

McKinsey Global Institute



June 2011

# An economy that works: Job creation and America's future



## The McKinsey Global Institute

The McKinsey Global Institute (MGI), established in 1990, is McKinsey & Company's business and economics research arm.

MGI's mission is to help leaders in the commercial, public, and social sectors develop a deeper understanding of the evolution of the global economy and to provide a fact base that contributes to decision making on critical management and policy issues.

MGI research combines two disciplines: economics and management. Economists often have limited access to the practical problems facing senior managers, while senior managers often lack the time and incentive to look beyond their own industry to the larger issues of the global economy. By integrating these perspectives, MGI is able to gain insights into the microeconomic underpinnings of the long-term macroeconomic trends affecting business strategy and policy making. For nearly two decades, MGI has utilized this "micro-to-macro" approach in research covering more than 20 countries and 30 industry sectors.

MGI's current research agenda focuses on three broad areas: productivity, competitiveness, and growth; the evolution of global financial markets; and the economic impact of technology. Recent research has examined a program of reform to bolster growth and renewal in Europe and the United States through accelerated productivity growth; Africa's economic potential; debt and deleveraging and the end of cheap capital; the impact of multinational companies on the US economy; technology-enabled business trends; urbanization in India and China; and the competitiveness of sectors and industrial policy.

MGI is led by three McKinsey & Company directors: Richard Dobbs, James Manyika, and Charles Roxburgh. Susan Lund serves as MGI's director of research. MGI project teams are led by a group of senior fellows and include consultants from McKinsey's offices around the world. These teams draw on McKinsey's global network of industry and management experts and partners. In addition, MGI works with leading economists, including Nobel laureates, who act as advisers to MGI projects.

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# An economy that works: Job creation and America's future

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# *The jobs picture in 2011*

## 7 million

Decline in the number of US jobs since December 2007

## 60 months

Projected length of “jobless recovery”

## 20%

Proportion of men in the population not working today, up from 7% in 1970

## 1 in 10

The number of Americans who move annually, down from 1 in 5 in 1985

## 23%

Drop in rate of new business creation since 2007, resulting in as many as 1.8 million fewer jobs



*... and the challenges ahead*

**21 million**

Jobs needed by 2020 to  
return to full employment

**9.3–22.5 million**

Range of jobs created in low-  
and high-job-growth scenarios

**1.5 million**

Estimated shortage of  
college graduates in  
the workforce in 2020

**40%**

Proportion of companies  
planning to hire that have  
had openings for 6 months

**58%**

Employers who say that  
they will hire more temporary  
and part-time workers

## Executive summary

The United States faces an immediate challenge: finding employment for 7 million people still out of work from the 2008–09 recession and reviving robust job creation in the decade to come. But simply employing a nation's people is not enough. In a globalized, information-age economy, there is no more important economic priority than building a strong workforce.

To understand how America might meet these challenges, the McKinsey Global Institute launched a research project that combines extensive sector analysis, interviews with human resource executives, a proprietary survey of business leaders, and our own scenario analysis and modeling. We sought to shed new light on how companies use labor, where new jobs are likely to come from, and what conditions are needed to ensure robust and sustainable job creation.

The results of our analysis are sobering: only in the most optimistic scenario will the United States return to full employment<sup>1</sup> before 2020. Achieving this outcome will require sustained demand growth, rising US competitiveness in the global economy, and better matching of US workers to jobs. Among our key findings:

- The United States has been experiencing increasingly lengthy “jobless recoveries” from recessions in the past two decades. It took roughly 6 months for employment to recover to its prerecession level after each postwar recession through the 1980s, but it took 15 months after the 1990–91 recession and 39 months after the 2001 recession. At the recent pace of job creation, it will take more than 60 months after GDP reached its prerecession level in December 2010 for employment to recover.<sup>2</sup>
- The United States will need to create a total of 21 million new jobs in this decade to put unemployed Americans back to work and to employ its growing population. We created three possible scenarios for job creation, based on sector analyses, and find that they deliver from 9.3 million to 22.5 million jobs. Only in the high-job-growth scenario will the United States return to full employment in this decade.
- Six sectors illustrate the potential for job growth in this decade: health care, business services, leisure and hospitality, construction, manufacturing, and retail. These sectors span a wide range of job types, skills, and growth dynamics. They account for 66 percent of employment today, and we project that they will account for up to 85 percent of new jobs created through the end of the decade.

