A BETTER DEAL
TWOELVE SUGGESTIONS FOR THE NEW U.S. PRESIDENT
Military Interventions • Counterterrorism • Afghanistan • Pakistan • Iraq • Iran • Turkey • Proliferation • Economy • Energy • Education • Health

Asian Exchange: China and India Trade Lessons in Education and Health
—By Charles A. Goldman, Krishna B. Kumar, Ying Liu, Sai Ma, and Neeraj Sood
Get the Big Picture

RAND Review covers the big issues with an eye for the important details.
A Time to Move Quickly

U.S. Treasury Secretary Henry Paulson voiced the anxiety of the age when he announced a $700-billion U-turn on November 12, abandoning a plan to purchase mortgage-backed securities from troubled banks and committing instead to use the congressionally approved bailout money to inject capital directly into the banks by acquiring equity stakes in them. The stock market fell 411 points, or about 5 percent, that day.

“I will not issue an apology for changing the strategy when the facts change,” Paulson defended his decision. “We had to move quickly.”

His shift in tack raised more questions than answers. But Paulson had concluded that the original bailout plan would not work. Something different had to be done. And fast. He did not have the luxury to conduct a thorough analysis of competing alternatives. He had to choose what he believed, if only in theory, to be a better use of resources.

The RAND experts who, in our cover story, present their suggestions to the new U.S. president find themselves in an analogous position. They would be the first to acknowledge that their recommendations have not been subjected to rigorous cost-benefit analyses. But they see current policies as being far from optimal. In many cases, something new must be attempted without delay to make better use of the vast amounts of money being spent.

The RAND experts call for strategic shifts that they believe, if only in theory, will offer America a better deal. They cannot assert what is the single most cost-effective way forward. But a sense of urgency propels them. If they could speak in one voice, they might echo Secretary Paulson: “We have to move quickly!”

—John Godges
Embassy Row

Jerrold Green’s article in the Summer 2008 issue [“The Future of Diplomacy: Real Time or Real Estate?”] reveals an ignorance of the role of diplomatic missions. U.S. diplomats do not stay confined to their offices all day long. They are out in meetings with the people they need to know in order to analyze trends and influence host country policies.

Shuttling in “laptop” diplomats from home offices accomplishes nothing. In my diplomatic career in Africa, I spent more time than I liked briefing the visiting roving diplomats from Australia, Sweden, and other countries that did not have local embassies. They had absolutely no relationships of any use in their foreign policies. All they could do was summarize what they learned from resident diplomats.

I imagine Mauritania in northwest Africa would be one of the first candidates for “distance diplomacy.” That country has had attacks from Islamic terrorists infiltrating from Algeria. We have had several hundred Special Forces troops in that country training the local military in counterterrorism operations. There has to be an embassy in a country to coordinate that type of activity. If we have nobody on site, we leave the field to others who have embassies in every country, especially China and Russia.

What kind of idea is it to examine visa applicants through SKYPE or similar [video link] devices? The local U.S. diplomat examines in the local language and understands who should be allowed in or not. Most of the work is in determining if an applicant is likely to burrow into the United States and not go back. Will some examiner sitting in Milwaukee at his computer screen be able to make a judgment about that?

Herman J. “Hank” Cohen
Former Assistant Secretary of State for Africa
Washington, DC

Jerrold Green replies:

I nowhere said that we should close or eliminate embassies. What I did say is that we should endeavor to make them smaller, less vulnerable, less expensive, and more efficient.

I doubt that our embassy in Nouakchott, to use Hank Cohen’s example, suffers from bloat, and thus it would not be a good candidate for being downsized. The same cannot be said for other embassies in other parts of the world.

As to processing visas from the United States, I remain skeptical that it is best to send a diplomat, his or her family, and their personal effects halfway around the world for this purpose when the same person could do the job from the United States at a fraction of the cost with little loss in efficiency. And at the end of three years we would not have to rotate this person home or send him or her to some other far-flung locale while bearing the substantial relocation costs yet again.
Relaxing Postal Service’s Mailbox Monopoly Could Reduce Safety

If the current U.S. Postal Service (USPS) monopoly on access to mailboxes is relaxed, it could have a moderate negative effect on public safety and mail security, according to a RAND study.

“Allowing private companies to compete with the postal service could increase the incidence of theft at the mailbox, increase the risks of mail-related financial crimes such as identity theft, and increase the delivery of suspicious items to consumers, including explosives-related items,” said Lois Davis, the study’s lead author and a senior RAND policy researcher.

Key reasons for the increased risks are differences in staff training between the USPS and private couriers and the increased number of personnel who would have access to mailboxes. There are also variations among couriers in their screening procedures and detection techniques.

Although private couriers did not respond to requests for data, publicly available documents and suggestive data from the U.S. Postal Inspection Service’s incident database allow for a comparison between the public and private systems. These data relate to a point at which the USPS and courier systems overlap: the “last mile” of delivery. At that point, couriers may transfer mail to the USPS when the destination is beyond the courier’s own delivery network (see the figure).

The database revealed 267 suspicious last-mile items from 2003 to 2007—items the USPS received from couriers that either had a leaking substance, triggered radiological alerts, or met some other warning criteria.

The couriers screened the items but detected none of them as suspicious. In contrast, the USPS screening and detection system identified 87 percent of the 267 items as suspicious. Most such items turn out not to be serious; still, the large discrepancy in screening and detection rates suggests that the USPS detects suspicious items with greater sensitivity than do couriers.

How much greater the risk might be depends on how much mail would shift to couriers and whether only the major couriers or a selected range of them were allowed to enter the postal market. Fully understanding this matter requires more detailed data on courier screening practices.

“Relaxing the mailbox monopoly could also dilute the U.S. Postal Inspection Service’s ability to track and police mail-related crimes,” Davis noted. A relaxation would limit federal jurisdiction over deliveries by couriers and could raise the cost and complexity of postal-inspection-service investigations.

While there are no specific pending proposals to relax the mailbox monopoly, several measures should be considered as part of any effort to do so. These include establishing national training standards for private couriers, identifying what agency should be responsible for oversight and enforcement of those standards, and creating a national reporting system to allow the U.S. Postal Inspection Service and the U.S. Department of Justice to track mail crimes and crime involving couriers.

Managing Environmental Issues Can Improve Army Mission Success

By better managing environmental issues during deployments, U.S. Army units can gain tactical and strategic advantages that will help in combat and post-conflict operations and can boost overall mission success, according to a RAND study.

Many environmental issues can affect the planning and execution of military operations or can be affected by them. These issues include clean water, sewage-related infrastructure, soldier health, compliance with environmental laws, sustainability, protection of historical and cultural sites, and management of agricultural and natural resources. The trend over the past 15 years toward longer deployments and more emphasis on stability and counterinsurgency operations amplifies the importance of the environment for army operations.

In countries where environmental conditions and infrastructure are severely degraded, the crucial priorities of local inhabitants include clean drinking water, effective sewage and trash systems, and viable farmland. Public opinion surveys indicate, for example, that Iraqis care about these issues a great deal (as shown in the figure).

U.S. experience in Iraq suggests that providing these life-sustaining infrastructures can influence whether the inhabitants support the local government and U.S. goals and objectives. The U.S. Army has also had a positive influence on the environment in operations in Afghanistan, Iraq, and the Balkans, where U.S. soldiers have helped to build wells, sewage treatment plants, and other water infrastructure systems, according to the study.

“Commanders and planners can take steps in the combat phase to preserve existing environmental infrastructure and resources that will be vital once combat has ended,” said lead author and RAND senior policy analyst David Mosher. “Determining what to preserve will demand that leaders and planners take a strategic view of the operation, including what the end result ought to be.”

Environmental issues can also affect soldier health and safety, the costs of an operation, the logistical burden of supporting the forces, and diplomatic relations. The study finds that long deployments and extended post-conflict operations like those in Iraq, Afghanistan, and the Balkans expose U.S. forces to a variety of environmental problems. At one base camp in Afghanistan, long-standing pollution problems caused short-term respiratory illnesses for U.S. soldiers until the problem was identified and addressed.

The study finds that commanders have not usually given environmental concerns high priority during planning, despite the effect that environmental conditions can have on troop health, safety, and security, and despite their importance for the local population.

The researchers recommend that U.S. Army leaders give more weight to the strategic, operational, and tactical aspects of environmental considerations during planning and operations and develop comprehensive standards and best practices to address environmental issues during contingencies.

Does Political Reform in Arab World Help to Counter Terrorism?

