pushing the bottom and middle up rather than dragging the top down), removing social barriers (such as to education), and boosting competition. In Latin America, he said, such a formula, though useful, is an “incomplete view of the best way to combat inequality.”

Inequality in Latin America and the Caribbean has become one of the main traits that characterize the history of the region, he argued, because of how deeply ingrained inequality has become. “Features of inequality have been an inheritance for hundreds of years. Inequality is very significant, very profound, very persistent, and very difficult to break. Inequality in income, education, and health pass from one generation to another.”

Addressing such intergenerational transfer of inequality should be a top priority for policymakers, said Muñoz, “both because it affects people’s lives and because it erodes social cohesion and democracy. If democracy doesn’t translate into better opportunities and the diminution of poverty, then frustration, apathy, corruption, and weakened institutions will ensue.”

Objective Measures
Although Latin America is not the world’s poorest region, it is the most unequal one, said Muñoz. It has 10 of the 15 most unequal countries in the world, when measured by household per-capita income. “Latin America is 65 percent more unequal than high-income countries, 36 percent more unequal than East Asia, and 18 percent more unequal than even the average for sub-Saharan Africa.”

He indicated that although Uruguay has the highest levels of equality in Latin America, Uruguay still is more unequal than the most unequal country in the European Union (Portugal) or than all the countries in the Organisation for Economic Co-operation and Development (OECD), “It’s like being champion in soccer but of the fourth division, not the premier league,” the president of Uruguay, José Mujica, ruefully

UN Assistant Secretary General Heraldo Muñoz challenged the conventional view of tackling inequality—which emphasizes upward mobility, removing social barriers, and boosting competition—as “incomplete” for Latin America.
Conditional cash-transfer programs, such as Bolsa Familia in Brazil and Oportunidades in Mexico, make the cash transfer conditional upon the recipients’ actions, such as enrolling children in public schools, obtaining regular medical checkups, or receiving vaccinations.

**Subjective Factors**

There is also a need to address the “subjective factors,” such as aspirations and autonomy, that perpetuate inequalities, said Muñoz. “When the distance between people’s aspirations and the resources needed to achieve them is too large, some families feel the investment in resources to get out of poverty is so large that it is hopeless.”

Such a fatalistic attitude is typical of stratified societies in Latin America and can lead families not to send their kids to school, he said. “Only about 3 percent of young people whose parents did not complete primary school ever finish college; by comparison, nearly 72 percent of kids whose parents have college degrees do complete college.”

Reducing inequality in Latin America and the Caribbean is possible, said Muñoz, but public policies should focus on “the three R’s of reform,” as proposed by Nobel Prize winner Amartya Sen in 2005: reach, range, and reason. “Policies geared toward redistribution must be effective at reaching the target groups they were intended for,” he said.

“The policies put forth must appreciate that households face multiple constraints that perpetuate poverty and inequality.” This range of constraints, he said, “refers to the need to address the multiple inequalities that are prevalent in Latin America.”

Finally, “the beneficiaries of the policies must have a say in the design and implementation process and be active agents of their own development and destinies.” This reason to participate, or motivation, “gets at the subjective factors—the lack of aspirations, for example—that keep countries mired in the inequality trap.”
Heart and Soul
For Global Health, Prescriptions of Medicine and Morality

WHILE THE WORLD FACES daunting challenges in reining in such diseases as malaria, river blindness, guinea worm, HIV/AIDS, and tuberculosis, often overlooked is the fact that progress is being made on multiple fronts. This progress also holds clues to making further gains.

That was the uplifting message delivered at RAND by William Foege, a world-renowned epidemiologist who helped devise and implement the successful strategy for eradicating smallpox in the 1970s and who continues to serve in international health policy leadership positions. Foege shared his decades-long perspective on what has been accomplished to improve global health and some personal lessons he has drawn from his work over the years.

Silver Linings
Foege finds hope amid some of the direst of the world’s circumstances. “Today, we celebrate getting down to less than 10 million deaths per year for children under the age of five. That’s almost obscene, but I can remember a time when it was 15 million such deaths a year.”

Another reason for encouragement is what has happened in Botswana in terms of HIV/AIDS, he said. “Ten years ago, 40 percent of all newborns were HIV-positive. But now, with the combined efforts of the Gates Foundation, Merck, Harvard, and the government of Botswana, the rate has dropped to less than 4 percent.” This progress among newborns is a sign of progress among adults as well, of course. “AIDS used to be a ‘radio disease’—something to talk about on the radio but never in person; now, people are talking about AIDS on the street.”

Signs of promise have also emerged in treating tuberculosis. “The current vaccine—known as BCG—has not been that effective over the years,” he said. “But new strategies to improve on or replace BCG have been developed over nearly the past 20 years, and there are now six new vaccines in human trials, which means the treatment of tuberculosis is going to change.”

Collaboration as Cure
One driver of such improvements, according to Foege, is the willingness of key stakeholders to work together. He applauded the efforts of the Global Alliance for Vaccines and Immunizations (GAVI), also known as the GAVI Alliance, which grew out of a 1984 task force sponsored by the World Health Organization, UNICEF, the World Bank, the United Nations Development Programme, and the Rockefeller Foundation.

“In 1984, former Secretary of Defense Robert McNamara said that if you could raise $100 million for immunizations, it would change everything, but people said it couldn’t be done,” Foege recalled. “In 1984, Italy alone put in $100 million for vaccines in Africa. Today, even in the midst of the global economic
recession, GAVI has raised $4.3 billion for new vaccines. If people believe there is a global plan, money becomes available.

Another story of exemplary cooperation is that of Mectizan, a drug developed by Merck to treat dogs for heartworm. As it turned out, Mectizan could also be used to treat humans for river blindness—a debilitating disease that infects 37 million people, threatens to infect 100 million, and renders people blind by the age of 50 or 60. “The drug has to be used only once a year.”

Merck approached the Atlanta-based Task Force for Child Survival and Development, “offered to give the drug away forever for this use, and asked if the task force would help distribute it,” Foege recounted. “Since 1987, over 530 million treatments have been approved, and the drug is now being given to more than 60 million people a year in Africa, Latin America, and Yemen.”

Science with a Moral Compass
Ironically for someone who has marshaled the global forces of modern medicine, Foege said that one of the most important lessons he has learned in his career has to do with the limits of science. “Even in physics, where we think we have facts, those facts are within a margin of error. I was shocked to see that the Periodic Table now has atomic weights plus or minus some number.”

