McKinsey Global Institute




October 2010

Beyond austerity: A path to economic growth and renewal in Europe

The McKinsey Global Institute

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

The partners of McKinsey & Company fund MGI's research, which is not commissioned by any business, government, or other institution.

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Beyond austerity: A path to economic growth and renewal in Europe

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Preface

Governments around the world continue to focus on how to handle the short-term pressures associated with the global economic downturn amid concerns about a double-dip recession. But it is vital to look to the longer term to ensure that economies are in a strong position to weather multiple forces set to bear down on GDP growth.

In this context, the McKinsey Global Institute (MGI), McKinsey & Company's business and economics research arm, has examined what Europe needs to do to overcome these headwinds in the years ahead. *Beyond austerity: A path to economic growth and renewal in Europe* looks in detail at labour market reform, Europe's productivity imperative, and ways in which some European companies and governments are leveraging new growth and innovation opportunities. The report is part of a broader ongoing MGI research effort on the topic of growth and renewal.

Jan Mischke and Baudouin Regout, MGI senior fellows, led this project under the direction of Charles Roxburgh, MGI and McKinsey director in London, with additional guidance from Harald Proff, a partner in Düsseldorf. We are also grateful for the advice of Jaana Remes, an MGI senior fellow in San Francisco, and Eric Labaye, McKinsey director in Paris and chair of MGI. The project team comprised Davide Archetti, Alexandre Chau, Paolo D'Aprile, Akshat Harbola, Dirk Schmautzer, Manuela Thomys, and Andreas Weber. We are grateful for the advice and input of many McKinsey colleagues, including Urs Binggeli, Vincent Champain, Luis Enriquez, Kuntala Karkun, Tobias Meyer, and Maria Joao Ribeirinho. The team also benefited from the contributions of Janet Bush, MGI senior editor, who provided editorial support; Rebeca Robboy, MGI external communications manager; and Marisa Carder, visual graphics specialist.

Distinguished experts outside McKinsey provided invaluable insights and advice. We would particularly like to thank Martin N. Baily, a senior adviser to McKinsey and a senior fellow at the Brookings Institution, and Michael Klein, former vice president for financial and private sector development for the World Bank and the International Finance Corporation. Stephen Nickell, warden of Nuffield College, Oxford, and Stefano Scarpetta, deputy director for Employment, Labour, and Social Affairs at the Organisation for Economic Co-operation and Development, provided early guidance on our discussion of the labour market.

This report contributes to 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 work is independent and has not been commissioned or sponsored in any way by any business, government, or other institution.

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October 2010

Challenges and opportunities

Per capita GDP is
24% lower in the EU-15 than in the United States

Productivity in 2009 is
15% lower in the EU-15 than in the United States

70% of Europe's 1995–2005 productivity growth gap with the United States is from local services

Europeans work on average
5 weeks less than do people in the United States

Labour market participation by 55- to 64-year-olds is
37% in Italy

28% of 2009 world GDP came from the EU-27

In 1995–2005, manufacturing drove **37%** of productivity growth in the EU-15

>100% of 1995–2005 net job growth in the EU-15 came from services

24 million net new jobs were created in the EU-15 in 1995–2008

Labour market participation by 55- to 64-year-olds is **74%** in Sweden

Contents

Executive summary

Many of Europe's political, financial, and academic leaders are still engaged in intense efforts to tackle the aftershocks of the global financial crisis amid fears that a double-dip recession may be in prospect. But while short-term pressures are forcing policy makers to focus their energies on fire fighting, there is a pressing need to turn attention to the task of generating sustainable long-term growth.

The challenges Europe faces are serious—more so for some economies than for others. Economic growth remains fragile in many parts of the region, but, given high debt and deficit levels, there is little remaining scope to stimulate growth from public funds. Unfortunately, the threat to growth is not likely to dissipate in the short term or even the medium term. Several factors are set to bear down on European GDP growth for years to come. Adding more strain to this picture are significant imbalances in unit labour costs and current account balances that have been allowed to develop because of a lack of coordination and a policy vacuum, at least in parts of Europe, on structural reform.

In this paper, the McKinsey Global Institute (MGI), McKinsey & Company's economics and business research arm, examines Europe's growth challenge and the building blocks of an effective pro-growth structural reform agenda.[1] The task ahead will be significantly more complex because of the significant divergence in performance among Europe's constituent economies and their different starting points on the road to renewal.

By the end of this year, government debt levels are expected to stand significantly above the 60 per cent of GDP defined as sustainable by the European Union (EU) in 11 of the EU-15 countries (the exceptions being Denmark, Finland, Luxembourg, and Sweden); in the case of Greece, debt is projected to reach an estimated 125 per cent by the end of 2010. The option of further direct pump priming of growth through the public purse would seem to have been closed off, at least for most major European countries. Indeed, many governments have announced, or are planning, sweeping cuts to scale back their deficits in the short and medium terms. This unfolding era of public austerity will coincide with a period of significant deleveraging by households in some major countries and some parts of the corporate sector such as commercial real estate. Taking

1 In this paper, we focus on the European Union 15 (EU-15). The EU-15 represented 88 per cent of EU-27 GDP in purchasing power parity (PPP) terms in 2009 and 98 per cent of the eurozone. The EU-15 includes three economies that are outside the eurozone—the United Kingdom, Denmark, and Sweden—that account for 20 per cent of EU-15 GDP. We excluded the 12 more recent EU member states, which still have a period of catching up ahead of them. In aggregate, these 12 states had per capita GDP of PPP $19,000 in 2009, compared with $35,000 in the EU-15, and productivity of $24 per hour, compared with $49. These states have had significantly higher compound annual growth rates of per capita GDP and productivity in the decade from 1998 to 2008 compared with the EU-15 (4.6 versus 1.7 per cent per capita GDP growth; 4.5 versus 1.3 per cent productivity growth). Many of the structural recommendations may still hold true also for the entire EU-27.

history as our guide, this process will weigh on Europe's GDP growth for some considerable time.

Intensifying these headwinds against growth, ageing will cause a drag on per capita GDP growth as the labour force shrinks over the next 20 years; MGI estimates the annual drag at 0.4 per cent. Even while ageing bears down on growth, it will also place further demands on the public purse. According to European Commission estimates, ageing will require additional government expenditure equivalent to as much as 3 per cent of GDP by 2035.[2]

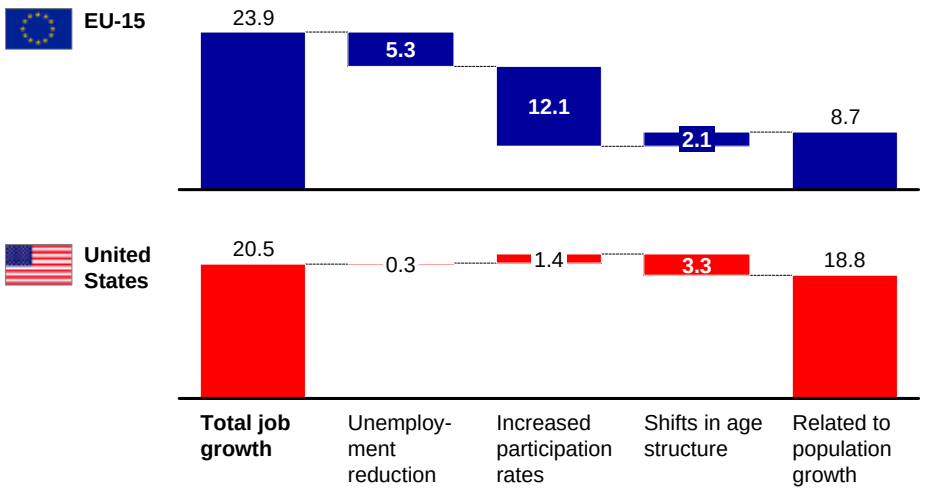
Conventional wisdom argues that Europe is a laggard in structural reform, politically unable or unwilling to change its "social model" and hobbled by perennially high unemployment. But this view misses some important developments. In the ten years prior to the crisis, Europe's per capita GDP growth matched that of the United States. This achievement was due importantly to the fact that Europe had been undertaking major reform to its labour markets that helped cut unemployment and boost participation by six percentage points in 20 years. Contrary to popular perceptions of Europe's poor record on job creation, 24 million new jobs were created between 1995 and 2008, more than in the United States over the same period despite slower population growth (Exhibit 1).

Exhibit 1

Europe has already successfully created many new jobs above population growth in the past decade

Additional jobs, 1995–2008

Million



Note: Numbers may not sum due to rounding.

SOURCE: The Conference Board; International Monetary Fund; Eurostat; McKinsey Global Institute analysis

Europe can take some comfort from these advances. However, after decades of catching up, the productivity gap against the United States has widened since the mid-1990s (Exhibit 2). Given many simultaneous pressures bearing down on Europe's growth, MGI finds that it 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

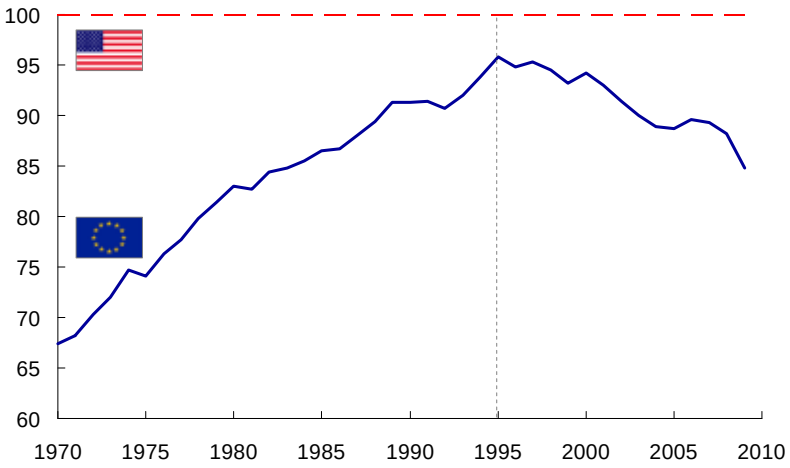
2 *2009 Ageing Report: Economic and Budgetary Projections for the EU-27 Member States (2008–2060)*, European Commission, 2009.

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.

Exhibit 2

Europe's labour productivity stopped catching up with US labour productivity in the mid-1990s

Labour productivity,[1] indexed to the United States



1 Expressed in $ at 2009 purchasing power parities (PPP) using the Elteto-Koves-Szulc (EKS) method for deriving transitive multilateral purchasing power parities.

SOURCE: The Conference Board; International Monetary Fund; OECD; McKinsey Global Institute analysis

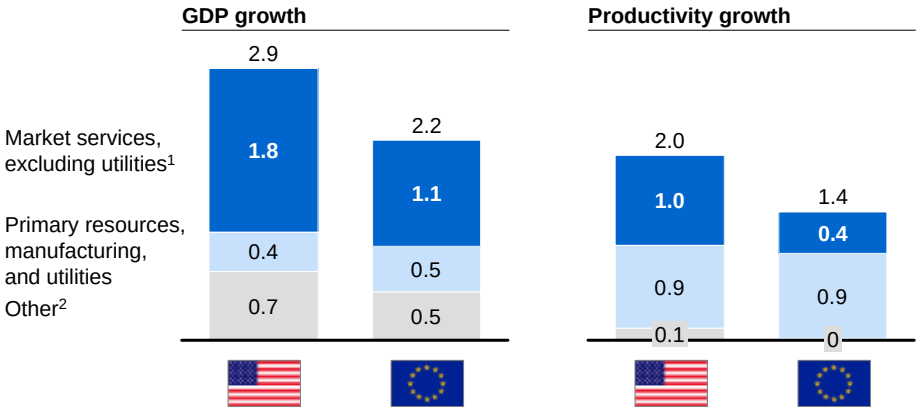
A major cause of the gap in both absolute productivity and productivity growth is Europe's relative weakness in service sectors (Exhibit 3).

Exhibit 3

Services sectors are the source of the GDP and productivity growth gap between the EU-15 and the United States

Sector contribution to 1995–2005 GDP and productivity growth

Compound annual growth rate, %



1 Construction; transport; retail; wholesale; hotels and restaurants; professional and financial services; computer and related activities; research and development; legal; technical and advertising services; renting of machinery and equipment; other community; social and personal services; and private households with employed persons.

2 Education, health and other public goods, real estate, and mix effect.

Note: Numbers may not sum due to rounding.

SOURCE: EU KLEMS; McKinsey Global Institute analysis

While European manufacturing and utilities have performed in line with the United States and contributed an important 60 per cent of overall productivity growth, service sectors have accounted for all of net job growth, as they have in all high-income economies. However, Europe's value-added and productivity growth severely lag behind these measures in the United States. Local services, including retail, wholesale, hotels and restaurants, private and other community services, and rental, accounted for five out of a total seven percentage points of productivity growth difference with the United States. Reforms to stimulate service sectors across the broad range of European economies would boost economic growth and employment, and they need to be a priority for economic policy makers.

Another challenge for Europe remains its relatively inflexible labour market. Despite important progress over the past ten years, further structural reforms are required. To illustrate, senior participation in the labour market—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. In addition, Europeans exercise 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 4).

