McKinsey Global Institute

Updated research









July 2011

European growth and renewal: The path from crisis to recovery

The McKinsey Global Institute

The McKinsey Global Institute (MGI), the business and economics research arm of McKinsey & Company, was established in 1990 to develop a deeper understanding of the evolving global economy. Our goal is to provide leaders in the commercial, public, and social sectors with the facts and insights on which to base management and policy decisions.

MGI research combines the disciplines of economics and management, employing the analytical tools of economics with the insights of business leaders. Our "micro-to-macro" methodology examines microeconomic industry trends to better understand the broad macroeconomic forces affecting business strategy and public policy. MGI's in-depth reports have covered more than 20 countries and 30 industries. Current research focuses on four themes: productivity and growth; the evolution of global financial markets; the economic impact of technology and innovation; and urbanization. Recent reports have assessed job creation, resource productivity, cities of the future, and the impact of the Internet.

MGI is led by three McKinsey & Company directors: Richard Dobbs, James Manyika, and Charles Roxburgh. Susan Lund serves as director of research. 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 partners and industry and management experts. In addition, leading economists, including Nobel laureates, act as research advisers.

The partners of McKinsey & Company fund MGI's research; it is not commissioned by any business, government, or other institution. For further information about MGI and to download reports, please visit www.mckinsey.com/mgi.

McKinsey Global Institute

Updated research and insights on:

European growth and renewal: The path from crisis to recovery

July 2011

Charles Roxburgh Jan Mischke

Preface

This paper sets out our perspective on where Europe stands today along the path from crisis to recovery, updating MGI's October 2010 report *Beyond austerity: A path to economic growth and renewal in Europe.* This work is part of an ongoing effort to look at prospects for economic growth and renewal in advanced economies around the world. The authors are grateful to Martin N. Baily, a senior adviser to McKinsey and a senior fellow at the Brookings Institution, for his helpful input and advice in the preparation of this paper.

It is MGI's mission to help global leaders understand the forces transforming the global economy, improve company performance, and work for better national and international policies. As with all MGI research, we would like to emphasise that this paper and the research on which it draws is independent and has not been commissioned or sponsored in any way by any business, government, or other institution.

Charles Roxburgh Director, McKinsey Global Institute London

July 2011

Contents

European growth and renewal: The path from crisis to recovery	.1
The European economy is growing again, but progress is uneven and the debt crisis casts a long shadow	.2
Europe has many strengths on which to build	.6
But Europe faces profound long-term challenges that, if unaddressed, could compromise growth	.8
Seven priorities for growth and renewal	15

European growth and renewal: The path from crisis to recovery

Europe is growing again.¹ But the recovery is uneven and under threat from the continuing debt crisis facing the eurozone. In this paper, we set out a perspective on where the European economy stands today, the challenges it faces, and the very considerable strengths on which it can build. We conclude by setting out seven priorities for action. This is by no means an exhaustive list. However, we believe that the priorities we lay out are all critical to the future success of Europe. Each requires joint action by policy makers and business leaders.

These are the main messages of this briefing note:

- Economic growth is recovering unevenly. While most of Europe is expected to return to pre-crisis GDP levels by 2012, recovery in Southern Europe, Ireland, and the United Kingdom is forecast to take considerably longer. The debt crisis and speculation about the possibility of sovereign defaults cast doubt on the resilience of the recovery.
- Europe has very significant, and sometimes underappreciated, strengths on which to build a sustained recovery. As the world's largest integrated economy, Europe is home to 124 Fortune 500 corporations. Several European countries have successfully reformed labour and product markets and can now serve as examples for others to follow. Europe is home to some of the most vibrant cities in the world and has a high quality of life.
- All European economies face a set of profound long-term challenges that, if unaddressed, will limit their future growth potential. Private- and public-sector deleveraging is only just starting and could weigh on growth for some time. Structural imbalances have left Southern Europe with a 4.6 per cent current account deficit today. Old-age dependency is set to double. Labour utilisation is 20 per cent below US levels, and Europe's productivity gap with the United States is widening again. Rising energy prices and competition from emerging economies will place increasing strain on Europe.
- Returning to a sustained path to economic growth and renewal will require innovation in European policy making together with bold leadership from the private sector. The seven priorities we highlight are consolidating Europe's fiscal position, expanding the supply of skilled labour mainly through senior participation, using structural reforms to fuel innovation and growth in services, boosting public-sector productivity, unlocking the potential of sustainable resources, winning in tradable goods and services, and supporting innovation.

¹ In this paper, we define 'Europe' to include all members of the European Union (EU-27) plus Norway and Switzerland.

The European economy is growing again, but progress is uneven and the debt crisis casts a long shadow

Europe is returning to growth. Per capita GDP growth is forecast to reach 1.6 per cent across Europe in 2011, which is only slightly below the 15-year average. However, we cannot take too much comfort from this bounce back given the significant uncertainties about the debt position of some European economies. At the time of writing, there is continuing speculation about the need for some renegotiation or rescheduling of Greek debt as well as heightened concerns about the fiscal challenges facing all highly indebted European countries. However, economic activity is, without doubt, strengthening.

RECOVERY TO PRE-CRISIS PEAKS IS IN SIGHT—BUT NOT FOR ALL EUROPEAN ECONOMIES

The GDP of the United States has grown more rapidly than that of Europe over the past 15 years, but that reflects faster population growth in the United States. If we look at per capita GDP (which we believe is a more useful metric) over the same period, Europe has slightly outpaced the United States with annual growth of 1.7 compared with 1.5 per cent (Exhibit 1). Admittedly, Europe's per capita GDP remains 35 per cent below US levels in purchasing-power-parity-adjusted (PPP) terms.

EXHIBIT 1



Europe's per capita GDP fell by more than 5 per cent during the recent global economic crisis (peak to trough on an annualised basis). It has now begun to recover but is not expected to return to pre-crisis peaks until early 2013 (Exhibit 2). In the EU-15, exports have bounced back to stand 12 per cent above 2008 levels. The Economic Sentiment Indicator is now higher than its long-term average. Unemployment levels across Europe stood at 9.3 per cent in May 2011 in the EU-27, similar to the 9.1 per cent US rate in that month.