He reflected on the role of science in the context of improving global health: “We should love science but not worship it. Science lacks a moral compass, which means scientists must cultivate it. Science with a moral compass is science that contributes to social equity, science in the service of humanity, science aimed at health for all, science that says you can’t take shortcuts.”

Foege has come to interpret the Hippocratic oath, “do no harm,” differently than it is typically meant. “We hear this often in almost every profession, but when we hear about it we are usually talking about errors of commission,” he said. “We can also do harm by committing errors of omission—by not using science, by not sharing science, by not using vaccines when we have them. Science needs to be applied to be useful.”

Two final lessons he has learned are the needs for tenacity and optimism. As for tenacity, he offered the example of Colonel Thomas Allen, who led the 5th Wisconsin Infantry in the battle of Chancellorsville in the Civil War. In rallying his troops, Allen said: “When the signal ‘forward’ is given, you will advance at double-quick . . . and you will not stop until you get the order to halt. You will never get that order.” After a pause, Foege observed: “That’s the situation we’re in now in trying to improve global health. We will never get the order to halt.”

As for optimism, he stressed the importance of not hiring pessimists: “It will ruin your day and ruin the office. When you need pessimism, contract out for it.”

“We should love science but not worship it. Science lacks a moral compass, which means scientists must cultivate it. Science with a moral compass is science that contributes to social equity, science in the service of humanity, science aimed at health for all, science that says you can’t take shortcuts.”

—William Foege, senior fellow, Global Health Program, Bill & Melinda Gates Foundation
Three Pots of Tea
Peace in Afghanistan Depends on Its Leaders, Neighbors, and Security Forces

By James Dobbins and Terrence K. Kelly

Ambassador James Dobbins is a RAND senior fellow and the director of the RAND International Security and Defense Policy Center. Terrence Kelly is a RAND senior operations researcher who focuses on counterinsurgency, security force assistance, and nation-building.

Here are three key ingredients for peace in Afghanistan. Afghan leaders must negotiate a peace. Afghan neighbors must respect the peace. And Afghan soldiers and police must keep the peace.

Only the Afghan parties should take part in the formal negotiations over their country’s future. But all of the major external stakeholders, including India, Iran, Pakistan, Russia, and the United States, should conduct parallel, less-formal discussions, with a view to exercising convergent influence on the Afghan parties. All potential parties to a peace treaty accept that the Taliban must be involved in negotiations and granted some role in the resulting government.

As for keeping the peace, there is likely no organization in the world other than the U.S. Army that can train security forces on the scale needed in places like Afghanistan. But current U.S. Army doctrine is insufficient for this task, and Western models for security forces may not work in Afghanistan. Developing and fielding host-nation forces that take the unique context of the country into account will be critical. So will be the army’s selection of advisers and preparation of leaders.

Pacifying Afghans and Their Neighbors

Agreement among the main Afghan parties is a necessary but not sufficient condition for peace. Unlike Iraq and Yugoslavia, which are strong states riven by even stronger ethnic antipathies, Afghanistan is a weak polity that has been torn apart by its near and more-distant neighbors, not unlike the hapless sheep that is pulled apart by mounted riders in buzkashi, the Central Asian version of polo. Until these neighboring countries sense that there is a credible endgame for an Afghan peace accord that protects their interests, they have every incentive to continue meddling destructively and to promote divisions among Afghans. To succeed, any peace process must include Afghanistan’s neighbors.

In the event of a pell-mell American and European retreat, the neighboring states would likely revert to their historical patterns, arming and financing their proxies and pulling Afghanistan asunder. The result would be a return to the earlier constellation of civil wars, with India, Iran, and Russia supporting northern, non-Pashtun resistance to a Pakistan-backed Pashtun hegemony. If Afghan history is any guide, this conflict would be much more violent than the one currently under way, producing many more casualties, larger refugee flows, and expanded opportunities for extremist groups to use Afghan territory, as they already use Pakistan, as a hub for more-distant attacks.
Fortunately, the priorities of all potential parties to an Afghan peace process overlap to a considerable degree. Each desires a withdrawal of Western armed forces. All Afghans want foreigners to stop interfering in their affairs. All foreign governments want assurances that Afghan territory will not be used to their disadvantage and thus want to ensure that terrorists hostile to their countries cannot use Afghanistan as a sanctuary.

Interests diverge less in the area of outcomes than in that of timing. Western governments want to withdraw NATO forces from Afghanistan sooner rather than later, a preference shared by the Taliban. Most other potential participants, including the Kabul government, are not in such a rush. Indeed, continuation of the current conflict, with the United States tied down and neither side able to prevail, is acceptable to most regional governments and, for Iran, probably optimal.

The United States should seek the appointment of a United Nations–endorsed facilitator to promote agreement among all the necessary parties regarding a venue, participation, and agenda to initiate a peace process. The U.S. objective in these negotiations should be a stable and peaceful Afghanistan that neither hosts nor collaborates with international terrorists. Only to the extent that other issues impinge on this objective should American negotiators be drawn into a discussion of Afghanistan’s social or constitutional issues, such as the role of women.

Negotiation among the Afghans will focus on the nature of any power-sharing arrangement, on possible modifications to the existing constitution, on social norms, and on the role of sharia, or Islamic law. Several broader issues include the withdrawal of NATO-led forces, the residual commitments and arrangements to combat terrorism, a commitment by the Afghan parties not to allow their territory to be used against any third party, a reciprocal commitment by Afghanistan’s neighbors not to allow their territories to be used to destabilize Afghanistan, a promise of continuing American security assistance, a United Nations peacekeeping operation, a commitment by Afghanistan and its neighbors to cooperate against drug trafficking, and commitments by the international community to continue economic assistance to Afghanistan.

The process will probably require years of talking. During this time, fighting will likely continue and may even intensify. Negotiation does not represent an easy or early path out of Afghanistan for the West, but it is the only way in which this war is likely to end in a long-term peace.

The most difficult challenge will be establishing and sustaining a minimum of law and order going into and lasting through the political transition. It will be important both for the parties to an accord and for international peacekeepers to identify deliberate violations of ceasefires. The terms to hammer out include the timing of the withdrawal, the conditions that will have to be met beforehand, and what, if any, security forces will remain to help train Afghan national forces. The most likely outcome is a United Nations–led peacekeeping force made up largely of non-Western troop contingents from Islamic countries that do not border Afghanistan, such as Indonesia, Jordan, and Malaysia. Turkey might also be an acceptable participant.

