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American Prosperity: Charting a Future in a Global and Digital Age

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Introduction

Five years after the start of the global financial crisis, the US economic recovery remains disappointingly weak. American prosperity is being sapped not only by the cyclical effects of recession, but by structural problems that had been building for decades. Persistently weak investment and erosion in the labor market are undermining the economy's future capacity. The Congressional Budget Office has recently lowered long-term growth forecasts for the United States, and this decline in potential GDP should be a call to action.

The challenge is to reignite growth and renewal by raising productivity, creating jobs, and re-establishing US competitiveness. Understanding the opportunities and pressures created by an increasingly global and digital world economy is essential. This paper provides a survey of these trends, the case for optimism and the work needed to realize that optimism.

Although Americans are anxious about the impact of globalization, growth in emerging markets need not spell decline for the United States. We are living through one of the greatest economic transformations in history, which will create opportunities for US companies and workers alike. Similarly, while technological progress brings disruptions, it also creates new opportunities for innovation and economic dynamism that creates economic growth through revitalization of existing industries, and the creation of new products, services, industries and jobs. Successfully competing in the global economy will require the United States to address a range of urgent issues: flagging productivity, stagnant job creation, an eroding educational system, and growing inequality. The United States has a long list of strengths and resources to meet these challenges, but it will require deeper engagement and cooperation between the business community and policymakers, and a willingness to invest in the future.

A global context for America's economic future

The pressures that are reshaping the US economy are best understood against a global backdrop. America now competes in an intricately networked global marketplace for goods, services, commodities, labor, capital, and ideas. The trends described here represent a significant break from the past and because they increasingly impact every sector and segment of the economy, they must be a critical underpinning for US future policy and decisions as well as innovations and investments by the private sector.

Growing pressures in an integrated world economy

After World War II, the US economy experienced a "golden age" of robust growth, expanding manufacturing, and rising wages for the middle class; this era remains deeply ingrained in the American narrative. The landscape has changed profoundly over the past two decades, however, as Western Europe and Japan have built highly competitive modern economies, and millions of

low-wage workers in emerging markets have joined the global labor force. Sustaining American prosperity will require adapting to these new realities.

Intensifying global competition

On most competiveness surveys the United States is seen as slipping from its historically unambiguous leadership position, mostly as a result of the huge strides that other advanced economies and emerging economies are making. The emerging world is producing its own crop of formidable corporate giants: the number of Fortune Global 500 companies headquartered in emerging markets rose from 33 in 2005 to 108 in 2012. The largest of these companies are posting twice the rate of revenue growth as multinationals based in advanced economies—not only in their home markets, but in other emerging and advanced economies.

Emerging markets are growing rapidly, and thereby increasing global demand in virtually every arena, raising the cost of resources and other inputs. As US companies race to serve these fast-growing markets, they now must compete with leading companies from these regions, who themselves are becoming innovators, for their own domestic market and for global markets. In addition, the impact of technology has given rise to complex international supply chains and tightly interconnected financial markets, creating new patterns of trade and capital flows that also form new arenas for competition.

Evolving global trade patterns

Although the US remains an attractive destination for investment, many other countries have built competitive business environments for global companies, and in many areas the US has not kept pace. Business executives tell us that US infrastructure is eroding, the regulatory and tax environment are too complex, and the American talent pool is insufficient. In contrast to other advanced economies, the United States runs a significant trade deficit in knowledge-intensive goods, (Exhibit 1), a broad category that includes autos and other transportation equipment, medical and precision devices, semiconductors and computers, and chemicals. These products require significant R&D, innovation, and highly skilled labor—areas in which the United States should be able to compete. Yet innovations conceived in the US are likely to be built elsewhere. To attract this activity—and the jobs it represents—the US must streamline cumbersome regulatory processes; undertake corporate tax reform with global competiveness in mind; commit to long-term investments in basic research, infrastructure, and workforce skills development; and more fully revive the US's historical comparative advantages in innovation, as well as emerging comparative advantages such as energy input costs.