EXHIBIT 2



Europe lost 5.5 per cent of per capita GDP during the crisis

¹ Quarterly GDP data from Global Insight converted to 2010 PPP \$ using 2010 PPP from IMF; forecast interpolated based on IMF World Economic Outlook Database April 2011; European countries' per capita GDP weighted with 2010 population. SOURCE: Global Insight; International Monetary Fund; McKinsey Global Institute analysis
Europe's economies have had different positions on the starting grid for this journey, and their progress thus far has been uneven (Exhibit 3). The five clusters we use in our analysis are based not only on geography but also on common patterns in productivity and labour market performance.² On these two measures, the Nordics are in pole position and are the benchmark for the rest of Europe with high productivity per hour of \$56 at PPP in 2010 and an employment rate of 51 per cent (people employed per capita). Compared with the Nordic group, productivity in the United Kingdom and Ireland is 12 per cent lower and employment

employment rate of 51 per cent (people employed per capita). Compared with the Nordic group, productivity in the United Kingdom and Ireland is 12 per cent lower and employment 9 per cent lower. Continental Europe matches the high productivity of the Nordics, but employment is on average 10 per cent lower. Southern Europe falls 27 per cent short of average productivity in the Nordics and, after 13 years of impressive employment increases, is now seeing employment falter in reaction to the crisis. The 12 new EU member states (NMS-12) have decades of productivity convergence ahead; they experienced declining employment before it stabilised in the early 2000s.

Progress toward recovery is not even. If we look at the different subregions of Europe, we expect per capita GDP to return to its pre-crisis peak in 2011 in the NMS-12, in early 2012 in Continental Europe, and in mid-2012 in the Nordics. However, Southern Europe and Ireland will need to wait beyond 2015, according to the International Monetary Fund (IMF), and the United Kingdom until 2014. The depth of the trough and expected growth in the years ahead vary widely (Exhibit 4).

² Given the huge differences between these economies, we analyse European economic performance using five clusters of reasonably similar countries, though even within each cluster there are important differences. The five clusters are: (1) The Nordics (Norway, Finland, Sweden, and Denmark); (2) the United Kingdom and Ireland; (3) Continental Europe (Germany, France, Benelux, Austria, and Switzerland); (4) Southern Europe (Italy, Spain, Portugal, and Greece); and (5) the 12 new member states of the European Union (EU) (Poland, Hungary, Czech Republic, Slovakia, Slovenia, Romania, Bulgaria, Estonia, Latvia, Lithuania, Cyprus, Malta).

EXHIBIT 3



1 New member states.

SOURCE: Conference Board; International Monetary Fund; Organisation for Economic Co-operation and Development; McKinsey Global Institute analysis

EXHIBIT 4

The path to recovery is uneven, with Ireland, Southern Europe, and the United Kingdom lagging behind most

PPP-adjusted per capita GDP %



1 Q4 2010 compared to the quarter with the highest value before the financial crisis (seasonally adjusted annualized values). SOURCE: International Monetary Fund; Global Insight; Conference Board; McKinsey Global Institute analysis

THE DEBT CRISIS PUTS THE RESILIENCE OF THE RECOVERY IN DOUBT

The difficulties many parts of Europe currently face as governments struggle with very significant—and rising—public debt and high deficit levels inevitably raise question marks regarding the resilience and sustainability of the recovery. In 2012, government debt is expected to exceed the 60 per cent of GDP limit enshrined in the Maastricht Treaty by a large margin in 11 of the EU-15 economies (the exceptions are Luxembourg and the economies of Scandinavia). The debt-to-GDP ratio could hit 156 per cent in Greece and 120 per cent in Italy. The new member states and European countries that are not members of the European Union are faring much better on this front. Of these economies, only Hungary is expected to exceed the Maastricht limit with its debt expected to reach 82 per cent in 2012. To return debt to sustainable levels, several decades of tighter fiscal policy and eventually surpluses will be required. According to an Organisation for Economic Co-operation and Development (OECD) simulation, if Europe's economies are to meet the Maastricht criteria by 2025, several European countries-including the United Kingdom, Ireland, Portugal, France, and Greecewill need to tighten their fiscal balance before interest payments by more than 10 percentage points of GDP. And interest rate spreads on Greek government debt (10 per cent compared to German ten-year bonds in May 2011), as well as that of the Portuguese and Irish governments, indicate that the markets see a significant default risk. Fortunately, the debt of these three countries combined represents only 6 per cent of European government debt-a crisis in Spain or Italy would be far more serious (Exhibit 5). In any case, Europe could take a generation to fully resolve the current debt crisis.

EXHIBIT 5



NOTE: Market exchange rates for the euro on May 25, 2011. Numbers may not sum due to rounding. SOURCE: Eurostat; International Monetary Fund; McKinsey Global Institute analysis

Europe has many strengths on which to build

Although Europe has a severe 'debt hangover' from the global downturn, the region has considerable strengths on which it can build a robust and sustainable recovery—strengths that are often underappreciated.

- Economic integration. While efforts to strengthen the single market within the European Union need to continue, Europe can already claim to have become the largest integrated economy in the world. In 2010, the 500 million inhabitants of the EU-27 produced \$15.9 trillion of GDP (at PPP), more than the \$14.6 trillion produced in the United States that year. In 2009, the European market boasted approximately 101 million households earning more than \$35,000 a year, adjusted for PPP, compared with 88 million such households in the United States. It is a mark of the strides made toward economic integration that today trade among the EU-27 countries now accounts for 20 per cent of the EU-27 economy.
- Vibrant, successful cities. Cities are the dynamos of world growth, accounting today for more than 80 per cent of global economic activity.³ Western Europe boasts 109 of the top 600 cities in the world ranked by their GDP—and Eastern Europe another 44. Over the next 15 years, Asian cities will rise up the global rankings. European companies that meet the needs of cities—in construction, infrastructure, business services, and financial services, for instance—will be well placed to benefit from the huge wave of urbanisation under way in the developing world. By 2025, nine of the world's top 25 cities ranked by GDP will be located in Asia, up from two in 2007, and four cities in Western Europe will drop out of this top 25. Even so, European cities will remain vibrant, important centres of global economic activity with fine infrastructure and advanced transportation links. London, Paris, the German conurbation of Rhein-Ruhr, and the Dutch conurbation of Randstad will all be in the top 25 in 2025.
- Leading corporations. The single market is a powerful springboard for European businesses. The continent is home to many world-leading corporations. Since 2003, the headquarters of between 106 and 124 companies represented in the Fortune 500 have been in the EU-15, while the number of US companies in this group has dropped from 233 to 162 today. And Europe's companies have been growing more profitably on average than their US counterparts—from 1998 to 2008, European companies posted average growth in their mean earnings before interest, tax, and amortisation of 9.7 per cent compared with 6.1 per cent in the United States. European companies are in a strong position to take advantage of major trends in the global economy, including the rapid growth of developing economies and waves of innovation in green (e.g., German companies are among the leading global producers of solar cells) and other cutting-edge technologies (e.g., five of the nine leading firms in biotech are based in Europe). Indeed, the EU-27 slightly increased its export share of global manufacturing from 20 per cent in 2000 to 21 per cent in 2008, while the United States saw a decline from 19 per cent to 13 per cent during this period. An important enabling factor for business is the fact that Europe has traditionally been strong at developing human capital. According to the EU Commission, the United Kingdom's top-ranked Oxford and Cambridge are probably the most high-profile universities, but they are the tip of the iceberg-Europe accounts for 20 per cent of the top-ranked universities globally.⁴