A basic precept of competent negotiation is to keep the best alternative to no agreement clearly in mind and to reject any accord that does not improve on it. In Afghanistan, the best alternative to no peace agreement would be a regime in Kabul that can sustain itself indefinitely against the Taliban with much lower levels of U.S. support. To the extent that the United States and its allies succeed in improving the capacity of the Afghan army, police, and government, they create an acceptable alternative to a negotiated agreement and thereby enhance their negotiating position.

U.S. policymakers should, therefore, prepare for two futures: one negotiated, one not. Both must meet the bottom-line need to prevent Afghanistan from falling into the hands of an Al Qaeda–linked regime. This means preparing both to leave definitively and to stay indefinitely. If negotiations fail, some level of U.S.
military engagement will probably be necessary well beyond the 2014 date by which President Obama has promised to remove all American combat forces.

Assisting Afghan Security Forces
The outcome of the Afghan campaign rests, in large part, on the effectiveness of security force assistance (SFA). In Afghanistan, SFA is the support provided by NATO forces to the Afghan National Army, Afghan National Police, and other indigenous security forces to help them bring their country under government control. To date, the U.S. military has struggled in its leadership of the SFA component of this mission.

Moving forward, the U.S. Army will likely play a central role in building Afghan security forces, but current army doctrine (as well as policy guidance) is insufficient for this mission. Today’s doctrine focuses heavily on the actions of army brigade combat teams, but those teams represent just one piece of SFA in Afghanistan, where all of the security institutions are in development. SFA cannot be done by some forces in isolation or assigned to one organization; it requires horizontal and vertical coordination among all coalition forces. And because the security forces must act jointly and with other government institutions, SFA must encompass not just the military but also the entire security enterprise.

Effective SFA requires more than effective forces; it also requires assisting the agencies and commands responsible for designing, fielding, and maintaining those forces. A complete doctrine would stipulate that U.S. forces should give feedback to national-level institutions, such as the security ministries, general staff, logistics command, and training and doctrine command, because these are the institutions that must design, field, and maintain the indigenous forces.

Afghan security institutions were built on Western models, in which civilian control of the military is a bedrock concept. But civilian control of the military does not have the same meaning in Afghanistan as it has in the West. In tribal and authoritarian political systems, civilian control of the military may result in one political party placing its adherents in a majority of military leadership posts to ensure it stays in power. The concept may also often result in something other than a merit-based system. Rather, personal, ethnic, or party loyalties are likely to be the conditions for important assignments and promotions. In Afghanistan, we see positions being sold if they offer the promise of illicit profits from corruption. We also see that some soldiers and police charged with protecting the population give their primary loyalties to individuals or social structures other than the nation.

The Afghan Ministry of Defense is not in fact a civilian institution. Of its 780 civilian slots, only 16 were filled with civilians as of January 2010. As a result, the Afghan defense establishment has what
amounts to two competing general staffs, a situation exacerbated by the fact that each is led by officials from different ethnic backgrounds who do not work well together.

These factors imply the need for training U.S. commanders and units to help professionalize indigenous forces and to design and develop those forces in ways that recognize the local constraints without compromising U.S. goals. Thus, these factors have implications for U.S. leader development and education programs. Case study readings and seminar discussions in the U.S. Army War College might focus on such situations and trade-offs.

The idea that leaders should place the welfare of their soldiers above their own is also a foreign concept in Afghanistan. This means that the entire ethos of leadership that is taught in the U.S. military will be difficult to instill in Afghanistan’s security forces in the short term. It also means that SFA providers must work with forces whose leaders may be corrupt and must be prepared to curb that corruption (such as the theft of soldiers’ pay and food rations by self-serving leaders) and to temper the expectations of leaders about what outcomes can be expected from SFA efforts with such forces.

There is also concern that Afghan basic training does not produce soldiers and police with sufficient skills. But there is a mismatch between Western-designed security systems and the capabilities of Afghan security personnel to run them. Large parts of the training model installed by U.S. forces reflect a Western approach, which relies on having *literate* indigenous partners to train. Instead, U.S. advisers should be trained on how to instill, develop, and reinforce skills in Afghan personnel who may be *illiterate.* Efforts to train U.S. advisers must be designed from the beginning to account for such factors as illiteracy.

The selection of U.S. advisers is also critical. Not all soldiers are equally able to work with indigenous forces. Moreover, the army’s personnel system does not adequately capture such critical factors as personality, and the army’s selection process for trainers does not consider experience with advising. Such experiences should be career-enhancing if the army wants its best people to sign up for them. Lessons in these areas may be available from the U.S. Army Special Forces, because this type of work is what they have traditionally been selected, structured, and trained to do.

The skills needed by SFA leaders and staffs are very different from those needed by commanders in other aspects of war. SFA leaders must be able to work with other U.S. government agencies, international organizations, nongovernmental organizations, and host-nation government and political leaders. SFA leaders must understand how to develop host-nation forces and employ them with coalition forces in such a way that both host-nation and U.S. interests are met. They must also plan to develop these forces on a time line that meets U.S. requirements to end the conflict in accordance with political direction. This is a tremendously difficult challenge under the best of circumstances. It is made even more difficult because the necessary skills have not traditionally been part of the army’s leadership development. But they should be if the army wants to perform this mission well.

**Related Reading**


An Afghan police officer searches community leaders attending a shura, or council meeting. U.S. troops are pushing local security forces to the forefront, trying to get the country to stand on its own.
Between 1999 and 2009, U.S. health care spending nearly doubled, climbing from $1.3 trillion to $2.5 trillion. The figures are striking, but what have they meant for individual Americans? RAND research published in the journal Health Affairs depicts how rising health care spending affects an average American family—in this case, a median-income married couple with two children, all covered by employer-sponsored health insurance.

Total annual income, including employer-paid contributions to family health insurance premiums, grew from $76,200 in 1999 to $99,120 in 2009—an increase of nearly $23,000. However, price and tax increases, together with the jump in health care spending, left families with just $1,140 in additional available income.

What Families Got for Spending Nearly Twice as Much

- A SMALLER INCREASE IN LIFE EXPECTANCY compared with other developed countries
- MORE-FREQUENT USE OF COSTLY HEALTH CARE TECHNOLOGY including imaging tests of questionable medical value
- LESS-EFFECTIVE TREATMENT OF CURABLE AILMENTS with the U.S. dropping from 14th to last among 16 developed countries in preventing death from treatable conditions

What Families Were Left with

- $2,880 more
- $5,400 more additional available income in 2009, given the 1999–2009 health care spending growth rate

If spending had grown at the rate of GDP + 1%:
- $2,880 more
- Paid for four-and-a-half months of child care for a 4-year-old
- Enrolled for a year of full-time community college classes
- Paid down 18% of credit card debt

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Soaring Health Care Spending and the American Family

This infographic is based on RAND research published as D. I. Auerbach and A. L. Kellermann, “A Decade of Health Care Cost Growth Has Wiped Out Real Income Gains for an Average US Family,” Health Affairs, Vol. 30, No. 9, September 2011. The RAND research brief is available at www.rand.org/RB9605. Other data are from The Baltimore Sun, the College Board, the National Association of Child Care Resource & Referral Agencies, and CreditCards.com.
In Just Ten Years, Families Nearly Doubled Their Spending on Health Care

However, the complex ways in which Americans paid for health care obscured how this happened.