Strains in the global labor market

Over the past three decades, 1.1 billion people have entered the global labor force—and nearly 900 million of them are in emerging markets. This has dramatically increased competition for jobs, particularly those in low-skill, labor-intensive industries where labor costs are a critical factor of success. At the same time, labor markets in advanced economies are going through profound structural shifts. From 1977 to 2007, they shed 19 million manufacturing jobs while gaining 52 million labor-intensive service jobs and 85 million high-value-added service jobs. This has put a premium on educational degrees and worker skills. Following the Great Recession, demand for low-skill labor in advanced economies remains weak and shows little sign of regaining past levels. But high-skill workers are benefiting from intensifying global competition for their services—and demand is outstripping supply, as education systems

struggle to keep pace with the rapid increase in skills required by business. This trend is part of a larger and global set of labor market mismatches in skills, geographies (where the jobs are versus where the workers are), and industries (growing industries versus slowing industries) that is being played out within and between sectors, countries, and regions. In addition, the pressure of new capital-labor substitution models that are now possible through technology are now impacting even high-skilled workers. The US is feeling these strains: we project a notional shortage of 1.5 million college graduates by 2020 but persistently high unemployment among the less educated.

Debt overhang

The recent financial crisis led to the first worldwide recession since the 1930s and exposed an enormous burden of debt that is slowing the recovery in the United States and Europe. As households and businesses pay down their debts, they consume and invest less, lowering aggregate demand. Government debt has surged in many countries, raising the prospect of higher taxes and less public spending in the future—which will create headwinds for future growth. On average, our examination of post-war deleveraging episodes suggests that the process of working through a debt crisis takes an average of five to seven years; given limited progress today in most countries, it could take even longer this time. The silver lining is that the US private sector has reduced debt faster than that in other countries, and American households may emerge from the deleveraging cycle within the next 12 to 18 months (Exhibit 2).

Unprecedented and shifting opportunities in the global economy

Beyond increased competition and labor market dislocation, globalization is also opening new markets that the US is well-positioned to capture. By 2025, annual consumption in emerging economies will reach $30 trillion—the biggest growth opportunity in history.

Rebalancing global growth and the rise of 2 billion new consumers

The world's economic center of gravity is moving decisively east and south. It took 153 years to double GDP per capita in the United Kingdom during the Industrial Revolution; more than 50 years for the US; and China and India are now repeating that transformation in just 12 to 15 years—and with a population nearly 100 times as large. Emerging economies are expected to contribute three-quarters of global GDP growth and half of global consumption growth between 2010 and 2025, as the emerging world produces almost 2 billion new consumers who collectively will change the nature and the price points of demand. This shift of growth and consumption to emerging economies also comes with changes in business models, purchase patterns, and price points for products and services that US companies must adjust to in what are very competitive arenas.

This seismic shift reinforces the importance of developing competitive export industries. US exports have grown from under 10 percent of GDP in 1990 to 14 percent in 2012. Many fast-growing emerging economies have been identified as priorities in the National Export Initiative, including Brazil, India, and Indonesia. There are promising opportunities to increase US service exports, which currently run a $200 billion trade surplus, and exports of knowledge-intensive manufactured goods, which run a trade deficit as noted above. Emerging markets are also home to large global companies that will want to invest in the US to reach its large consumer market; streamlining processes for these companies to invest here must be a priority.

The century of cities

Around the world, cities are increasingly the engines of economic growth, policy, and dynamism. Roughly 600 cities worldwide will account for 64 percent of global GDP growth through 2025 (Exhibit 3). Of these, almost one in seven is in the United States: American cities are expected to generate more than 10 percent of global GDP growth between 2010 and 2025—more than the cities of all other advanced economies combined. The United States stands apart from other advanced economies in the strong economic performance of its 257 "middleweight" cities—those with populations between 150,000 and 10 million, including Boston, San Jose, and Austin. Middleweight cities account for more than 70 percent of US GDP, and they are taking a range of pathways to growth (Exhibit 4). The US has excelled at developing industry-specific clusters in many cities across the country, creating productive ecosystems that foster faster growth, higher productivity, and more innovation. Silicon Valley and North Carolina's Research Triangle are well-known, but dozens of other economic clusters are the hidden strength of the US economy, from cyber security in San Antonio to cardiovascular equipment in Minneapolis and imaging equipment in Rochester. Other countries are beginning to replicate this model, but the US remains among the leaders.

Disruptive technologies and innovation

The Internet increasingly binds the global economy together. Flows of data and information between countries are now many times the size of flows of goods, services, or money. Today the Internet economy—measured as the sum of Internet consumption and expenditures (for instance, on access providers, web services, e-commerce, online entertainment and advertising)—accounts for an average of 3.4 percent of GDP, making it larger than the agriculture or energy sectors in most countries. It is worth $1.2 trillion in advanced economies and more than $365 billion in aspiring countries, and it creates more than 3 jobs for every job replaced. It supports small businesses and entrepreneurship: we estimate it raises SME revenues by 6.1 percent and lowers costs by 3.8 percent. Yet the magnitude of this potential economic opportunity to create jobs and unleash innovation remains underappreciated.