³ *Urban world: Mapping the economic power of cities*, McKinsey Global Institute, March 2011 (www.mckinsey.com/mgi).

⁴ Statistics come from Times Higher Education and the Shanghai Academic Ranking of World Universities.

Progress on labour market reform and productivity. Some European countries have made significant progress in reforming labour markets and ramping up productivity in particular sectors—and provide examples of best practice that others can emulate. The EU-15 has increased participation in the labour market by six percentage points in 20 years and created 24 million new jobs between 1995 and 2008—more than the United States. Germany has been a strong reformer of labour markets over the past ten years through its so-called Hartz Laws and through constructive employer-union negotiations that have helped to reduce unemployment, hold down unit labour costs, and improve the economy's overall competitiveness. A particularly valuable German labour market innovation that smoothed out the labour market during the downturn was its *Kurzarbeit* (short-time) worker scheme. Rather than laying off workers, companies have put them on short-time work schedules, and the federal employment agency has partly compensated those workers for the wages they lost. This way, workers did not become unemployed and were in place, with their skills and experience intact, when the companies returned to normal working schedules.

Europe has made definite progress on the smart regulation of product markets. On a 0 to 6 scale defined by the OECD to reflect the regulatory state of play, the gap between the EU-15 average and other major OECD countries narrowed from 0.3 in 1998 to 0.05 in 2008, due largely to less government control and relaxed barriers to competition in network sectors (e.g., utilities) as well as a lighter administrative touch. This approach has boosted the productivity of certain sectors including retail in Sweden, road transport in France and Germany, and construction in the United Kingdom. The Swedish experience is particularly instructive for the rest of Europe. Following its financial crisis in the early 1990s, Sweden put in place a series of structural reforms that transformed its public finances and doubled its underlying rate of productivity growth.

Quality of life. Europe scores well on non-growth indicators that measure sustainability and quality of life dimensions such as health, education, social inclusion, security, and the environment. On average, a person born in Europe can expect to live three more years of healthy life than a US citizen. From 1970 to 2008, life expectancy increased by more in France and Germany than it did in the United States. US maternal mortality is almost double the EU-15 average (11 versus 5 deaths per 100,000 live births), and the EU-15 is also performing slightly better than Canada or Japan, two other large G-8 economies. European society tends to be egalitarian, with a significantly lower concentration of income than we see in the United States. The US Gini coefficient after taxes and transfers is 38, compared with the EU-15's 31. And income distribution has remained stable in Europe. Median incomes have risen at about the same rates as mean incomes in most European countries, whereas US median incomes have grown less strongly than the mean, reflecting an increasing concentration of income growth in the upper deciles of the population. There is no cause for complacency in Europe, however, as some countries including the United Kingdom are beginning to experience similar concentrations of income. Homicides per 100,000 of population are 0.9 on average in the EU-15 compared with 1.6 in Canada and 6.0 in the United States. Finally, Europe could be considered the world leader in sustainability. The Environmental Performance Index ranks the EU-15 on average higher than the United States, Canada, and Japan; Sweden, France, and Austria are all in the top ten of this global ranking. The EU has committed itself to reducing greenhouse gas emissions to 20 per cent below their level in 1990. Europe already generates more than 12 per cent of its electricity through renewable resources, compared with about 9 per cent in the United States and Japan.

But Europe faces profound long-term challenges that, if unaddressed, could compromise growth

Despite the many intrinsic strengths and recent progress of some of Europe's leading economies, the continent needs to face up to seven major challenges if it is to secure robust and sustainable long-term growth. We now briefly discuss these challenges in turn.

1. DEBT, DELEVERAGING, AND THE CONTINUED SPECTRE OF DEFAULT

Deleveraging in the public, private, and financial sectors has only just begun in many European countries. Previous MGI research has shown that historic deleveraging episodes have on average lasted six to seven years after the end of recessions, slowing both consumption and GDP growth significantly during those years.⁵ In some instances, deleveraging can take even longer. After World War II, it took the United Kingdom 18 years to reduce its total debt to GDP from 150 to 60 per cent of GDP (similar to Greece's challenge today) and 24 years starting from the peak at 240 per cent—and this despite a healthy annual nominal GDP growth rate of 7 per cent over the same period. Before the current crisis, households in Spain, the United Kingdom, and Italy increased their debt-to-GDP ratios by 40, 32, and 18 percentage points, respectively, from 2000 to 2008 (Exhibit 6). Private-sector deleveraging has only just begun and has been more than offset by substantial increases in public debt.

EXHIBIT 6



Household deleveraging still has a long way to go

⁵ Debt and deleveraging: The global credit bubble and its economic consequences, McKinsey Global Institute, January 2010 (www.mckinsey.com/mgi).

Private-sector deleveraging will create some drag on growth in the affected countries. However, it is the high deficits and unsustainable levels of public-sector debt that pose the biggest threat to Europe's future growth. While there is legitimate debate about the appropriate speed of deficit reduction in countries with high deficits, there can be no debate about the need to get public finances back in balance over time. However essential in the long term, serious deficit reduction has an inescapable near-term negative impact on growth. With deleveraging in its early stages, the major impact is yet to be felt in economies including Spain and the United Kingdom.