Families can easily perceive increases in employee health insurance premiums and out-of-pocket health spending (e.g., copays, deductibles).

But other increases are largely hidden from view, such as what employers pay toward insurance coverage (which would otherwise be paid out as wages) and the share of income and payroll taxes that pays for Medicare, Medicaid, and other government health programs.

What Families Could Have Done with the Extra Money

During the 1990s, U.S. health care spending grew at the rate of GDP + 1%. If spending had continued growing at that rate instead of accelerating, families would have had an extra $2,880 in 2009. They could have:

- Made two extra mortgage payments
- Enrolled for a year of full-time community college classes
- Paid for four-and-a-half months of child care for a 4-year-old
- Paid down 18% of credit card debt

What Families Could Have Been Left with

Additional available income in 2009, given the 1999–2009 health care spending growth rate

- $1,140
- $2,880 more
- $5,400 more
Prisoner Reentry

As California Releases Prisoners, It Must Confront the Public Health Consequences

By Lois M. Davis

Lois Davis is a RAND senior policy researcher who focuses on the intersection of public safety and public health.

The confluence of three events has dramatically broadened the public health implications of prisoner reentry into California communities. First, the state is in the midst of a deep and persistent recession, which has severely strained the resources available for the health care safety net upon which ex-prisoners rely. Second, the state is implementing its 2011 public safety realignment plan, which shifts responsibility for low-level offenders from the state to counties; this will aid the state’s efforts to abide by a U.S. Supreme Court order to reduce the prison population. Third, federal health care reform will expand Medicaid eligibility and coverage for some important services, removing a key access-to-care barrier for the prisoner reentry population.

These events argue for assessing the health needs of California’s reentry population, the related public health challenges, and the policy options for improving access to safety net services. In a study sponsored by The California Endowment, a research team at RAND conducted such an assessment and concluded the following:

• The health care needs of California prisoners are high, but their mental health and drug treatment needs are even higher.
• Certain California counties and communities are particularly affected by reentry.
• Ex-prisoners’ access to California’s health care safety net varies across counties, within counties, and by race and ethnicity.
• Public safety realignment and federal health care reform present challenges and opportunities for improving access to services for this population, all requiring the state and counties to coordinate their efforts.

Numerous Unmet Needs Reported

With respect to physical health conditions, California state prisoners reported a high burden of chronic diseases, such as asthma and hypertension, and infectious diseases, such as hepatitis and tuberculosis. Ex-prisoners face a number of barriers to accessing health care, including lack of health insurance. As a result, ex-prisoners returning to communities will largely have to rely on counties’ health care safety nets for the uninsured to meet their health needs.

Self-reported mental health and drug treatment needs are especially high. More than half of California inmates reported a recent mental health problem, but only about half of those reported having received treatment in prison. Nearly 60 percent of California inmates reported having a drug abuse or dependence problem. Given the high prevalence of these reported conditions, the need for county mental health services may be particularly high.

When we interviewed health care providers who deal with the reentry population, their observations confirmed that this population has substantial mental health and drug treatment needs and other health problems—needs exacerbated by neglect or reduced access to care. Providers also noted a range of social services needs—such as transportation, employment, housing, and family reunification—that make treating ex-prisoners for such health conditions even more resource-intensive. For example, if an individual has a
wound that requires periodic cleaning and dressing, would there be a hygienic place to do it?

Inadequate discharge planning for prisoners can be another major barrier to continuity of care. Upon release, many ex-prisoners lack medical records to give health care providers; thus, providers have little information about their medical history. For individuals with infectious diseases, such as HIV/AIDS or hepatitis, providers felt it was critical to know what kind of care and education a patient had received while incarcerated. Ex-prisoners without health insurance have limited treatment options. Difficulties navigating the health care and social services systems complicate referrals. Discharge planning needs to take such factors into account.

Budget cuts present further barriers to care. Providers report that they have had to eliminate or curtail HIV, dental, mental health, or alcohol and drug treatment programs. Because of state-level cuts in funding for community-based treatment programs, one provider we interviewed had to close a sober living facility.

**Ex-Prisoners Concentrated Primarily in 11 Counties**

To understand where ex-prisoners go upon release and which counties and communities are especially affected by reentry, we used parolee data to examine their geographic distribution following release, illustrated here in the map of California. The map shows that certain counties are particularly affected by reentry. Tiny dots represent each of the nearly 140,000 parolees released in 2005 and 2006, with major clusters shown as yellow ellipses. Darker shades of blue indicate counties with higher numbers of returnees per 1,000 residents; lighter shades indicate lower numbers of returnees. As shown, parolees tend to cluster in certain communities and neighborhoods, with implications for targeting resources.

Eleven counties, concentrated around the Bay Area and in the southern part of the state, had the highest rates of return. By far the highest rates were in Southern California, especially Los Angeles, Orange, Riverside, San Bernardino, and San Diego counties. Also, African-American and Latino parolees tended to return to disadvantaged neighborhoods and communities, defined by high poverty rates, high unemployment rates, and low educational attainment.

We focused on four counties—Alameda, Kern, Los Angeles, and San Diego—that received a third of the state’s total parolees. In Alameda County, almost 45 percent of the returning population was concentrated in five clusters, primarily around Oakland and the northern section of the county. Four clusters within Kern County accounted for almost 58 percent of its parolees, while in San Diego County there were eight clusters accounting for nearly half the parolee population, with the largest in downtown and Southeast San Diego. Unlike the other counties, Los Angeles County had 23 clusters covering a large geographic area but accounting for only 35 percent of the total number of returnees.