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1 In this report we refer to full employment as 5 percent unemployment, roughly what the US economy experienced before this recession. We do not take a view on what the natural rate of unemployment will be in the future.

2 This calculation is based on total net job creation of 117,000 jobs per month, the average from January through April 2011, using data from the Current Population Survey. The widely publicized monthly payroll job creation figures are higher, but they exclude self-employed workers.

- Under current trends, the United States will not have enough workers with the right education and training to fill the skill profiles of the jobs likely to be created. Our analysis suggests a shortage of up to 1.5 million workers with bachelor's degrees or higher in 2020. At the same time, nearly 6 million Americans without a high school diploma are likely to be without a job.
- Moreover, too few Americans who attend college and vocational schools choose fields of study that will give them the specific skills that employers are seeking. Our interviews point to potential shortages in many occupations, such as nutritionists, welders, and nurse's aides—in addition to the often-predicted shortfall in computer specialists and engineers.
- The nature of work is changing in ways that present both opportunities and challenges. Ubiquitous digital communications and advanced information systems enable employers to disaggregate jobs into specialized tasks, which can then be performed remotely. This facilitates rapid growth in part-time and contingent employment and is also enabling companies to bring back some services jobs from abroad.

Given these challenges, the United States will not return to full employment by simply following a “business as usual” course. A robust economic recovery will be essential to attain high job growth in the future, but it will not be sufficient by itself. To reverse the recent pattern of slow job growth, businesses, government leaders, educational institutions, and workers themselves will need the courage to consider bold new approaches and must work together for such approaches to succeed.

Our research indicates that progress on four dimensions is needed: ensuring that the workforce acquires skills needed for the jobs that will be in demand; finding ways for US workers to win “share” in the global economy; encouraging innovation, new business creation, and the scaling up of industries in the United States; and removing unnecessary impediments that slow business investment and job creation.

### **JOBLESS RECOVERIES: THE NEW NORMAL?**

The jobless recovery phenomenon of the past 20 years is a symptom of several deeper changes (Exhibit E1). One is the relentless efforts of globally competitive companies to improve efficiency. In classic cyclical recessions, companies sacrificed some productivity and profitability until demand returned; today, they respond to downturns primarily by reducing employment. In our survey of 2,000 business executives, 65 percent reported their companies have made operational changes to improve productivity and reduce employment in the past three years.<sup>3</sup>

Jobless recoveries also highlight difficulties in matching workers with jobs. Layoffs today are more likely than in the past to be permanent, and many new jobs created in recoveries emerge in different industries and occupations from where jobs were lost. Displaced workers without transferable skills face increasingly lengthy job searches. And because of the aging of the population, higher rates of home ownership, and the rise of dual-career families, Americans today are much less willing or able to move for a job than they were in the past.