Democratic political reforms can marginalize extremists and undermine support for terrorism, but enacting merely cosmetic reforms and backtracking on democratization can exacerbate the risk of terrorism, according to a RAND study.

The study looked at the effects of liberalization processes on domestic political violence in six Arab states: Algeria, Bahrain, Egypt, Jordan, Morocco, and Saudi Arabia.

The belief that greater democracy reduces terrorism has played a significant role in recent U.S. foreign policy. However, the study finds little direct evidence that democracy has either a positive or negative effect on terrorism. Using data from the RAND–Memorial Institute for the Prevention of Terrorism, the study compared the number of terrorist incidents in each country with its score on the Freedom House index, which ranks a country’s level of freedom based on political rights and civil liberties.

The figure shows the results for Egypt from 1985 to 2007. Although there is some relationship between terrorist incidents and Freedom House rankings—for example, a rise in terrorism in the early 1990s at the same time that Egypt’s Freedom House score worsened (rose higher)—there is not a strong correlation between the number of incidents and the degree of liberalization over time. The results for the other countries show a similar pattern.

“Political reforms had little effect on promoting norms of tolerance or inclusive political institutions, as democracy advocates might expect,” said Dalia Dassa Kaye, the report’s lead author and a RAND political scientist. “Instead, they often exacerbated existing societal cleavages, because those in power tended to ‘stack the deck’ to maintain their power when implementing reforms.”

Moreover, cosmetic reforms, or those put into place and then withdrawn, can destabilize a country by eroding the legitimacy of the system, thereby undermining moderate factions among political opposition groups and undercutting public support for counterterrorism efforts.

Then again, even limited reforms can have some beneficial effects. In some cases, allowing opposition movements to participate in the political process has marginalized radical elements and prevented more violent tactics.

Some believe democracy is dangerous to U.S. interests in the Middle East, but the study recommends “realistic democracy promotion.” Such a policy would apply sustained pressure to strengthen democratic institutions and practices and to scrutinize reforms; emphasize human rights, transparency, judicial reform, and the rule of law; avoid taking sides in elections; safeguard security while respecting the rule of law; engage Islamic parties while leveling the playing field for other types of political opposition; and recognize political motivations behind both sides of the democratization debate.

ALTHOUGH MANY EXPERTS AGREE that there has been inadequate progress in U.S. health policy over the past three decades—a period in which health care reform has been on and off the policy agenda—there has been steady progress in the analytical tools used to inform health policy. And now those tools may be positioned to play a stronger role than ever before.

The story begins with the RAND Health Insurance Experiment. Begun in 1974 and completed nearly a decade later in 1982, the experiment remains the largest and most sustained evaluation of health insurance design effects ever conducted and stands out today as the only randomized trial of the effects of cost sharing on medical service use, quality of care, and health.

While the experiment’s influence on U.S. health policy has been widely acknowledged, a less visible legacy has been the evolution of health policy “microsimulation models”: computerized statistical tools that model the individual behaviors of people, families, or firms to estimate the likely aggregate outcomes of a change in health policy. The model that RAND researchers created in 1988, based on the results of the Health Insurance Experiment, has been used in many subsequent analyses to predict spending and insurance choices and has inspired the development of many health policy microsimulation models being used today.

**Building the Foundation**

Because policymakers cannot know in advance how people will respond to a change in policy, being able to simulate likely consequences—both intended and unintended—becomes crucially important, especially in the complex area of health policy. Emmett Keeler, Joan Buchanan, and other RAND colleagues designed the original microsimulation model based on the actual behaviors that were observed in the Health Insurance Experiment.

“A new generation of “dynamic” models can project changes in the health and spending of people over time.”

“Our original model predicted the impact of different kinds of insurance on total medical spending versus out-of-pocket spending and estimated the value of that spending to the patient—precisely, how the mythical ‘economically rational person’ would pick insurance,” said Keeler.

The model used statistical estimates to “simulate spending on episodes of treatment by a representative group of families, an effective and fairly new approach to the study of demand,” Buchanan noted. The simulation showed that cost sharing affects the number of episodes of illness for which people seek treatment and has much smaller effects on the amount of treatment in each episode of treatment. The simulation also showed that small deductibles can restrain excess demand and that large individual caps on out-of-pocket spending can limit risk without greatly increasing spending.

In the late 1980s, the RAND model was used to simulate the effects of a mandate that all employers provide health insurance to their employees. The model estimated that both health service use and employers’ liability for health care costs would increase.

The model was used again in the 1990s to simulate the effect of adding medical savings accounts (MSAs) to the other features of the Health Insurance Reform Act of 1995 (also known as Kassebaum-Kennedy). Republicans had pushed for MSAs, but Democrats feared they would be utilized by only the healthy and wealthy and would damage the traditional insurance market.

“The resulting controversy threatened to kill the legislation,” said Keeler, “but simulations showed that the overall insurance market would not be harmed. As a result, the two sides were able to reach a compromise, and the main part of the bill, including a demonstration of MSAs, passed.”

**Modeling the Future**

The original simulation model was a “static” one that predicted what would happen in a year. As the field of health policy simulation has progressed, a new generation of “dynamic” models has been developed that can project changes in the health and spending of people over time.

One example is RAND’s Future Elderly Model (FEM), which helps forecast trends in health, health spending, medi-
Retirees Harry and Joyce Smith hold on their laps evidence of an emerging trend: their long-term health insurance policy. The Smiths, of Green Valley, Arizona, are among eight million Americans with long-term care insurance—an area in which insurers expect big growth as baby boomers move into their senior years.

Because of FEM, policymakers will be better equipped to design social programs that improve health with the lowest effective public and private expenditures,” said Dana Goldman, who developed the model with his RAND colleagues. FEM is at the heart of research being done in the RAND Roybal Center for Health Policy Simulation.

RAND Health’s Comprehensive Assessment of Reform Efforts (COMPARE) initiative has developed a new microsimulation model that builds on what has been learned from prior RAND modeling. “Starting in early 2009, COMPARE will provide online access to the results of simulations on the effects of coverage-related policy changes on the number of people with insurance, spending, consumer financial risk, and health relative to what would occur in the absence of any change in policy,” according to Elizabeth McGlynn, who co-leads the initiative with Jeffrey Wasserman.

Using COMPARE, which will be available to the general public, RAND and other users will be able to see the extent to which various health care reform proposals achieve their objectives. RAND will examine the effects of both incremental and multifaceted policy changes. The results will provide a common base of knowledge for policy debate and development, carrying on the legacy of health policy simulation begun more than 30 years ago.

Related Reading


Modeling the Health and Medical Care Spending of the Future Elderly, RAND/RB-9324, 2008, 8 pp. As of press time (Web only): www.rand.org/pubs/research_briefs/RB9324/


RAND COMPARE Web site: www.randcompare.org/
Asian Exchange

China and India Trade Lessons in Education and Health

By Charles A. Goldman, Krishna B. Kumar, Ying Liu, Sai Ma, and Neeraj Sood

Phenomenal growth in China and India has drawn attention to their relative performance in various spheres, but there has been little comparison of their education and health systems. Comparing these systems can illuminate their worthiness as examples for one another and for the rest of the developing world.

India has focused on higher education for a few, while China has focused on basic education for the masses. As one would expect, India enjoyed a competitive edge over China in higher education until very recently, while China has outperformed India in primary and secondary education. Both models have contributed to economic growth but are likely to produce very different distributional outcomes.

India can learn from China how to improve the efficiency of public education, particularly by providing appropriate incentives to teachers and schools, whereas China can learn from India how to expand private higher education. India is unusual, however, in that it has benefited from a broad base of English-speaking workers. The universal education strategy of China might be safer for other countries to emulate.

Both countries have made substantial gains in life expectancy and disease prevention, but neither health system offers much protection against financial risk. Both countries should restructure health care financing to reduce out-of-pocket costs; increase access to care for the poor, especially in rural areas; modify hospital capabilities to suit local needs; make patient satisfaction a higher priority; reduce the overuse of health services associated with regulated prices; and strengthen communicable disease surveillance and control.

China should emulate two aspects of India’s health system: greater involvement of the private sector, where medical students increasingly prefer to work, and reduced regulation of prices. For example, the overutilization of newly marketed drugs in China is a very problematic issue that raises concerns about wasteful spending as well as quality of care. The Chinese government should focus on regulating the quality of drugs rather than their price.