**Unequal Access to Care**

We also wanted to know where ex-prisoners were located relative to communities’ health care safety nets: the hospitals, clinics, and mental health and substance abuse treatment providers that would serve the reentry population. So we overlaid such facilities on our county-level maps and found that the capacity of the health care safety net varies within counties. Many ex-prisoners in the three large urban counties—Alameda, Los Angeles, and San Diego—returned to areas with lower levels of accessibility to safety net facilities than found elsewhere in those counties.
In Los Angeles County, for example, some county supervisorial districts with high concentrations of ex-prisoners tended to have fewer hospital and primary care clinics than did other districts. In District 2, which covers South Los Angeles and has a relatively high concentration of ex-prisoners, there are relatively few clinics. And there is only one hospital affiliated with the Medically Indigent Services Program, which is the county-provided program of last resort for those who are not eligible for Medicare, Medicaid (Medi-Cal in California), or private health insurance and who meet socioeconomic eligibility standards.

To understand how much access ex-prisoners had to these facilities, we created accessibility measures for each facility based on its capacity, demand, and travel distance. In Los Angeles County, more than half of parolees (53 percent) returned to areas with lower levels of accessibility to hospitals. More African-American parolees (60 percent) lived in areas with lower accessibility than did Latino or white parolees (51 percent and 47 percent, respectively). Alameda County had a similar pattern, but in Kern and San Diego counties, more Latino parolees lived in areas with lower accessibility to hospitals than did white and African-American parolees.

**Realignment and Reform**

California’s public safety realignment plan and the U.S. federal health care reform represent important opportunities to improve services to the reentry population, and the stakeholders involved in preparing for both policy measures overlap. For realignment, the California Department of Corrections and Rehabilitation must coordinate with counties to shift responsibility for low-level offenders; for health care reform, California’s Department of Health Care Services must coordinate with counties to prepare for full implementation and for expanding Medicaid.

Both policy measures present opportunities and challenges for addressing ex-prisoners’ health care and reentry needs. As an opportunity, realignment focuses attention on the need to improve prerelease planning for the transition of care from correctional health to safety net providers. As a challenge, realignment dramatically changes how low-level offenders will obtain health care and social services, shifting attention from state parole to county-level supervision.

As an opportunity, health care reform opens up the possibility for many ex-prisoners and others in the criminal justice system to become eligible for Medicaid and to have drug treatment services, prevention services, and wellness programs covered more fully. As a challenge, expanding Medicaid eligibility could lead to increased demand for health care safety net services that are already stretched thin.

There are many steps the state and counties can take. They can develop better estimates of the percentage of the Medicaid expansion population that the reentry population represents. Because the Medicaid expansion population is expected to include individuals with multiple comorbidities and a high demand for mental health care and alcohol and drug treatment, investing in “health homes” (teams of providers) and other integrated case management systems for this population will be an important way to manage their complex care needs.

Expanding prerelease planning to more fully include those with chronic medical, mental health, and substance abuse problems makes sense, as does having the state assess options, such as electronic medical records, for easing the transition of care to community health care systems. Also important will be developing strategies to enroll the reentry population in Medicaid or reinstate their Medicaid benefits and to improve the needed expertise and capacity of treatment providers, especially in localities with higher numbers of ex-prisoners, so providers can better meet the expected increase in demand for services.

Both public safety realignment and federal health reform come with funding streams. Some of this money could leverage existing investments in planning for health care reform for the reentry population. For example, some funds could be used to develop “health homes” or other case management systems. Investing in treatment for this population now may help offset criminal justice costs later on, and expanding access to primary care and integrated care may help avoid more expensive and intensive care down the road.

**Related Reading**


Much has been written since October about the world’s population having passed 7 billion, but little attention has been paid to the implications of recent demographic changes for the world’s nations and regions relative to one another. In this article, we turn our focus to the demographic futures and related economic prospects facing China, India, and the United States over the next several decades. The trends in these countries reflect just some of the shifts in power to which the world has already, literally, given birth. How the countries respond will determine their ultimate fates. . . .
China's population is expected to peak at 1.4 billion in 2026 and to decline thereafter, whereas India's population will likely keep growing through mid-century, surpassing China's no later than 2025 and topping 1.65 billion in 2050, according to the U.S. Census Bureau's International Data Base (see Figure 1). More importantly, by 2035, China's population will skew heavily toward older age groups, while India's largest cohorts will still be in the age groups below 50.

Right now, as of 2012, China is entering an era in which its rapidly aging population could constrain its economic growth. India, in contrast, will enjoy a substantial demographic advantage until around 2030, when the ratio of working-age Indians to dependents will likely be at its highest.

Alone among the world’s large affluent nations, the United States will see modest increases in its working-age population through 2050; meanwhile, the working-age populations of Europe and Japan are projected to fall steeply through 2050. These demographic and economic trends alone may mean the United States will be the predominant global power for at least the next half-century. If anything, the United States could become even more dominant in the alliances it leads.

A World Reborn
Forty years ago, one could confidently assert that the rich got richer and the poor had babies. Forty years ago, one could confidently assert that the rich got richer and the poor had babies—and lots of them. Women in almost all developing countries averaged four to seven surviving children over their lifetimes. Women in developed countries averaged two to three.

Since then, fertility rates in the richer lands have continued to fall and now range from just over one child per woman (in Hong Kong, South Korea, and Taiwan) to just over two children per woman (in the United States). In Communist and former Communist countries, the rates have fallen even farther than in many richer countries, either from fiat (such as China’s one-child policy) or from the aftereffects of the collapse of Communist rule. Births in the middle-income lands—Latin America, northern Africa, Turkey, Lebanon, Iran, formerly Soviet Central Asia, southwestern India, and Southeast Asia—have also fallen sharply to somewhat above two per woman or lower.

The swath between Afghanistan, Pakistan, and the Ganges Valley is still adding population. Fertility rates there average above three and a half children per woman. Sub-Saharan Africa, between the tropics of Cancer and Capricorn, is adding population even faster. Fertility rates in most of those countries have been generally falling for 30 years, but the declines have stalled in some during the past decade.

The consequence of what has already taken place in the world’s maternity wards (and home nurseries) will unfold over the next 20 to 40 years, as follows.

First, the working-age population of India (defined as people between the ages of 20 and 59) will likely overtake that of China by 2030, with a projected 841 million working-age Indians outnumbering an estimated 783 million working-age Chinese in that year. More importantly, by 2035, China's population will skew heavily toward older age groups, while India's largest cohorts will still be in the age groups below 50.

Second, the United States will continue to see modest increases in its working-age population, thanks to replacement-level fertility rates and a likely return to vigorous levels of (mostly legal) immigration. At the same time, the working-age populations of Europe, Japan, and the Asian Tigers (South Korea, Taiwan, Singapore, and Hong Kong) are projected to fall by as much as 10 to 15 percent by 2030, and by as much as 30 to 40 percent by 2050. The United States will account for a larger percentage of the population of its Atlantic and Pacific alliances. To put it another
way, the capacity of traditional alliances to multiply U.S. demographic power is likely to decline, perhaps sharply, through 2050.