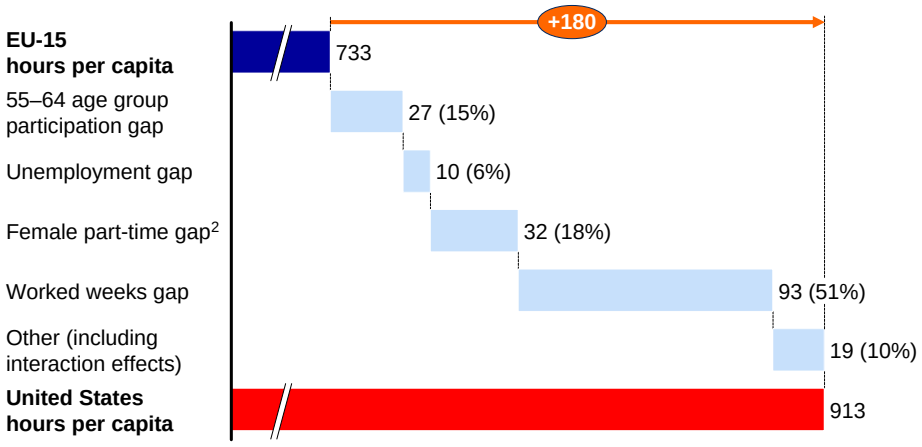
Exhibit 4

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

ESTIMATES

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

Annual hours per capita,[1] 2008



1 Standardised hours used for cross-country comparison. Official hours adjusted using the adjustment factors in OECD *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: OECD; Eurostat; McKinsey Global Institute analysis

In today's environment of inhibited growth and constrained public finances, we believe that Europe has little option but to address structural barriers to growth that many individual economies have allowed to remain in place for too long. We think Europe has sufficient competitive strengths on which to build to emerge from the current crisis on a path of higher and more sustainable growth—provided that it embarks on bold reforms in three areas in parallel:

- **Further reforming labour markets in four areas**: (1) boosting participation among older workers as spearheaded by Nordic countries as well as the Netherlands; (2) reducing structural unemployment through reforms as implemented in Denmark or the United Kingdom; (3) reducing unemployment among young workers through successful policies such as those implemented in the Netherlands; and (4) balancing the mix of part-time and full-time work for women as one way to increase the average number of hours worked.

- **Unlocking the full growth potential of service sectors in four ways:** (1) further opening up competition in service sectors that remain constrained by a high level of regulation (e.g., professional services) and monopolistic structures (e.g., network industries); (2) boosting productivity by continuing smart regulation of product, land, and labour markets and supporting greater operational efficiency and professionalism in sectors such as retail, land transport, and construction; (3) unlocking growth by setting the direction and providing crucial enablers such as standards, education, and infrastructure in, for instance, business services, tourism, and telecommunications; and (4) ensuring European scale across national borders.

- **Aligning policies to growth and innovation**: capturing opportunities in growth and innovation particularly in high-tech and manufacturing in areas such as exports to expanding emerging markets, clean technology, or longer-term technological innovation (e.g., biosciences and nanotechnology) by (1) re-prioritising funds and allocating them in innovative and competitive ways to support R&D and innovation; (2) developing larger-scale clusters; (3) improving the link between academia and business; and (4) fostering a more entrepreneurial mind-set.

In each of these areas, Europe has some weaknesses to overcome—weaknesses that should not be seen as a cause for pessimism but as untapped opportunities for growth. In each case, the most effective reform will draw on proven best practices that some European countries have already implemented and that have delivered success. None of the measures we discuss relies on importing politically unrealistic proposals from outside Europe. Rather, the aim is to apply European best practices to spur European growth.

European leaders should act boldly—and soon. If they take the crisis as an opportunity to embark on far-reaching reforms across the continent, just as Sweden did in the 1990s, they can lead European economies back to a sustainable path of growth and renewal.

1. European economies face a challenging growth outlook

Economic growth in Europe remains anaemic. In the first quarter of 2010, the eurozone and the EU-27 each posted GDP growth of only 0.2 per cent. Yet despite this marginal growth, the parlous fiscal position of many European governments means that most of them have embarked on budget cuts and austerity in order to put their fiscal houses in order. This process will play out in parallel with household deleveraging in some countries as well as secular trends—notably ageing—that will also bear down on growth. The continent faces severe and simultaneous pressures on growth.

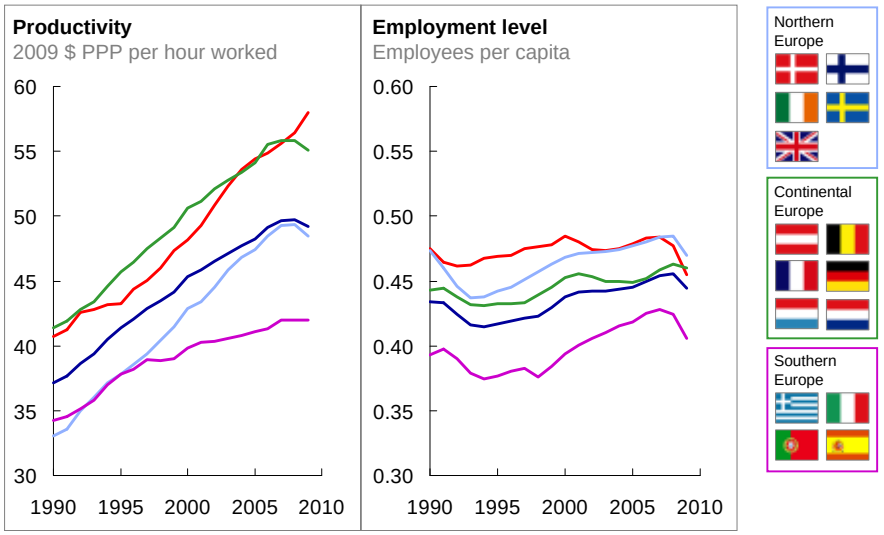
The growth challenge varies enormously from country to country as European economies have experienced widely divergent trends in per capita GDP as well as its key components—labour productivity and labour utilisation—in recent years. Depending on the metric analysed, different clusters of European economies with similar trends emerge. For the sake of simplicity, the analysis in this paper uses a largely geographically driven segmentation (see box 1, “MGI analyses Europe’s economies in three geographic clusters,” and the appendices for more detail and a country-by-country analysis).

Box 1. MGI analyses Europe's economies in three geographic clusters

Europe's economies have different starting points on the road back to sustainable growth (Exhibit 5).[3] We look at three clusters based on geography and take into account common patterns in terms of both productivity and labour market institutions.[4] We confirmed the three groupings with multivariate cluster analysis of aggregate indicators such as labour productivity levels and growth and employment rate levels and growth, as well as of more detailed country indicators used in the appendix (Exhibit 6).[5]

Exhibit 5

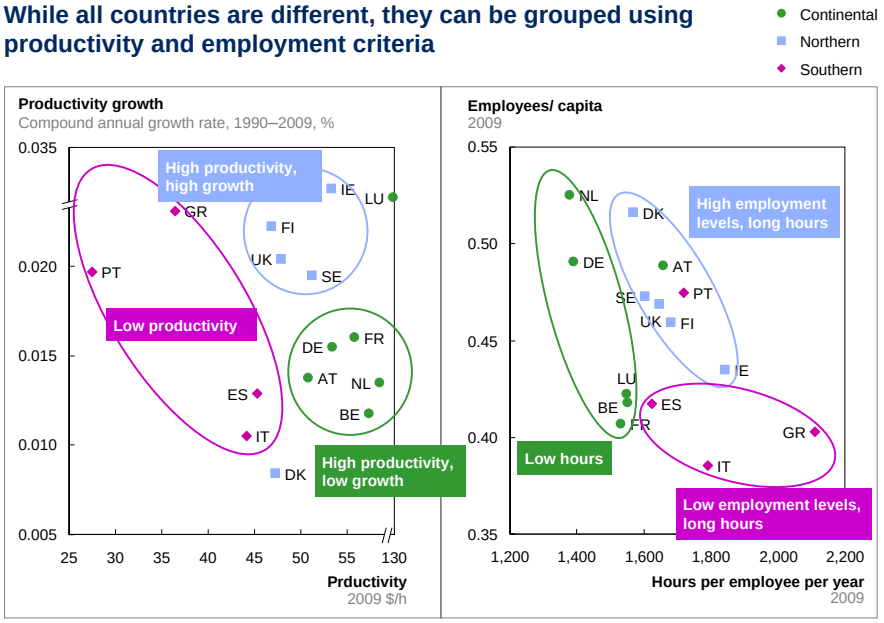
The geographic clusters tend to correlate with economic patterns



SOURCE: Conference Board; International Monetary Fund; McKinsey Global Institute analysis

Exhibit 6

While all countries are different, they can be grouped using productivity and employment criteria



SOURCE: EU KLEMS; McKinsey Global Institute analysis

3 Throughout this paper, we identify differences in starting positions where relevant. See the appendix for a more granular analysis of, and profile for, each of the EU-15 member countries.

4 See also Tito Boeri, *Let Social Policy Models Compete and Europe Will Win*, paper presented at a conference hosted by the Kennedy School of Government, Harvard University, April 2002.

5 We treated Luxembourg (because of its high productivity arising from financial services) as an outlier and clustered it with continental Europe due to its geographical position. If four clusters had been used instead of three, the United Kingdom and Ireland would have been a cluster. We decided to treat them together with Scandinavian countries in the main sections of this paper due to their similar performance on the level and growth of productivity and employment.

- **Cluster 1: Northern Europe.** This group consists of Denmark, Finland, Ireland, Sweden, and the United Kingdom. These countries have labour utilisation rates that are significantly higher than the European average and almost on a par with the United States. Each economy has experienced strong increases in labour utilisation since the mid-1990s, and productivity is in line with the EU-15 average. Finland and the United Kingdom have caught up with that average over the past ten years, and Ireland's productivity has had a significant boost from more productive foreign direct investment. Denmark is the outlier in this group; its productivity has seen a large drop in recent years. Ireland also stands out for the fact that unemployment has risen particularly sharply in response to the severe hit the economy experienced during the global economic crisis.

- **Cluster 2: Continental Europe.** This group comprises Austria, Belgium, France, Germany, Luxembourg, and the Netherlands, and has above-average productivity. The Netherlands, Belgium, and Luxembourg had higher productivity than in the United States in the run-up to the financial crisis. Productivity in France and Germany slightly exceeded US levels in the past but has recently fallen below US levels again. In contrast, labour utilisation is generally substantially below the EU-15 average due to low annual hours worked per employee and a mixed picture on employment. Austria is a modest exception, with labour utilisation almost matching rates in Nordic countries and productivity on a par with the EU-15 average. The Netherlands, too, stands out positively in terms of employment rates and Germany in terms of senior participation.

- **Cluster 3: Southern Europe.** This group consists of Greece, Italy, Portugal, and Spain and is the least homogeneous group of countries. Portugal and Greece have very high labour utilisation rates, driven by extraordinarily high reported annual working hours. In Greece, however, employment remains low, driven by low female and senior participation. Spain had a very significant increase in labour utilisation until the crisis, when rising unemployment caused the rate of utilisation to drop back again. Italy continues to post below-average labour utilisation as relatively long annual hours per employee fails to compensate for the lowest employment rate in the EU-15. On productivity, this group of countries still severely lags behind EU-15 levels. While Greece and Portugal have made up considerable ground from very low starting levels in recent years, Spain and Italy started at higher levels but have fallen behind. All countries in this cluster lag behind other groupings on innovation-related indicators as well as those related to the development of service sectors.

Europe's economies have reacted very differently to the strains of the global economic downturn. Across the EU-15, GDP is still 3.3 per cent below its pre-crisis level.[6] The recovery has proceeded at different speeds in different countries. Germany rebounded strongly during the first half of 2010 as a weak euro exchange rate fuelled exports to emerging markets; however, the rebound was from a low base given the German economy's sharp decline in the aftermath of the crisis. Germany's unemployment rate declined to 7 per cent in the second quarter of 2010, its lowest level in almost 18 years. France has recovered at a slightly lower rate, but from a higher base as it suffered a less severe contraction during the global downturn. Several countries are struggling with continued recession, mass unemployment, and very large public deficits. In June 2010, Spain's unemployment rose to 20 per cent. Greece's economy is projected to contract by 3.7 per cent in 2010.[7] Ireland may enter a double-dip recession with GDP declining by 1.2 per cent in the second quarter of 2010.

6 Eurostat, GDP in volumes, second quarter 2010 versus second quarter 2008.

7 OECD Economic Outlook database.

1.1 The priority of tackling ballooning debt will rein in growth for some time

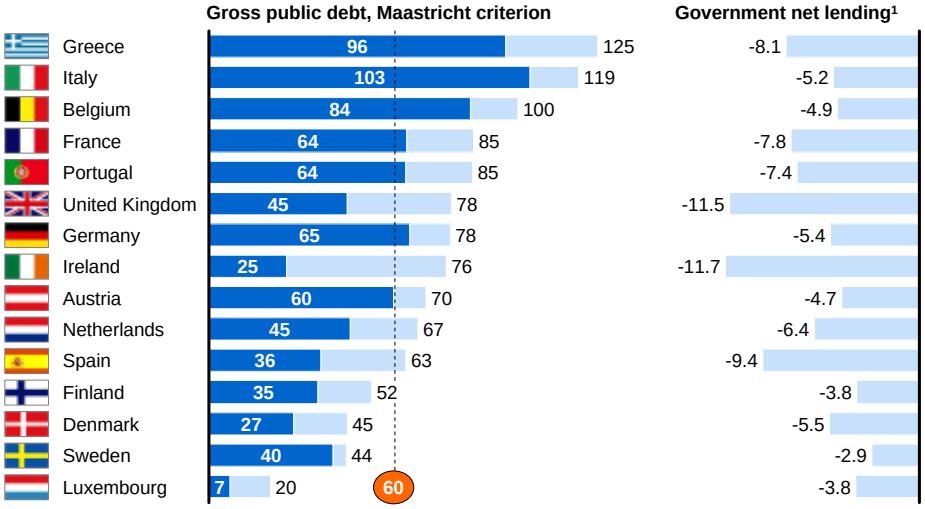
In common with other developed regions around the world, Europe has built up very substantial levels of private and public debt as a direct consequence of the first global recession since World War II.

Government debt has ballooned as a direct result of substantial public spending designed to stimulate economic recovery and automatic stabilisers. In many European countries, gross public debt has soared way above the 60 per cent upper limit enshrined in the EU's Maastricht Treaty (Exhibit 7). European Central Bank researchers have concluded that gross government debt levels above 90 to 100 per cent of GDP are usually associated with lower long-term growth rates—and that the negative impact may even start from around 70 to 80 per cent.[8]

Exhibit 7

In most European countries, public debt has soared way above 60 per cent of GDP

% of GDP, 2010 projection



1 Differs from the Maastricht definition in that it does not include streams of payments and receipts from swap agreements and forward rate agreements.