However, the immediate challenge is the crisis of the highly indebted eurozone countries. Significant cross-holdings of debt pose a risk of financial contagion throughout the EU. The external debt of Spain, Italy, Portugal, Ireland, and Greece totalled \$3 trillion at the end of 2010, with France (\$650 billion) and Germany (\$530 billion) having the highest exposures. As of December 2010, Ireland had drawn funds equivalent to 86 per cent of GDP and Greece funds equivalent to 43 per cent of GDP from the European Central Bank's lending facility. At the time of writing, there is continuing speculation about whether Greece will need to negotiate a restructuring of its debt. Most commentators believe that some form of renegotiation and rescheduling of Greek debt is inevitable, but the timing remains highly uncertain—according to the OECD, the market price for Greek sovereign bond insurance suggests 64 per cent probability of default within two years assuming 45 per cent loss of the principal. The inexorable logic of economics is locked in battle with equally powerful political forces. We will return to this challenge when we discuss the seven priorities Europe must address.

2. STRUCTURAL IMBALANCES THREATENING EUROZONE STABILITY

Europe overall maintains a fairly balanced current account (on average a deficit of 1 per cent of GDP between 2004 and 2009). But the region consistently runs significant trade deficits with Asia. And there are major differences in competitiveness across Europe (Exhibit 7). For instance, Continental and Northern regions score well, while Southern and Eastern European countries rank at between 40th and 70th out of 139 countries in the World Economic Forum Global Competitiveness Ranking. And unit labour costs have diverged since the advent of monetary union because countries have no scope to compensate through currency devaluation. Between 1999 and 2010, unit labour costs in Germany rose by 4 per cent compared with 38 per cent in Greece. These factors contribute to structural imbalances within Europe; Germany boasted a 2010 current account surplus of 5.3 per cent, while Greece posted a deficit of 10.4 per cent.

Current account deficits are mirrored by net foreign borrowing (including the net acquisition of domestic assets by foreign residents), and therefore run counter to attempts at deleveraging of foreign debt. Indebted eurozone countries will need to reverse the trend and export more than they import. In the absence of an option to devaluate their currency, this will require productivity growth faster than in surplus countries, or nominal wage cuts, or both—all of which are difficult to achieve. If major imbalances were to persist, there would need to be a high level of fiscal transfers, possible within a nation state, but politically challenging between nation states.

The differences in competitiveness are also reflected in major gaps in aggregate demand in several economies and sustained increases in unemployment. In Spain, unemployment increased from 8.3 per cent in 2007 to 20.1 per cent in 2010. Ireland experienced a similar rise in unemployment of 9.1 percentage points over the same period.

For the eurozone to survive in its current form, a reasonable level of consistency in fiscal policy and competitiveness is essential.

Nordic and Continental European countries are net exporters, in contrast to the rest of Europe

Current account balance 2010 % of GDP, weighted averages



SOURCE: Eurostat; Organisation for Economic Co-operation and Development; McKinsey Global Institute analysis

3. AGING PUTTING PRESSURE ON THE LABOUR FORCE AND WEIGHING ON PUBLIC BUDGETS

Europe's population is aging rapidly due to a combination of increasing longevity and declining fertility, most markedly in Germany, Italy, and Spain. Italy's median age, for instance, was 28.6 in 1950, 43.3 in 2010, and is projected to climb to 50.1 years by 2030. Aging will put pressure on growth, public budgets, and dependency ratios. In the 1980s, an expanding share of working-age people in the population contributed 0.4 percentage points to annual per capita GDP growth in the EU-15; in the 2020s, a shrinking labour force will subtract 0.5 percentage points from GDP (Exhibit 8). Taking into account expected trends in immigration and participation, the EU-15 labour force is expected to decline by 0.1 per cent a year over the next 20 years. Pension systems rely on a low dependency ratio for the working generation to provide goods and services for the older generation. In the EU-15, the old-age dependency rate, the ratio of people aged 65-plus to those aged 15 to 64, is expected to almost double from 0.27 in 2010 to 0.52 in 2060. This deterioration should be partly balanced by a lower youth dependency ratio and higher participation rates particularly among seniors. Taking the two ratios together, we expect the overall dependency ratio of people outside the labour force or unemployed versus the employed to increase by 17 per cent over the same period. By 2035, the EU-15 will need to spend 3.4 per cent of GDP more than it did in 2007 directly because of aging. Of this, 1.8 per cent is due to the cost of pensions, 1.0 per cent due to increased demand for health care, and a further 0.6 per cent to long-term-care provision.

EXHIBIT 8

The impact of a changing age mix has been positive or negligible in the past but will become significantly negative in the next decades

Contribution of share of working-age population growth to yearly per capita GDP growth¹ Percentage points



4. LOW LABOUR UTILISATION

Europe has a much lower rate of labour utilisation than the United States. This only partly reflects a societal choice in favour of more free time—absences from work due to longer vacations and other paid leave total five weeks more per year than in the United States (Exhibit 9). In fact, in the EU-15, the participation of older workers aged 55 to 64 stands at 51 per cent, compared with 65 per cent in the United States; unemployment has averaged 2.5 percentage points higher; and a higher share of women, on average, tend to work part time rather than full time. Youth unemployment is of particular concern due to the negative implications on young individuals' lives and the risk to become structural; at the end of 2009, more than one of every four young workers was unemployed in Spain, Ireland, Hungary, France, and the Slovak Republic. However, the pattern of labour utilisation across Europe varies widely.

Europe's labour utilisation is much lower than it is in the United States

ESTIMATES

Decomposition of hours worked per capita gap between the United States and the EU-15 Annual hours per capita, 2008¹



1 Standardised hours used for cross-country comparison. Official hours adjusted using the adjustment factors in Organisation for Economic Co-operation and Development Going for Growth, 2008; using official hours, the gap would be around 60 hours smaller (overall and in terms of worked weeks).

2 Assuming female part-time incidence aligned to US level and keeping current average weekly hours in part-time/full-time jobs. NOTE: Numbers may not sum due to rounding.

SOURCE: Organisation for Economic Co-operation and Development; Eurostat; McKinsey Global Institute analysis

5. LOW PRODUCTIVITY GROWTH

For decades, Europe had been closing its productivity gap with the United States. From 1970, labour productivity for the EU-15 was 35 per cent lower than US levels. By 1995, the gap was only 10 per cent, and Continental Europe had even overtaken the United States. But, since the mid-1990s, that gap has started widening again (Exhibit 10). The decline is most striking for the Southern European countries, but even Continental European economies have had lower productivity growth than the United States (20 per cent since 1995 versus 35 per cent). Only the Nordics—and the new member states, starting from comparatively low levels—continued to match US productivity growth rates.