Beyond the Internet, there is a broad pipeline of new technologies that will have the power to disrupt industries and create new businesses. These include mobile Internet, automation of knowledge work, the Internet of Things, cloud computing, advanced robotics, autonomous vehicles, 3-D printing, advanced materials, next-generation genomics, energy storage, hydraulic fracturing and horizontal drilling, and renewable energy – and they will have broad impact on society, businesses, and economies (Exhibit 5). In the future, we expect IT, big data, and advanced analytics to spread to more organizations and sectors of the economy, but the benefits created will not be evenly distributed. Consumers and entrepreneurs will be big winners, and incumbent businesses will need to move fast on multiple fronts to keep up. The nature of work, the skills required, the returns to human capital and how companies utilize human capital may all change dramatically, potentially raising new challenges to ensure that economic opportunity is widely shared.

Four challenges for rebuilding American prosperity

While the US adjusts to a new era of intense global competition, it is grappling with profound economic shifts at home. The Great Recession has given way to the weakest recovery since World War II, exacerbating structural problems in the labor market that have been brewing for

decades. To effectively compete in the global economy and capitalize on the rapidly emerging opportunities it presents, the US will need to address four critical challenges.

The productivity imperative

Productivity remains the key to prosperity. If young Americans are to enjoy the same increase in living standards as previous generations, the US must increase labor productivity to a rate not seen since the 1960s (Exhibit 6). Although many people worry that productivity improvements come at the expense of jobs, productivity improvements and job growth have always gone hand in hand over the past 80 years. Products became better and cheaper, causing demand to rise and companies to expand production to meet that demand. But in the last decade, some sectors, such as manufacturing, saw mainly labor-saving productivity growth – and the number of US manufacturing jobs decline by one-third. In other words, productivity coupled with demand growth is critical for achieving job growth and prosperity. Therefore, reviving productivity through innovation and making new products that consumers want, not just labor-saving automation, is an imperative.

Equally important for the US economy, is the need to raise productivity in the large health-care and government sectors, where productivity growth has been negligible. Big data analytics offer one solution to the challenge. Sectors across the economy can find new efficiencies by harnessing the deluge of data generated by transactions, medical and legal records, videos, sensors, and social technologies. In retail, for example, real-time data on inventory can be combined with more accurate demand forecasting to reduce excess ordering and stockouts. In health care, big data analytics can improve treatments and clinical outcomes. Government operations can utilize big data to reduce procurement costs, improper payments, and reduce tax fraud. The talent needed to recognize this opportunity is significant: we estimate that by 2018, the United States will face a shortage of up to 190,000 data scientists with advanced training in statistics and machine learning as well as 1.5 million managers and analysts with enough proficiency in statistics to use big data effectively.

The faltering US job creation engine and the changing nature of work

The job losses that accompanied the 2008 recession were more than twice as large as those in previous postwar recessions, and the recovery in employment has been painfully slow (Exhibit 7). The US economy today has 2.9 million fewer jobs than it did prior to the start of the recession, and nearly 40 percent of the unemployed have been out of work for six months or longer. The national unemployment rate has ticked down to 7.5 percent, but labor force participation has dropped to 63.3 percent, a 34-year low.

These labor market woes are not simply a product of the recession. The US job creation engine was in trouble well before. A “lost decade” between 2000 and 2011 saw zero net job growth due to two recessions and the slow recoveries that followed them. The process of re-employment has been slowed by a geographical mismatch: jobs are not where the workers are, and mobility has declined significantly since 1990. In the 1950s and ‘60s, 1 in 5 Americans changed residences every year; but that figure started declining around 1990 and has now dropped to 1 in 8 (Exhibit 8). Several factors have contributed to the decline in mobility, including the growth of dual-income families and the rise of homeownership.

Moreover, the types of jobs that are being created in today's economy are different from the ones that have been lost. Since 2000, all net new job creation in the United States fell into the category of "interaction jobs," or those that require in-person exchanges, problem-solving and collaboration. Interaction jobs are integral to the knowledge economy, and include both highly skilled professions (e.g., doctors, lawyers) as well as medium- and low-skill positions (e.g., nurses, home health aides). In contrast, production jobs and transaction jobs have declined (Exhibit 9) -- yet the US educational system is failing to keep pace with these changes.