SOURCE: OECD Economic Outlook database, 2010

After at least two years of substantial publicly financed economic stimulus, it now appears that policy makers across Europe are committed to a period of austerity to restore public finances to sustainability. Some of the planned debt cuts are very substantial, forced upon governments that are facing a crisis of market confidence because of perceptions that their fiscal positions are unsustainable. In exchange for a multibillion-euro bailout package from eurozone member governments and the International Monetary Fund (IMF) in early summer 2010, Greece has committed to cutting its budget deficit by the equivalent of more than 10 per cent of its GDP. Without IMF intervention, Spain has committed to a reduction by 8.0 per cent, the United Kingdom by 7.2 per cent, France 5.2 per cent, and Portugal 4.3 per cent.

8 Cristina Checherita and Philipp Rother, *The Impact of High and Growing Government Debt on Economic Growth: An Empirical Investigation for the Euro Area*, European Central Bank, Working Paper Series Number 1237, August 2010.

At the same time, households in some countries will be retrenching as they seek to rebuild their financial health. Although MGI does not forecast GDP, it appears likely that the simultaneous efforts of households and governments to cut their debts—in the case of governments, to the EU's benchmark of 60 per cent of GDP—could place a drag on GDP growth for a considerable period.

Recent MGI research has demonstrated that deleveraging has followed nearly every major financial crisis since World War II and that this is usually a long and difficult process.[9] Although there are instances of economies deleveraging through default, high inflation, or simply growing out of debt, by far the most common type of post-crisis deleveraging is belt tightening. MGI analysis shows that such efforts have lasted an average of six to seven years and reduced debt to GDP by about 25 percentage points. In nearly every episode MGI examined, GDP growth declined in the early years of the deleveraging process but then rebounded in the next four to five years, even while deleveraging continued. This time around, deleveraging may prove even more painful. In the past, such episodes involved one economy or a few relatively small economies. Today's crisis is global in scale.

1.2 Europe's demographics are creating additional headwinds

On top of a potentially prolonged period of public and private deleveraging, European GDP faces a challenging demographic environment. Europe's population is ageing, due to a combination of increasing longevity, lower fertility rates, and the ageing of the large baby boom generation. In the EU-15, growth in the population is slower than it is in the United States, due to both lower natural growth—the EU fertility rate is only 1.6, compared with 2.1 in the United States—and lower net immigration. From 1970 to 2010, the population of the EU grew at a compound annual rate of only 0.4 per cent, compared with 1.1 per cent in the United States. This trend will continue. While the EU-15 population is projected to grow by only 3 per cent from 2010 to 2050, that of the United States is projected to expand by a robust 27 per cent.

A shift in Europe's age mix will have profound economic implications, bearing down on purchasing power, consumption, and per capita GDP and GDP growth. In the EU-27, old-age dependency ratios will rise.[10] Whereas each retiree today is supported by 2.6 employed persons, in 2050 there will be one retiree for every 1.5 employed persons.[11] Ageing will place increasing strain on the public financing of pensions, and governments are responding by increasing the average retirement age and reducing pension generosity. Even a combination of higher labour market participation and longer working hours will not be sufficient to overcome demographic headwinds.

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

10 Georges Desvaux and Baudouin Regout, "Older, smarter, more value conscious: The French consumer transformation," *McKinsey Quarterly*, June 2010 (www.mckinseyquarterly.com).

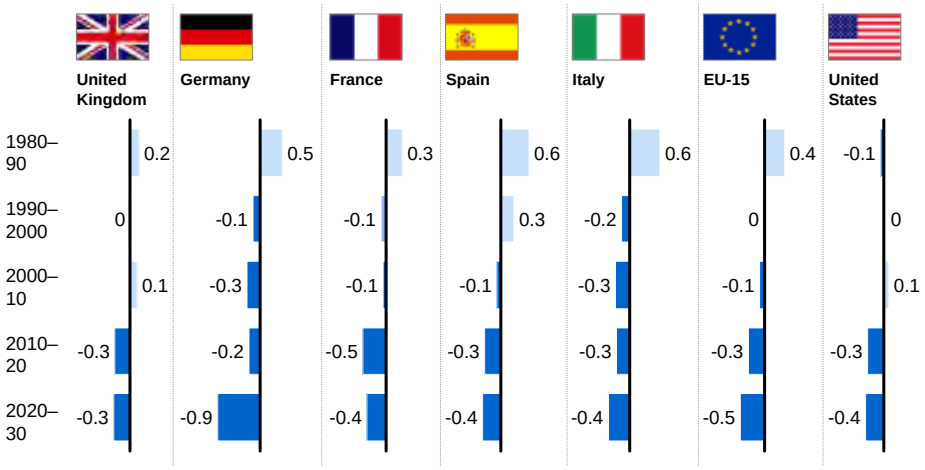
11 This calculation includes an expected increase in participation. If we do not take into account projected higher participation, the ratio would develop from four people to only two people of working age supporting each 65-year-old.

In the past, the age mix—i.e., the share of the population that falls into the working-age category—made a positive contribution to per capita GDP growth. Demographics added 0.3 percentage points to per capita GDP growth in the 1980s. But as the population ages, the mix will impose a 0.4 percentage point drag on per capita GDP growth by 2030. The hardest hit of Europe's economies will be Germany (Exhibit 8).

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 GDP per capita growth[1]
Percentage points



1 Under *ceteris paribus* assumptions on labour utilisation and productivity.
SOURCE: United Nations Population Division

Ageing will impose an increasing fiscal burden on European governments. Even after taking into account reduced public expenditure on education or unemployment benefits (reflecting the declining population in the relevant age bands), the European Commission projects that spending on pensions, health care, and long-term care expenditures will impose an additional "off-balance-sheet commitment" for governments of 3 per cent of GDP as early as 2035 and 4.8 per cent of GDP by 2060.[12] This off-balance-sheet burden ranges from 1.6 per cent in Italy to 18.0 per cent in Luxembourg. To put this commitment into context, it is, in aggregate, comparable in its size to the fiscal tightening required in the years ahead to reduce budget deficits after the crisis.

12 In 2007, spending on pensions, health care, and long-term care totalled 18 per cent of EU-15 GDP. For more detail, see *2009 Ageing Report: Economic and Budgetary Projections for the EU-27 Member States (2008–2060),* European Commission, 2009.

2. The region needs to use today's tough environment as a catalyst to accelerated structural reform

Europe should seize today's tough economic conditions as an opportunity to make positive changes to its economy rather than use them as an excuse for inaction. The imperative to embrace structural reform is compelling. A failure in many parts of Europe to grasp this nettle contributes to significant trade and competitiveness imbalances in the region's economy that have put economic management under severe strain. And as Europe strives to return to robust growth, there are few other options given the already critical state of public finances in many of its economies.

The positive news is that, in the run-up to the global economic downturn, at least parts of Europe had made significant progress on structural reform and entered the crisis in relatively robust shape. This is a solid basis on which to build further—and broader—reform to underpin growth in the face of the difficult economic conditions expected in the years ahead.

In this chapter, we look first at the significant imbalances that make the case for structural reform even stronger, and then we turn to a discussion of the progress Europe has already made on this front and the further potential that exists.

2.1 Unsustainable imbalances have developed in the eurozone

Europe faces not only many pressures on growth but also significant economic imbalances among its economies that are imposing stress on economic management—particularly within the eurozone. Politicians and economists have revived talk about a Europe of two speeds, and there is open discussion on the odds of the single currency surviving the first serious test of the monetary union's structural robustness.

A failure in many parts of Europe to embrace structural reform is the root cause of these imbalances, which predated the global economic downturn and now underscore the need to take up the initiative on reform.

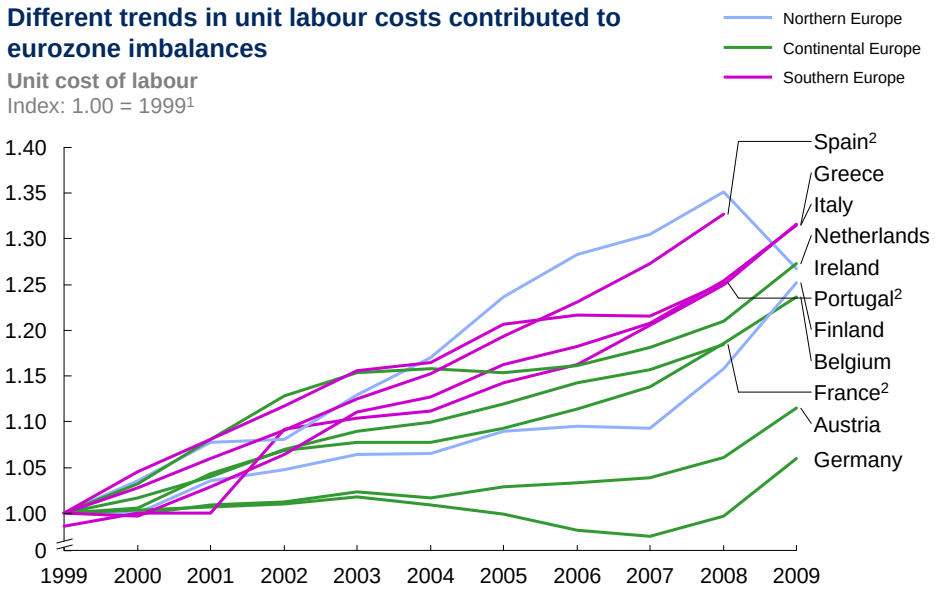
There are widening gaps in competitiveness between Europe's economies broadly, and in the eurozone more specifically. Since the inception of the euro in 1999, unit labour cost trends in the eurozone economies have been very different (Exhibit 9). As illustration, Germany experienced no increase in the cost of labour per unit of output between 2000 and 2008 before feeling a negative impact from decreasing output during the crisis in 2009. In contrast, Ireland's unit labour costs rose by 35 per cent and Spain's by 33 per cent during the same period; Ireland saw unit labour costs come down again in 2009 as a reaction to the crisis;

Ireland's nominal wages fell by 5.3 per cent and productivity increased through job losses in lower-skilled and lower-productivity sectors like construction.[13]

Exhibit 9

Different trends in unit labour costs contributed to eurozone imbalances

Unit cost of labour
Index: 1.00 = 1999[1]



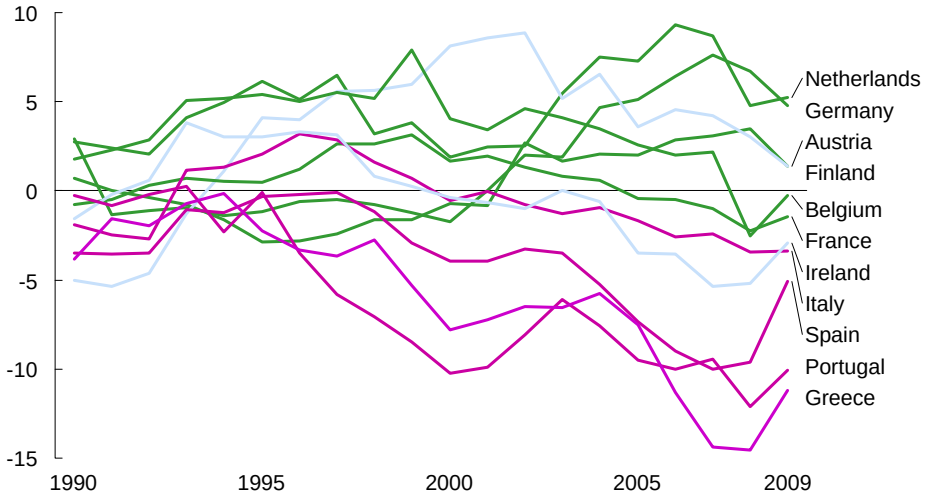
1 Instead of 1999 = 1.00, Greece is indexed to 2000 = 1.00. This is because the exchange rate between the Greek drachma and the euro was fixed in June 2000.
2 2009 data not available.
SOURCE: OECD

Current account balances, too, have diverged widely (Exhibit 10). While Germany boasted a current account surplus of 6.7 per cent of GDP in 2008, Greece's deficit on the current account had swelled to 14.6 per cent and Spain's to 9.6 per cent. The crisis has reduced current account deficits in Southern Europe, but imbalances remain.

Exhibit 10

Major current account imbalances within the eurozone preceded the crisis

Current account balance eurozone countries[1]
% of GDP



1 Excluding Luxembourg.
SOURCE: International Monetary Fund

13 OECD, *Employment Outlook 2010 – How Does Ireland Compare?* July 2010.

Within the eurozone, it will be difficult for Southern European economies to regain competitiveness using macroeconomic tools. These economies cannot devalue to restore competitiveness against European trading partners as they did in the pre-euro era; increasing inflation in Germany, another theoretical route to closing the competitiveness gap, seems unlikely; and nominal reductions in wages in Southern European countries will face fierce public resistance. There seems little alternative but to accelerate structural reforms to boost productivity.

2.2 Europe made progress on structural reform in the decade before the global economic crisis

For all the stresses that erupted in the European economy in the spring and summer of 2010, it is important to look beyond the myth of Europe as a sclerotic, ex-growth economy and consider the facts of European economic performance in the decade prior to the crisis. There are many positives, including (1) continued economic and political integration; (2) solid per capita GDP growth; (3) major labour market reforms followed by strong rises in participation and reductions in unemployment prior to the crisis; and (4) steady adoption of smart regulation of product markets.