India should emulate two aspects of China’s health system: greater spending on basic national health infrastructure, such as clinics and preventive care services at the village level, and greater efforts to reduce preventable deaths from communicable diseases and from poor maternal and infant health. The Indian government should commit more resources to improving hygiene, water quality, and nutrition.

Education as Destiny

Since the end of the Chinese Civil War in 1949, China has made great strides in educating the masses. The primary school gross enrollment rate (which includes those who do not belong in the relevant age group for a given level of education) reached 100 percent in 1985.
The secondary gross enrollment rate rose above 70 percent in 2003, representing a huge increase from 40 percent in 1960. Most impressively, the adult literacy rate soared from about 20 percent in the late 1940s to 93 percent in 2007 (see Figure 1).

India, on the other hand, devoted a large proportion of its education resources to higher education, particularly in science and technology. This has resulted in a higher percentage of college-educated people than in China (see Figure 2). This has also left India with some of the finest institutes of higher education, notably the Indian Institutes of Technology and the Indian Institutes of Management. Meanwhile, the Indian population at large remains uneducated. According to 2004 data, India, with an adult literacy rate of 61 percent, lagged far behind China’s 91 percent and was barely even with sub-Saharan Africa. India’s female adult literacy rate of 48 percent in 2004 was actually lower than that of sub-Saharan Africa’s 53 percent.

The different patterns of economic development appear to mirror the differing education models. A larger labor pool with basic education has allowed China to attract large-scale manufacturing plants. Education has equipped Chinese workers with the basic skills for manufacturing and allowed them to travel from rural areas to the jobs in urban areas. In contrast, a larger stock of college-educated, technically savvy, English-speaking labor has made India a choice destination for international software and services outsourcing.

Developing countries in Africa and the rest of Asia can draw lessons from the contrasting experiences of China and India. Countries with little disparity in education achievement tend to have smaller variations in income. Those with concentrated education attainment are more likely to see larger income gaps. Japan and the East Asian “Tigers” are good illustrations of the former, while Latin America is often cited as an example of the latter. Persistent inequality can derail economic reforms by removing political support for them.

China also offers an excellent example of how school choice and merit-based teachers’ salaries can provide incentives to achieve higher performance. In Chinese public schools, teacher salaries usually include a fixed component and a bonus component that depends on student scores. Students can attend schools outside their neighborhoods, provided they pay “choice fees” to the chosen schools. Better performance allows a school to charge higher fees in the local education market. Evidently, this market-based approach has worked well in China, and India could explore similar strategies.

India’s experience with private higher education offers a possible direction for China. In 2005–2006, private higher education accounted for 31 percent of total higher education enrollment in India, compared with a modest 9 percent in China. The proliferation of private institutes has greatly helped to expand the higher education capacity in India at a time when public enrollment and capacity have increased only marginally. Private institutes, typically more sensitive to labor market needs, have helped to expand the higher education capacity in India at a time when public enrollment and capacity have increased only marginally.
market conditions, also have the potential to improve the relevance of higher education, a concern for both India and China.

**Health as Wealth**

Overall, people in China live longer, healthier lives than do people in India. The difference for women is larger than that for men, owing in part to the tenfold greater maternal death rate during childbirth for Indian women compared with Chinese women (see the table). Furthermore, China has achieved better prevention and control of communicable diseases. Noncommunicable diseases, particularly chronic obstructive pulmonary disease and cancer, now account for 77 percent of all deaths in China. In India, by comparison, more than 40 percent of all deaths are still due to communicable diseases, including HIV/AIDS, diarrheal diseases, respiratory infections, and perinatal conditions.

The health systems in both countries provide little protection from financial risk. In China, medical expenditures have become a principal cause of poverty, swelling the number of rural households that are below the poverty line by 44 percent. In India, up to a third of hospitalized patients are impoverished by medical costs.

The heavy burden of health costs in China and India is not surprising given the lack of well-developed health insurance schemes in both countries. This situation is exacerbated by two factors. First, the lack of access to affordable care means that people defer preventive and other necessary care; consequently, when they do seek care, they typically have a more serious and costly medical condition. Second, for those who seek care, physician-induced overutilization of care further increases the financial burden.

The chief challenge for both systems is to reduce the out-of-pocket burden on individuals. This can be accomplished by providing nationalized or social insurance, as is common in Europe, or by encouraging private insurance, as is common in the United States.
China is leaning toward the former, whereas India seems to be favoring the latter. But both public and private insurance should be considered in both countries to meet a diversity of needs.

To contain costs further, both countries should consider alternative reimbursement mechanisms, such as prospective payment systems that cover predetermined amounts of money, similar to how Medicare operates in the United States. Both China and India should also consider vertically integrated provision of health insurance and health care, similar to health maintenance organizations.

In the 1980s, both countries faced pressure to increase the role of the private sector in providing health care services. But health care privatization has had some negative effects. Citizens of both countries now bear greater burdens in financing their health care needs. In addition, the private sector has a greater incentive to provide curative rather than preventive treatments. The reduced focus on public health, especially on the prevention of communicable diseases and on the promotion of healthy lifestyles, may be one of the most important health issues emerging in each country.

Both China and India face the critical challenge of increasing access to care for the poor. Both countries need to build more primary health care facilities and to better manage existing facilities. Special attention should be paid to improving access to care in rural and remote areas by expanding their programs for education, screening, immunization, and transportation assistance. Ensuring resources for preventive and basic curative care will help local clinics and community hospitals continue to exist and improve.

China and India account for more than 40 percent of the world population. The health policy choices of these two countries not only will affect their citizens but also could give policymakers around the world ideas for coping with their own health care challenges.

### Related Reading


**People in China Live Longer, Healthier Lives Than Do People in India**

<table>
<thead>
<tr>
<th>Key Health System Indicators</th>
<th>China</th>
<th>India</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total expenditure on health per capita (2003)</td>
<td>$61</td>
<td>$27</td>
</tr>
<tr>
<td>Out-of-pocket expenses as a percentage of total medical spending (2003)</td>
<td>56%</td>
<td>73%</td>
</tr>
<tr>
<td>Private providers as a percentage of total medical care provision (China in 2002, India in 2003)</td>
<td>4%</td>
<td>79%</td>
</tr>
<tr>
<td>Life expectancy (2004)</td>
<td>72 years</td>
<td>62 years</td>
</tr>
<tr>
<td>Maternal death rate during childbirth per 100,000 women (2000)</td>
<td>56</td>
<td>540</td>
</tr>
</tbody>
</table>


**NOTE:** Total expenditure on health per capita is shown in U.S. dollars at average exchange rates.

Outside Changzhou, a sprawling industrial city in eastern China, sits a small factory farm processing chemicals from pig guts into heparin, a blood thinner that has been linked to 19 deaths and hundreds of allergic reactions.
Judging by the emerging worldwide consensus, President-elect Barack Obama is about to assume an economic burden second only to the one facing President-elect Franklin Roosevelt upon his entering the Oval Office in January 1933. The test for the new U.S. president will be to offer leadership and financial stewardship worthy of the challenge.

As early as April 2008, an International Monetary Fund document called the economic fallout from the collapse of the U.S. subprime mortgage market “the largest financial crisis in the United States since the Great Depression.” The forecast grew even dimmer this past autumn as banks and brokerages failed, as turmoil roiled Wall Street, and as the credit crisis spread beyond U.S. shores. In October 2008, Deutsche Bank predicted that major industrialized economies in 2009 would suffer their worst slump since the 1930s: “We now expect a major recession for the world economy over the year ahead, with growth in the industrial countries falling to its lowest level since the Great Depression.”

The financial crisis will consume much of the president’s attention and may limit his ability to achieve other important policy goals. But the dire economic circumstances also offer the new administration an opportunity—if not a duty—to rethink old ways of governing and to replace them with ways that are smarter, better, and cheaper.

Eight of the twelve following essays suggest that the nation’s current policies are not the most efficient ways of doing things. While it is unclear whether the proposed alternatives would cost less, they would offer more bang for the national buck. These are changes for the better that we can afford.

Robert Hunter reports that the ratio between military and nonmilitary U.S. national security spending is now 17 to 1. According to Hunter, that is nowhere near the kind of balance required between military and civilian efforts at a time when civilian reconstruction activities are the linchpins of stabilization and counterinsurgency operations.

Brian Jenkins supports numerous shifts in counterterrorist strategy to make it sustainable. Keep the focus on jihadists. Avoid large-scale military buildups when local capabilities can be developed. Reorganize U.S. forces around customized teams of military and civilian specialists. Close Guantanamo. And secure the homeland with infrastructure improvements that are needed anyway.