Reversing this trend in labour productivity is essential. Recent MGI research found that Europe will need to accelerate productivity growth by around 30 per cent over historic levels (or increase labour input beyond projections) just to maintain past GDP growth levels. Productivity growth would have to grow by an even greater margin if Europe is to close the 24 per cent per capita GDP gap with the United States that prevails today—equivalent to \$11,250 per capita, or \$4.5 trillion in overall GDP.⁶

Boosting productivity growth is likely to become more challenging. Countries can close a large gap to leaders relatively quickly by adoption of existing technologies and business practices. Leading from the front is a much slower and more difficult process. The world's leading nations have seen long-term average productivity growth of only 1.4 per cent per annum since the beginning of the process of industrialisation; periods of faster productivity growth have required large-scale technological innovation (e.g., the information and communications technology revolution), breakthroughs in management practice (e.g., mass production), large-scale

⁶ Beyond austerity: A path to economic growth and renewal in Europe, McKinsey Global Institute, October 2010 (www.mckinsey.com/mgi).

infrastructure investment (e.g., railroads), or rapid increases in educational attainment. Given Europe's stagnant population growth, it could be trapped in low GDP growth at or around 1.5 per cent unless it can capture some new driver of accelerated productivity growth.



6. DEPENDENCY ON ENERGY IMPORTS AND INCREASING PRICES

Over the past century, resource prices have fallen by 1 per cent a year in real terms (Exhibit 11). However, over the past decade, resource prices have doubled, reflecting supply constraints in oil and rapid demand growth from emerging economies for materials.

Energy is a major challenge, in Europe as elsewhere. On the supply side, Europe depends heavily on foreign energy supplies. In 2008, the EU-27 imported 1,010 million tonnes of oil equivalents, net of exports, equal to 53.8 per cent of its gross energy consumption. On the demand side, global energy demand is expected to rise by 32 per cent by 2030. Energy infrastructure requires substantial investment (the United Kingdom, for instance, will need to spend an estimated £120 billion to £170 billion over the next 20 years to replace and renew its energy infrastructure).

Another strand of the energy challenge is the fact that the EU-27 is the world's third-largest producer of carbon dioxide after China and the United States. The European Commission is committed to reducing energy consumption by 20 per cent compared with the 1990 level. By 2008, the region was at the halfway point of that journey, but that is an average that belies significant differences. The Baltic States and Germany have actually met their 2020 target, and the United Kingdom is close to it. But others, including Cyprus, Malta, and Spain, have seen their emissions increase. Previous MGI research found that Europe can achieve its target of a 20 per cent cut in emissions—and bring projected annual growth in demand down to zero—through action to boost energy productivity, the level of benefits we achieve from the energy

we consume.⁷ Attitudes toward nuclear power vary widely across Europe, and the future role of nuclear energy remains unclear given the recent disaster in Japan. If Europe turns against nuclear power, that will further complicate its strategy for energy security and the reduction of carbon emissions.



EXHIBIT 11

7. GLOBAL COMPETITION

Tackling the broad issues that we have discussed becomes even more urgent given the considerable competitive challenge from up-and-coming economies and regions in Latin America and Asia. By 2030, China, India, and Brazil alone are expected to generate 38 per cent of world output compared with 15 per cent today and 7 per cent in 2000. As Japan, South Korea, and Taiwan did before them, these emerging world economic giants are likely to move their production capacity from labour- to capital- to knowledge-intensive, and sources of competitiveness will evolve in parallel. The speed and scale of change in these large developing economies is unprecedented—and advanced economies are being forced to adjust. Companies in advanced economies are moving up the value chain, offshoring lower-value-added tasks such as assembly and migrating employment to higher skill levels. While the EU-27 current account is fairly balanced overall, the deficit with China amounts to €150 billion.

CONCLUSION: LIVING IN A VOLATILE, UNCERTAIN WORLD

The interaction of these seven forces creates the potential for a very uncertain and volatile future for Europe. External shocks could come from multiple sources—both economic (e.g., commodity price spikes, major national debt crises) and political, and at both the national and

⁷ *Capturing the European energy productivity opportunity*, McKinsey Global Institute, September 2008 (www.mckinsey.com/mgi).

regional levels. A particular challenge for Europe in navigating through this volatile world will be to ensure that its political institutions can react fast enough to the crises and shocks as they emerge.

Seven priorities for growth and renewal

There is much that European businesses, with the enabling hands of policy makers, can do to meet the challenges ahead. We see seven priorities that Europe needs to address in order to secure its long-term growth and renewal.

1. CONSOLIDATE EUROPE'S FISCAL POSITION AND BOLSTER RESILIENCE TO FUTURE CRISES

The eurozone debt crisis is likely to be the dominant focus of economic policy for several years to come, not only within the eurozone but, given the interconnectedness of all Europe's economies, across the entire continent. The stakes are huge. Can the euro survive? Will continued austerity be politically acceptable within the debtor countries? Can countries that have lost competitiveness within the euro regain it fast enough to maintain a strong industrial base? Will Europe's institutional structures be strong enough to manage through what is likely to be a series of stressful crises over the coming years?

While we will leave the speculation on these big questions to others, there are some priorities for action that will make the crisis more manageable and lessen its impact on the broader economy.

- Stay the course on the tough austerity plans in the debtor countries. This is going to get harder over the next 24 months as the impact bites and as the political costs rise. Some changes of pace may be required in light of the rate of recovery, but there should be no reversal of direction.
- Improve the resilience of the banking system through rigorous stress tests and, where necessary, further capital raising. The European banking system is now far better capitalised than it was pre-crisis and is much more resilient. However, there may well be the need for more capital, both to meet higher Basel III requirements and to reflect the economic value of some assets that are still held at 100 cents on the euro despite growing evidence that full repayment is unlikely.
- Pursue pro-growth structural reforms in order to improve competitiveness. Over recent years, the more radical structural reforms have been undertaken by the countries that are now in the best fiscal position (e.g., the Nordics, Germany). Although it is difficult to pursue structural reform in the face of fiscal rebalancing, it is not impossible, as Sweden showed in its response to the crisis of the early 1990s.
- Prepare for the future. The recent crisis has reminded us that private debt can quickly turn into public debt and severe crises. Careful monitoring of trends and macro-prudential policies will therefore be crucial. While it is difficult to tell sustainable from unsustainable trends, analysis can reveal unhealthy policy and trigger early intervention. Also, just as companies maintain disaster recovery plans, it is crucial for Europe to establish a proper framework to deal with crises when they do happen.

