### McKinsey Global Institute









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# Growth and renewal in the United States: Retooling America's economic engine

### The McKinsey Global Institute

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MGI's work is conducted by a group of full-time senior fellows based in offices in Beijing, Brussels, Delhi, London, San Francisco, Singapore, and Washington, DC. MGI project teams include consultants from McKinsey's offices around the world and are supported by McKinsey's network of industry and management experts and worldwide partners. In addition, leading economists, including Nobel laureates and policy experts, act as advisers to our work.

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# Challenges and opportunities

In 2000-08, productivity contributed

80% of annual GDP growth

Without increased labor inputs, productivity growth must accelerate 30%+ to sustain past GDP growth rates

Americans born in 1960 saw their per capita GDP grow

2.5 times by the age of 40 ...

Americans born in 2000 will see an increase of

1.6 times

Companies can close 3/4 of the gap to historic GDP growth

> Since 1929, US jobs and productivity both grew in all but one

10-year period

From 2000 to 2008, five sectors accounted for 35% of GDP, but 75% of productivity growth

170/o higher than the US average in the Far West, but 130/o the Plains

For the past 40 years, spending on health care has grown at

4.9% while per capita GDP has increased at 2.1%

Over the next decade, the United States could face a

1.9 million shortfall in technical and analytical workers

Over the last decade, the US ranking in infrastructure quality fell from 7th to 23rd

#### 1

### **Executive summary**

With the United States slowly recovering from recession, government and business leaders face the urgent task of reigniting growth and renewal in the American economy. They need to spur faster GDP growth, create jobs, and reestablish US competitiveness in a rapidly changing global economy. This is not only a short-term challenge; what matters more is the long-term growth pattern over the next several decades. A drop in the rate of GDP growth from its historic 50-year average of 3.3 percent per annum to, say, 1.5 percent for each of the next 20 years would be far more damaging to prosperity and jobs in the United States than even a double-dip recession sometime in the next 12 months.

To deliver economic prosperity for this generation and the ones that follow, the United States needs to retool the economy's engine so that it can run at a higher, sustainable growth rate for decades to come. The key to achieving this aim is productivity—the engine that has powered US growth in recent decades and been a source of US competitiveness. Research by the McKinsey Global Institute (MGI), the business and economics research arm of McKinsey & Company, finds that the United States needs to accelerate labor productivity growth to a rate not seen since the 1960s. Further, the United States needs to ensure that this productivity growth is broadly based, coming from efficiency gains, innovation, and increasing the value and quality of goods and services produced.

While this challenge is daunting, our research suggests that the United States can meet it. The US productivity engine has not run out of steam: we have identified sufficient opportunities to achieve the broad-based productivity acceleration necessary to match, and even surpass, historic GDP growth rates. However, to achieve this potential, we identify seven priority issues that need to be addressed by business leaders and policy makers.

### MORE THAN EVER, THE UNITED STATES NEEDS TO RELY ON PRODUCTIVITY TO DELIVER GROWTH AND COMPETITIVENESS

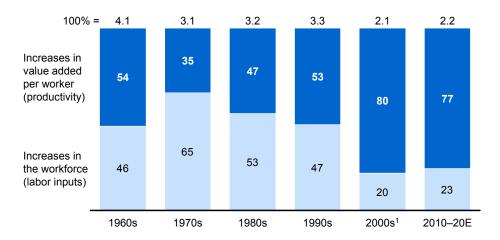
For half a century, healthy increases in labor and productivity have together powered growth. The nation's labor force grew rapidly as the postwar baby-boom generation came of age and women streamed into the workplace. As a result, labor has contributed 1.6 percent to annual GDP growth since 1960. At the same time, productivity rose at an average 1.7 percent annual rate as business processes evolved and new technologies emerged. Together, they contributed to robust annual GDP growth of 3.3 percent in nearly equal proportions.

As baby boomers retire and the female participation rate plateaus, the US economy will receive significantly less lift from increases in the labor force and will therefore have to rely increasingly on productivity gains to fuel growth. In the first decade of the 21st century, productivity gains have already contributed 80 percent of total GDP growth compared with 35 percent in the 1970s. The expectation is that this trend of greater reliance on productivity for GDP growth will continue (Exhibit E1).

### Exhibit E1

### US GDP growth has been driven by increases in both labor and productivity, but labor's contribution is declining with demographic shifts

Contributions to growth in real US GDP, overall economy Share of compound annual growth rate, 1960–2008, %



1 2000-08 data used for 2000s.