America's eroding human capital

While the skill requirements of work in the United States are rising, America's human capital is eroding. At the end of 2012, 31 percent of the civilian population aged 25 or over had at least four years of college education. Although this is the highest proportion on record (up from 21 percent in 1990), the United States is now lagging other countries in educating younger generations (Exhibit 10). And in a recent McKinsey survey of US businesses, more than 60 percent had an unfavorable view of recent graduates' potential to succeed in their company.

Faltering K-12 schools and ineffective post-secondary programs also threaten to increase structural unemployment, leaving millions trapped without the skills needed to succeed in today's economy. In this recession, the unemployment rate never rose above 5 percent for Americans with a college degree, but was four times that for those lacking a high school degree. Today nearly half of the unemployed have a high school degree or less.

Building a more competitive workforce must begin with improving student achievement in K-12 schools. Achievement in primary and secondary school, which lays the groundwork for future productivity and innovation, is closely linked to GDP growth—so it is worrisome that the US ranks only 31st in the world and below the OECD average for students' math proficiency. Equally important is rethinking post-secondary degree programs to ensure they fit employer needs; business involvement with educators will be essential. Short-term training programs are needed for unemployed workers to gain credentials and employment opportunities. Such programs may be particularly helpful to train workers for middle-skill jobs, many of which are currently hard to fill, such as technicians, factory floor workers, home health aides, and commercial vehicle drivers. As work gets more specialized and interaction-based, middle-skill jobs may take on more tasks—for example, physician assistants could take on more routine functions from doctors. Adapting to these changing tasks will require a nimble training system for middle-skill workers.

Growing concentration of income and wealth

US prosperity has always rested on the promise of a thriving middle class and broad economic opportunity. Put more simply as an economic reality, GDP growth for the US economy relies disproportionately on consumer and household spending. Therefore as income and wealth have become more concentrated in fewer households at the top of the income distribution, the demand growth needed to drive economic growth has been put in jeopardy. Despite strong gains in corporate earnings, real wages for most workers have fallen over the past decade, and median US household income has fallen by $4,500 since 2007. Although overall household wealth has recovered from the 2008-09 losses, this recovery has only been felt by the top 7 percent of households. The overwhelming majority of Americans have yet to recoup their losses. Without more broadly shared prosperity, the US economy will struggle to accelerate out of its recent

pattern of disappointing growth. As the fortunes of the educated and the uneducated diverge more widely, the US risks becoming a more polarized society unless it can rebuild the middle class and make the American Dream more attainable.

The United States can jumpstart growth and capture new opportunities, but only with bold action

As America seeks to build real economic momentum, policymakers and business leaders alike will have to look beyond quick fixes and take a longer view that is geared to generating sustainable jobs, bolstering the middle class, and building US competitiveness.

The case for economic optimism

Even after a bruising recession, the US economy remains the largest in the world and can draw on considerable strengths:

- An attractive market profile. The United States remains the world's largest consumer market, attracting significant investment from foreign companies to set up production here. Indeed, the United States is one of the only advanced economies that has seen foreign direct investment increase compared to pre-recession levels. Despite an aging population, the United States has relatively favorable demographics and will continue to benefit from a growing workforce.
- Economic dynamism. The US culture of innovation and entrepreneurship is alive and well, with thriving regional clusters in sectors that lead the world in fields such as information technology and medicine. Although Washington is mired in stalemate, state and local governments are taking the lead in experimenting with new policies and reforms to revive growth and bolster competitiveness—often in collaboration with local businesses.
- A rich and ongoing pipeline of innovations. The US has led development of many recent disruptive technologies, including advances in autonomous vehicles, additive manufacturing, next-generation genomics, and nanotechnology. Some of these will produce waves of creative destruction that will affect companies and workers, however.
- New discoveries in areas that matter. The shale gas and oil boom in western Pennsylvania, Texas, North Dakota, and elsewhere offers compelling evidence of how rapidly US industry—including small independent producers—can adapt to seize new opportunities. This development alone raises the prospect of achieving greater energy security, reducing energy imports, and benefits for a range of energy-intensive industries.

What's needed to move forward

To rebuild the US middle class, the US will have to confront the structural shifts outlined in this paper. For several years, the economy has been in a state of suspended animation, with Washington gridlocked and US companies reluctant to invest. Neither the public nor the private sector can tackle this far-ranging set of challenges alone, however, and finding solutions that can reinvigorate growth will require a new level of engagement and cooperation between business leaders and policymakers. Many of the most promising policy innovations might emanate from the state and local levels.