These actions are equally important under a scenario in which the euro survives or in an alternative hypothetical scenario in which some countries leave monetary union. Leaving the euro and pursuing a strategy of repeated currency devaluations will not improve a country's long-term competitiveness unless accompanied by bold structural reforms to improve

productivity and boost employment participation. Equally, staying within the euro and working, over many years, to improve competitiveness without the flexibility of one's own exchange rate is a very challenging path as well. As Lord Turner said in the context of banking regulation, the answer is probably either 'more Europe, or less Europe'.⁸ Out of the current crisis will emerge either a more unified eurozone with higher coordination of both fiscal and economic policies and higher fiscal transfers, or a smaller eurozone comprising countries with similar levels of competitiveness and compatible fiscal policies.

2. EXPAND THE SUPPLY OF SKILLED LABOUR

An aging population requires active measures to sustain employment. Europe can build on, and broaden, labour market reform that has taken place in parts of the region in recent years to expand the supply of labour and its contribution to growth. Europe can look to Nordic countries and the Netherlands for their success in boosting participation among older workers; at Denmark and the United Kingdom, which have both been effective at reducing structural unemployment; and at the Netherlands for its effectiveness in tackling youth unemployment. Sweden is a useful model for its work on mixing part-time and full-time employment for women as one way to increase the average number of hours worked. Business leaders need to innovate new working models to enable senior workers to remain active for longer in both full-and part-time employment.

Some European countries whose populations are declining particularly rapidly may even benefit from importing labour through immigration. The free movement of labour across the EU has been one of the great successes of the European project. More needs to be done to enable labour mobility within Europe and—subject to appropriate controls—immigration from outside the EU. Although immigration poses significant political challenges in many countries, it is essential that responsible and thoughtful political leaders continue to make the case for an immigration system that supports economic growth while stamping out the abuses that undermine public trust. Continued immigration is particularly important for highly skilled positions, both in business and in academia. Policies that limit the supply of talent to an economy will be ultimately self-defeating.

As the average pension age rises, lifelong education and adult retraining will increase in importance. Aging is expected to contribute to a shortage of talent particularly in science, technology, engineering, and mathematics (STEM) graduates to feed knowledge industries. Germany, for instance, may face a gap of 1.2 million STEM graduates by 2020. This need for continuing education presents an enormous opportunity for Europe's great universities and leading companies.

3. USE STRUCTURAL REFORM TO UNLEASH A NEW WAVE OF PRODUCTIVITY GROWTH AND INNOVATION IN SERVICES

Europe needs to exploit major opportunities to make headway on productivity growth in service sectors. While the EU-15's manufacturing and utilities have performed in line with the United States and contributed an important 60 per cent of overall productivity growth, the story on services has been far less impressive. Local services accounted for five out of a total seven percentage points' productivity growth difference with the United States. Growth in services has been particularly slow in Continental and Southern Europe (Exhibit 12). By contrast, in the more liberalised economies of the Nordic region, and the United Kingdom and Ireland, there has been strong growth in service sectors—and not just financial services—that has accounted for the more rapid increase in value added of these economies. There is substantial potential

⁸ Lord Adair Turner, *The Turner Review: A regulatory response to the global banking crisis*, Financial Services Authority (FSA) of the United Kingdom, March 2009.

McKinsey Global Institute Updated research

to drive higher productivity growth in services through smart regulation that removes hurdles to competition and growth (e.g., restrictions in professional services or pharmacies; national monopolies/oligopolies in network industries). Many of these service sectors are highly fragmented in Europe, in contrast to US service sectors that are more concentrated. Large companies are able to invest more in R&D, and we see much higher levels of R&D spending in services in the United States than in Europe. Similarly, large companies can introduce process innovations and more effective managerial practices, thus also improving productivity.

Service sectors have grown less in Europe than in the United States

EXHIBIT 12



SOURCE: EU KLEMS; McKinsey Global Institute analysis

Innovation of business models, processes, and technologies in service sectors will be important. The EU's Expert Panel on Service Innovation has proposed to develop and pilot innovative services in several cities or regions, such as coordinated, technology-enabled tourism development in remote areas or new concepts of urban transport services. Governments can promote education in knowledge and skills areas that are crucial for innovation, support primary research in these areas, and, as a large consumer of services, encourage innovation through public procurement and the setting of industry-wide service standards. More than one in four companies active in service sectors cite a lack of financing, the cost of innovation, and economic risks related to innovation as barriers, according to the Third Community Innovation Survey 2004.9 Public policies aimed at increasing the amount of venture capital and fostering entrepreneurship (e.g., through publicly funded incubators) can help overcome these barriers. At present, many government policies are biased toward innovation in traditional, capital-intensive, or R&D-heavy industries. By contrast, innovation in service sectors receives relatively little support. Governments can also promote the diffusion of service innovation by removing regulatory barriers, fostering competition, and stimulating the exchange of knowledge between companies and industries.

⁹ This survey takes place every four years in EU countries to investigate levels of innovation in business.

4. ACHIEVE A STEP CHANGE IN PUBLIC-SECTOR PRODUCTIVITY

Europe also needs to seek a step change in the productivity of the public sector, as public spending makes up about half of GDP in most European economies (in 2009, 55 per cent in Sweden, 52 per cent in United Kingdom, 47 per cent in Germany). Experimental output indicators produced by the United Kingdom's National Statistics suggest that public-sector productivity (notoriously difficult to measure) may have fallen between 1997 and 2007, even while productivity grew by 2.3 per cent a year in the overall economy. It is to the United Kingdom's credit that it tries to measure public-sector productivity rigorously. Most governments do not, but they urgently need to start. There is an important role for international organisations in facilitating a process of cross-country benchmarks and comparative data on public-sector productivity.

Where there is reliable comparative data on public-sector outcomes, it is clear that there is very wide variability of productivity across different national systems. In education, for instance, PISA scores show limited correlation to money spent on education, with some countries such as Finland performing particularly well (Exhibit 13).¹⁰ This suggests that there is huge scope for many governments to raise productivity, delivering the same level of public service at significantly lower cost. Given the fiscal challenges facing most European governments, this has to be a very high priority.