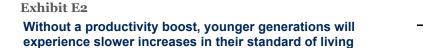
SOURCE: US Bureau of Economic Analysis; US Bureau of Labor Statistics; McKinsey Global Institute analysis

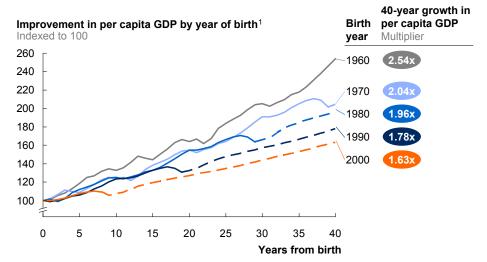
If, over the next ten years, the labor force were to grow as currently projected and productivity increases at the average 1.7 percent annual rate that the United States has posted both over the long term (1960 to 2008) and more recently (1990 to 2008¹), US GDP growth would decline to 2.2 percent per year. With the working-age population declining from 67 percent to 64 percent, Americans on average would experience slower gains in living standards than did their parents and grandparents (Exhibit E2).²

<sup>1</sup> Given the focus of this report on longer-term US productivity growth prospects, we have used 2000–2008 growth to understand pre-recession productivity trends in the last decade. For future growth projections, we assume a return to employment and GDP growth trends based on consensus estimates and apply productivity growth opportunity estimates to the underlying long-term trend.

<sup>2</sup> We use per capita GDP as the measure of living standards.

- - Forecast





<sup>1</sup> GDP data for 2010–15 is based on McKinsey and Moody's consensus projections. Thereafter, we assume 1.7 percent productivity growth in line with the historical rate. The share of the working-age population will decline with UN projections (66 percent in 2009; 60 percent in 2030).

SOURCE: US Bureau of Economic Analysis; US Census Bureau; Moody's Economy.com; McKinsey Global Institute analysis

If we look just at the last two decades and aim to recapture the 2.8 percent growth in GDP of that period, labor productivity growth needs to increase from 1.7 percent per year to 2.3 percent—an acceleration of 34 percent. The United States is not alone in facing this productivity and growth challenge. Japan and Western Europe are already experiencing stronger demographic headwinds. The Japanese workingage population has started to decline, with a cumulative reduction of 9 percent projected by 2020. Within the EU-15, the working-age population is projected to fall by 4 percent over the next ten years. As a result, the productivity challenge in Japan and Europe is even larger than it is in the United States. Japan will need to accelerate productivity growth by more than 80 percent and the EU-15 by nearly 60 percent if they are to sustain their past growth rates.

GDP and productivity growth are also vital for competitiveness, ensuring that the United States remains an attractive place in which businesses can operate, invest, and expand. At the core of US competitive strength has been the economy's rapid rate of innovation and productivity growth, as well as the large, expanding, and dynamic US domestic market. The United States has led the world's developed nations in terms of productivity performance. Over the past two decades, while the US economy was delivering robust productivity growth of 1.7 percent annually, productivity growth in the EU-15 and Japan was 1.4 percent and 1.2 percent, respectively. By 2008, US labor productivity was 1.23 times that of Europe and 1.38 times that of Japan. However, it is important to note that emerging economies such as China and India are experiencing rapid GDP and productivity growth and are

<sup>3</sup> Projections from the Population Division of the Department of Economic and Social Affairs of the United Nations Secretariat, *World population prospects: The 2008 revision*. The EU-15 comprises Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, the Netherlands, Portugal, Spain, Sweden, and the United Kingdom.

<sup>4</sup> Since 1995, McKinsey Global Institute has conducted a range of comparative productivity assessments on the United States, Western Europe, and Japan, drawing on McKinsey's industry-level expertise globally. For more, see www.mckinsey.com/mgi/.

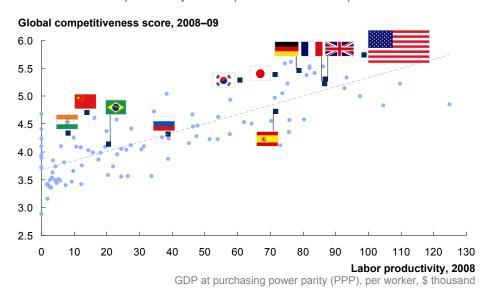
intensifying the competitive pressure on the United States in an increasingly broad range of goods and services.