Seth Jones urges a modest increase in U.S. and NATO forces in Afghanistan, including a redeployment of some U.S. forces from Iraq. But he also urges a new balance between top-down efforts to create a central government and bottom-up efforts to secure local support, working with tribes, subtribes, and clans to help establish order and governance.

Christine Fair wants a better return on the U.S. investment in Pakistan. First, she advises, make U.S. military assistance to Pakistan contingent on its resolute action against militant groups. Meanwhile, expand U.S. aid to the country’s civilian institutions, such as the police, courts, and civil society groups that are key to cultivating a democratic Pakistan.

Turning to domestic policy, Titus Galama and James Hosek see the debate over the U.S. economy lurching from one fix to the next, devoid of a comprehensive plan to spur innovation and competitiveness. Such a plan would allow U.S. leaders to make decisions on related matters, even immigration and education policies, in accordance with a larger vision.

On energy policy, Michael Toman advises the new president to weigh the environmental and economic trade-offs of myriad
A passerby peers through an ice sculpture called “Main Street Meltdown” in New York City on October 29, 2008, the 79th anniversary of the Black Tuesday stock market crash of 1929 that led to the Great Depression. The artists, Nora Ligano and Marshall Reese, said the sculpture would take 10 to 24 hours to completely melt down.

energy options. He recommends some combination of renewable energies, unconventional fossil fuels, energy efficiency, and conservation.

On education policy, Brian Stecher and Laura Hamilton argue for greater flexibility in the accountability systems associated with the No Child Left Behind Act. Being more responsive to local conditions could reduce local opposition to this federal investment.

Finally, there are few better examples of wasteful national spending than the U.S. health care system, and few policy areas have been more resistant to reform. To help break the logjam, Elizabeth McGlynn and Jeffrey Wasserman offer a tool to compare the effects of proposed reforms across multiple dimensions affecting numerous interest groups.

McGlynn and Wasserman have begun to do for health care what needs to be done for all areas of public policy. It is time to take stock of the options, to cash out the losses, and to make wiser investments in the public interest. The eight essays cited above—along with the accompanying essays on Iraq, Iran, Turkey, and nuclear proliferation—propose some of the ways in which the new U.S. president can offer America a better deal.

While it is unclear whether the proposed alternatives would cost less, they would offer more bang for the national buck. These are changes for the better that we can afford.

The ratio between military and nonmilitary U.S. national security spending is now 17 to 1. A major increase in the share for nonmilitary activities is in order. This should include adding at least 1,100 foreign service officers to the U.S. State Department, adding 2,000 officers to the U.S. Agency for International Development, and creating a separate agency similar to the now-defunct U.S. Information Agency.

These and the other recommendations below can be implemented without changing the National Security Act and without major legislation, except to increase funding for nonmilitary national security activities. The new administration and Congress can make these changes rapidly and largely through administrative action.

U.S. success in interventions abroad, particularly counter-insurgencies and counterterrorism, requires more coordination and integration of military and nonmilitary efforts, activities, agencies, and personnel than ever before. Arms-length relationships between departments like Defense and State are no longer acceptable.

Preparing for success must begin with cross-agency training and education in modern techniques of military and nonmilitary activities. There needs to be a reorganization of the civilian agencies to promote career-enhancing professional exchanges.

Robert Hunter, U.S. ambassador to NATO from 1993 to 1998, is a senior adviser at RAND.
The struggle against terrorism will last many years. It will require a sustainable strategy that evolves as the terrorist threat itself mutates. Strategic principles rather than a fixed strategy should guide our efforts.

The prospect of lengthy conflicts and economic difficulties make it tempting for the United States to disengage and to focus on domestic issues. But the United States must remain involved in efforts to destroy al Qaeda and its affiliates, to defend Afghanistan, to help maintain stability in Pakistan, and to work closely with allies to improve their capacity to deal with terrorist threats.

The term “Global War on Terrorism” enabled us to mobilize national resources and seize the initiative. But it quickly grew into an unwieldy assortment of ambitions that encompasses too many things. We oppose all terrorists, but we must define our missions with limited goals.

The jihadist enterprise inspired by al Qaeda’s ideology remains the principal terrorist threat to the United States. It should remain the principal focus of our counterterrorism efforts—al Qaeda must be destroyed. This means smashing its organization, defeating its plots, blunting its message, and shrinking its recruiting reservoir.

Political warfare, including public diplomacy and psychological operations, must be given greater priority. This will require a more formal structure than the current interagency effort.

The United States has provided vigorous leadership to global efforts against terrorism, but progress will require inter-
national cooperation and multilateral efforts, the composition of which will change with circumstances. Multiple overlapping campaigns will be pursued by multiple overlapping coalitions.

Our strategy must be consistent with our values. We should close down Guantanamo, promptly release those who have been wrongly held, and develop a patentely fair procedure to try the rest, while holding onto the most dangerous terrorist planners. Our opposition to torture must be unequivocal and must apply to all U.S. agencies. Judicial oversight of domestic intelligence collection should be fully restored.

We must continue our military and economic commitment to Afghanistan, even though the conflict there could continue for another 30 years. Some additional American reinforcements may be needed, but we should avoid the kind of large-scale military buildup that shortens time horizons.

U.S. counterterrorism efforts should always favor developing local capability. It will not be American or NATO forces that ultimately prevail over al Qaeda and the Taliban, but Afghan forces. The same is true in other countries where terrorists threaten local society. We must look for ways to accelerate the development of local capacity, including assigning area-trained American volunteers to remain in high-threat areas for long periods and to work directly with local forces.

The U.S. military should be willing to consider very different structures. One would comprise our current armed forces, trained and equipped to project conventional military power and increasingly experienced in counterinsurgency. The other would be a virtual organization that could assemble military specialists in counterinsurgency and psychological warfare, with volunteer civilians serving as political officers and development agents, to meet specific missions.

Major military incursions into Pakistan would be a mistake. The political risks outweigh any temporary military gains. An invasion could provoke a negative reaction in Pakistan's tribal areas, further complicate the already precarious political situation, and galvanize new support for al Qaeda.

Talking to adversaries must remain a part of America’s strategy. Dialogue is not an alternative to fighting, nor does it necessarily end fighting. It is part of a strategy aimed at dissuading, demoralizing, and dividing the enemy, while offering an exit for the disillusioned—to reverse Clausewitz’s famous dictum, an extension of war by other means.

We must look for ways to deflect vulnerable young men from a trajectory that is destructive and self-destructive, without alienating or stigmatizing any communities. Offering individual terrorists an attractive way out of the terrorist orbit should be a component of our counterterrorist strategy, despite the likely low yield. This will require flexibility in the justice system. While a law enforcement approach to terrorism may be preferable to a military approach, strict adherence to the criminal justice system should not get in the way of defeating the terrorist movement.

The emphasis on homeland security also must be on sustainability: efforts to impede recruitment to violence, security measures that are built-in and do not hinder the economy, an informed allocation of possibly declining security resources, and, above all, the education and active engagement of the public.

We must seek security solutions that are both effective and efficient. We cannot allow the terrorist threat to destroy our economy or alter our society. Rebuilding America’s crumbling infrastructure presents an opportunity to completely rethink how we move people, goods, energy, and information to achieve nonsecurity solutions to security problems.
It is time for the United States to finish what it started when it overthrew the Taliban in 2001. The United States and NATO must now proceed swiftly on multiple fronts simultaneously. The allies should increase their forces in Afghanistan, fortify Afghan security forces, support tribal groups, strengthen local governance, and work with neighboring Pakistan to eliminate the insurgent sanctuaries across the Afghan border.

U.S. intelligence agencies have identified terrorist plots stemming from the Afghanistan-Pakistan border region as perhaps the single most important threat to the U.S. homeland. NATO’s reputation is also at stake over its first-ever involvement in ground combat, and its credibility would be severely tarnished if it failed to stabilize Afghanistan.

There are more than 50,000 international troops in Afghanistan, along with more than 50,000 Afghan National Army soldiers. The number of U.S. and NATO forces should rise by at least 28,000 until indigenous soldiers can fill those ranks. This will entail making difficult choices, such as redeploying some U.S. forces from Iraq to Afghanistan.