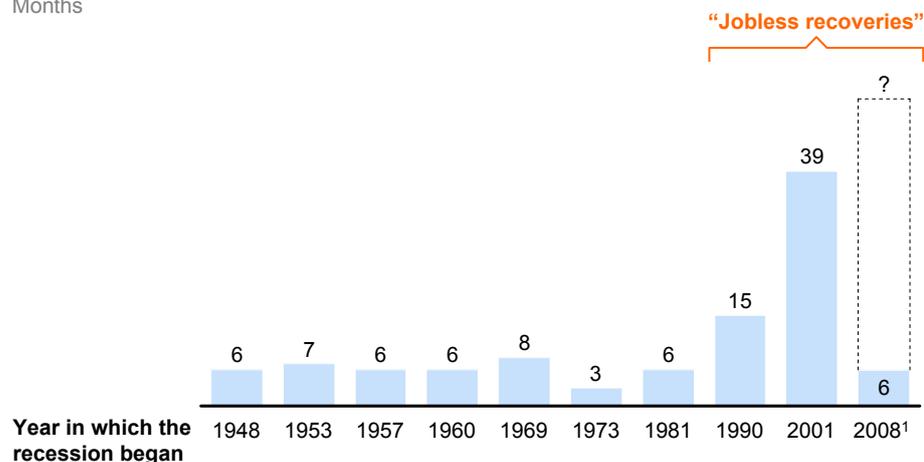
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<sup>3</sup> See Appendix B of this report for more detail on the business survey results.

### Exhibit E1

#### Jobless recoveries: The time lag between GDP recovery and employment recovery has been increasing

Lag from when real GDP returns to prerecession peak to when employment returns to prerecession peak  
Months



<sup>1</sup> The National Bureau of Economic Research estimates that the recession began in December 2007. GDP returned to its prerecession peak in December 2010.

SOURCE: US Bureau of Labor Statistics; US Bureau of Economic Analysis; McKinsey Global Institute analysis

The jobless recovery that is now unfolding also reflects a slow rate of new business creation, which fell 23 percent between 2007 and 2010, more than in past recessions. Even before that, the number of employees per new business had been falling, from eight in the 1990s to fewer than six in recent years. Had new businesses been launched at the prerecession rate, we calculate that the United States would have had 1.8 million more jobs by the end of 2010.<sup>4</sup>

The problems of US job creation are not restricted to periods of recession and recovery. Between 2000 and 2007, the United States posted a weaker record of job creation than during any decade since the Great Depression. Total employment from 2000 to 2007 increased by 9.2 million—less than half the rate of increase of preceding decades—and 1.2 million of those jobs were in sectors directly fueled by the credit bubble. The question now is whether this is the “new normal” or whether the economy can return to the job creation rate it experienced before 2000.

Weak job creation and jobless recoveries have negative effects on individual workers, their families, communities, the overall quality of the labor force—and, inevitably, on society. An extended period of unemployment measurably lowers health outcomes and lifetime earnings; a worker who returns to work after long-term unemployment will earn 20 percent less over the next 15 to 20 years than a worker who was continuously employed.<sup>5</sup>

<sup>4</sup> This calculation assumes roughly 7 employees in each new business; the average size of new businesses for the period 1995–2000.

<sup>5</sup> See Louis S. Jacobson, Robert J. LaLonde, and Daniel G. Sullivan, *The costs of worker dislocation* (Kalamazoo, MI: W. E. Upjohn Institute for Employment Research, 1993); see also Till von Wachter, Jae Song, and Joyce Manchester, *Long-term earnings losses due to mass layoffs during the 1982 recession*, Columbia University, Department of Economics discussion paper, 0708-16, 2009.

## WANTED: 21 MILLION JOBS

To return to prerecession employment levels by 2020 and accommodate the new entrants into the labor force, the United States will need to create 21 million net new jobs in this decade. To understand how this might be achieved, we created three scenarios of sector job growth, using our survey data, interviews with companies, and macroeconomic forecasts of sector demand.

In the most optimistic scenario, 22.5 million new jobs could be created by 2020, returning the economy to a 5 percent rate of unemployment by 2018. However, in the low-job-growth scenario, only 9.3 million net new jobs are added—implying continued levels of high unemployment. In our midrange scenario, about 17 million jobs would be created, with the unemployment rate remaining at nearly 7 percent in 2020 (Exhibit E2).