The correlation between productivity and competitiveness is well established and close, not only in the United States but also in economies around the world (Exhibit E3). Productivity is the key to ensuring competitiveness and growth, not just at the national level, but also for sectors and individual companies.

### Exhibit E3

### At the national level, productivity correlates closely with competitiveness

Correlation between productivity and competitiveness for a sample of countries



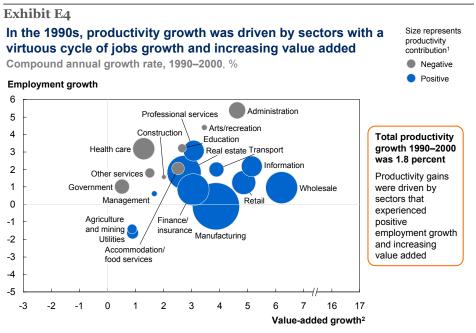
SOURCE: World Economic Forum, Global competitiveness report 2008-09; The Conference Board

# ACCELERATED PRODUCTIVITY GROWTH MUST INCLUDE BOTH EFFICIENCY GAINS AND INCREASES IN THE VALUE AND QUALITY OF GOODS AND SERVICES PRODUCED

By definition, the necessary acceleration in productivity can come either from efficiency gains—reducing inputs for given output—or by increasing the volume and value of outputs for any given input. The United States will need to see both kinds of productivity gains in order to experience balanced, sustainable growth. Efficiency gains are important not only for competitiveness—at the company, sector, and national levels—but also for facilitating the movement of labor and capital to new and growing sectors. Meanwhile, improving the quality and volume of goods and services facilitates a virtuous cycle of growth in which increases in value provide for rises in income that, in turn, fuel demand for more and better goods and services. This process ultimately spurs robust future growth and prosperity.

The productivity acceleration and rapid GDP growth that the United States enjoyed in the second half of 1990s was enabled by solid gains in both sources of productivity growth. Two sectors—large-employment retail, and very high-productivity semiconductors and electronics—collectively contributed 35 percent to that period's acceleration in productivity growth. This helped the private sector boost its

productivity growth from 1 percent in 1985 to 1995 to 2.4 percent in 1995 to 1999.<sup>5</sup> At the same time, these two sectors added more than two million new jobs (Exhibit E4).



- 1 Productivity contribution for 1990-2000 calculated using Moody's Economy.com data.
- 2 Value-added growth is the contribution of each sector to total GDP growth.

SOURCE: US Bureau of Economic Analysis; Moody's Economy.com; McKinsey Global Institute Sunrise Productivity Model

In contrast, the largest productivity gains since 2000 have come from sectors that experienced substantial employment reductions (Exhibit E5). Computers and related electronics, the rest of manufacturing, and information sectors have contributed around half of overall productivity growth since the turn of the century but reduced employment by almost 4.5 million jobs—more than 85 percent of which occurred before the onset of the recession. The sectors that added the most employment during this period tended to be ones with below-average productivity—notably the health sector.

Periods such as the years since 2000 have made many Americans suspicious that boosting productivity is a job-destroying exercise. But this does not hold true beyond the short term. Since 1929, every ten-year rolling period except one has recorded increases in both US productivity and employment. And even on a rolling annual basis, 69 percent of periods have delivered both productivity and jobs growth (Exhibit E6). What the United States needs is to return to the more broadly based productivity growth that the economy enjoyed in the 1990s. During that period, strong demand and a shift to products with a higher value per unit helped to ensure that sector employment expanded at the same time that productivity was growing—reigniting the virtuous cycle of growth in which productivity gains spur increased demand, in turn leading to higher economic growth.

<sup>5</sup> US productivity growth 1995–2000, McKinsey Global Institute, October 2001; How IT enables productivity growth, McKinsey Global Institute, October 2002 (www.mckinsey.com/.mgi).
Employment numbers come from the US Bureau of Economic Analysis.

<sup>6</sup> The only exception is the period between 1944 and 1954 in the aftermath of the Second World War.