Although public funding is in short supply, US companies are holding a record sum of cash – some $1.7 trillion as we write this paper. A greater willingness to explore new models in public-private partnerships is one solution that can mobilize a wave of investment to fuel growth. One of the most urgent priorities is restoring US infrastructure to the level of peer countries, without which the US will be unable to boost productivity and capture new opportunities in energy and trade.

Another urgent challenge that cannot be deferred any longer is the need to shore up workforce skills, beginning with K-12 schools and extending through post-secondary vocational training and higher education. The education system has become increasingly disconnected from the labor market, and increased private-sector engagement involvement can provide funding, real-world learning opportunities, and a focus on the skills that are actually needed to compete in the global economy. There are already creative examples of businesses and regional consortia cooperating with community college systems to design curricula that improve job prospects for graduates.

Focusing on educational opportunities is one tangible strategy to rebuild a pathway into the middle class. However, skill-building is only part of the solution. We must face some of the tough questions around the changing nature of work, and what it means to be employed. But what is clear is that economic growth is faster when it is widely shared—and a lack of opportunity means that human capital is being wasted.

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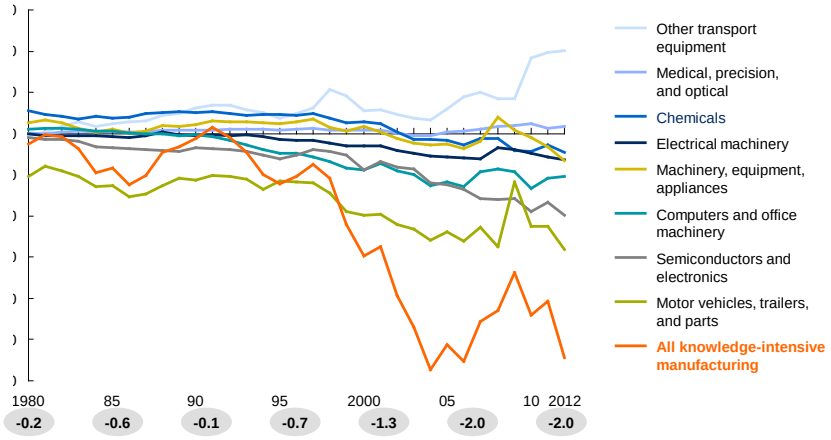
This paper draws on research reports published by the McKinsey Global Institute on the US and global economy, as well as inputs from numerous colleagues and academic experts. The authors would like to acknowledge the contributions of Sreenivas Ramaswamy and Duncan Kauffman, fellows at McKinsey Global Institute, in preparing this paper.

Exhibits

Exhibit 1

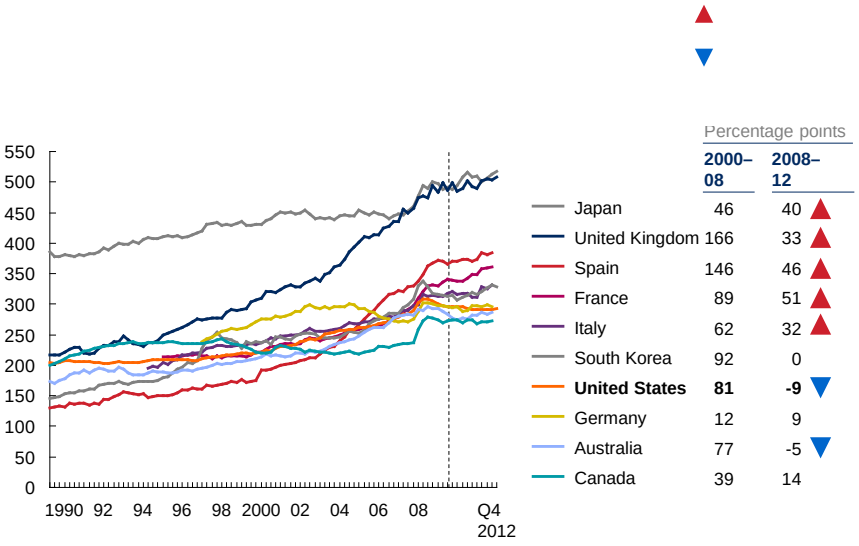
Declining competitiveness: the US trade deficit in knowledge-intensive goods reached $270 billion in 2012

Net exports, 1980–2012
$ billion, real (2005)



IRCE: IHS Global Insight May 2013; McKinsey Global Institute analysis

Exhibit 2



1 Includes all loans and fixed-income securities of households, corporations, financial institutions, and government.
2 Defined as an increase of 25 percentage points or more.