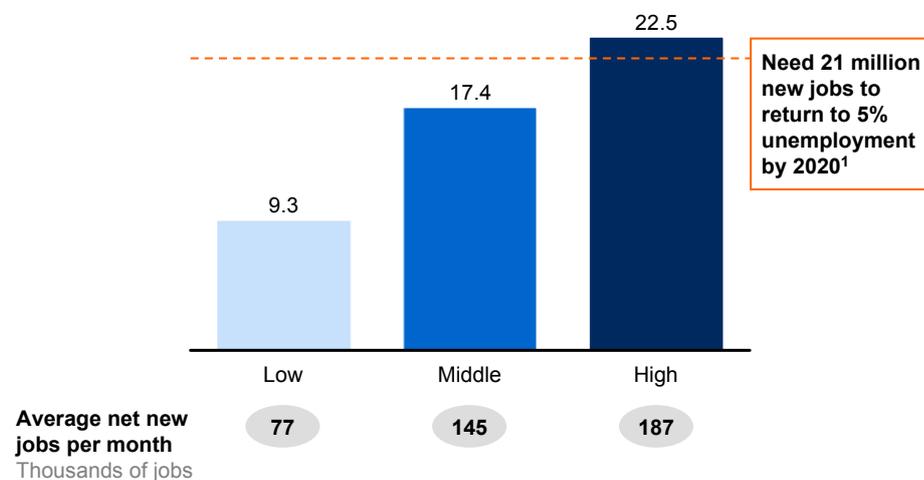
The low-job-growth scenario is frighteningly familiar. Essentially, it would be a continuation of the weak US job creation trend since 2000. It would mean further contraction in manufacturing employment, a continued wave of automation and offshoring in administrative and back-office positions, and a new wave of automation in retail (for instance, more widespread adoption of self-checkout). As in the past decade, our projections show that college graduates would fill a disproportionate share of whatever jobs would be created. Where the scenario would diverge from the past decade is in health care, in which large efficiency gains or significant cost controls unaccompanied by job-creating innovation could slow rates of job growth.

Achieving the high-job-growth scenario will require strong performance in several sectors of the economy. Health care is pivotal, with the potential to create more than 5 million new jobs. This would stem from rising demand from the aging population and the addition of millions of newly insured Americans to the health care system. The scenario also assumes that innovative approaches in primary care, chronic disease management, and geriatric care would create new jobs.

### Exhibit E2

#### The high-job-growth scenario is the only one that returns the United States to 5 percent unemployment by 2020

Employment demand scenarios  
2020, millions of jobs



<sup>1</sup> Based on our labor force supply projections discussed in Chapter 3 of this report.  
SOURCE: Moody's Analytics; McKinsey Global Institute analysis

Slowing the rate of manufacturing job losses since 2000 will also be critical in the high-job-growth scenario. Business services, a category that includes everything from facilities support to architectural services, could create nearly 6 million more jobs. This will depend on preserving employment in administrative support and other functions that many companies have outsourced, often to locations outside the United States. A rebound in housing and consumer demand could add a total of 3 million jobs in construction and retail. Leisure and hospitality would perform best with strong growth in both domestic travel and foreign tourism.

Highly educated Americans see job growth in all scenarios, but only under the high-job-growth scenario does employment grow significantly for workers with less than a college degree. This scenario also offers the possibility that the United States can start to reverse two decades of "hollowing out" middle-income jobs, which are essential for social mobility.<sup>6</sup>

### **AMERICA'S EVOLVING WORKFORCE: INVESTING IN A NATIONAL ASSET**

Despite an aging population, in this decade the US labor force will continue to grow, reaching 168.9 million in 2020, from 153.8 million at the end of 2010, according to our projections.

However, the configuration of the labor force will not neatly fit the requirements of employers. While company executives in interviews expressed enthusiasm for the strength and productivity of the US workforce, they also indicated a strong need for workers with specific skills and educational requirements—which may be lacking in the labor force of 2020, absent changes in policies and institutions.