### Exhibit E5

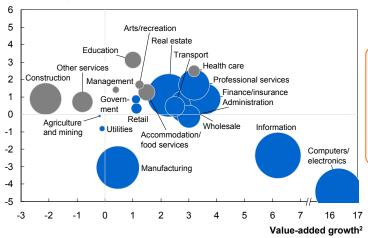
# Since 2000, the largest contributions to productivity gain were driven by declining employment

Compound annual growth rate, 2000–08, %

# Size represents productivity contribution<sup>1</sup> Negative







Total productivity growth 2000-08 was 1.6 percent

Large share of productivity gains came from tradable sectors with large efficiency gains and job losses

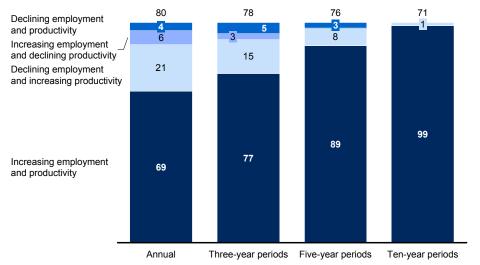
- 1 Manufacturing sector excluding Computers/electronics sector.
- 2 Value-added growth is the contribution of each sector to total GDP growth.

SOURCE: US Bureau of Economic Analysis; McKinsey Global Institute Sunrise Productivity Model

#### **Exhibit E6**

# The "trade-off" between aggregate employment and productivity levels is a short-term phenomenon

Rolling periods of employment and productivity change, 1929–2009 %; periods



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

# THE UNITED STATES HAS LARGE UNTAPPED POTENTIAL TO INCREASE PRODUCTIVITY AND GROWTH

Accelerating productivity to the degree necessary to maintain historic rates of GDP growth may seem a daunting challenge. However, our research finds that, despite strong aggregate productivity gains in the past two decades, the US productivity engine is not running out of steam. More than enough opportunities exist across the US economy to achieve the necessary productivity acceleration. We drew on McKinsey's industry expertise, 20 years of MGI research on US productivity covering 30 sectors, and recent MGI reports including an examination of the contribution of multinational corporations to the growth and health of the US economy. In this current report, we added to this body of work by examining sector contributions to aggregate growth and assessing opportunities for productivity improvement in three very different sectors—retail, aerospace, and health care.

We found evidence of productivity opportunities across these and other US sectors. Even sectors that have historically made large contributions to productivity growth have ample headroom to continue to innovate and become more efficient. Tradable sectors such as manufacturing will need to keep improving their productivity in the face of intense global competition; domestic sectors such as retail will need to do the same to cope with strong domestic competition. Unsurprisingly, sectors that have been persistent productivity laggards—notably the public sector and regulated sectors such as health care—have the potential for dramatic productivity gains. To capture all these opportunities will require large-scale changes (e.g., greater use of market-based mechanisms, including incentives to increase competition; leverage of technology; managerial innovations; and productivity best practices from the private sector).

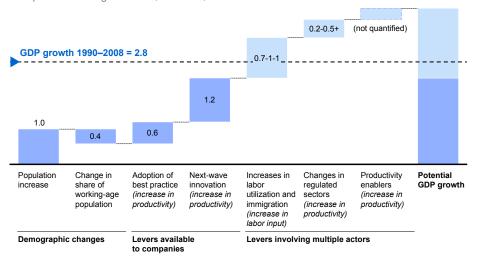
We have identified opportunities to diffuse best practices and implement emerging business and technology innovations that could achieve three-quarters of the productivity growth acceleration needed by the United States. The rest of the acceleration—and even more—can come from making structural changes in regulated sectors and strengthening productivity enablers. Furthermore, there is room to counteract demographic trends and increase the labor contribution to overall GDP growth. Government and business will need to take concerted action to change policies and practices across sectors and regions (Exhibit E7).

#### **Exhibit E7**

### The United States can achieve historic levels of GDP growth—or better—by pursuing opportunities that require coordination across multiple actors

Potential GDP growth

Compound annual growth rate, 2010-20, %



SOURCE: Organisation for Economic Co-operation and Development; Central Intelligence Agency; World Bank; McKinsey Global Institute analysis

# Adopting best practice more widely can deliver one-quarter of the necessary productivity acceleration

There is still considerable room for the United States to adopt best practice operational improvements. Take lean principles—the goal of which is to eliminate waste—as an example. Even in such sectors as retail, where US businesses have had a strong record on productivity, there is scope to do more. One way is to take lean practices from the stockroom to the storefront. Adjusting the scheduling of employee activities to account for peak shopping hours can substantially increase staff utilization and, at the same time, increase customer satisfaction.