2.2.1 EUROPE BECAME THE WORLD'S LARGEST INTEGRATED ECONOMY

The Single Market

The EU has made huge progress toward its vision of a large integrated "Single Market". For the majority of products, EU countries abide by the principle of mutual recognition of national rules so that any product legally manufactured and sold in one member state must be allowed to be sold on the market in all others. In 2009, the European market boasted approximately 101 million households earning more than $35,000 a year, adjusted for purchasing power parity (PPP), compared with 88 million such households in the United States.[14] This system of mutual recognition has also made possible the liberalisation of services, including access to, or practice of, professions such as law, medicine, and banking. Such liberalisation has led to greater competition across Europe, for instance greatly reducing the price of national telephone calls and air travel. Europe has not yet achieved sufficient mobility of labour, but it is working to ensure that educational and vocational qualifications obtained in one EU country are recognised across Europe. Public contracts are now open to bidders from anywhere in the EU. A mark of the success of the Single Market is the fact that trade among EU-27 countries now amounts to 20 per cent of the EU-27 economy. And, representing 28 per cent of world GDP in nominal terms, the EU-27 is today the largest integrated economy worldwide, ahead of the United States (Exhibit 11).

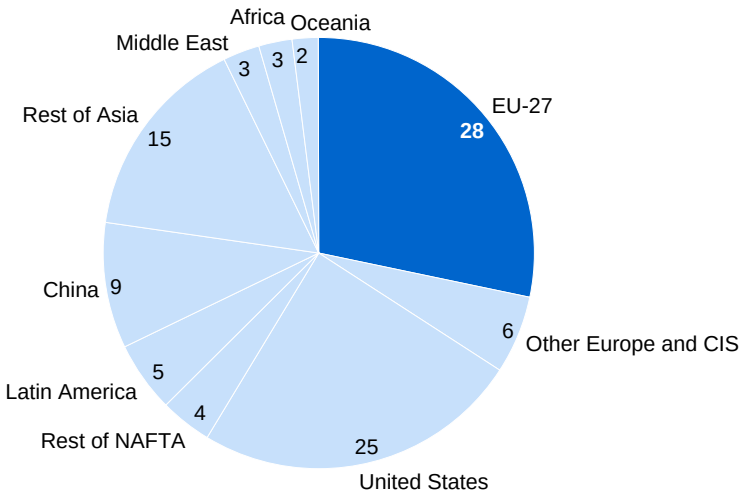
14 We use 2008 data from the Economist Intelligence Unit; EU data refer to the aggregate of the EU-15.

Exhibit 11

Europe has become the world's largest integrated economic area

Share of world GDP in nominal terms, 2009

%



SOURCE: International Monetary Fund

High share of world-leading corporations

Europe 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 highly profitable. From 1998 to 2008, European companies have been growing more profitably, with an average growth rate of mean EBITA (earnings before interest, tax and amortisation) of 9.7 per cent, compared with 6.1 per cent in the United States; mean EBITA as a percentage of sales caught up from 8.4 in 1998 (versus 10.4 in the United States) to 10.6 in 2008 (versus 10.9 in the United States).[15] The Single Market has made a significant contribution to the success of the many European companies that have expanded beyond the borders of their home markets and have a strong presence all over Europe and in the rest of the world. For example, mobile communications company Vodafone earns a mere 11 per cent of revenue in the United Kingdom and 57 per cent in the rest of Europe. Insurer Allianz has a pan-European footprint with around 22 per cent of its property and casualty premiums in Germany and more than two-thirds in Europe overall.

Strong ties to fast-developing economies

Moreover, Europe has well-developed economic and political relationships with the world's largest high-growth emerging economies, shipping twice as many exports as the United States to the BRICs (Brazil, Russia, India, and China). In addition, Western Europe has strong ties with high-growth Eastern European economies. Given historical, cultural, and language linkages, Europe is well placed to leverage revived growth in the Spanish-speaking markets of Latin

15 This calculation uses McKinsey's Corporate Performance Analysis Tool (CPAT). It is based on a sample of the top 2,600 companies by revenue in 1998 and the top 2,100 in 2008, excluding financial companies.

America, as well as to benefit from, and support, Africa's economic growth.[16] Additionally, Europe should be able to build strong economic ties with Turkey, an increasingly important growth market and a candidate for future accession to the EU.

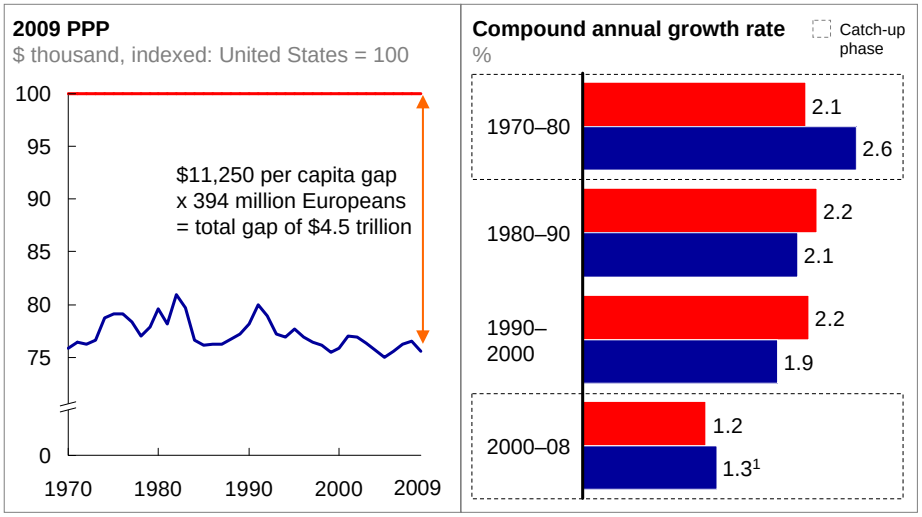
These are solid foundations on which to build as Europe searches for new sources of growth.

2.2.2. PER CAPITA GDP HAS GROWN IN LINE WITH LONG-TERM TRENDS AND KEPT PACE WITH THE UNITED STATES

Europe's per capita GDP grew slightly more quickly than that of the United States from 2000 to 2008 (Exhibit 12). Looking in more detail at individual European economies, we see that fast growth in the Nordic cluster of economies (Finland and Ireland both grew at 2.4 per cent) compensated for relatively slow growth in continental Europe of typically around the 1 per cent mark. Southern Europe showed a wide range of growth trajectories, with Italy almost stagnant but Greece expanding rapidly at a rate of 3.7 per cent until the crisis of 2010.

Exhibit 12

EU-15 per capita GDP still significantly lags behind that of the United States, but caught up slightly before the crisis



1 Higher growth rate for EU-15 not driven by 2008 "bubble" effect (EU-15/US average growth rates in 2005–06 = 2.4/1.7; 2005–07 = 2.2/1.4; 2005–09 = -0.1/-0.3).

SOURCE: The Conference Board

16 *Lions on the move: The progress and potential of African economies*, McKinsey Global Institute, June 2010 (www.mckinsey.com/mgi).

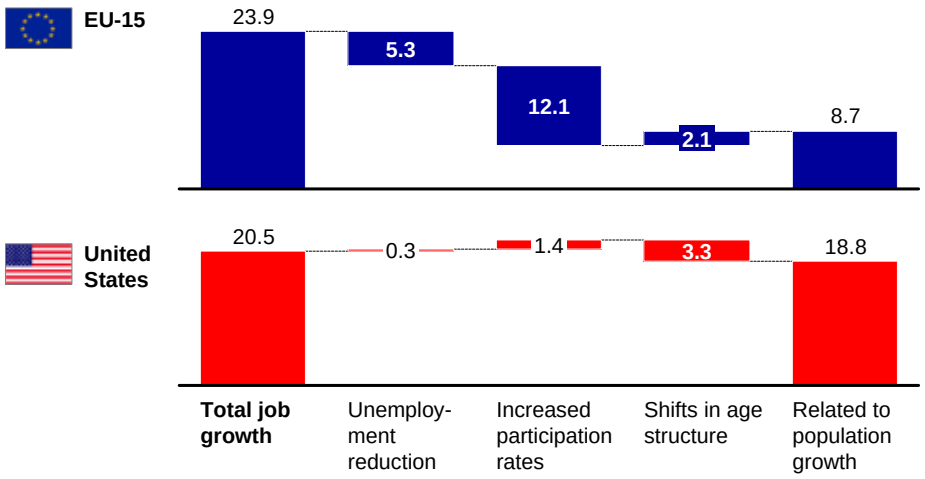
Europe has also been creating jobs at a fast pace across all three geographic clusters. Between 1995 and 2008, the EU-15 created 23.9 million jobs, of which only 8.7 million were related to its increase in population during this period. In comparison, the United States generated 20.5 million jobs, most of which (18.8 million) accommodated a rising population (Exhibit 13).

Exhibit 13

Europe has already successfully created many new jobs above population growth in the past decade

Additional jobs, 1995–2008

Million



Note: Numbers may not sum due to rounding.

SOURCE: The Conference Board; International Monetary Fund; Eurostat; McKinsey Global Institute analysis

The major reason for this relatively robust performance in recent years is the (largely unsung) reform in European labour markets that we describe later in this paper.

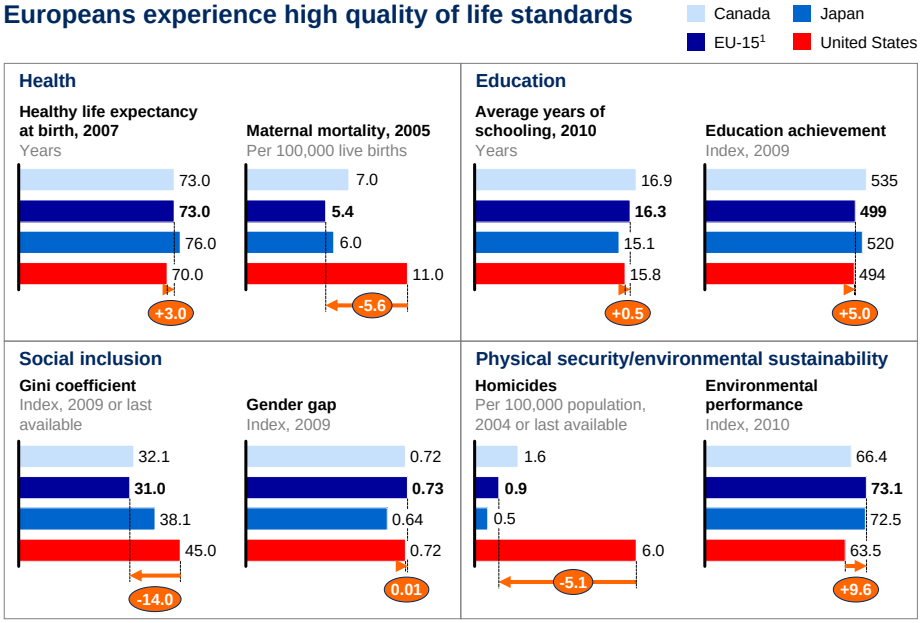
2.2.3 EUROPE SCORES WELL ON MANY NON-GROWTH INDICATORS

Per capita GDP is not the only way to measure national success—indeed, a vibrant debate rages about whether such economic metrics should be accorded such prominence. 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 (Exhibit 14). On average, a person born in Europe can expect to live three more years of healthy life than a US citizen.[17] From 1970 to 2008, life expectancy increased by more in France and Germany than in the United States despite lower per capita GDP growth in the European economies. 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.

17 All EU-15 data in this chapter are a weighted average (by population) of EU-15 country data.

Exhibit 14

Europeans experience high quality of life standards



1 Weighted average of countries (population as weight).
SOURCE: World Health Organization; World Economic Forum; Vision of Humanity; CIA; UN Office on Drugs and Crime

In education, the United States has a higher proportion of annual graduates in higher education (tertiary and advanced research programmes) at 9.1 per 1,000 inhabitants, compared with 7.5 in Europe. However, Europe has 1.8 per 1,000 in science and engineering, compared with 1.4 in the United States. Europeans on average attend more years of schooling than Japanese or US citizens (16.3 on average in the EU-15, compared with 15.1 in Japan and 15.8 in the United States). Standardised education achievements in 10 of the 15 European countries are higher than in the United States, but Southern European countries lower the EU-15 average to a level similar to that of the United States.[18]

European society tends to be egalitarian, with a significantly lower concentration of income than we see in the United States. The US Gini coefficient is 45, compared with the EU-15's 31.[19] Northern European countries such as Finland, Sweden, and Denmark lead the world in terms of gender equality, although if we take the EU-15 on average, the Gender Gap Index of the World Economic Forum (WEF) is comparable with, or only slightly better than, the reading in Canada or the United States. Another dimension contributing to a high quality of life in Europe is physical security. 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

18 Standardised education achievement scores are based on international assessments in which these countries participated.

19 The Gini coefficient is a measure of statistical dispersion that is the most widely used measure of income inequality. A lower value indicates a lower income inequality.

end of this global ranking.[20] 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. Europe needs only half as much energy per unit of economic output as the United States and 20 per cent less than Japan.[21] Europe's public transport networks are highly developed. For example, the subway network is almost comparable to Japan's (which is widely seen as one of the most advanced in the world and has arguably been surpassed only by Dubai's system, which was launched in September 2009) and is more extensive than that of the United States (8.9 kilometres per million urban inhabitants versus 5.6 kilometres).

2.2.4 PARTICIPATION AND EMPLOYMENT RATES HAVE IMPROVED

It may have gone largely unnoticed and fly in the face of conventional wisdom, but there have been major labour market reforms across Europe over the past 15 years. These have supported large increases in participation and employment, even while Europe has maintained its continuous trajectory of declining working hours per employee.