We project that 56.5 million members of the workforce in 2020—or about 34 percent—will have college or graduate degrees. However, if the high-job-growth scenario is achieved, there will still be 1.5 million too few college graduates (Exhibit E3). Moreover, in 2020, some 38 percent of US workers—or 64 million—will have a high school diploma or less. We project there will be 5.9 million more high school dropouts in 2020 than jobs available for workers with that level of education.

A growing source of potential matching problems among workers with postsecondary education is the fields of study they choose. Many are not obtaining the skills that will be most in demand. Extrapolating from the current trend, in this decade the United States will produce twice as many graduates in social sciences and business as in science, technology, engineering, and mathematics (the STEM fields)—exacerbating the shortage of qualified candidates for technical jobs reported in our employer survey. Shortages are also likely in some health care categories and in a number of specific vocations that students in community colleges and vocational schools could be training for. In our survey, 64 percent of companies reported having positions for which they often cannot find qualified applicants, with management, scientists, and computer engineers topping the list.

In general, workers of all ages need better information on which to base their educational and training decisions. A national database, showing which jobs are in demand locally and nationally, could be a great help. Similarly, a system to certify

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6 See David Autor, *The polarization of job opportunities in the U.S. labor market*, Center for American Progress (The Hamilton Project), April 2010; see also Claudia Goldin and Lawrence Katz, "Long-run changes in the wage structure: Narrowing, widening, polarizing," *Brookings Papers on Economic Activity*, Volume 38, Issue 2, 2007.

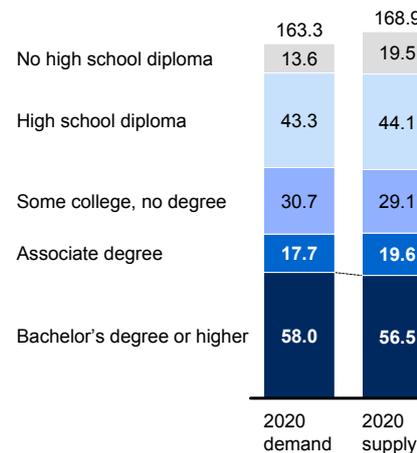
the skills of employees in many kinds of jobs, reflecting both formal education and on-the-job training, could make matching far easier.

### Exhibit E3

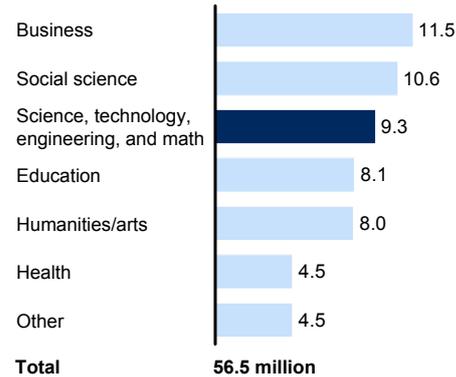
#### Labor demand and supply projections indicate 1.5 million too few college graduates in 2020

Million

##### Demand vs. supply—2020 projections (high-growth demand scenario)



##### Bachelor's degree or higher, by specialization— 2020 labor supply projections



SOURCE: US Bureau of Labor Statistics; Anthony Carnevale, Nicole Smith, and Jeff Strohl, *Help wanted: Projections of jobs and education requirements through 2018, 2010*; McKinsey Global Institute analysis

### ANYTIME, ANYWHERE: THE CHANGING NATURE OF WORK

As the United States replaces the jobs lost by the recession, many workers will confront an evolving employment landscape. Thanks to broadband communications and other technologies, more work can be done remotely and more jobs can be “disaggregated” into different tasks.

Disaggregation means separating simple repetitive tasks from more complex, interactive jobs and then either automating them or assigning them to lower-cost workers. Sometimes, disaggregation can lead to the creation of new middle-income jobs, too. One example: using other health care workers to offload from physicians those tasks that require time and attention rather than advanced skills.