Other sectors—US aerospace being an example—have thus far lagged behind in operational best practice. Despite being leading global exporters, aerospace companies have yet to adopt lean practices in the systematic way that we have seen among best-in-class automotive players, for instance. Public sector and regulated sectors such as health care have not faced strong pressure to use resources more efficiently, and this offers another significant opportunity. Health care players have only just begun to adopt lean operational principles. Hospitals, for example, have room to improve how nurses spend their time; at some hospitals, less than 40 percent of their time is spent with patients and the rest on tasks such as paperwork. Hospitals also can improve their discharge and admissions processes to reduce turnaround times and expand patient capacity.

<sup>7</sup> Productivity in the public and regulated sectors is notoriously difficult to measure because there are no reliable metrics for sector output. Changes in value added are often poor indicators of changes in quality-adjusted output, whether in public sector activities such as federal or state governments, or regulated sectors like health care or education. Conversely, operational productivity improvements may not show up as changes in value added as measured. Despite these measurement issues, industry evidence suggests that quality-adjusted productivity growth in these sectors has significantly lagged behind that of private industries.

We have identified opportunities to adopt known best practices that, if applied across the private and relevant regulated sectors, could achieve one-quarter of the productivity acceleration necessary for sectors to return to historic rates of GDP growth. Forthcoming MGI research on Big Data and public sector productivity will shed further light on the biggest available opportunities.

# Using the next wave of innovation could achieve a further half of the necessary productivity growth acceleration

Over the next ten years, many industries will tap into the productivity gains available from a wave of innovations coming on stream. To give a flavor of the opportunities available, we illustrate with three examples from our sector case studies. Economywide productivity gains are often the result of seemingly minor company-level changes that in combination can have large aggregate impact.

First, take enhanced business operations such as deeper supply chain integration. US companies have already made large gains in supply chain efficiency, but there is more to come (e.g., the declining cost of radio-frequency identification, or RFID, enables a new wave of end-to-end supply chain models). In retail, for instance, integrating physical and online supply chains both reduces costs through increasing the scale of inventory management and boosts revenue and value added by reducing markdowns.

Second, continued innovations in customer responsiveness and engagement can spur productivity growth. Companies can increase both revenue and customer satisfaction by improving how quickly and directly they respond to evolving customer preferences and behavior. Retailers can tailor targeted promotions as part of a peer review service and move toward self-service checkouts and information kiosks. The health care sector can encourage e-mail and phone communication rather than the frequent face-to-face visits that inflate outpatient care costs. The financial industry is looking to emerging service demands as a source of future growth (e.g., offering more effective management of personal finances through software that uses information across various accounts).

A third example is service and product innovation. Companies can boost productivity by innovating in what, and how, goods and services are provided to customers. Companies can provide services that supplement traditional product offerings (e.g., an office supply company can offer comprehensive procurement services). Retail banks and payment companies can find new ways to serve the nearly one-quarter of Americans who are unbanked or under-banked.

Many more such innovations are emerging from dynamic companies in a variety of sectors, and have the potential to transform industries and their value-added productivity growth, much like we saw in the 1990s with the "Wal-Mart effect." Continued innovation and its wide-scale adoption could capture half of the acceleration in productivity growth that the United States needs.

<sup>8</sup> Lean principles do not necessarily apply uniformly across regulated sectors.

# THE UNITED STATES SHOULD TACKLE SEVEN PRIORITIES TO ACHIEVE THE REMAINING PRODUCTIVITY ACCELERATION AND THEREBY DRIVE GROWTH AND PROSPERITY

The United States clearly faces a number of near-term challenges. The economy continues to fall short of creating the 200,000 jobs required each month to bring unemployment down to 5 percent by 2016. Meanwhile, government and consumer deleveraging will bear down on GDP growth, a pressure that could last three to five years beyond the recession. The United States needs to address issues of weak aggregate demand, debt and deleveraging, the stability of the financial system, and the deficit. While these are very important issues to tackle in the near term, they should not distract from the critical long-term imperative of sustaining growth through higher productivity. MGI is engaged in research on US jobs and labor market challenges, the results of which we will publish in 2011.

Some argue that economic development and technological innovation in the United States may have reached a plateau and that the US productivity engine is running out of steam. Our research suggests otherwise. We find that companies alone can deliver three-quarters of the acceleration in productivity growth that the United States needs to match historic growth rates by applying best practice across the economy and tapping the next wave of innovation. The United States has seen step changes in information technology and its application, and managerial innovations that have not yet worked their way fully through the economy. Furthermore, many new technologies—some in their early stages such as biotechnology and nanotechnology, others more developed such as cloud computing—could also accelerate productivity improvement.