At the same time, the United States and its allies must redouble their efforts to build the Afghan security forces, particularly the police. In most operations against al Qaeda, local police forces have greater legitimacy and a better understanding of the environment than U.S. forces have. But the Afghan National Police force is in disarray, is incompetent, and is almost uniformly corrupt. Corruption is detrimental to the counter-insurgency campaign because it diminishes the population’s support for its leaders. Based on the low quality of the Afghan police in 2001, when the Taliban regime was overthrown, police...
The deteriorating situation and local nature of the insurgency now require Western support for local tribes, subtribes, and clans to help establish order and governance.

reform there will take at least a decade, or until 2011. Persistence is essential to police reform.

In addition, security and stability in Afghanistan have historically required a balance between top-down efforts to create a central government and bottom-up efforts to secure local support. Since 2001, the United States and the international community have focused predominantly on top-down security efforts, including the establishment of the Afghan National Police and Afghan National Army. But the deteriorating situation and local nature of the insurgency now require Western support for local tribes, subtribes, and clans to help establish order and governance.

Indeed, the United States and its allies must sharply augment their efforts to improve the quality of local government, particularly in rural regions. The poor security environment has kept reconstruction and development efforts from reaching outlying areas. The lack of roads, electricity, and water is a foremost concern of the population, especially in rural areas. The counterinsurgency will be won or lost in the rural communities of Afghanistan, not in urban centers such as Kabul. This means that the counterinsurgency must find ways to reach rural communities despite security concerns.

Failing to eliminate the insurgent sanctuaries in Pakistan will cripple the efforts to stabilize and rebuild Afghanistan. Every successful insurgency in Afghanistan since 1979 has enjoyed a safe haven in Pakistan and assistance from individuals within the Pakistani government, which must now be convinced to undermine the sanctuaries on its own soil.

There is room for hope in Afghanistan. Many Afghans express optimism in the face of their country’s difficulties, and most Afghans still oppose the Taliban and other insurgent groups. But support for the U.S. presence is dwindling. The key is to funnel sufficient resources and coordination through a narrowing window of opportunity and to build Afghan capacity quickly.

PAKISTAN

PUT INSTITUTIONS FIRST

By C. Christine Fair

Pakistan is a crucial U.S. ally but is mired in instability and uncertainty, raising questions about its will and capacity to stay engaged in the fight against terrorism. Few Pakistanis embrace the fight as their own, and they increasingly oppose military operations in the country’s Pashtun belt. More troubling is the fact that many Pakistanis doubt that the various militant groups ensconced on the frontier bordering Afghanistan are threats to their national or personal security.

The Pakistani polity harbors suspicions about the United States and its intentions. The bulk of the more than $10 billion in U.S. assistance and reimbursements sent to Pakistan since 9/11 has focused on the military. Little has gone to ordinary Pakistanis, and perilously few resources have been devoted to strengthening Pakistan’s emaciated civilian institutions.

Discussions of U.S. aid cutoffs and conditions related to the counterterrorism campaign are thus fraught with dangers. Pakistanis note that in the past, the United States has been most generous with military leaders but has cut off aid when civilian leadership returns. This has fostered cynicism that the United States prefers a militarily dominated Pakistan to a democratic one.

The task now before the United States is to use aid selectively to encourage a military retreat from politics and a gradual evolution of competent politicians. For U.S. assistance to be efficacious, the United States will require partnerships with civilian leaders dedicated to reform. It is important that the United States reach out to all political parties, key civilian institutions, and civil society groups while sustaining a working relationship with the armed forces. The new U.S. president should view Pakistan’s civilian leaders as important partners in forging a secure and prosperous Pakistan.

There is an urgent need to rewrite the terms of U.S. military assistance to Pakistan. Weapons and programs that could serve Pakistan’s strategic purposes against India should be contingent upon demonstrable evidence of Pakistani alignment with U.S.
counterterrorism efforts. The United States should continue to expand programs that enable Pakistan to fight terrorism more effectively. At all levels, the United States must engage in a genuine strategic dialogue with Pakistani military and civilian leaders.

Meanwhile, the United States should dramatically expand its assistance to reform Pakistan’s civilian institutions, notably the judiciary, police, and law enforcement; to train large numbers of politicians; and to support civil society institutions such as those that monitor human rights, corruption, political reconciliation, and human development. Education should remain a priority, but educational initiatives should be sensitive to Pakistani preferences, which may not involve secularization of the curriculum.

The United States has agreed to spend $750 million in development funds in Pakistan’s Federally Administered Tribal Areas along the Afghan border. But neither Washington nor Islamabad has backed legal and political reforms for these areas. It is unlikely that economic investments will bring residents of these areas into mainstream society in the absence of a legal framework consistent with Pakistan’s own constitution and absent the functioning police, courts, and other basic services that Pakistanis elsewhere enjoy.

Pakistanis need to be reassured that the United States is seriously committed to securing a democratic Pakistan. The United States should shift from supporting one person or party toward supporting the key democratic institutions and processes of this critical country.

However, without a Pakistani commitment to change, the United States will be unable to help Pakistan transform and stabilize itself. Should Pakistan be unwilling to reverse course and to take decisive action against all militant groups active in the country, Washington must be willing and ready to conclude that Pakistan is an unsuitable recipient of U.S. generosity. And this is a choice that Pakistan should have to make.
Progress has been made in Iraq on enhancing civilian safety, implementing a counterinsurgency strategy, and transferring authority over these matters to Iraqi leaders, but there will be a continuing need for the United States to evaluate these efforts and to make further adjustments. Promoting U.S. interests in Iraq will require a continued role for U.S. military forces, though one that is different in terms of missions, force structure, size, and basing than that currently in play.

Violence in Iraq has diminished over the past year thanks to several major contributing factors: Sunni reaction to al Qaeda excesses (the Sunni “awakening”), a pullback of Shiite militias from anti-Sunni violence and from confrontation with coalition forces, a diminution in externally supplied armaments, and a temporary increase in the number of U.S. forces (the “surge”) coupled with a more effective use of Iraqi Army forces. Moving U.S. forces out of military bases and into places such as Baghdad has also increased their ability to monitor the safety and security of the population.

All these factors are subject to change. At reduced levels, U.S. forces might not have sufficient troops on hand to protect the population. Some members of the Sunni awakening could grow disenchanted if they are not integrated into the security forces as quickly as promised. The Shia cease-fires, always shaky, could easily be withdrawn or ignored by rogue members. Corruption in the Iraqi National Police and key ministries remains a problem. And potentially destabilizing activities in Iraq by its neighbors continue to cause concern for security, both in Iraq and in the broader region.

A coherent counterinsurgency transition strategy from coalition to Iraqi security forces will need to be put in place. Such a
America’s role in Iraq is in transition. Local acceptance of a U.S. presence will continue to depend on its perceived effectiveness.

strategy will, among other things, need to focus on protecting the population, increasing the emphasis on law enforcement and non-military approaches to security, providing essential social as well as economic services, moving toward a detainee process that demonstrates a commitment to human rights, and supporting a political agenda that focuses on the role of not only the Iraqi government but also the Iraqi public in national reconciliation efforts.

America’s role in Iraq is in transition. Local acceptance of a U.S. presence will continue to depend on its perceived effectiveness. Iraqi trust in the ability of indigenous security forces to ensure safety and stability appears to be growing. And in terms of a future relationship with the United States, Iraq does not yet speak with one voice. The Kurds want a rock-solid partnership and U.S. bases. Arab Shias and Sunnis are divided on this topic, but both communities appear to know that they need some U.S. presence for the foreseeable future—both to maintain a positive trend in security and to continue building Iraq’s security forces.

The long-term intentions of the United States in Iraq and in the region also remain in flux. The United States continues to build base infrastructure at the same time that it debates exit strategies, and this sends mixed signals to friends and foes alike. Furthermore, U.S. partners in the Middle East remain unsure of America’s vision for future regional security, particularly with regard to Iran, but such a vision is of critical importance to the long-term U.S.-Iraqi relationship.

The United States must offer its vision for Iraq and the region. Despite positive signs of progress in Iraq, the ultimate outcome there remains uncertain. Therefore, a long-term bilateral partnership with Iraq will need to be robust enough to advance mutual interests, flexible enough to respond to emerging political conditions, and muted enough to assuage local and regional sensitivities. Moreover, the United States should encourage a multilateral regional security framework centered on issues of broad interest, such as disaster relief and border security—a framework in which a moderate, growing Iraq can thrive.

The Iranian regime is likely to remain stable and resistant to external pressures for dramatic change in the short term. However, Iranian societal conditions seem conducive to a more constructive relationship with the United States in the long term.