EXHIBIT 13



SOURCE: Organisation for Economic Co-operation and Development Education at Glance 2009; McKinsey analysis

The levers available to boost productivity range from efficiency drivers such as lean operations, simplification and automation of processes, optimisation of management layers of control, and procurement optimisation to effectiveness levers such as demand management (e.g., self-service or water-trading schemes) and customer segmentation (e.g., using data to focus on most likely tax avoiders) to policy levers such as redesigning health or unemployment systems. Our experience in implementing lean management techniques in tax processing, for instance,

¹⁰ Programme for International Student Assessment.

shows the potential for vast impact: a 75 per cent increase in returns processed per full-time equivalent, an up to 60 per cent reduction in error rates in customer service, or a reduction in lead times of more than 75 per cent.

One specific opportunity is collecting, storing, and mining very large-scale datasets (so-called big data) for insights that can create significant value. In a recent research report, MGI found that government administration in the developed economies of Europe could save more than €100 billion in operational efficiency improvements alone by using big data, and this estimate does not include big data levers that could reduce fraud, errors, and tax gaps (i.e., the gap between potential and actual tax revenue).¹¹ US health care could generate more than \$300 billion in value every year from using big data, two-thirds of which would be in the form of reducing national health care expenditures by about 8 per cent. In 2007, France launched a public-sector reform programme with more than 450 initiatives in 15 government ministries including the merger of tax and collections agencies and performance-based funding for universities. In hospitals, waiting times have been reduced by an average of 28 per cent.¹²

5. CAPTURE THE RESOURCE-PRODUCTIVITY OPPORTUNITY

Resource productivity increased significantly more slowly between 1990 and 2008 than the 2.2 per cent annual growth in labour productivity during this period. During an era of falling real costs of resources, this was understandable and not a critical constraint on overall economic success.¹³ However, if Europe is to meet its energy challenges and maintain its competitiveness in the face of higher and more volatile resource costs, then it must accelerate the growth of productivity in how it uses its resources, especially in energy (Exhibit 14).

Fortunately, there is substantial scope to accelerate the productivity with which Europe uses resources. In forthcoming research we will set out our perspective that by using existing and proven technologies and practices, it should be possible to improve resource productivity by one to two percentage points above historic rates.

European policy makers should set the incentives that help ensure stability of prices and supply and do what they can to enable the private sector to leverage the world's growing appetite for green technologies to build positions in both domestic and export markets. Cleantech is a particular area of strength for Europe. Many companies are global leaders in emerging green technologies—for instance, German companies are among the leading producers of solar cells and operate successfully along the value chain. A proactive governmental stance toward cleantech can only help the private sector continue to make the global running in this sector.

¹¹ Big data: The next frontier for innovation, competition, and productivity, McKinsey Global Institute, May 2011 (www.mckinsey.com/mgi).

¹² Martin N. Baily, Karen Croxson, Thomas Dohrmann, and Lenny Mendonca, *The public-sector productivity imperative*, McKinsey & Company, March 2011.

¹³ Resource productivity here is used to describe the ratio of outputs to inputs across a range of resources including energy, land, water, steel, carbon, and other materials.

The productivity of natural resources has underperformed labour inputs into the production process

Productivity compound annual growth rate, 1990–2008 %



1 Tonnes of total material extraction, including fossil fuels, biomass, and mineral resources.

2 Based on agriculture and other water-intensive industries, using real GDP.

3 All greenhouse gases; tCO2e = tonne of carbon dioxide equivalents.

SOURCE: Global Insight; Intergovernmental Panel on Climate Change; International Energy Agency; World Bank; Food and Agriculture Organization of the United Nations; McKinsey analysis

6. WIN IN TRADABLES AND MANAGE THE REBALANCING OF THE WORLD ECONOMY

To date, Europe has held its own in global exports. However, the region faces ever-increasing competition from emerging markets whose companies are rapidly moving up the value chain to compete more directly with Europe's advanced industrial leaders. Europe needs to continue to maintain a healthy manufacturing sector (as manufacturing still accounts for three-quarters of trade), but it will also need to win in growing export markets for services and intangible goods. In fact, we believe that the distinction between manufacturing and services is increasingly irrelevant in an advanced economy. What matters is that a country or a region such as Europe maintains competitiveness in all tradable sectors of the economy.¹⁴

For all the recent discussion about manufacturing being in decline due to competition from emerging markets, and a particular need to support manufacturing in order to create jobs, the fact is that over the past 25 years, the EU-15 has grown real manufacturing value added by 35 per cent and the manufacturing trade balance improved by 4 per cent of gross value added. Europe's manufacturers have remained competitive by achieving huge productivity increases well ahead of demand growth, leading to a decline in the share of manufacturing employment from 23 to 13 per cent (Exhibit 15). Far from being a cause for concern, such productivity gains are an essential element of success in an advanced economy and are likely to continue. Employment in manufacturing is likely to continue to fall, as processes become more automated and labour inputs are reserved for the most highly skilled and specialised functions. In fact, manufacturing may face increasing skill shortages as these sectors need more science and engineering graduates, which are in short supply globally and especially in Europe.

¹⁴ For a further discussion of tradables, see Michael Spence and Sandile Hlatshwayo, *The evolving structure of the American economy and the employment challenge*, Council on Foreign Relations, March 2011.

Manufacturing can never again be a large creator of low- and medium-skilled jobs in an advanced economy. Public policy needs to recognise this inevitable fact.

EXHIBIT 15

Manufacturing sectors have been growing strongly productivity has outpaced demand

Gross value-added growth decomposition of manufacturing \$ billion, real 2005



Winning in the tradable sectors of the global economy requires both continued productivity gains in manufacturing and further innovation in the tradable sectors of the service economy. Trade in services has become increasingly important. In the United Kingdom, for instance, 2009 service exports were 11.5 per cent of GDP compared with 16.3 per cent for goods. Adjusting for the import share of exports, service exports almost matched goods exports at 10.5 per cent versus 11.5 per cent. Trade in financial, insurance, computer, information, and other business services yielded a surplus of 4 per cent of GDP.