But to obtain the last one-quarter of what's required—and potentially more—federal, state, and local governments need to tackle economy-wide barriers that have long hampered productivity growth. The key challenges are driving structural changes in public and regulated sectors (e.g., realigning incentives with productivity growth); and strengthening the skill base, infrastructure, and other underlying productivity enablers. An additional boost to growth is achievable by expanding labor force participation and migration to counteract demographic shifts.

We see seven major imperatives that the United States needs to meet if it is to achieve the productivity growth that is required to sustain its historic pace of GDP growth and continued prosperity. For each of these imperatives, there exists a rich set of potential solutions. Our examples are not meant to be exhaustive, and we invite others to contribute ideas to this ongoing dialogue about US growth and renewal and how the United States can address the seven priorities we highlight:

1. Drive productivity gains in the public and regulated sectors. Public and regulated sectors such as health care and education represent more than 20 percent of the US economy, but their persistently low productivity growth slows overall economic growth. McKinsey analysis has demonstrated that if the US public sector could halve the estimated productivity gap with similar private sector organizational functions, its productivity would be 5 to 15 percent higher

<sup>9</sup> Debt and deleveraging: The global credit bubble and its economic consequences, McKinsey Global Institute, January 2010 (www.mckinsey.com/mgi).

<sup>10</sup> Research from The Conference Board suggests that productivity improvements can alleviate the challenges of sovereign debt and fiscal deficits. The Conference Board, Escaping the sovereign-debt crisis: Productivity-driven growth and moderate spending may offer a way out, December 2010.

- and would generate annual savings of \$100 billion to \$300 billion. Many parts of these sectors could benefit from greater competitive intensity, more extensive use of technology, and applications of managerial innovations and productivity best practices learned from the private sector that are consistent with the broader goals of improved health and education outcomes.
- 2. Reinvigorate the innovation economy. Innovation can increase the quality and quantity of goods and services produced, contributing to productivity gains. US policy and regulation should provide the right incentives for private companies, which have a strong record of innovation, to continue to invest in innovation and expand their US-based R&D activities (e.g., extending and expanding R&D tax breaks)—thereby creating a virtuous cycle of US productivity growth. 12 Innovation has traditionally benefited from government contracts and research institutions such as DARPA, but, while the United States remains the global leader in R&D spending, others are rapidly catching up.<sup>13</sup> Specifically, the United States needs to ensure that the IT infrastructure and technologies are in place to capture fully the transformational potential of digital technology. The potential ranges from Big Data—data-driven business decisions and actions—to cloud computing and the application of advances in biology and life science. All these new-wave innovations can potentially produce fresh productivity gains, notably in public and regulated sectors such as education and health care. Innovation that drives productivity is not limited to new technology. Managerial innovation, including the development of novel products and services, new business models, identifying fresh uses and markets for existing products, and better ways to organize business activities are equally critical aspects of innovation. Businesses and government need to address potential barriers to the productivity impact in these areas (e.g., privacy protection). MGI will publish new research on Big Data in spring 2011.
- 3. Develop the US talent pool to match the economy of the future and harness the full capabilities of the US population. The US talent pool is not growing fast enough to meet future demand, and the United States needs to work on multiple fronts to address this. <sup>14</sup> We estimate that the United States may face a shortfall of almost two million technical and analytical workers and a shortage of several hundred thousand nurses and as many as 100,000 physicians over the next ten years. In the aerospace sector, 60 percent of the aerospace workforce is over 45 years old compared with 40 percent in the overall economy, posing a particularly acute skills challenge. The United States could alleviate these shortages by removing barriers to older workers staying in the workforce

<sup>11</sup> See, for example, Thomas Dohrmann and Lenny T. Mendonca, "Boosting government productivity." *McKinsey Quarterly*, Number 4, 2004 (www.mckinseyquarterly.com); and *Accounting for the cost of US health care: A new look at why Americans spend more*, McKinsey Global Institute, November 2008 (www.mckinsey.com/mgi).

<sup>12</sup> How IT enables productivity growth, McKinsey Global Institute, October 2002 (www.mckinsey. com/mgi).

<sup>13</sup> The Defense Advanced Projects Research Agency (DARPA) is the research and development office of the US Department of Defense. For more on the role of government in innovative sectors, see *How to compete and grow: A sector guide to policy*, McKinsey Global Institute, March 2010 (www.mckinsey.com/mgi).