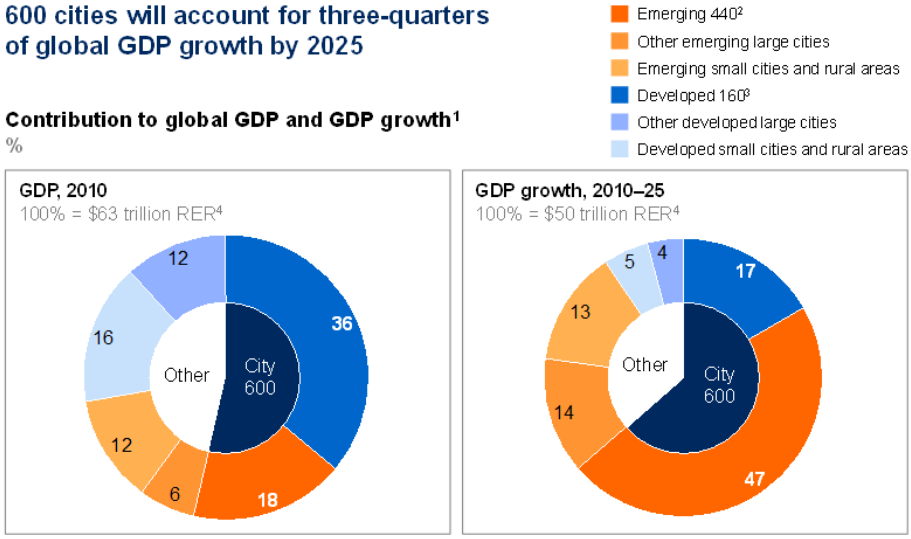
SOURCE: Haver Analytics; national central banks; McKinsey Global Institute

Exhibit 3

600 cities will account for three-quarters of global GDP growth by 2025

Contribution to global GDP and GDP growth[1]

%



1 Global GDP and GDP growth figures include 2,600+ large cities in Cityscope, as well as smaller cities and rural areas.
2 The Emerging 440 is 443 emerging market cities in City 600.
3 The 157 developed market cities in City 600.
4 Real exchange rate (RER) for 2010 is the market exchange rate. RER for 2025 was predicted from differences in the per capita GDP growth rates of countries relative to the United States.

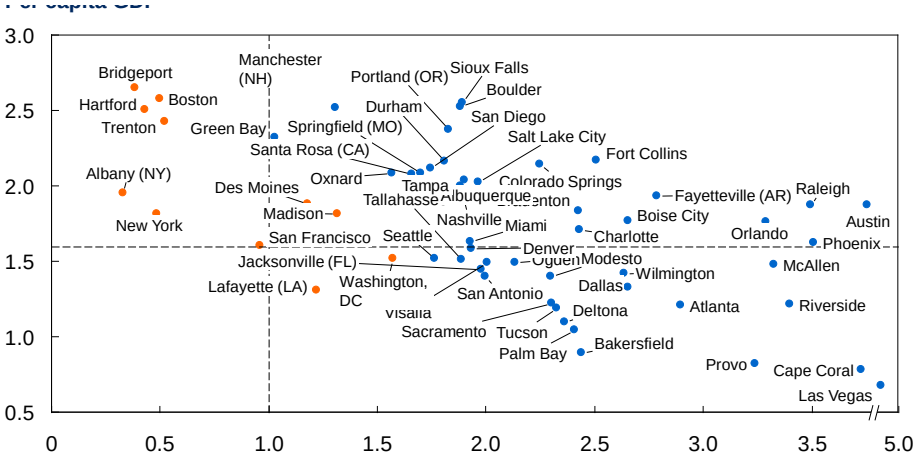
SOURCE: McKinsey Global Institute Cityscope 2.0

Exhibit 4

The most successful cities over the past three decades have diverse profiles; there is no single path to success

Compound annual growth of sample of outperforming cities 1978–2010[1]