Third, the working-age populations of most middle-income developing countries (such as Chile and Thailand) are likely to level off, or even decline, by or just before 2030. And fourth, barring catastrophe, many of the world’s most populous countries will be in Africa: Nigeria, Ethiopia, Congo, Sudan, and Tanzania. It is also possible that Pakistan could supplant the United States as having the world’s third-largest working-age population by 2050, behind India and China.

China is likely to become the most important economic contender over the next 40 years in terms of its national resource base. If it achieves Japan-like levels of productivity by 2050, its gross domestic product (GDP) will be double America’s. If China’s economy begins to level off as it approaches the productivity levels characteristic of South Korea today, then China’s economy will be somewhat larger than the American economy. If, however, the many challenges China faces—pollution, corruption, and financing the elderly—are not met, China may reach an economic inflection point earlier rather than later and fail to surpass U.S. GDP levels. Demographic trends suggest that if China’s economy cannot surpass that of the United States by 2050, it might never do so.

**Dividends and Drags**

China and India will remain the world’s two most populous countries through 2050. But India’s current rate of population growth is more than twice that of China (1.34 percent annually versus 0.49 percent for China, according to the latest U.S. Census Bureau estimates). As suggested above, India’s total population is projected to equal China’s by 2025 (about 1.4 billion in each country), thereafter exceeding China’s.

From the standpoint of economic competition between the two countries, though, the age composition of their populations is more significant than their aggregate size. If the working-age population is slightly redefined as those between 15 and 64, then India’s working-age population will overtake China’s in 2028. Moreover, the percentage of the population that is of working age in India will surpass that of China in 2030 (see Figure 2).

Indeed, the two countries will experience very different patterns in their overall dependency ratios—that is, the ratio of the young and the elderly to those of prime working age. The dependency ratio implies that, on average, people aged 15–64 produce more than they consume, while the opposite is true for those younger and older. Rising dependency ratios are generally viewed as an impediment to economic performance, while falling ratios are generally considered an advantage. Although India’s overall dependency ratio is currently higher than China’s, the ratio will be rising rapidly in China in the next two decades, while it will be declining in India.

An increasing proportion of the population that is of working age provides an opportunity to reap a “demographic dividend,” through both a brute force increase in the numbers of potential workers and an accelerated accumulation of capital due to reduced spending on dependents. Demographic dividends are estimated to have accounted for 25–40 percent of East Asian per capita GDP growth in the late 20th century. China’s demographic window of opportunity is rapidly closing; India’s will remain open until at least 2030.

Though growth in the working-age population provides an opportunity for a country to reap a demographic dividend, the extent to which this occurs

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**Figure 2**—The Percentage of the Population That Is of Working Age in India Will Surpass That of China in 2030

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<th>Year</th>
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**SOURCE:** China and India, 2025, 2011.
RECENT SNAPSHOTS of fertility indicators across Europe look less depressing than they did a decade ago: The fertility rate for the European Union (EU) as a whole has stabilized, and it has increased in a number of member states. Still, the rate remains below the replacement rate of 2.1 children per woman in all 27 EU countries, with 12 having a rate below 1.5 (see the figure). A rate of 1.5 or lower means, all else equal, that a country’s population will be reduced by half in fewer than seven decades.

Eastern, Southern, and German-speaking European countries tend to have the lowest fertility rates. In Germany, the rate has been below 1.4 children per woman since 1990 and is still one of the lowest rates in Europe. Higher rates are found in Western and Northern European countries.

The alarmingly low fertility rates in several EU countries will lead to significantly fewer young people in the labor force a generation from now and will reduce the future population of potential mothers. Over the next four decades, the ratio of the population over age 65 to that of working age is expected to double across the EU. This has serious consequences not only because of the increased pressure on pension and health provisions, with more older people and fewer taxpayers, but also because the larger group of older people will wield greater political power.

The main driver behind the looming increase in dependency ratios is not fertility but the pending retirement of the baby boom generation. Even if fertility rates continue to rebound, it would take decades of levels that are substantially above replacement rate (which is very unlikely) to reverse the aging of Europe’s population.

As the current financial crisis across the Eurozone suggests, European governments will have to introduce pension, health, and labor market reforms to reduce public debt and to ensure the future affordability of their welfare states. To do this, the governments will have to take all three components of population change into account: fertility, mortality, and migration.

Related Reading

depends on the socioeconomic and policy environment. Currently, the population of China is better educated than that of India. In 2002–2003, the most recent year for which data are available, China had higher rates of school enrollment at all levels and a considerably higher adult literacy rate than did India (91 percent versus 61 percent). Furthermore, the data suggest that the quality of schooling is better in China: In 2002–2003, China had a far lower average pupil-per-teacher ratio in primary schools than did India (17.6 versus 40.2) and spent more money per student, especially on secondary education.

Another significant determinant of future economic growth in both countries will be the degree to which women participate in the formal economy. In 2006, 69 percent of women in China participated, while in India the rate was only 34 percent. Females lag behind males in literacy and educational attainment in both countries, but this is particularly so in India.

The contrasting composition of each nation’s population indicates that issues related to youth, such as education, will be more prominent in India, while issues regarding the elderly, such as pensions and geriatric health care, will be more prominent in China. It is not clear whether China has dedicated the resources necessary to support larger numbers of the elderly with fewer workers. The state-owned enterprises that traditionally funded social programs for workers and their families have largely collapsed, and no national social welfare system has yet replaced them.

Whether India’s demographic advantages—increasing numbers, younger age cohorts, declining dependency ratios—will be a dividend or drag on its economic growth will depend on the extent to which productive employment opportunities emerge from an open, competitive, innovative, and entrepreneurial Indian economy. Conversely, whether China’s demographic disadvantages—fewer workers, a rapidly aging population, rising dependency ratios—will be a drag or a dividend will depend on the extent to which these circumstances provide a stimulus to improving technology and to raising the skill and productivity of a shrinking labor force.

In the short term, when compared with India, China seems to have more of the preconditions to take advantage of its demographic window of opportunity and to deal with demographics when they become a potential drag: more-flexible labor markets; higher rates of female labor force participation, more highly educated women, and more-open attitudes about women working; less illiteracy in general (especially for women); better infrastructure; more internal migration (though much of it “illegal”); a higher degree of urbanization; more openness to foreign trade; and slightly higher rates of coverage by public pensions. It is for these reasons that, on balance, China is likely to remain “ahead” of India at least until 2025.