Significant catch-up in women's participation

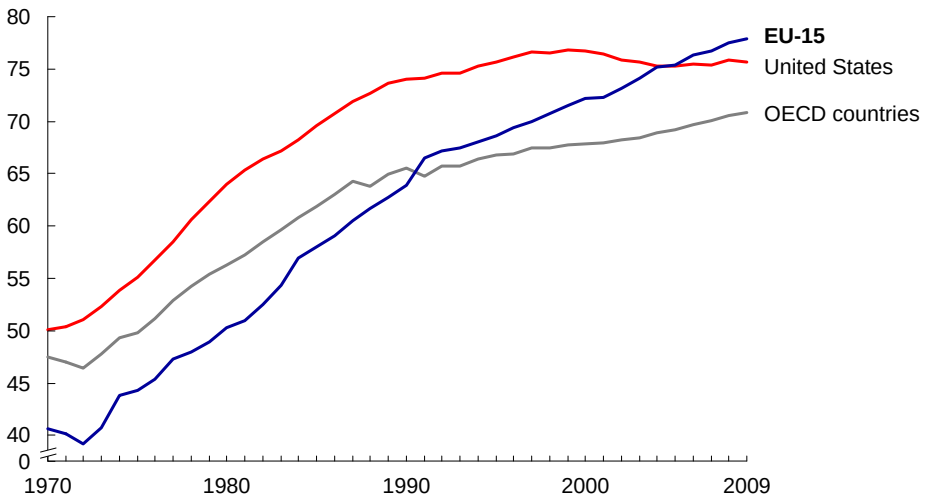
From 1990 to 2009, the EU boosted participation in the labour market by six percentage points. The participation of male workers remained stable, while that of female workers rose by 11 percentage points (Exhibit 15).

Exhibit 15

The EU-15 has successfully increased the labour participation of women

Labour force participation rate, female population aged 25–54

%



SOURCE: OECD

20 Columbia and Yale universities developed this index in collaboration with the World Economic Forum and the European Commission. The index ranks 163 countries on 25 performance indicators covering both environmental public health and ecosystem vitality.

21 2007 data.

In the United States over the same period, women's participation—already at a high level—was broadly stable. Looking in more detail below the aggregate level in Europe, Nordic countries have stolen a march on others on women's participation for decades (see box 2, "How Sweden beat the world on women in the labour market"). Continental Europe has overtaken the United States only within the past decade. Southern Europe is catching up rapidly but still lags behind other European clusters and the United States.

Many European countries have used a range of tools to increase women's participation, including enhanced women's education provisions, child care subsidies twinned with improved provision of day care, income support at birth, and, in some countries, more part-time employment opportunities (Exhibit 16). Spain, for example, has written into law a number of measures to encourage women's participation. These measures include a programme to help women get back to work after childbirth coupled with comprehensive equal opportunities legislation; tax breaks that effectively discount kindergarten fees and other forms of child care; and a Law of Conciliation between Family and Work Life in 1999 that allows for a reduced length of workday and a proportional reduction in salary for women taking care of children younger than six years. Germany, too, has acted on multiple fronts to boost women's participation, significantly expanding child care provision and, in particular, focusing on ways to promote good-quality part-time jobs.

Box 2. How Sweden beat the world on women in the labour market

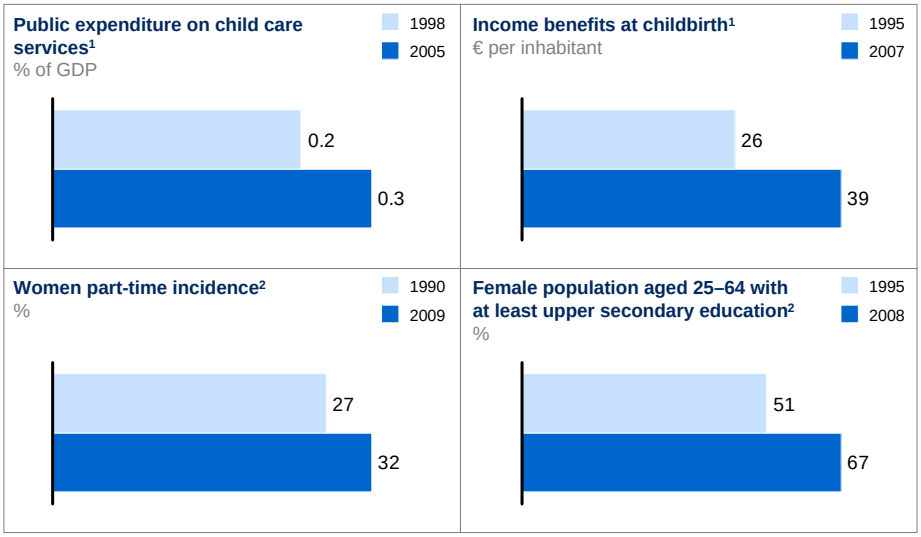
In 2008, Sweden had one of the highest rates of labour force participation—88 per cent—among women aged 25 to 54 of any Organisation for Economic Co-operation and Development (OECD) country. As well as having a very high participation rate, Sweden has a lower incidence of part-time work among women, at 14 per cent, than is the case in its European neighbours; in Germany, for instance, the rate is 39 per cent.[22]The lower incidence of female part-time working drives a higher tally of weekly hours worked by women to an average of 35 hours versus 30 in Germany.[23] Two major policy areas—taxes and benefits—help to explain this outcome. Women's participation started soaring immediately after 1971 when Sweden switched from joint to individual filing, greatly reducing the marginal tax rates on second earners. Affordable and high-quality care both for children (Sweden has one of the highest enrolment rates among children under three) and the elderly, as well as generous parental leave, have all been helpful. It is noteworthy that parental leave benefits depend on previous earnings and that day care is for nearly exclusive use of labour market participants, providing a strong incentive for women to work.

22 We use the OECD's common definition.

23 This is the usual weekly hours worked on a main job by the 25 to 54 age group; OECD data 2008.

Exhibit 16

Female participation has increased with improved women's education, child care, maternal income support, and working time flexibility in EU-15



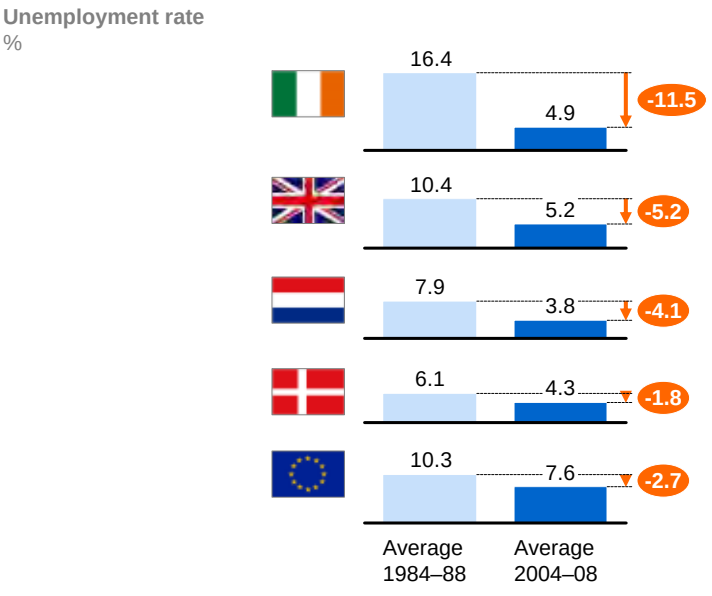
1 Excluding the Netherlands and Luxembourg.
2 Excluding Luxembourg.
SOURCE: Eurostat; OECD

Strong progress on unemployment in some countries

At the same time as broadly increasing labour market participation, several European countries have achieved much larger cuts in unemployment prior to the crisis than the average observed in any of the three geographic groupings we have analysed (Exhibit 17).

Exhibit 17

Successes in reducing unemployment include Ireland, the United Kingdom, the Netherlands, and Denmark



SOURCE: Eurostat; OECD

Take the Netherlands as illustration. From 2004 to 2008, average unemployment in the Netherlands was 4.1 percentage points lower than in 1984 to 1988, and the country had a 24 percentage point rise in participation in the period from 1990 to 2008. With substantial differences in country-specific implementation of policy, the Netherlands followed a set of reform levers broadly comparable with those that Denmark adopted (we will analyse these levers in depth in chapter 3). Germany has also pursued important labour market reforms since 2003 that have contributed to a continuous decline in unemployment witnessed in the country in the years prior to the global downturn (see box 3, "Germany's labour market reforms").

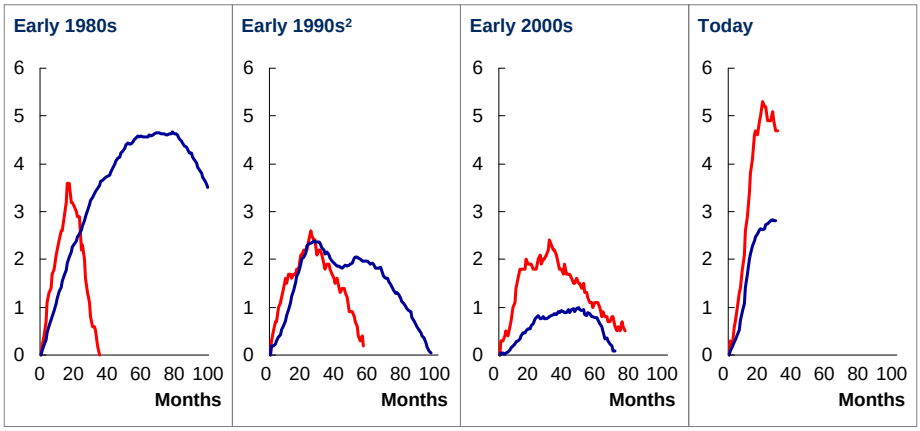
Overall, the labour market in Europe has proved more resilient in the face of the global economic crisis than in the United States (Exhibit 18).

Exhibit 18

During the recent global economic crisis, European employment fell but not as much as in the United States

Increase and recovery of unemployment rate after economic downturn

Difference of unemployment rate relative to trough before crisis,[1] percentage points



1 Phases of significant increase in unemployment rate and recovery months thereafter: US: 1980s: Jul 1981; 1990s: Jun 1990; 2000s: Dec 2000; Today: Feb 2008 (until Jul 2010); EU-15: 1980s: Jun 1980; 1990s: Dec 1991; 2000s: April 2001; Today: Mar 2008 (until Jul 2010).
2 EU-15 period starts in Dec 1991 and excludes the one-time increase in unemployment rate due to German reunification.

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

Box 3. Germany's labour market reforms

Between 2003 and 2005, under its so-called Hartz Laws, Germany increased the effectiveness of its labour market services.[24] For example, Germany reorganised its local employment agencies so that they were more accountable against their results and had a greater focus on targeting specific profiles among the jobless. It enforced the principle of "rights and responsibilities" among the unemployed. On the one hand, Germany modified the rules for entitlement to unemployment and social assistance, reducing the duration and generosity of the benefits, and encouraging the proactive behaviour of the unemployed. On the other hand, it increasingly adopted smart regulation of the labour market further, importantly facilitating new forms of employment for temporary workers.

From 2005 to 2008, the number of unemployed in Germany decreased by one-third, and, when the world financial crisis hit, the reforms afforded the economy a measure of insulation. The impact on employment of the crisis has been quite limited, with only a 0.5 percentage point rise in unemployment compared with a three percentage point increase in the OECD overall. A major contributor to Germany's relative resilience on employment was also its widespread use of the short-time worker scheme—*Kurzarbeit*—under which the Federal Employment Agency can subsidise part of the foregone income of employees if a company reduces working time for economic reasons.[25] The subsidy scheme prevented companies in temporary distress from laying off workers if the jobs seemed viable in the long run. It will be important, however, to adjust the scheme and allow for changes in longer term demand once the repercussions of the crisis have vanished.[26]

24 The Hartz Laws grew out of the recommendations of a commission on reforms to the German labour market in 2002. The reforms of Hartz I - III were implemented between January 1, 2003, and December 31, 2004; Hartz IV began on January 1, 2005.

25 The eligibility of companies is based on a major drop in orders that is deemed to be temporary in nature, with at least one-third of the employees losing more than 10 per cent of their gross wage (condition temporarily suspended in 2010). Employees accept a cut in monthly income as the state pays only 60 per cent of the foregone net wage.

26 Also see the IMF's country analysis for Germany in March 2010 and the OECD *Employment Outlook*, 2010.

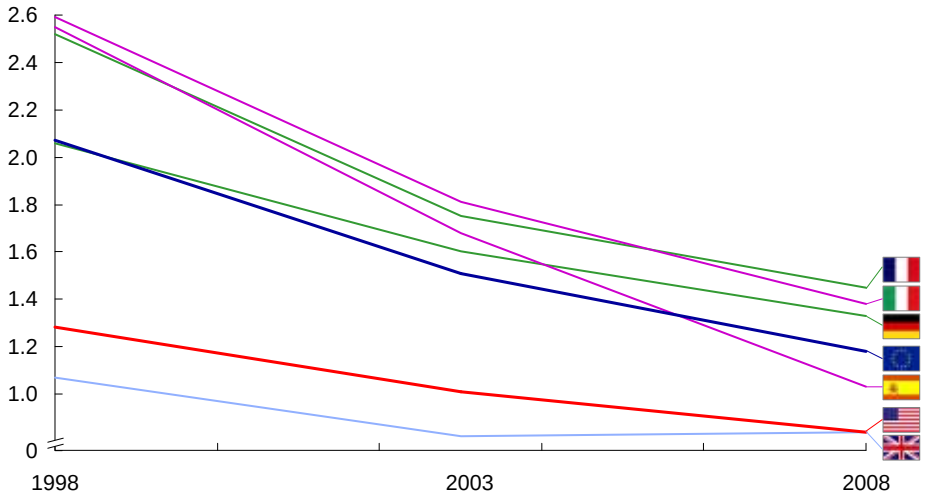
2.2.5 PRODUCT MARKETS BECAME MORE FLEXIBLE

Europe has made significant progress in smart regulation of product markets. On a 0 to 6 scale defined by the OECD (reflecting state control, regulatory and administrative opacity, administrative burdens on start-up companies, barriers to competition, and hurdles to trade and investment), the gap between the EU-15 average and other major OECD countries decreased from 0.3 in 1998 to 0.05 in 2008. This was due largely to decreased government control and relaxed barriers to competition in network sectors (e.g., utilities), and lighter administrative burdens (Exhibit 19).[27]

Exhibit 19

Europe has strongly deregulated product markets but overall not to the extent seen in the United States

OECD product market regulation index[1]



1 0–6 range, higher scores indicating higher product market regulation. EU score weighted by member country share of GDP.
SOURCE: OECD

However, several countries—including Greece, France, Luxembourg, and Austria—still have far more restrictive product market regulations than the average. France and Greece retain significant degrees of state control; Luxembourg and Greece maintain barriers to entrepreneurship; and Austria and Greece still have barriers to trade and investment. The regulatory state of play varies enormously from sector to sector, too. So while Europe is at a par with OECD best practice in some sectors such as post and electricity, the continent lags in other sectors, notably service sectors. In retail, rail, and gas, the regulatory gap ranges from 1.7 to 2.2, still mostly driven by public ownership for network industries and by operational restrictions for retail.