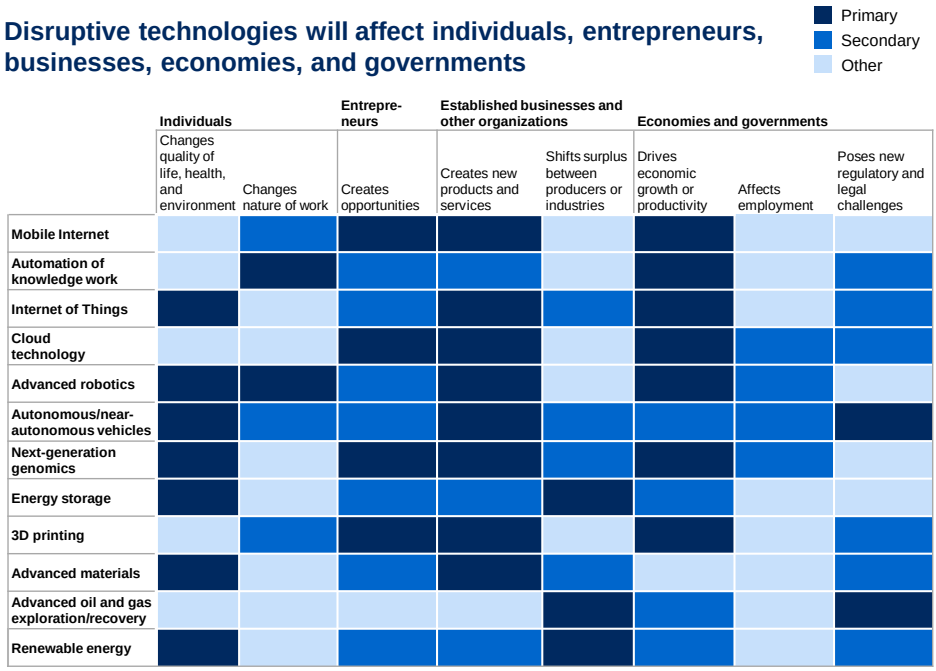
%



1 'Outperforming' defined as exceeding either US GDP compound annual growth or per capita GDP level by 25 percent.

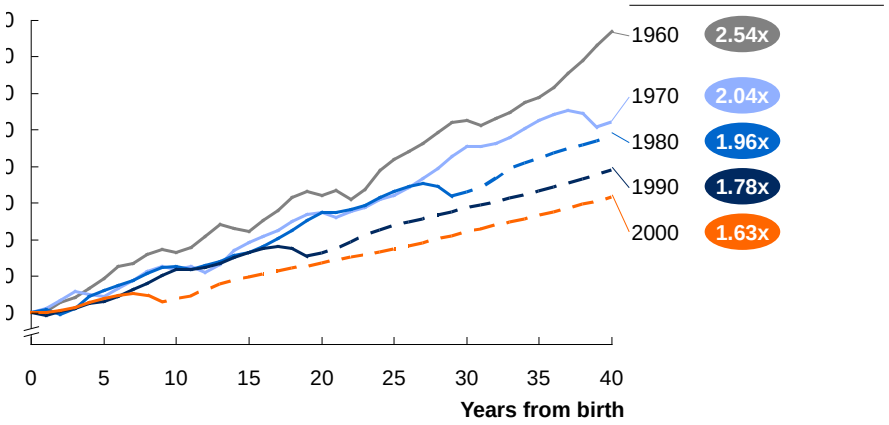
SOURCE: Moody's Analytics; McKinsey Global Institute analysis

Exhibit 5



SOURCE: McKinsey Global Institute analysis

Exhibit 6

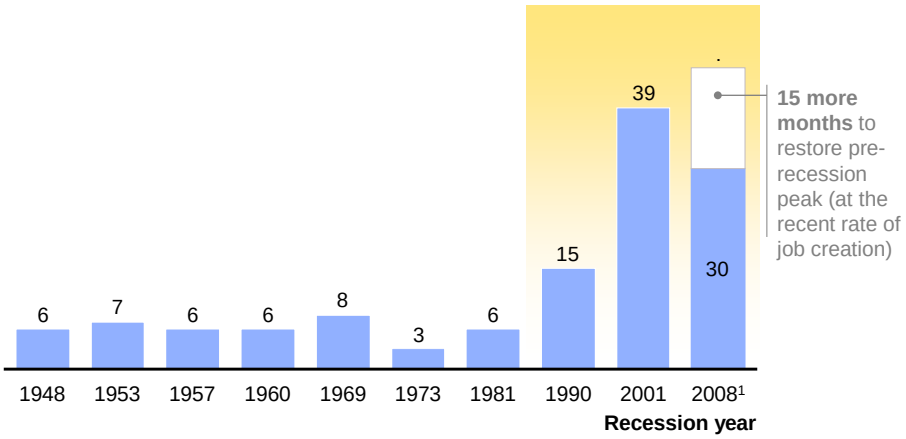


;DP data for 2010–15 is based on McKinsey and Moody's consensus projections. Thereafter, we assume 1.7 percent roductivity growth in line with the historical rate. The share of the working-age population will decline with UN projections 56 percent in 2009; 60 percent in 2030).