In the long term, however, China’s prospects may be hindered by its demographics. An aging population without an established safety net will create demands for new types of services (particularly health care), reducing the disposable income of the working population through wealth transfers to the elderly and laying claim to the large national savings pool that China has built up during the boom years.

Whether India is able to reap a demographic dividend will depend on successful government implementation of an ambitious economic development agenda. Improving infrastructure, health, education, and the role of women while maintaining social peace in a society that is increasingly stratified by income requires national consensus with a long-term outlook. Whether such a course is possible in a large, diverse, parliamentary democracy such as India’s is hard to predict.

In general, however, demographic changes are likely to be relatively more favorable to India than to China. From a developmental standpoint, demographic changes promise a dividend for India and portend a drag on the progress of China.

### Still Alone at the Top

Worldwide, the most prominent feature of demographics over the past few decades has been the sharp fall in the fertility rate in almost every country on earth. In rich countries, the break-even fertility rate is an average of 2.1 births for each woman over her lifetime—the rate needed for the population size to stabilize over time. In poor countries, because mortality—notably infant mortality—rates are higher, the fertility rates must be correspondingly higher to produce enough women of childbearing age to maintain overall population levels.
Fertility rates of many countries have fallen below the break-even, or replacement, rate. The U.S. fertility rate is just at the level that presages natural replacement in the long run, before immigration is factored in (see Figure 3). Israel is the only country among the world’s affluent nations whose fertility rate is more than high enough to reproduce its population. All other rich countries will experience inevitable declines in their native cohorts if current fertility rates continue. Moreover, because these rich states have had below-replacement fertility rates for well over a generation, the size of their child-bearing cohort has been correspondingly reduced, which means that even a return to relatively high fertility rates is unlikely to restore native population levels anytime soon.

China’s total fertility rate has fallen to below 1.5 children per woman, according to the Population Reference Bureau. This rate, which is quite low for a country in which most people are still poor, is widely considered to be a consequence of China’s one-child policy, as if to indicate that the lifting of such a policy would result in an immediate rebound in births. Yet other factors cannot be ruled out. Taiwan and Hong Kong, which, admittedly, are affluent places but do not have a one-child policy, nevertheless have the world’s lowest fertility rates: 1.1 and 1.0, respectively. Neighboring countries in Southeast Asia, such as Vietnam and Thailand, also lack China’s one-child policy but have fertility rates at or below replacement level: 2.1 and 1.8, respectively. Current data suggest that urban Chinese simply do not want to have many children.

When global immigration is factored in, there are net “winners” and “losers.” The United States is the largest winner, adding roughly 1.6 million people on net through immigration (minus emigration) per year. Indeed, the United States accounts for 40 percent of all net immigration worldwide. The other countries with annual net-immigration levels exceeding 100,000 are Canada, Australia, Britain, Germany, and Italy. The largest country of net emigration is Mexico, whose 400,000 emigrants correspond to only a quarter of all U.S. gains. Other countries with high levels of net emigration include China, India, Indonesia, the Philippines, Pakistan, Bangladesh, Peru, Iraq, Kazakhstan, and Morocco.

The U.S. working-age population is projected to keep growing, but at a relatively modest rate of just under 0.5 percent a year (less if the recession that began in 2008 continues to persist and if immigration falls off or reverses itself). Most likely, the size of the U.S. working-age population will keep increasing by roughly 6 percent every ten years. Nearly all of this increase will come from immigration.

In 2005, Germany had the world’s 12th largest working-age population; in 2030, it is projected to have the 20th largest, even though it receives net immigration. By 2050, Germany’s working-age population will be down by a third. The story in other large European countries is similar, whether one is talking about Italy (dropping 6 percent every ten years), Poland (a 14-percent drop by 2030 and a 40-percent drop by 2050), or France (a 5-percent drop by 2030 followed by a leveling off). Spain manages to retain the size of its working-age population through 2020, only because of expected high immigration levels, but it then falls nearly 20 percent by 2050. The United

When global immigration is factored in, there are net “winners” and “losers.” The United States is the largest winner.
Kingdom, the exception, might even eke out small increases through 2050.

As a consequence, the United States is likely to remain an indispensable nation for the protection of international stability and liberal (Western) norms through at least the middle of the century. Among the world’s rich countries, no country (apart from tiny Israel) has a higher fertility rate. The countries with higher immigration rates, such as Canada and Australia, have far lower fertility rates than does the United States. As shown in the table, the U.S. working-age cohort is likely to constitute a growing percentage of the total manpower of the Atlantic alliance (essentially NATO) and the Pacific alliances (Australia, New Zealand, Japan, South Korea, and Taiwan).

The United States also appears likely to have the demographic and economic resources to retain its global supremacy through at least 2050. Its fertility and immigration rates are high enough to keep its population rising, albeit in the range of 0.5 to 1 percent per year (once the effects of the current recession on immigration rates wear off). The United States, which has 4.7 percent of the world’s working-age population today, will still have 4.3 percent by 2050. (If one assumes that the U.S. fertility rate, which, uniquely, is higher than it was in the last generation, stays constant and that illegal immigration continues at rates characteristic of the last ten years, then the U.S. percentage of total world population might not decline at all.) When the relative flatness of the ratio between U.S. GDP per capita and the GDP per capita of most other nations is factored in, the current share of global GDP accounted for by the U.S. economy is likely to stay quite high.

Demographics are not destiny, but they are the next best thing. The accumulation of slow demographic changes inexorably alters nations, especially vis-à-vis one another—and in ways that are not easy to reverse. In the decades ahead, China and India will have the most to gain or to lose, and the United States will continue to have the most to protect and to defend.

The United States is likely to remain an indispensable nation for the protection of international stability and liberal (Western) norms through at least the middle of the century.

### Related Reading


### U.S. Workers Are Likely to Represent Growing Portions of the Manpower of the Atlantic and Pacific Alliances

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<td>Other NATO</td>
<td></td>
<td>329</td>
<td>312</td>
<td>289</td>
<td>–4%</td>
<td>–12%</td>
</tr>
<tr>
<td>Chinaa and North Korea</td>
<td></td>
<td>814</td>
<td>778</td>
<td>631</td>
<td>–4%</td>
<td>–23%</td>
</tr>
<tr>
<td>Rich Pacific friends of U.S. b</td>
<td></td>
<td>126</td>
<td>112</td>
<td>94</td>
<td>–11%</td>
<td>–26%</td>
</tr>
<tr>
<td>Other Pacific friends of U.S. c</td>
<td></td>
<td>86</td>
<td>106</td>
<td>118</td>
<td>24%</td>
<td>37%</td>
</tr>
<tr>
<td>Pacific swing nationsd</td>
<td></td>
<td>225</td>
<td>269</td>
<td>258</td>
<td>19%</td>
<td>14%</td>
</tr>
</tbody>
</table>

**Sources:** United Nations Population Division, World Population Prospects, 2010 Revision, medium variant; United States Census Bureau, International Database.