27 The “major” OECD countries are Australia, Canada, Japan, South Korea, Mexico, New Zealand, and the United States.

2.3 Europe still has significant further potential to improve economic performance by addressing structural inefficiencies

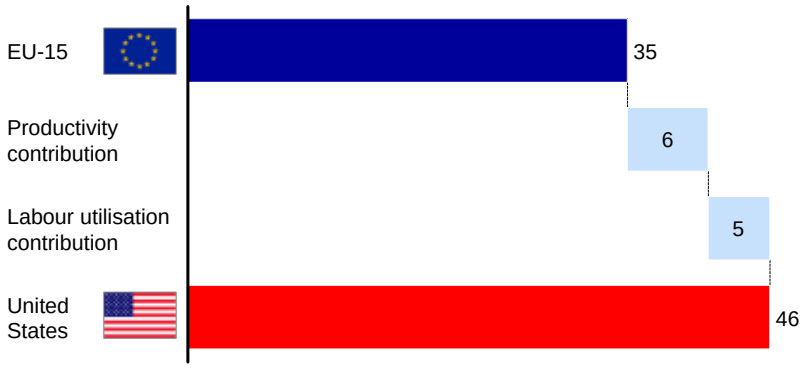
Despite the progress in labour and product market reform made in Europe in the past ten years, the continent's per capita GDP still lags behind that of the United States by around 24 per cent—$4.5 trillion in total, or the equivalent of $11,250 per inhabitant (Exhibit 20). In this section, we look at lagging labour utilisation, a widening productivity gap to the United States, and the subpar development of Europe's service sectors.

Exhibit 20

The EU-15 still has a substantial per capita GDP gap with the United States

Per capita GDP, 2009

PPP, $ thousand



SOURCE: The Conference Board; Eurostat; Global Insight; International Monetary Fund; McKinsey Global Institute analysis

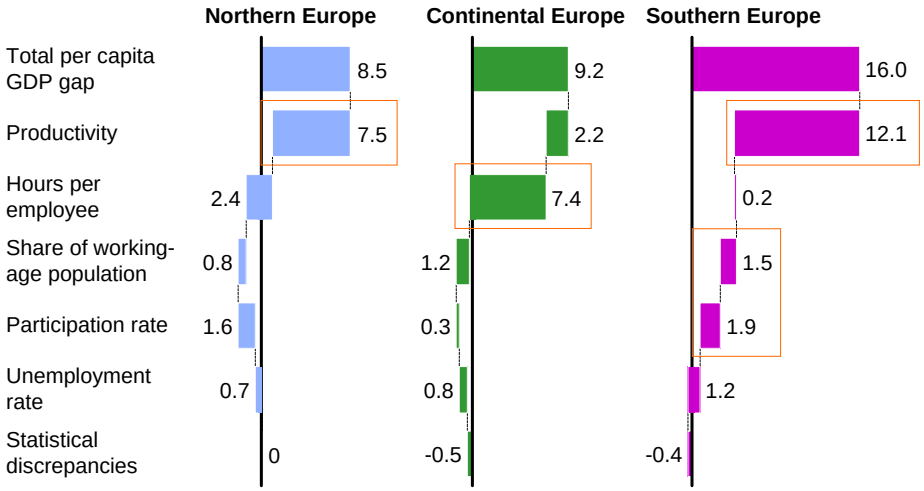
On an aggregate European level, lower productivity and labour utilisation contribute almost equally to that gap, but the components of that gap vary markedly from country to country (Exhibit 21). In the Nordic cluster, the issue is mostly one of productivity; Continental Europe faces a gap in hours per employee; Southern Europe faces simultaneous challenges on productivity, participation, and unemployment. At the level of individual economies, the differences are even larger. In the United Kingdom, lagging productivity explains 86 per cent of the gap. In Germany, 96 per cent of the gap is due to low hours worked per employee. In Italy, low participation accounts for one-third of the gap and relatively sluggish productivity for the rest.

Exhibit 21

The importance of productivity versus labour utilisation for the per capita GDP gap varies from country to country in Europe

Contribution to per capita GDP gap vs. United States by key drivers, 2009

PPP, $ thousand



SOURCE: The Conference Board; International Monetary Fund; Eurostat; Global Insight; OECD; McKinsey Global Institute analysis

2.3.1 EUROPE NEEDS A SUBSTANTIAL ACCELERATION IN PRODUCTIVITY GROWTH TO MAINTAIN HISTORIC GROWTH RATES

Given declining populations, European economies need to achieve even higher rates of productivity growth to maintain historical rates of growth in per capita GDP. Based on current projections for population growth, age mix, and trends in participation rates, MGI estimates that Europe needs to find 0.4 percentage points of incremental productivity growth throughout the next 20 years to match the historical economic growth rate of the past 20 years.[28] To achieve the 2.9 per cent rate of growth observed in the United States, Europe would need incremental productivity growth of 1.3 per cent. Such growth in productivity would take Europe close to the original target of 3 per cent set out in the Lisbon agenda and would represent an acceleration of two-thirds from historic rates of productivity growth (Exhibit 22).[29]

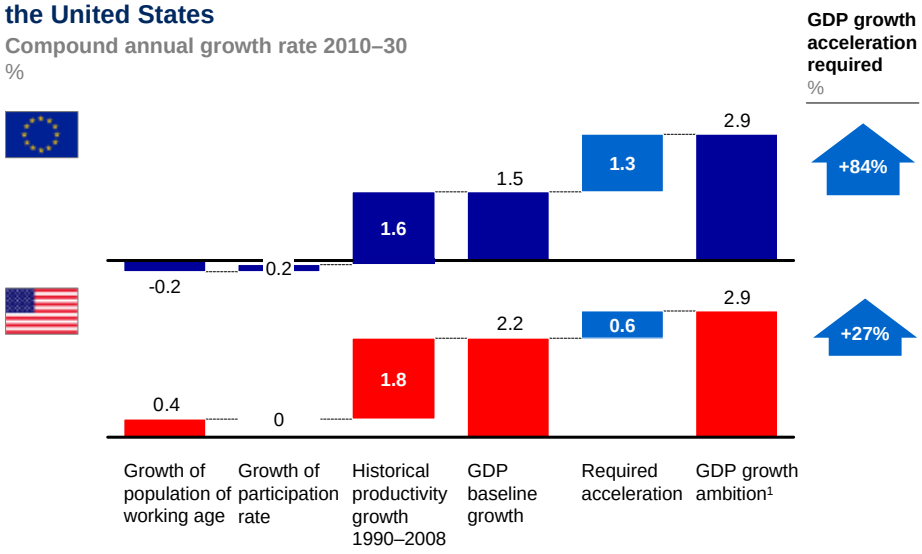
28 The European Commission's 2009 report on ageing sees a 2.6 percentage point increase in participation by 2030 for the EU-15, equivalent to 0.16 percentage point of growth per annum. See *2009 Ageing Report: Economic and Budgetary Projections for the EU-27 Member States (2008–2060)*, European Commission, 2009.

29 The Lisbon agenda, launched at an EU summit in Portugal in March 2000, committed member states to a programme aimed at making the EU "the most competitive and dynamic knowledge-based economy in the world capable of sustainable economic growth with more and better jobs and greater social cohesion".

Exhibit 22

The EU-15 needs to accelerate GDP growth to catch up with the United States

Compound annual growth rate 2010–30
%



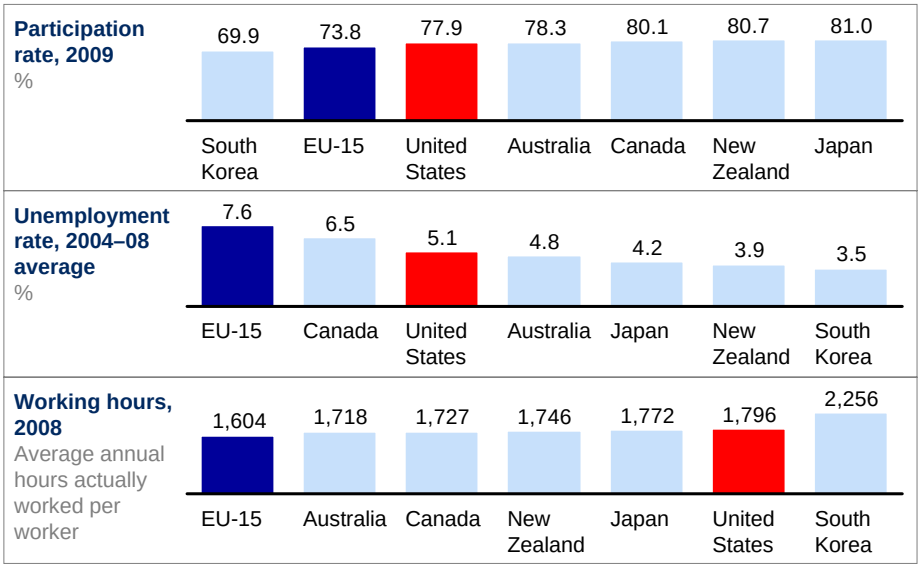
1 Set to the US historical GDP growth rate (1990–2008). OECD forecast for 2012–25 growth is 2.4 per cent for the United States, 1.9 per cent for EU-15 in base scenario of *Economic Outlook* No. 87; historical EU-15 GDP growth is 2.0 per cent.
Note: Numbers may not sum due to rounding.
SOURCE: The Conference Board; United Nations Population Division; BLS; EC; McKinsey Global Institute analysis

2.3.2 LABOUR UTILISATION STILL LAGS BEHIND INTERNATIONAL COMPARISONS

Europe still lags behind the United States and other major OECD countries in its rates of participation by seniors in the labour market, in levels of structural unemployment, and in working hours—the latter reflecting a societal choice in Europe for more leisure time (Exhibit 23).

Exhibit 23

A significant gap remains in terms of participation rates, structural unemployment, and hours per employee



SOURCE: OECD

Participation

Europe still has low levels of participation in the labour force compared with other developed economies. The average participation rate in the EU-15 is 74 per cent, compared with 78 per cent in the United States and Australia, 80 per cent in Canada, and 81 per cent in New Zealand and Japan. The participation of older workers aged 55 to 64 is markedly lower in Europe than in other developed economies. In spite of the abandonment of a number of early retirement schemes over recent years, participation by Europe's seniors stands at only 51 per cent, compared with 65 per cent in the United States and 69 per cent in Japan. Older workers' participation accounts for more than half of Europe's total participation gap with the United States.

Average unemployment

Over the past five years, average unemployment has also been higher in the EU-15 than in other major OECD economies—2.5 percentage points higher on average than in the United States with a particular penalty for younger workers (4.2 percentage points) between 2004 and 2008). In the EU-15, 22 per cent of unemployment in the 15 to 24 age group is long term (longer than one year), compared with 7 per cent in the United States and only 2 per cent in Canada. Japan had an even higher share of long-term unemployment among younger workers at 24 per cent.

Societal choice for lower working hours

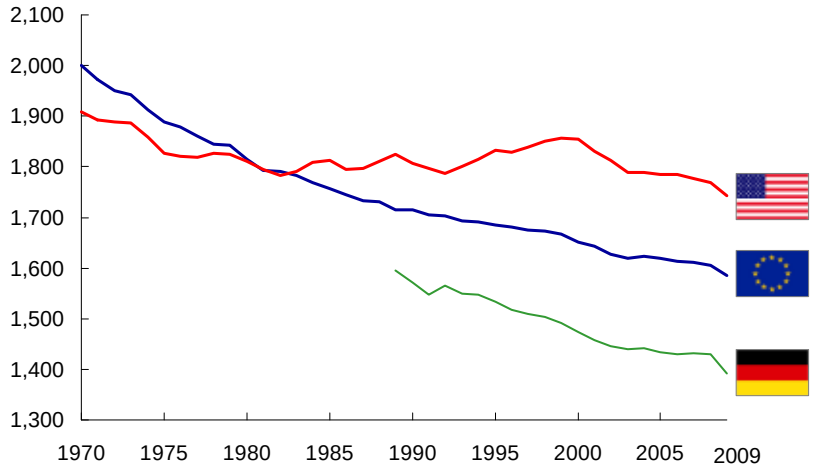
European employees today work on average 11 per cent fewer hours per year than do their US counterparts and also significantly less than in other major OECD economies. In 2008, the average annual working hours per worker in the EU-15 was 1,604 hours. This compared with 1,772 in Japan, 1,796 in the United States, and 2,256 in South Korea.[30] Before the economic crisis, the United States maintained low unemployment levels and substantially increased its productivity without a reduction in working time (today, however, the United States is grappling with a very rapid rise of unemployment). By contrast, working hours in Europe have consistently declined over the past 40 years, particularly in large Continental European countries (Exhibit 24).

30 *Official Annual Hours*, OECD 2008; EU-15 data calculated as the weighted average of the 15 countries' annual hours (using employment as weight).