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

Exhibit 7

The United States is in the third and likely longest "jobless recovery" of the last 20 years

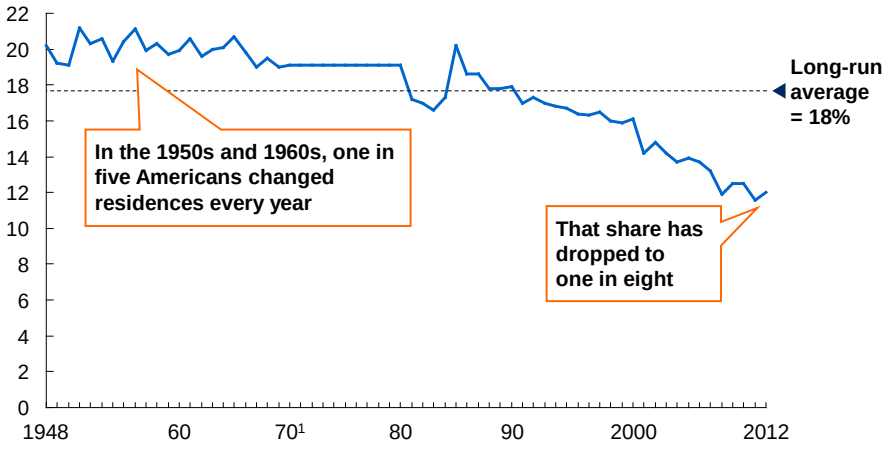


1 GDP returned to its pre-recession peak in December 2010

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

Exhibit 8

Mobility in the United States has been declining since 1990 and is now at a 50-year low



1 1970–1981 data are interpolated due to data constraints.

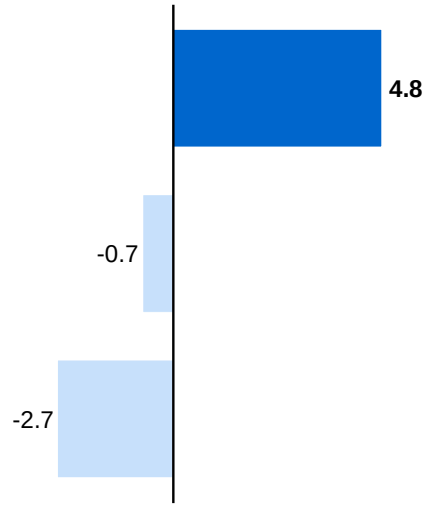
SOURCE: US Census Bureau; McKinsey Global Institute analysis

Exhibit 9

Most job growth in mature economies involves complex interactions, not routine production or transaction work

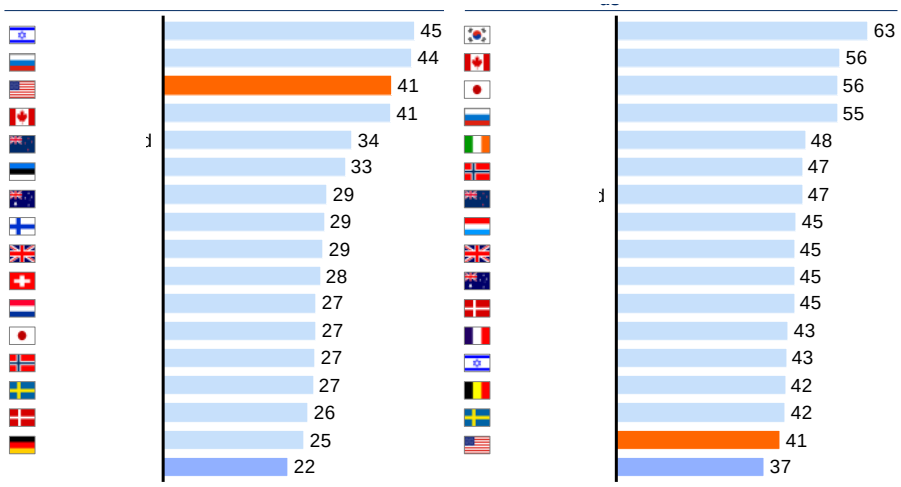
New jobs created in the United States, 2001–09

Million employees



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

Exhibit 10



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