*a* Includes Hong Kong and Macao.

*b* Australia, Japan, New Zealand, Singapore, South Korea, and Taiwan.

*c* Philippines and Thailand.

*d* Brunei, Cambodia, Indonesia, Laos, Myanmar, Papua New Guinea, and Vietnam.
Life Spans of Today’s Humans Will Transform the Nations

Because of the inexorable power of demographics to shape the future, much about the story of human life on earth through 2050 has already been determined: births through 2010, working-age populations in 2030, and the elderly in 2050. The three figures that accompany the world map focus on the three most populous nations (China, India, and the United States) and the most populous nations of Africa, Latin America, and Western Europe (Nigeria, Brazil, and Germany).

1950–2010

Fertility falls
From 1950 through 2010, fertility rates fell sharply in most major countries, with the United States as a notable exception since 1980.

2010–2030

Workers of the world shift
The working-age populations of 2030 have already been born. In that year, the populations of people between the ages of 20 and 59 will be larger in many countries than they were in 2010 but smaller in several important others.

Interactive Graphic
Scan the code with your smartphone to view global and national demographic trends through 2050. Also available at www.randreview.org/online/

Sources—For all illustrations on this spread: United Nations Population Division, World Population Prospects, the 2010 Revision, medium variant. For map only: Global Demographic Change and Its Implications for Military Power, Libicki et al., RAND/MG-1091-AF, 2011, www.rand.org/t/MG1091. For only Taiwan on the map: United States Census Bureau, International Data Base.
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Demographic research and analysis by Clifford A. Grammich; design by Eileen La Russo

FEWER WORKERS IN RELATION TO ELDERS

Even in Brazil, India, and the United States, despite their growing working-age populations through 2050, the people of working age will account for declining fractions of the national populations by then because of their longer life spans.

THE RISE OF THE OLDEST OLD

In many countries, the skyrocketing populations of those 85 and older will have far fewer working-age people per capita on whom to depend.
Passionate, Pragmatic, Prudent
A New RAND President and RAND at Its Best

Michael D. Rich, the new president and chief executive officer of the RAND Corporation (and future author of this Publisher’s Page), sat down with RAND Review to share his thoughts about his new role and the future of RAND.

RAND REVIEW: What makes you so passionate about RAND?

MICHAEL RICH: Like everyone else, I want the world that my children and their children will live in to be better than ours—healthier, safer, more prosperous, and more secure. I want the problems we face to be addressed with the best available evidence about what works and what doesn’t work. RAND is a collection of nearly 2,000 individuals who are dedicated to doing exactly that.

RAND REVIEW: Tell us about RAND’s research agenda. How has it changed? And what are the issues RAND is most focused on today?

RICH: Up until the mid-1960s, national defense and international affairs made up close to 100 percent of our research agenda. Now it’s 50 percent. Our work in health, education, energy and the environment, civil justice, and the like has really blossomed. What we focus on starts with the challenges faced by senior policymakers in the public and private sectors. Right now, we are seeing greater demand to help clients meet the challenge of doing more with less. And RAND has a long track record of doing that, helping the military services and other public-sector organizations reduce and avoid costs—and make hard choices.

RAND REVIEW: What are the major challenges facing RAND?

RICH: RAND is strictly nonpartisan. Yet it is more and more challenging to bring unbiased analysis into an increasingly polarized environment. RAND has something distinctive to offer in this regard. Especially in the face of likely public spending cuts, you can make a strong case that government decisionmakers need analytic resources like RAND’s more than ever.

RAND REVIEW: What’s new about today’s RAND?

RICH: We have exciting opportunities both in the United States and overseas to apply our unique brand of rigorous, objective, nonpartisan analysis. We’re helping countries and communities become healthier, safer, more secure, and more prosperous. We are also seeing an increasing number of donors making gifts to RAND because they want problems addressed with facts and careful analysis. Their support helps us innovate and stay ahead of the curve on a wide range of important issues.

RAND REVIEW: What experience has most prepared you for your new role as president and CEO?

RICH: My very first mentor at RAND, Nancy Nimitz, had a favorite saying: “Prepare to be surprised!” She taught me the RAND way: Don’t settle on an answer or a position before analyzing all the evidence with the best methods and techniques, and until then, “prepare to be surprised.” The lesson I learned from Nancy Nimitz in my first month at RAND is still probably the most valuable one.

RAND REVIEW: You have been at RAND since 1976. After 35 years, what don’t people know about you?

RICH: My favorite type of music is reggae.
Our Veterans

Wounds of the Invisible Healing

Your gift to RAND supports effective analysis that improves lives.

The number of veterans in the United States exceeds 20 million, with more than 2 million men and women having served in Iraq and Afghanistan. Today, many veterans struggle with mental health conditions, multiple tours abroad, unemployment at home, poor access to benefits and services, and, tragically, a growing susceptibility to suicide. RAND applies its extensive expertise in health and defense policy research to help improve the lives of veterans and their families—and the care systems upon which they depend.

To learn more about how giving to RAND can make a difference, visit www.rand.org/giving

RAND is a nonprofit institution. Generous philanthropic contributions, combined with earnings from RAND’s endowment and operations, make possible RAND’s Investment in People and Ideas program, our vehicle for funding research inquiries into critical but often underappreciated policy areas and attracting the world’s top talent to focus on these challenges.
“For more than 45 years, we have shared a passion for improving the world. Our commitments have driven us to focus on foreign relations, seeking creative approaches to bringing together people with different worldviews. Our association with RAND has been gratifying. Through RAND, we have had access to many influential figures in the formulation of foreign policy.”

Guilford Glazer is a board member of the RAND Center for Middle East Public Policy. He has had a successful career in the production of fabricated steel and later in real estate, including major malls and office buildings, in the United States and Europe. His wife Diane, an attorney, had a successful career in television. The Glazers have a special interest in China, the Mideast, Eastern Europe, and the worlds of Islam and Israel.

Generous contributions from donors such as GUILFORD AND DIANE GLAZER enable RAND, a nonprofit institution, to fund groundbreaking research in the public interest.