Exhibit 24

EU-15 working time has fallen substantially, widening the gap with the United States

Annual hours worked per employee



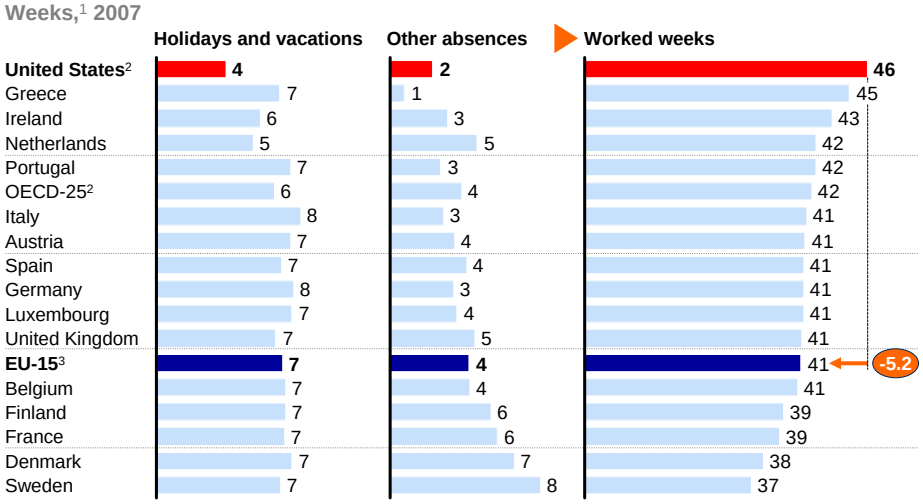
SOURCE: The Conference Board; national statistical institutes

Many European countries favour longer holidays and periods of leave that account for five weeks less of work per year, or more than 70 per cent of the working time gap between Europe and the United States (Exhibit 25). Lower weekly hours, and in particular a higher share of part-time work, are responsible for the rest of the gap. The incidence of part-time rather than full-time working is particularly high among European women. There is a wide variance among EU economies.

Exhibit 25

EU-15 employees work five weeks less on average than their US counterparts

Weeks,[1] 2007



1 Dependent employees, full-time equivalent.
2 2005.
3 Simple average.
Note: Numbers may not sum due to rounding.
SOURCE: OECD

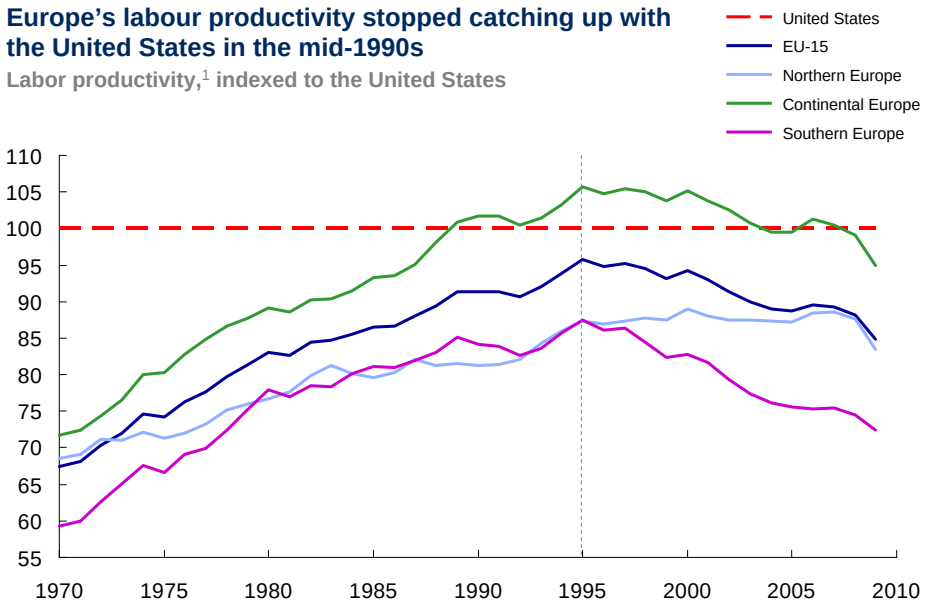
2.3.3 PRODUCTIVITY GAP WITH THE UNITED STATES IS WIDENING

From the 1960s to 1995, Europe steadily closed its productivity gap with the United States. But since the mid-1990s, the gap has started widening again (Exhibit 26).

Exhibit 26

Europe's labour productivity stopped catching up with the United States in the mid-1990s

Labor productivity,[1] indexed to the United States



1 Expressed in $ at 2009 EKS PPPs.
SOURCE: The Conference Board

While productivity is not an end in itself, it is a critical means to an end—higher growth and competitiveness. Per capita GDP, competitiveness, and productivity move in lockstep with each other. So if Europe is to maintain past GDP growth rates or even close its per capita GDP gap with the United States, it will have to boost productivity (see box 4, "The productivity imperative").

Box 4. The productivity imperative

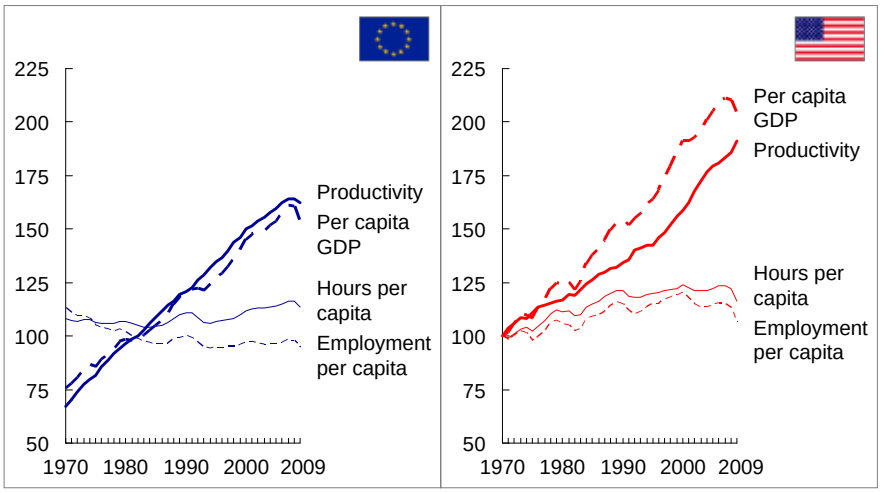
In the long run, productivity is the key driver of per capita GDP growth. Over the past 40 years, all per capita GDP growth in Europe has come from productivity increases, while in the United States labour utilisation has also made a positive contribution (Exhibit 27).

Exhibit 27

In the long run, productivity is the main driver of economic wealth

Economic growth

Indexed:[1] 100 = United States 1970



1 The trends are based on real growth.

SOURCE: The Conference Board; McKinsey Global Institute analysis

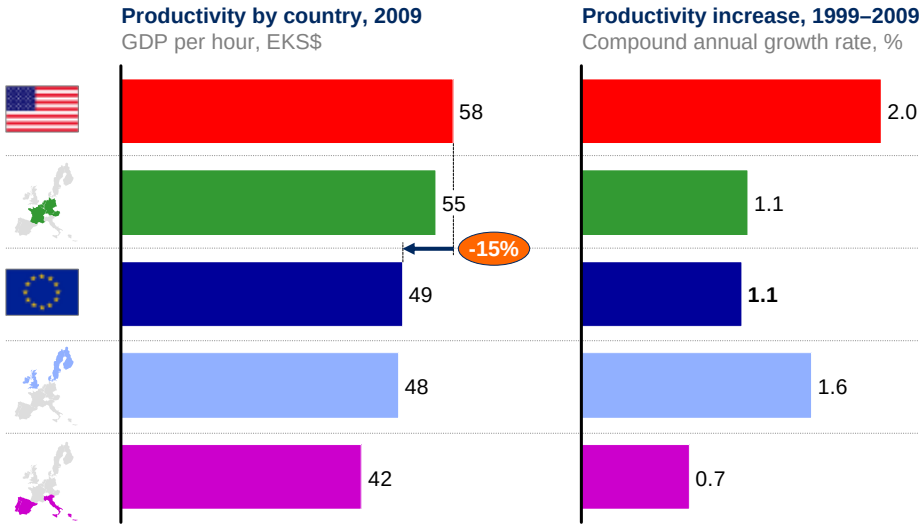
Productivity is also crucial for competitiveness. There are two broad ways of assessing national competitiveness. An "outcome" view sees competitiveness as little different from productivity.[31] An "input" view treats competitiveness as an amalgam of institutional and business characteristics that help create the conditions for a productive, growing economy; the competitiveness "ranking systems" published by the WEF and International Institute for Management Development (IMD) are prime examples of this approach. These two perspectives correlate reasonably closely as countries with efficient businesses, markets, and government institutions (measured by the input view) also tend to have higher productivity (leading to outcomes) and enjoy higher GDP per worker.

31 Readers interested in MGI's extensive analysis on productivity can download research at http://www.mckinsey.com/mgi/rp/CSProductivity/.

Today, productivity varies widely in Europe and therefore the challenge facing individual European economies differs, too (see box 5, “Productivity and productivity growth patterns across European geographic clusters”). Continental Europe’s productivity has been largely on a par with the United States but has lost steam recently. Southern Europe not only started from lower levels (especially in Portugal, Greece, and Spain), but also (in the case of Italy and Spain) has lost ground since the end of the 1990s. Greece, for instance, would have to boost its productivity by 65 per cent to match the performance of the United States; Spain would have to boost productivity by 28 per cent and Italy by 31 per cent. Over the decades prior to the global crisis, the Nordic group of countries including the United Kingdom and Ireland grew their productivity substantially more rapidly than the European average and caught up with that average (Exhibit 28).

Exhibit 28

Europe as a whole has a significant productivity gap with the United States—with major differences between parts of the region



SOURCE: The Conference Board; International Monetary Fund; McKinsey Global Institute analysis

Box 5. Productivity and productivity growth patterns across European geographic clusters

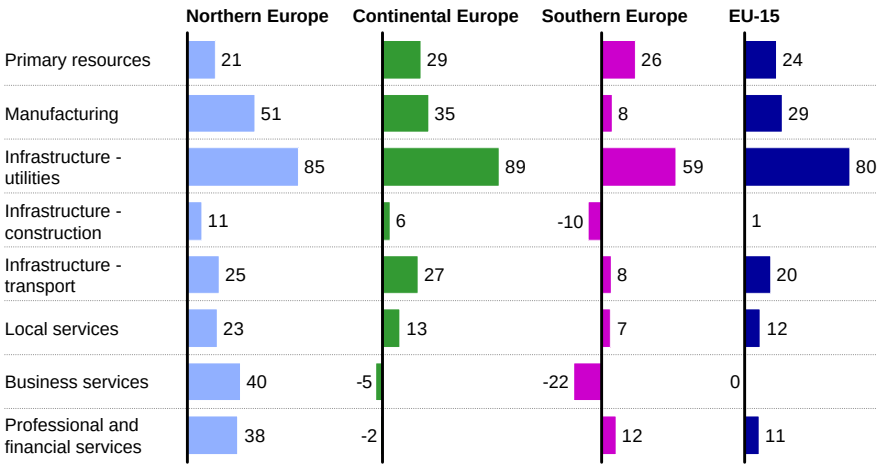
Productivity growth

Productivity growth rates varied widely from sector to sector in different European geographies between 1995 and 2005 (Exhibit 29). Northern Europe has been catching up with other parts of Europe, a process that has been most evident in local, business, and professional and financial services, but also in manufacturing. In this group of countries, Sweden and the United Kingdom drove productivity growth. For example, Swedish manufacturing increased its productivity by 60 per cent during this period and surpassed the productivity of manufacturing in Continental Europe. In the United Kingdom, the business, professional and financial services sectors raised their productivity by more than 40 per cent compared with stagnation in the productivity of these sectors in Continental Europe. In contrast, Southern Europe has been losing ground across almost all sectors. Most notably, construction productivity actually declined, particularly in Spain whose labour force grew rapidly following a steep increase in real estate prices. The productivity of business services also fell, particularly in Italy but also in Greece. In manufacturing, Italy in particular has lost touch with Continental Europe; manufacturing productivity stood at similar levels as those prevailing in Continental Europe in 1995 but then grew by a mere 2 per cent over the subsequent decade compared with 35 per cent in Continental Europe. Utilities have seen rapid growth in productivity across European geographies, largely reflecting advances in telecommunications.

Exhibit 29

Northern Europe has outperformed the rest of Europe on productivity growth, particularly in the case of services

Productivity growth[1]
1995–2005 growth, %



1 Excluding real estate as well as health, education, and other public goods.
SOURCE: EU KLEMS; McKinsey Global Institute analysis

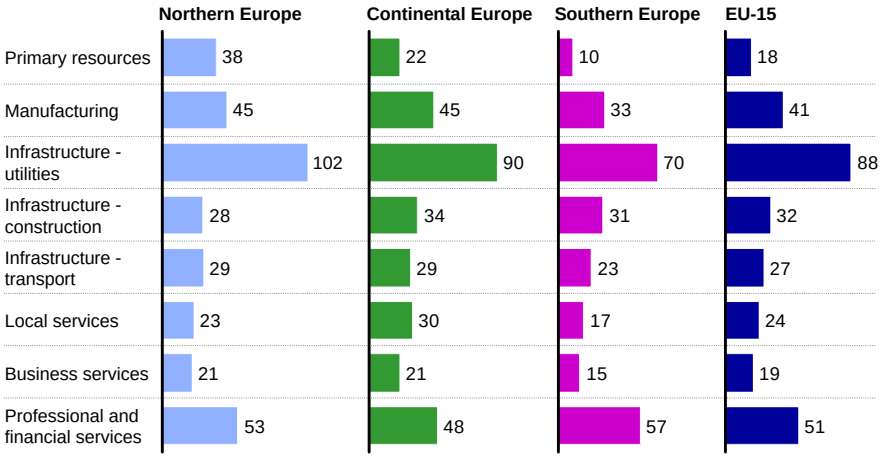
Productivity levels

So where have these varied productivity growth rates left the level of productivity in the different geographic clusters we discuss in this paper? In 2005, we find that Continental Europe boasted an advantage of 15 per cent over Northern Europe (Exhibit 30). Comparatively low productivity in local services in the United Kingdom and Ireland alone accounts for one-third of this gap—most prominently in the United Kingdom's wholesale and community, social, and personal services sectors. Continental Europe's construction sector enjoys a clear productivity advantage over that of Northern Europe, but Northern Europe boasts high productivity in primary resources sectors because of its access to oil and other natural resources. Southern Europe's productivity lagged behind that of Continental Europe by 23 per cent in 2005. Productivity gaps between Continental and Southern Europe are evident across all groups of sectors with the exception of high productivity levels in financial intermediation in Spain and Portugal.