<sup>14</sup> Previous McKinsey research found that a persistent gap in academic achievement between children in the United States and their counterparts in other countries deprived the US economy of as much as \$2.3 trillion in economic output in 2008. Interested readers can turn to Byron G. Auguste, Bryan Hancock, and Martha Laboissière, "The economic cost of the US education gap," *McKinsey Quarterly*, June 2009 (www.mckinseyquarterly.com).

longer (e.g., altering disincentives in how health care costs for older workers are allocated; addressing defined benefit rules). The United States could also improve incentives to technical and analytical training, for example through innovative funding mechanisms and direct links between jobs and college or vocational training schools. Another front for action is immigration, where the United States could consider reducing barriers to the immigration of skilled workers by, for instance, increasing H-1B visa quotas, replacing quotas with a points-based system that rewards educational attainment, and/or easing barriers in the process of acquiring a green card (Exhibit E8).

### **Exhibit E8**

### Increasing the US labor force could add a significant amount to GDP growth but would likely require major changes in policy and practices

Increases in the workforce by lever1 Compound annual growth rate, 2009-19, %2 0.2 - 0.30.7 - 1.10.1 - 0.20.1-0.2 0.3-0.5 Total impact of labor force increase is equivalent to ~30 percent of historic GDP growth of 2.8 percent Female Senior Youth Net migration Total impact of participation participation unemployment labor increases Reduce Assumptions<sup>3</sup> Increase Increase Increase net participation of participation of unemployment in migration from 4.3 females aged workers aged 15–24 age group from 18 to 7 percent per thousand to 5.7 55–64 from 65 to 74 25-54 in labor force (level of US net from 76 to 87 percent (Sweden) (Netherlands) migration in 2000) percent (Sweden)

- 1 Assumes all else remains constant (e.g., working hours and productivity levels). Numbers may not sum due to rounding.
- 2 Excludes impact of dynamic demographic changes over a ten-year period.
- 3 All assumptions are based on 2009 data comparing US with international levels; the exception is net migration, which compares US data for 2000 with US projections for 2010.

SOURCE: Organisation for Economic Co-operation and Development; Central Intelligence Agency; World Bank;
McKinsey Global Institute analysis

4. Build 21st-century infrastructure. US infrastructure is inadequate to meet the needs of a dynamic, growing economy. At the same time, the quality of infrastructure from transportation to water systems has been in relative decline in the United States, which currently ranks 23rd in the quality of its overall infrastructure, undermining competitiveness. Multinational companies consistently rank infrastructure among the top four criteria they use to make decisions about where to invest. In addition, there is considerable scope for the United States to identify and implement leading-edge practices in infrastructure development from project selection to financing and delivery, sometimes using the vehicle of public-private partnerships. There is also scope to improve the use of demand-management techniques (e.g., city center congestion pricing; bridge tolls that vary by time of day).

<sup>15</sup> Talkin' 'bout my generation: The economic impact of aging US baby boomers, McKinsey Global Institute, June 2008 (www.mckinsey.com/mgi).

<sup>16</sup> World Economic Forum, Global competitiveness report 2010–2011.

<sup>17</sup> Growth and competitiveness in the United States: The role of its multinational companies, McKinsey Global Institute, June 2010 (www.mckinsey.com/mgi).

<sup>18</sup> For a discussion of the infrastructure challenge and potential solutions in the United Kingdom, see *From austerity to prosperity: Seven priorities for the long term*, McKinsey & Company London and the McKinsey Global Institute, November 2010 (www.mckinsey.com/mgi.)