The growing sophistication of communications technology makes it possible for people to work anytime, anywhere. This virtualization of jobs is opening up new opportunities for Americans to work from home or from remote centers in lower-cost parts of the country. As a result, some companies are moving jobs back from offshore locations, a trend we think could gain steam if more businesses had better information about the opportunities. “Home-sourcing”—people working from home for call center or administrative work—could be the best prospect for many laid-off workers who cannot sell their homes or move.

Finally, technology makes it possible for companies to manage labor as a variable input rather than a fixed one. Using new resource-scheduling systems, they can staff workers only when needed—whether it’s for a full day or a few hours. In our survey, more than half of employers expected to use more part-time, temporary, and contingent workers in the years ahead (Exhibit E4). This trend is driven partly by concerns over the strength of the current recovery, but many employers say they will

continue to employ contingent workers for flexibility and to better use their permanent workforces.

For high-skill employees and professionals, the ability to set their own hours and work from any location can be liberating and empowering. Indeed, employers are using remote work to attract and retain some types of employees, including mothers and people nearing retirement. At the same time, workers who shuttle from one part-time job to another as they piece together a full-time paycheck will be outside the traditional employer-based benefits system.

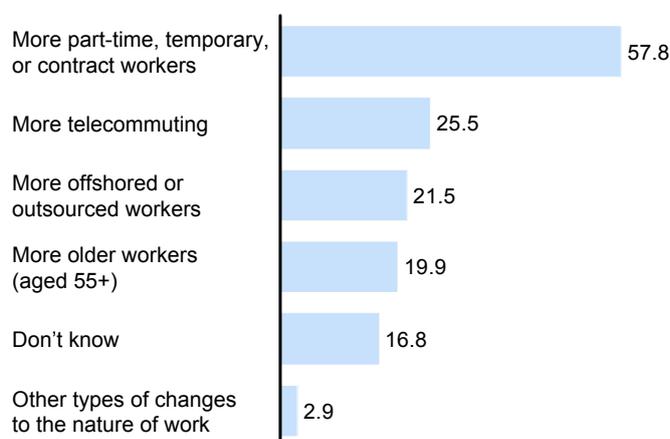
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#### Exhibit E4

#### Our survey reveals that employers foresee a more flexible and virtual labor force

**How will your company's workforce change over the next 5 years?  
(Select all that apply)**

% of respondents (n = 2,000)



SOURCE: McKinsey Global Institute US Jobs Survey, 2011; McKinsey Global Institute analysis

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### TOWARD A US JOBS AGENDA

While a robust economic recovery is a foundation for job growth, a cyclical rebound in GDP growth alone is unlikely to put enough Americans back to work. Job creation must become a national priority, not a by-product of other policy decisions. Our research indicates that progress on four dimensions is needed: addressing the growing skill mismatch problem; finding ways to make globalization a better source of job creation in the United States; stimulating innovation and new company creation; and simplifying regulatory procedures that create obstacles to job creation. We present a range of possible solutions in these four areas, which we hope will advance the conversation about growth and jobs.

- **Skill: Develop the workforce of tomorrow.** Despite rising educational attainment and large investments by the federal government in education and job training, employers say they cannot find workers with specific skills. Meanwhile, students lack a clear picture of which jobs to prepare themselves for. Businesses can become more involved in developing curricula in community colleges and vocational schools, and a national jobs database could provide the basis for informed decisions about majors and training programs. Targeting federal scholarships and loans for students pursuing education in technical fields can reduce potential shortages in areas such as software design. Policy makers can also learn from successful job retraining and placement models in other nations.