More and more sectors of the economy are likely to become traded, and this will create new export industries beyond the classic service sector export earners of financial services and tourism. For instance, both health and education have high potential as export earners in advanced economies. Creative industries should be a particular source of strength for Europe given its rich cultural heritage. In the United Kingdom, creative industries now contribute nearly 8 per cent of GDP, matching the contribution of financial services, and employ about two million people.¹⁵

Policy makers will need to rethink many aspects of current policy. Government export support is typically geared to capital-intensive manufacturing industries rather than intangibles and services. Trade promotion agencies are strong in the low-growth markets of the developed world, but they are inexperienced and underrepresented in the high-growth cities of the next 20 years. And these new-growth tradable sectors offer high potential for Europe's large corporations and entrepreneurs as they create global business models to capture the opportunity.

¹⁵ Helen Alexander, Confederation of British Industry (CBI) president, speech to CBI annual dinner, May 18, 2011.

7. SUPPORT INNOVATION

Productivity tends to grow slowly except in periods that see waves of innovation. Europe's policy makers talk a great deal about the importance of innovation and in particular of supporting R&D, but the region's record is somewhat weak. The EU still allocates a large share—32 per cent—of its funds to preserving slow-growing, low-productivity industries such as agriculture and coal mining, with only 8 per cent going to R&D. Indeed, Europe's R&D spending is below the OECD average. Direct and indirect government funding of business R&D and tax incentives for R&D are lower in most European countries than in the United States, Canada, or South Korea. Reallocating one-third of the subsidies currently spent on agriculture to R&D would vault Europe's government-financed R&D spending as a per cent of GDP to the US level. ¹⁶

As it is ultimately the private sector that delivers innovation to markets, the best policy for governments wanting to stimulate innovation is to ensure highly competitive markets characterised by low barriers to the formation of new businesses and growth as well as a stable and predictable regulatory regime. Public policy does have a very important part to play in creating the conditions in which the private sector can innovate successfully. For instance, governments can trigger demand for early innovations via standard setting and precommercial procurement practices. And governments have a central role in funding long-term primary scientific research. It is no accident that the origins of the Internet and biotech revolutions lie in government-funded programmes. It is critical that this type of primary research funding is maintained despite the pressures on public finances. Strong education systems are vital, especially tertiary education in science and technology. Governments can also help through providing incentives for R&D, improving collaboration between academe and industry, supporting venture capital funding, encouraging skilled immigration, and establishing programmes to encourage entrepreneurship.

It is also essential that Europe remains an attractive location for multinational corporations (MNCs), which are major contributors to productivity growth and innovation in advanced economies. In the United States, MNCs account for 74 per cent of private-sector R&D spending and have accounted for 41 per cent of labour productivity gains since 1990. In the United Kingdom, large enterprises have productivity growth that is eight times higher than the growth in small enterprises. Attracting and retaining MNCs is an issue of creating a competitive, predictable tax regime, but that is only a part of it. MNCs place greater value on other factors—high-quality talent, good infrastructure, predictable regulation and legal environment, and a good quality of life for their employees. Europe needs to be an attractive location for the international operations and research facilities of new global leaders from the developing world.

In parallel, there is scope for private-sector-driven industry-wide and cross-industry measures including investing in training, creating demand through common standards, achieving economies of scale in research via multicompany collaborations, or forming consortia for cross-licensing and the joint solving of major issues.

And Europe can build on best practices elsewhere. Israel today spends 4.7 per cent of its GDP on R&D, the highest share in the world and more than twice the OECD average. Israel's business R&D spending is higher than that of any other developed economy, and the country has the highest number of start-ups per capita in the world. Critical to this position was Israel's establishment of a legal framework to support private R&D that included the formation of consortia between academia and industry eligible for grants and its support for the development of a vibrant venture capital industry.

¹⁶ Beyond austerity: A path to economic growth and renewal in Europe, McKinsey Global Institute, October 2010 (www.mckinsey.com/mgi).

\Box \Box \Box

The immediate challenges of the debt crisis and continued headwinds from public- and privatesector deleveraging undoubtedly present major challenges to all Europe's economies over the next few years. However, Europe has many of the competitive advantages needed to succeed in the highly competitive global economy over the next two to three decades—more than 500 million citizens, high educational standards, hundreds of the world's leading corporations, many of the world's greatest universities, a rich cultural heritage, and a high quality of life.

The barriers to Europe achieving its full potential are largely within Europe's own control bringing order to the public finances, continuing to pursue structural reform, and creating the conditions within which the private sector can compete and innovate. Provided Europe addresses these challenges, there is no reason why it cannot fully return to a path to sustained economic growth and renewal.

Relevant McKinsey Global Institute publications



Internet matters: The net's sweeping impact on growth, jobs, and prosperity (May 2011)

The Internet accounts for significant and growing portion of global GDP. Internet-related consumption and expenditure, if measured as a sector, is now bigger than agriculture or energy. On average, the Internet contributes 3.4 per cent to GDP in the G-8 countries, China, India, Brazil, South Korea, and Sweden—equal to the GDP of Spain or Canada.



Big data: The next frontier for innovation, competition, and productivity (May 2011)

Big data will become a key basis of competition, underpinning new waves of productivity growth, innovation, and consumer surplus—as long as the right policies and enablers are in place.



Urban world: Mapping the economic power of cities (March 2011)

600 cities—the City 600—are projected to generate more than 60 per cent of global growth to 2025. Within this group, companies need to adjust their strategy to include the 577 fast-growing "middleweight cities" with populations under 10 million. Moreover, nearly half of global growth from 2007 to 2025 will come from 443 emerging region cities in the City 600, as urban economic power moves south, and even more decisively, east. Middleweights in these regions alone will contribute an estimated 40 per cent of global growth.



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.



From austerity to prosperity: Seven priorities for the long term in the United Kingdom (November 2010)

Prospects for economic growth in the United Kingdom are strong, provided that bold action is taken to remove key barriers. Moving from austerity to prosperity requires a step change in actions on seven fronts spanning sector productivity, multinational attraction, infrastructure investment and innovation.



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

With multiple pressures on growth and constrained public finances, Europe needs structural reform even to match past GDP growth rates. Parts of Europe have begun to reform with demonstrable success. If the rest of Europe emulated their best practice, the region could add 4 to 11 per cent to per capita GDP, without cutting holidays and leave.

www.mckinsey.com/mgi

eBook versions of selected MGI reports are available at MGI's website, Amazon's Kindle bookstore, and Apple's iBookstore.

Download and listen to MGI podcasts on iTunes or at www.mckinsey.com/mgi/publications/multimedia/

McKinsey Global Institute July 2011 Copyright © McKinsey & Company www.mckinsey.com/mgi