- 5. Enhance the competitiveness of the US business and regulatory environment. The relative competitiveness of the US business and regulatory environment is declining—at a time when many international jurisdictions are streamlining processes for working with business and aggressively adjusting their regulatory framework in order to attract new investment. The United States, for example, scores particularly poorly on the burden of government regulation and red tape. 19 The United States needs to reduce regulatory complexity, streamline the process of resolving disputes, and eliminate remaining sector-level barriers to more robust competition, particularly in small or developing segments (e.g., eliminate barriers to online auto sales or retail sales of pet medicines). As MGI has recently highlighted, countries are engaged in a global competition to attract companies to invest and participate in their economies. Many countries have taken huge steps to create attractive business environments. The United States should clearly not copy all the efforts that other countries have taken but should, at least, learn from them and realize the need to continue to cultivate an attractive business environment for the world's most innovative and competitive companies.20
- 6. Embrace the energy productivity challenge. Global demand for energy is predicted to rise at an accelerating pace over the next 20 years, imposing increasing environmental costs and potentially straining supply. In this context, the global focus needs to shift to how to use existing energy supplies more productively. The United States has lagged behind other countries' efforts to pursue increased energy productivity—the level of GDP obtained from each unit of energy consumed. The United States also risks being left behind in important emerging technologies. Clear, long-term policy could encourage the market discipline that drives productivity. For example, fuel-economy standards could encourage the adoption of existing energy-saving technologies and spur the development of new ones. Labeling and innovations such as advanced metering can help make consumers more value conscious in their energy choices.
- 7. Harness regional and local capacities to boost overall US growth and productivity. Cities and regions in the United States have markedly different growth and productivity trajectories, and there is insufficient sharing of best practice among them. Yet there is a rich seam of experimentation with effective solutions at both the federal and local levels that offers scope for shared performance metrics (e.g., a defined set of tracking variables made transparent through digital media) and the transfer of best practice. All levels of government should also seek cross-regional alliances in economic development.

<sup>19</sup> Growth and competitiveness in the United States: The role of its multinational companies, McKinsey Global Institute, June 2010 (www.mckinsey.com/mgi).

<sup>20</sup> Growth and competitiveness in the United States: The role of its multinational companies, McKinsey Global Institute, June 2010 (www.mckinsey.com/mgi).

<sup>21</sup> Curbing global energy demand growth: The energy productivity opportunity, McKinsey Global Institute, May 2007 (www.mckinsey.com/mgi).

Tackling this expansive agenda requires concerted action on several fronts. Private sector companies should take on the opportunities to improve productivity within their operations. Public sector entities should adopt productivity best practices from the private sector in areas where there are analogies between private sector activities (e.g., payroll processing) and their own. Equally important, policy makers will need to improve the alignment of incentives and investments to create an environment that spurs productivity. In some areas, progress will require partnership between public and private players to address system-wide challenges and bottlenecks. Policy makers should engage with the private sector, as well as learn from the actions that other economies are taking to create competitive economies. By doing so, they will reestablish the United States as a crucible from which new world-leading innovations and businesses emerge and ensure that the next generations of citizens enjoy the same pace of rising prosperity as did their parents and grandparents.

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

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How to compete and grow: A sector guide to policy (March 2010)

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US productivity growth 1995–2000: Understanding the contributions of information technology relative to other factors (October 2001)

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How IT enables productivity growth (October 2002)

Looking at three sectors in detail—retail banking, retail trade, and semiconductors—MGI finds that while IT enabled productivity gains in each sector, its impact was complex and varied. IT applications that had a high impact on productivity shared three characteristics: They were tailored to sector-specific business processes and linked to performance levers; they were deployed in a sequence that allowed companies to leverage their previous IT investments effectively; and they evolved in conjunction with managerial innovation.



Debt and deleveraging: The global credit bubble and its economic consequences (January 2010)

The recent bursting of the great global credit bubble has left a large burden of debt weighing on many households, businesses, and governments, as well as on the broader prospects for economic recovery in countries around the world. Leverage levels are still very high in ten sectors of five major economies. If history is a guide, one would expect many years of debt reduction in these sectors, which would exert a significant drag on GDP growth.



Beyond austerity: A path to economic growth and renewal in Europe (October 2010)

Europe faces pressures on GDP growth at a time when scope to stimulate growth from public funds is limited by high debt and deficit levels. The threat to growth is unlikely to dissipate in the short or even medium term, and significant imbalances in unit labor costs and current account positions between European economies intensify the strain. In this challenging context, Europe has little choice but to pursue structural reform to bolster growth. This report sets out a comprehensive agenda for European structural reform on the basis of analysis of existing best practice within the region, proposing action in three areas in parallel.



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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. MGI 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 next largest contributors are the cost of drugs, and administration and insurance.



Curbing global energy demand growth: The energy productivity opportunity (May 2007)

Drawing on a proprietary model of global energy demand, this report offers a detailed look at what's driving soaring global demand for energy in major regions and sectors, providing a glimpse into how global energy will grow and the fuel mix will evolve to 2020 with current policies. The research also sizes the substantial opportunity to curb this growth and, with it, CO2 emissions, by boosting energy productivity—or the level of output we achieve from the energy we consume. Finally, the report looks at the reasons available opportunities to curb energy demand are not being captured and what policies could ensure that they are.



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.

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