- **Share: Harness globalization to create more US jobs.** Despite the recent financial crisis, the global economy is booming, and for the most part American companies have adapted and thrived. However, the same cannot be said for American workers. The United States needs to ensure that its workers—not just its companies—win “share” in the global marketplace. One way is to increase foreign direct investment in the United States, particularly investment into job-creating “greenfield” investment projects. At the same time, the United States can do a better job of encouraging exports by smaller companies. Another promising new trend that should be encouraged is repatriating some types of services that have been offshored; shifting economics will make it more competitively attractive to locate many remote business services jobs in the United States.
- **Spark: Grow emerging industries and new businesses and reignite innovation.** Innovation, new industries, and new company creation are essential for strong demand growth and job creation. An important first step will be to restart the flow of financing to start-ups and growing young companies. Adopting some existing state-level models to encourage angel and venture capital would be a good step, for both new companies and established players. Government can also use its influence as a standards setter and buyer of equipment to help accelerate the development of new technologies and industries. Finally, government, academia, and the private sector should collaborate on ways to make sure that more new ideas developed by US companies and in American research labs scale up into industries in the United States.
- **Speed: Clear the path for investing and hiring.** Uncertainty over the direction of regulation—and the time and expense required to comply with current regulation—has made some companies hesitant to invest. Speeding the resolution of investment decisions, too often delayed by overlapping or conflicting environmental and land use regulations or by their unnecessarily slow application, is critical. “Plug and play” enterprise zones, which would be preapproved for most zoning and environmental permits, could cut in half the time needed to bring a new plant online. Another critical obstacle to job growth is the backlog at the US Patent Office, where it can take more than three years to get approval. Finally, there are some regulations in fields such as medicine or shipping that needlessly restrict how services can be delivered and by whom.

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Waiting for the US job market to correct itself and depending on the solutions of the past will not hasten the return to full employment or set the stage for sustained job creation in the years to come. To create the jobs that America needs to continue growing and to remain competitive, leaders in government, business, and education will have to be creative—and willing to consider solutions they have not tried before. Workers themselves will need to acquire the right skills and to adapt to a future of lifelong learning and new ways of working. As Peter Drucker warned, “The greatest danger in times of turbulence is not the turbulence; it is to act with yesterday’s logic.”

## Relevant McKinsey Global Institute publications



### **Growth and renewal in the United States: Retooling America's economic engine (February 2011)**

In order to drive growth and competitiveness, the United States needs to boost labor productivity growth to a rate not seen since the 1960s. It is important that the United States returns to the more broadly based productivity growth of the 1990s when strong demand and a shift to products with a higher value per unit helped to create jobs even as productivity was growing.



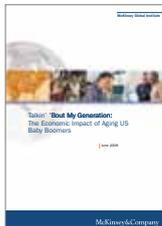
### **Growth and competitiveness in the United States: The role of its multinational companies (June 2010)**

Although US multinationals include many of the biggest companies in the United States, the full extent of their economic impacts is less well known. MGI seeks to provide a fuller picture by assessing the contributions of MNCs across the key metrics of economic performance.



### **Changing the fortunes of America's workforce: A human capital challenge (June 2009)**

Rising income dispersion in the United States and other advanced nations has become a source of concern. Since the early 1970s, incomes for the highest US earners have raced ahead, while those at the bottom of the income distribution have stood still and those in the middle barely increased. This report examines changes in income dispersion and their causes from 1991 to 2005.



### **Talkin' 'bout my generation: The economic impact of aging US baby boomers (June 2008)**

Despite their aggregate wealth, a vast majority of US baby boomers are unprepared for retirement. Enabling them to work longer would significantly benefit both individuals and the broader economy, but policy makers and business leaders will need to take action.



### **Accounting for the costs of US health care: A new look at why Americans spend more (December 2008)**

The United States spends \$650 billion more on health care than expected, even when adjusting for the economy's relative wealth; MGI examines the underlying trends and key drivers of these higher costs. The study finds that outpatient care, which includes same-day hospital and physician office visits, is by far the largest and fastest-growing part of the US health system.



### **The emerging global labor market (June 2005)**

Although the practice of offshoring is growing among companies in developed countries, a wide gap exists between the number of service jobs that could be located remotely and the number of jobs that have been offshored. This white paper examines the potential for offshoring in a variety of industries.

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