Political, demographic, and economic trends suggest that Iran is likely to become more democratic and less obdurate over time. Educational levels have increased dramatically. Citizens vote and expect their government to be responsive to their concerns. The 2009 election will provide Iranians an opportunity to change their president. Information flows relatively freely, at least over the Internet. The media engage in debates on a wide range of policies. Incomes are rising, and consumer spending is shifting toward patterns typical of more-developed countries. More women are participating in the labor force.

Non-Persian ethnic groups account for half the country’s population and are often strong proponents of expanding civil liberties and the powers of elected officials. These groups are likely to play a significant role in moving the country toward greater democracy.

The United States can foster Iranian tendencies and policies that favor greater personal freedoms by communicating with the Iranian government; encouraging more discussion among Iranians about social, political, and economic issues; and sponsoring more contacts and interactions between Iranians and Americans. The U.S. government should fund educational and diplomatic
An Iranian moneychanger eats his lunch as he displays bank notes in Tehran, Iran, on October 30, 2008. The country has plunged into a storm of recrimination, directed largely at President Mahmoud Ahmadinejad, as falling oil prices have hurt the Iranian economy.

changes more generously, encourage U.S. officials to speak to Iranian media, and expand U.S.-supported broadcasts in local languages as a forum for discussion of major social issues.

The United States can also promote changes to liberalize the Iranian economy, potentially strengthening the private sector and weakening the sway of the religious establishment. To this end, the United States should not oppose Iran’s accession to the World Trade Organization and should support efforts by the International Monetary Fund and World Bank to encourage better economic management in the country. The United States should still maintain an embargo on gas liquefaction and gas-to-liquids technologies as a bargaining chip until Iranian policies become more congruent with U.S. interests.

There are greater similarities than differences in the values held by the two peoples. Both Iranians and Americans place high importance on family, religion, work, and service to others, with few differences contributing to “civilizational clashes.” The governments could turn to these shared values if and when Tehran and Washington decide to normalize relations.

Iranians do have an imposing set of grievances against the United States and vice versa. But Iran is more democratic than Egypt and less fundamentalist than Saudi Arabia, two of America’s most important allies in the region. It is time to apply to Iran the same set of policies that won the Cold War, liberated the Warsaw Pact, and reunited Europe: détente and containment, communication whenever possible, and confrontation when necessary. It is time to negotiate with Iran, unconditionally and comprehensively.

stable democratic Turkey is strongly in the American interest and would contribute to enhancing stability in three areas of increasing strategic importance to the United States: the Middle East, the Caucasus, and Central Asia. The best way for U.S. officials to ensure that a stable Turkey remains closely anchored to the West is to continue to nudge the country toward strengthening the kind of political and economic reforms that would help to ease the growing polarization in Turkish society that has been evident in recent years.

Specifically, the United States should support those sectors in Turkish society that are working to reconcile Islam with democracy. The obvious example is the ruling Justice and Development Party, which received a renewed mandate in the July 2007 parliamentary elections. The ability of this party with Islamic roots to operate within the framework of a secular democratic system, while respecting the boundaries between religion and state, refutes the argument that Islam cannot be reconciled with modern secular democracy. On the other hand, if the experiment fails, it could lead to greater polarization along a secular-Islamic axis, further reducing the middle ground needed to build a moderate Muslim bulwark to contain the spread of radicalized Islam.

In addition, the United States needs to deal more resolutely with the terrorist attacks against Turkish territory conducted by the Kurdistan Workers’ Party (PKK) from sanctuaries in northern Iraq. In Turkish eyes, the PKK issue is the litmus test of the value of the U.S.-Turkish security relationship. The U.S. reluctance to help Turkey respond to Kurdish terrorism has been the primary cause of the strained relations between Turkey and America and of the dramatic rise in anti-American sentiment in Turkey since 2004.

The closer military and intelligence cooperation with Ankara against the PKK since Prime Minister Recep Tayyip
Erdoğan’s visit to Washington in November 2007 has helped to defuse some of the mistrust that has built up since—and to a large degree as a consequence of—the U.S.-led invasion of Iraq. But this cooperation needs to be followed up by other concrete steps. In particular, the United States should put greater pressure on the Kurdistan Regional Government in northern Iraq to crack down on the PKK.

However, the PKK cannot be defeated by military means alone. While a tough counterterrorist program is important, it must be combined with Turkish social and economic reforms that address the root causes of the Kurdish grievances. The United States should also encourage Turkey to enter into a direct dialogue with the Kurdistan Regional Government, whose cooperation is essential to reduce the PKK threat.

The new U.S. administration also needs to ensure that the Armenian genocide resolution periodically introduced in the U.S. Congress by the Armenian lobby does not lead to new strains in relations with Ankara. In 2007, the Bush administration shelved a genocide resolution at the last second, narrowly averting a serious crisis with Ankara. But the resolution is likely to be reintroduced and to remain a potential source of discord.

Passage of such a resolution would do nothing to foster Turkish-Armenian reconciliation. If anything, it would stimulate a nationalist backlash in Turkey and make reconciliation more difficult. The new U.S. president thus needs to work closely with the congressional leadership to keep the genocide issue from causing a new crisis that could derail the important improvement in U.S.-Turkish relations since late 2007.

Finally, the United States should support Turkey’s ambition to join the European Union (EU). Turkey’s integration into the EU would strengthen Turkey’s Western orientation and would rebut the claim that the West—especially Europe—is innately hostile to Muslims.

Conversely, rejection of Turkey’s candidacy could provoke an anti-Western backlash, strengthening those forces in Turkey that want to weaken its ties to the West. The United States should support Turkish membership diplomatically behind the scenes but avoid overt pressure on the EU, which could backfire and damage Turkey’s chances of obtaining EU membership over the long run.
A BETTER DEAL

PROLIFERATION
PREVENT NUCLEAR USE,
DETER TERRORIST ACQUISITION

By David Ochmanek

David Ochmanek, a RAND defense analyst, served as deputy assistant secretary of defense for strategy from 1993 to 1995.

When North Korea tested its first nuclear device on October 9, 2006, the rather unimpressive explosive yield of half a kiloton belied the larger threat: the fact that an impoverished nation could develop and test a nuclear device in the face of opposition from the United States and all the neighboring states in northeast Asia. If North Korea, Iran, and other regional adversaries cannot be convinced to forgo nuclear weapons, the consequences for U.S. and allied security could be profound.

It is important to distinguish between nuclear-armed regional adversaries and larger, more powerful nuclear-armed states, such as Russia, China, and India. The former are likely to behave differently, and in some cases more dangerously, than the latter. Regional adversaries are those countries whose leaders pursue policies at odds with those of the United States and its allies, whose actions run counter to broadly accepted norms of state behavior, and whose conventional military forces are not formidable. In a conflict, adversaries of this class could regard the use of nuclear weapons as an attractive option—or at least less unattractive than withholding use—in the face of vastly superior U.S. conventional forces.

An enemy leader facing the prospect of his or her regime’s collapse may perceive the country to be in a use-or-lose situation. Attempts to deter such an enemy’s use of nuclear weapons by threatening retaliation (a mainstay of Cold War military strategy) could be problematic in many plausible conflict scenarios involving nuclear-armed regional adversaries, for the simple reason that adversary leaders may not believe that they will be any worse off for having used nuclear weapons than if they were to forgo their use.

U.S. and allied leaders will not be satisfied with simply trying to deter the use of nuclear weapons by regional adversaries. Deterrence would depend on convincing adversaries not to use their weapons. Beyond deterrence, U.S. and allied leaders will want military capabilities that offer far greater assurance that the use of nuclear weapons by such adversaries can be prevented, which would mean physically blocking an attack irrespective of the intentions and actions of the adversary. This will require forces that can locate, track, and destroy nuclear weapons and their delivery vehicles before and, above all, after they are launched. Accordingly, greater emphasis should be placed on developing and fielding more-effective defenses against theater-range missiles that could deliver such weapons.

At the same time that the United States should look beyond deterrence against nuclear-armed regional adversaries, deterrence will still have its place, particularly with regard to their relations with terrorist groups. As my RAND colleague Brian Michael Jenkins has pointed out, it is unlikely that any nuclear-weapons state would turn over part of its nuclear arsenal to terrorist control, because the benefits to the state would be uncertain, and the risks would be enormous.

However, we can further influence the calculations of these states. We must maintain the deterrent principles that states will be held accountable for the actions of terrorists when there is evidence of collaboration, that retaliation remains an element of U.S. deterrence strategy, and that in a post-nuclear terrorist environment, the pressures for U.S. action will be immense. In such an event, the standards of evidence may be lowered. Governments with secret nuclear programs may have little time to prove their innocence. Absolute proof of a connection may not be prerequisite to action.

WWW.RAND.ORG RAND REVIEW / FALL 2008
Economic issues played a big role in the presidential election, but most of the economic debate revolved around reactive measures, such as bailing out Wall Street, stemming home foreclosures, or drilling for oil. The United States needs a longer-term economic vision that will make the most of the nation’s strengths in science and technology.

The vision should be based on an objective assessment of where U.S. science and technology stand today. Is the United States faltering as Europe strengthens its scientific capabilities and emerging countries create theirs, and is the United States likely to suffer from shortages of scientists and engineers in its workforce? Lacking an objective assessment of these trends, U.S. leaders run the risk of making ad hoc decisions when shaping policies to promote innovation and competitiveness.

There is enormous potential to harness the power of Yankee ingenuity. Despite perceptions that the United States is losing its competitive edge as a result of globalization and perceived disinvestment at home, our assessment is that the nation remains the world’s leader in science and technology, accounting for 40 percent of the world’s spending on research and development, employing 70 percent of the world’s Nobel Prize winners, and being home to three-quarters of the world’s top 40 universities.

U.S. investments in research and development have grown steadily (see the figure) and at faster rates than those in Europe and Japan. China is investing heavily in these areas, but it does not yet account for a large share of world innovation and scientific output, which continues to be dominated by the United States, Europe, and Japan.

The United States has built and maintained its lead with help from an inflow of foreign students in the sciences and of foreign scientists and engineers. Retaining this inflow of foreign-born talent to the United States is essential. America should welcome the immigration and the indefinite stay of highly trained foreign labor.

Regrettably, a recent reduction in the cap on H1-B skilled immigrant visas could reduce the inflow of foreign science and engineering workers. Curtailing the supply of these workers could lead U.S. firms to outsource more of their research and development to foreign countries and to locate new facilities overseas. Rather than protecting jobs, this policy could lead to reduced investment and employment at home.

The United States cannot afford to be complacent. Other nations are building scientific capacity and are rapidly educating their populations in science and technology. While the United States has benefited and is likely to continue to benefit from the globalization of science and technology, globalization is a powerful force of change with an uncertain outcome.

To position itself best for the global economy, America should continue to improve K–12 education in general and science and technology education in particular. America should increase its capacity to learn from science centers in Europe, Japan, China, India, and other countries. New research also raises the possibility of placing more emphasis on early childhood development to raise education attainment overall.

Turning an economic vision into reality depends on sound policymaking rooted in a thorough understanding of the issues. The U.S. government should fund an independent body to evaluate the country’s science and technology performance, to monitor the condition of the science and engineering workforce over the long term, and to assess the likely outcomes of complex forces such as globalization.


**A BETTER DEAL**

**ENERGY**

Pursue a Range of Solutions

By Michael Toman

RAND economist Michael Toman specializes in climate change mitigation, sustainable development, energy markets, energy security, and environmental policy design.

Unstable oil prices, rising concerns about energy security, and growing worries about greenhouse gases that cause global warming have raised interest in greater use of both renewable energy and unconventional fossil fuels. But energy policies that enhance energy security might not reduce emissions of greenhouse gases (particularly carbon dioxide, the most prevalent greenhouse gas), and policies that reduce greenhouse gas emissions might not enhance energy security. The new U.S. president will need to pursue a combination of options that can address several environmental and economic trade-offs.

Two unconventional fossil fuels—synthetic crude oil derived from oil sands deposits in Canada, and liquid fuels produced from coal—hold significant economic promise over the next 20 years. Extensively tapping these fuels would help to keep world oil prices lower than otherwise, thus reducing the cost of oil that we do continue to import.

But both fossil fuels also raise environmental concerns. While some involve risks to local lands and water supplies, a primary issue is that both fuels emit greater amounts of carbon dioxide than do conventional petroleum products. These emissions could be reduced to levels comparable to those of conventional petroleum by investing in equipment to capture the carbon dioxide and to pump it into long-term underground storage. The technical and economic feasibility of large-scale carbon capture and storage is currently under study but has not yet been demonstrated. And even with success in such carbon dioxide storage, these fuels would not put the country on a path to very low greenhouse gas emissions to protect the climate over the longer term.

Substituting renewable energy for fossil fuels would also help hold down the price of crude oil over time, and it would help reduce emissions of carbon dioxide. Among the renewable energy options, biomass and wind power offer the most potential. Another option—fuel from a synthetic mixture of biomass and liquefied coal, combined with carbon capture and storage—could also greatly reduce carbon emissions.

But dramatic further progress in renewable energy technologies is required over the next two decades if the United States hopes to produce a significant percentage of the nation’s electricity and motor vehicle fuel from renewable sources at a reasonable cost to consumers. An especially important concern is the future availability and cost of a sustainably grown biomass supply, given the importance of biomass feedstock for renewable liquid fuels, coal-biomass liquid blends, and electricity.

None of these fossil-based or renewable fuel options alone is capable of making a major dent in demand for conventional petroleum-based fuels over the next ten or more years to enhance energy security. Nor will pursuing all these options simultaneously suffice. Increased energy efficiency (for example, more carpooling) and greater fuel conservation (for example, less driving) also need to be part of a broad portfolio of technology initiatives and policy instruments to promote energy diversity while reducing greenhouse gas emissions.

Increased energy efficiency and greater fuel conservation need to be part of a broad portfolio.

A new solar power system is unveiled in Arvada, Colorado, on October 6, 2008. The system uses a reflective film instead of heavy, fragile, expensive curved glass mirrors. This technology, developed with the National Renewable Energy Laboratory, helps reduce the cost of the solar field by 25 percent compared with previous generation systems.
Some time after the U.S. Congress reconvenes in February 2009, the debate will resume over reauthorization of the No Child Left Behind Act of 2001. The law has had positive and negative effects that ought to be considered during the reauthorization debate.

The law created a testing and accountability system that mandates potentially severe interventions for schools and districts that receive federal Title I funding and that repeatedly fail to make “adequate yearly progress.” Title I funding is set aside for schools and districts with high percentages of students from low-income families.

We studied the effects of the law in California, Georgia, and Pennsylvania. Among the positive results, school districts are aligning local curricula with state standards and assessments, using test data to make decisions about curriculum and instruction, and providing extra support to low-performing students. Educators across the three states say the test data facilitate their ability to meet individual students’ learning needs. Teachers report improvements in academic rigor, instruction, and the focus on student learning.

However, administrators are more positive about the effects than are teachers. Teachers are more likely to question the validity of state test results. Some teachers worry that the standards are too difficult for certain students and, at the same time, that the emphasis on having every student attain “proficiency” has led to a curriculum that is not challenging enough for high-achieving students. A majority of teachers do not believe that the state accountability systems are beneficial for students. Moreover, teachers report a variety of ways in which they have narrowed their instruction to focus on tested material, to the exclusion of topics and subject areas that are not included in state tests but that nonetheless would generally be viewed as critical to a well-rounded education.

No Child Left Behind has led to distinctive accountability systems in each state: different standards, different assessments, and different assistance strategies. In some cases, changes may be needed to reduce or to eliminate these differences—for example, to make the definition of “proficiency” in reading and mathematics similar across all states or to equalize the content standards across states.

In other cases, it may be wise to relax rules to give states greater flexibility. School improvement efforts might be more effective if they were responsive to local conditions. Rather than imposing a fixed set of choices that apply when schools fail to make progress for a given number of years, the improvement efforts could be customized to address the specific causes of failure and the local capacity to ameliorate them. Such efforts should include resources to help teachers offer high-quality instruction while avoiding the temptation to focus exclusively on tested content.

Additional changes to the law may be warranted to promote better measurement of outcomes. Moving away from a system that focuses on whether a student performs above or below the “proficient” level and toward a system that measures progress at all points along the achievement distribution would provide better information about how well schools are performing and could substantially increase teachers’ support for the system.

There is a further lesson for school-based accountability systems. Although educators have become comfortable with the underlying theory of accountability, they are not comfortable when implementation of the theory seems to clash with their local situations.

Such conflicts can occur when the local curriculum does not match the state content standards, when the proficient level seems unattainable for many students, or when an entire school is judged against targets that both seem unattainable and fail to reflect the breadth of learning the school is trying to promote. A good way to start bridging these gaps between theory and practice would be to engage educators themselves, to a greater extent than has been done in the past, in the reauthorization of No Child Left Behind.
A BETTER DEAL

HEALTH

USE “COMPARE” FOR BETTER POLICYMAKING

By Elizabeth A. McGlynn and Jeffrey Wasserman

Elizabeth McGlynn is the associate director of RAND Health. Jeffrey Wasserman is a RAND senior policy researcher specializing in health care reform.

Most politicians agree that the U.S. health care system is in crisis. Its ills are legion.

Health care spending is approaching 15 percent of U.S. gross domestic product, diminishing the profitability of American companies and crowding out other private and public expenditures. Ninety percent of Americans say that health care costs are a big or very big problem for the U.S. economy.

Also, there are serious quality problems. U.S. adults receive just over half of recommended care. Nearly 100,000 Americans die each year in hospitals from medical errors.

About 46 million Americans are uninsured. Among the insured, the availability of coverage is declining and the generosity of benefits is eroding.

Waste is rampant. About a third of U.S. health care spending produces no value. Examples include unnecessary services, duplication of tests, lost opportunities for early intervention, and inefficient delivery of care.

Americans aren’t getting what they’re paying for. Compared with people in other developed countries, U.S. adults have lower life expectancies, and U.S. children have higher infant mortality rates.

Most vexing of all, the complexity and fragmentation of the U.S. health care system has generated multiple competing demands from a wide variety of stakeholders, raising significant barriers to reform. It is nearly impossible to have a constructive, objective dialogue about the relative merits of different proposed solutions.

To advance the national dialogue, RAND Health is launching the COMPARE initiative. COMPARE stands for Comprehensive Assessment of Reform Efforts. At the heart of COMPARE is an online policy options “dashboard”—or a spreadsheet in the form of a control panel—that indicates the effects of policy changes on the performance of the U.S. health care system. The dashboard summarizes the status quo and the intended and unintended effects of different policy options across ten dimensions.

For example, the dashboard shows the known effects of an individual insurance coverage mandate, an employer mandate, or a Medicaid expansion on such outcomes as spending, consumer financial risk, health, and coverage. The COMPARE Web site also provides detailed information on the expected effects of many other policy options, of a range of legislative and other proposals to modify the health care system, and of the status quo.

RAND hopes COMPARE will serve as a valuable resource for the media, for legislative and executive staff at the state and federal levels, and for other public- and private-sector policymakers. RAND will not use the tool to design its own proposal, but others will be able to use the information to compare the pros and cons of various proposals.

Ultimately, users must make their own judgments about the wisdom of health policy proposals based on the trade-offs involved, the preferred priorities, and the expected magnitudes of changes, as suggested by the evidence to date. In some cases, there is no solid evidence with which to estimate the likely effects of reforms, leaving ample room for judgment calls. But for the first time, there is a strong foundation from which people with different value systems can discuss options based on a shared set of facts.

With no health insurance offered through their jobs, and no money to purchase coverage on their own, the family of John and Delynn Gibel, of Senecaville, Ohio, faced $30,000 in medical bills in 2008. The only option, said John, was to declare bankruptcy.

Waste is rampant. About a third of U.S. health care spending produces no value.
**Related Reading**

**Afghanistan**


Getting Back on Track in Afghanistan, Seth G. Jones, RAND/CT-301, testimony presented before the House Foreign Affairs Committee, Subcommittee on the Middle East and South Asia on April 2, 2008, 10 pp. As of press time (Web only): www.rand.org/pubs/testimonies/CT301/


In the Graveyard of Empires: America’s War in Afghanistan, Seth G. Jones, W. W. Norton, forthcoming.

**Counterterrorism**


**Economy**


**Education**


**Energy**


**Health**


The RAND COMPARE Web site: www.randcompare.org/

**Iran**


Negotiating with Iran, James Dobbins, RAND/CT-293, testimony presented before the House Committee on Oversight and Government Reform, Subcommittee on National Security and Foreign Affairs on November 7, 2008, 10 pp. As of press time (Web only): www.rand.org/pubs/testimonies/CT293/

**Iraq**


**Military Interventions**


**Pakistan**


**Proliferation**


**Turkey**


STRATEGIC ANALYSIS AT HOME AND ABROAD

Pacific Currents
The Responses of U.S. Allies and Security Partners in East Asia to China's Rise
Evan S. Medeiros, Keith Crane, Eric Heginbotham, Norman D. Levin, Julia F. Lowell, Angel Rabasa, Somi Seong

The inexorable rise of China's economic, military, and diplomatic power has prompted worries that it is nudging aside U.S. influence in the Asia-Pacific region. The authors examined six U.S. allies and partners—Australia, Japan, the Philippines, Singapore, South Korea, and Thailand—assessing the responses in each nation to China's rise and the implications for U.S. regional security interests.

308 pp. • color charts • 2008 • $52 (paperback) • ISBN 978-0-8330-4464-8

Moving Los Angeles
Short-Term Policy Options for Improving Transportation
Paul Sorensen, Martin Wachs, Endy Y. Min, Aaron Kofner, Liisa Ecola, Mark Hanson, Allison Yoh, Thomas Light, James Griffin

“The report provides a storehouse of information that will assist transportation planners and policymakers for many years to come.”
—Richard W. Wilson, Ph.D., FAICP, professor and chair, Department of Urban and Regional Planning, California State Polytechnic University, Pomona

The authors recommend strategies for reducing congestion in Los Angeles County that could be implemented and produce significant improvements within about five years. Recommendations proffered in the book are tailored to the L.A. region, but they are of value for leaders in other cities who are interested in strategies to reduce congestion.

This summary volume includes the full volume and extensive appendixes on compact disc.

308 pp. (summary) • 638 pp. on compact disc • 2008 • $35 (paperback) • ISBN 978-0-8330-4555-3

THE HISTORICAL PERSPECTIVE

RAND and the Information Evolution
A History in Essays and Vignettes
Willis H. Ware

The RAND Corporation played a pivotal role in the development of computer science. RAND’s accomplishments included important advances in hardware and software as well as analytic techniques that exploited the speed and power of computers. This memoir includes dozens of fascinating photographs and vignettes that reveal the collegial, creative, and often playful spirit in which this groundbreaking research was conducted at RAND.

228 pp. • 2008 • $34 (paperback) • ISBN 978-0-8330-4513-3

After the War
Nation-Building from FDR to George W. Bush
James Dobbins, Michele A. Poole, Austin Long, Benjamin Runkle

“Jim Dobbins and his coauthors do a terrific job of summarizing the approaches of several administrations to addressing the issues associated with nation-building.”
—David Rothkopf, author of Running the World: The Inside Story of the National Security Council and the Architects of American Power

By combining theory and evidence on the eight significant nation-building operations since World War II—in Germany, Japan, Somalia, Haiti, Bosnia, Kosovo, Afghanistan, and Iraq—the authors draw conclusions about the influence of decisionmaking style and structure on American nation-building.

188 pp. • 2008 • $25 (paperback) • ISBN 978-0-8330-4181-4

RAND titles are available at better bookstores, online stores, or directly from:
RAND Corporation
Publications Orders
1776 Main Street • P.O. Box 2138 • Santa Monica, CA 90407 2138
Phone: 877 584 8642 (toll free); 310 415 7002 (outside the United States)
Fax: 412-802-4981; Email: order@rand.org
For new and recent titles, visit www.rand.org/pubs
“Many of us have benefited greatly from RAND’s willingness to take a chance on young researchers trying to work on new, not-yet-fashionable ideas. I am funding the Rockwell Prize for the development of innovative policy analysis to try in a small way to pass on to a new generation some of the blessings that RAND’s faith in me helped bring into my own life. We hope other alumni will find ways, great or small, to help RAND continue to fund the new research and researchers who will make the company’s future as illustrious as the past 60 years have been.”

—Tom Rockwell helped to launch RAND Health in the 1960s and served as its first director. He left RAND in the mid-1970s, created the nation’s largest emergency-physician group practice, and cofounded the Lifetime cable television network. Laura Rockwell, the former chief financial officer of the early Internet start-up GeoCities, is a principal, with Tom, of Cyrcon Builders LP, a firm that specializes in the construction of medical facilities. The firm’s clients include the new Ronald Reagan UCLA Medical Center at the University of California, Los Angeles.

Generous contributions from donors such as Tom and Laura Rockwell enable RAND, a nonprofit institution, to fund groundbreaking research in the public interest.