Exhibit 30

Continental Europe boasts higher productivity than the EU-15 average due largely to local services[1]

Productivity levels
2005 $ PPP per hour worked



1 Continental Europe also gains advantage from the public sector and real estate but statistics have limited reliability.
SOURCE: EU KLEMS; McKinsey Global Institute analysis

Several sectors contribute to the EU-15's productivity gap with the United States. The productivity of primary resources and manufacturing sectors lags behind that of those sectors in the United States, but the main cause is the lower productivity in Europe's service sector. There is strong reason to believe that there is major potential to improve the productivity of health, education, and public services in Europe, too (see box 6, "Europe's productivity in health, education, and public services"). However, in this report, we focus on private sector service industries.

Box 6. Europe's productivity in health, education, and public services

Productivity in health, education, and public services is inherently difficult to measure: the output of services such as defence or education is hard to define. Most national accounts therefore assume a value of output equal to the total cost of the inputs. This results in public sector productivity growing in line with wage increases beyond inflation.

The United Kingdom's UK National Statistics has started using direct indicators of output, such as the number of medical consultations or the number of children taught since 1998, and extended this initiative more recently to measuring quality. The effort is still partially experimental, but there are indications that public sector productivity may actually have fallen in the decade from 1997 to 2007, in strong contrast to an annual 2.3 per cent productivity gain for the overall economy.

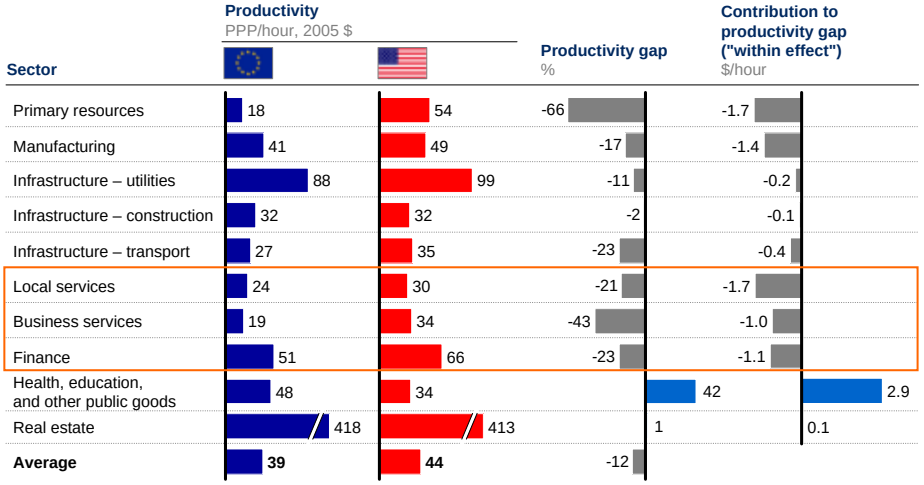
Measuring and finding ways to improve upon productivity in health, education, and public services is high on MGI's agenda for future research.

Looking at groups of sectors, we find that primary resources had the largest productivity gap with the United States at 66 per cent in 2005 (Exhibit 31). This gap was driven to some extent by the higher share in the United States of extractive industries such as oil and other natural resources with the high productivity typical of these sectors; however, large subsidies on Europe's low-productivity agricultural sector may have also made a contribution to this gap. Although the productivity of agriculture is relatively low worldwide, the US agriculture sector, for instance, is almost twice as productive the EU-15's. The second-largest productivity gap was in business services at 43 per cent, followed by transport infrastructure, financial services, and local services. Taking all sectors into account, the total gap between European and US productivity was $5.23 per hour of work in 2005.

Exhibit 31

Europe's productivity gap is mainly driven by service sectors, but also by primary resources and manufacturing

2005 productivity levels and gap



1 If within and mix effect were calculated from sector contributions instead of cluster contributions, the result would be -$3.30/hour from within effect and -$1.90/hour from mix effect.

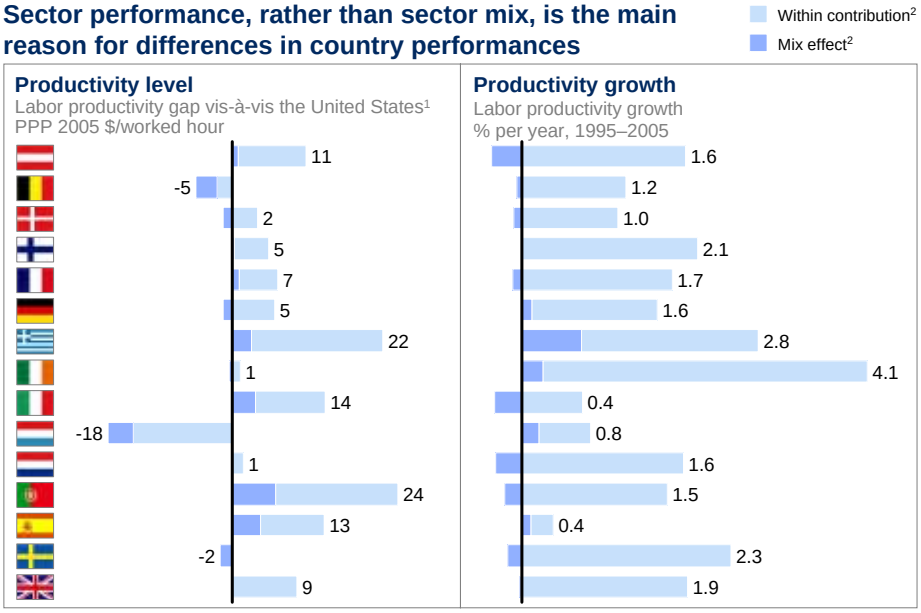
SOURCE: EU KLEMS; McKinsey Global Institute analysis

In this context, it is important to note that productivity growth and, to a lesser extent, also productivity levels, are largely driven by productivity and growth gaps between similar sectors and not by differences in an economy's sectoral mix. This suggests that policy makers should focus more on driving productivity within sectors rather than attempting to reshape the mix of their economies through measures that favour one sector over another. Comparing productivity levels and growth between EU-15 countries and the United States, for instance, shows that sector mix accounts for less than 20 per cent of the difference in productivity growth and levels (Exhibit 32). Even for economies as different as the United States and India, the sector mix contributes less than 20 per cent to the aggregate productivity difference between the two economies.[32]

32 There are, of course, some exceptions to this general rule, particularly in terms of productivity levels; typically the rule applies more broadly to productivity growth: (1) Our analysis excludes mining due to different endowments of natural resources in various economies. It also excludes real estate, health, education, and public services due to measurement and comparability issues. Norway's strong oil industry alone, for instance, gives Norway an $11 per hour productivity advantage over the economy in the United States—90 per cent of Norway's total advantage; (2) the sectoral balance of economies can lead to a measurable mix effect particularly in the case of small countries (such as Luxembourg whose high-weight financial services industry positively contributes to productivity), or countries going through a boom cycle (for example, construction in Spain that is weighing down on productivity); (3) looking at an even greater level of detail than is typically available in national accounts, we find that "operational" mix effects do play a significant role within sectors. In retail, for example, the format mix is crucial for productivity; the product mix is crucial for company success in many industries; and (4) finally, the sector mix can have an important secondary impact. For example, a developed machinery sector can support the automation of, and productivity increases in, agriculture to the extent that equipment cannot simply be sourced from abroad. For a more detailed discussion of this point, see also *How to compete and grow: A sector guide to policy*, McKinsey Global Institute, March 2010 (www.mckinsey.com/mgi). Interested readers can also download a number of country-level productivity analyses from http://www.mckinsey.com/mgi/rp/CSProductivity/.

Exhibit 32

Sector performance, rather than sector mix, is the main reason for differences in country performances



1 Excluding mining, real estate, education, health and other public goods.
2 Calculated on the highest level of available sector granularity.
SOURCE: EU KLEMS; McKinsey Global Institute analysis

2.3.4 SERVICE SECTOR DEVELOPMENT HAS NOT KEPT PACE WITH THAT OF THE UNITED STATES

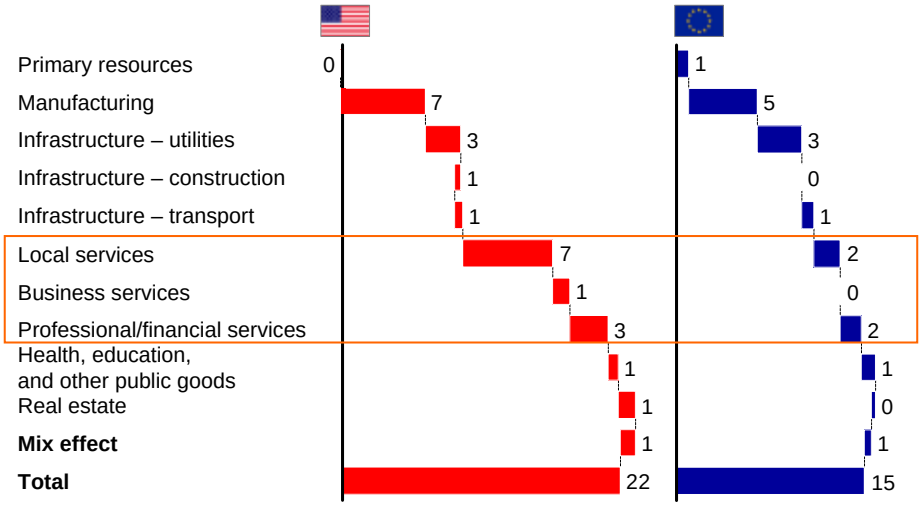
Service sectors are the key contributors to the productivity growth gap between Europe and the United States. If we examine productivity growth in the United States and the EU-15 from 1995 to 2005, we find that services make a much smaller contribution to growth in Europe than in the United States. US productivity increased by 22 per cent in that period. Local (retail and wholesale, private domestic services, rental, hotels, and restaurants), business (computer and related activities, software and IT services, R&D), and professional and financial services together contributed 11 percentage points, or around half, to this total growth. In Europe, productivity grew by 15 per cent during this period, of which four percentage points—or only one-quarter—came from these three types of service industries. Local services alone explain five percentage points, or two-thirds, of the overall productivity growth gap in that decade (Exhibit 33).

Exhibit 33

Europe's slow productivity growth stems mostly from under-performing service sectors

Contribution to overall EU-15 and US productivity growth by sector, 1995–2005

%



Note: Numbers may not sum due to rounding.

SOURCE: EU KLEMS; McKinsey Global Institute analysis

MGI analysed US productivity growth from 1995 to 2000, mostly driven by five services sectors (retail, wholesale trade, securities, retail banking, and hotels).[33] In wholesale, productivity growth has been driven by operational drivers such as automation, a shift to higher-value products, and improved organisation of functions and tasks, as well as by industry dynamics including consolidation at the wholesale and retail levels. Large wholesalers can more easily automate their warehouses to increase productivity and, in pharmaceuticals wholesale, for instance, the top five players increased their market share from 73 to 95 per cent between 1995 and 1999. In retail, the main driver of higher productivity has been the emergence of a clear productivity leader in Wal-Mart as well as a shift to higher-value products as incomes have risen.

Across the European economy, the productivity growth gap in local services stems from subpar increases in multifactor productivity rather than a lack of capital investment.[34] In European local services, multifactor productivity did not grow at all from 1995 to 2005, while it increased by 2.3 per cent a year during this period in the United States. In European retail and wholesale, Europe's multifactor productivity growth was a mere 0.7 per cent, compared with 3.3 per cent in the United States. In some European economies—notably Italy and Spain—multifactor productivity actually fell back (Exhibit 34).

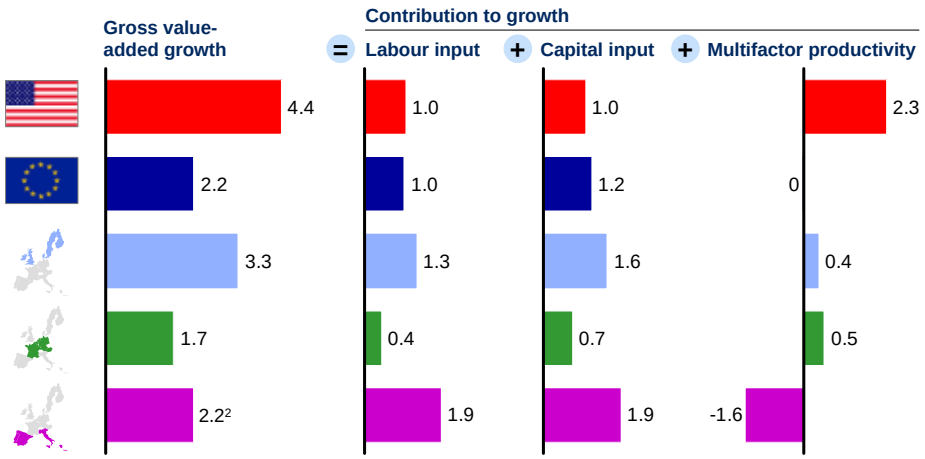
33 See *US productivity growth 1995–2000*, McKinsey Global Institute, October 2001 (www.mckinsey.com/mgi).

34 Multifactor productivity describes residual per capita GDP growth after accommodating for capital increases (at constant returns), labour increases, and improvements in labour quality (estimated via wages). It is usually considered as a metric reflecting the efficiency of use of inputs, and its growth is related to innovation in technology and processes.

Exhibit 34

The productivity growth gap in local services between Europe and the United States is due mostly to differences in multifactor productivity[1]

Average percentage growth in local services, weighted averages, 1995–2005



1 Multifactor productivity is a productivity measure that relates gross output to primary (capital and labour) and intermediate inputs (energy, other intermediate goods, services).
2 Excluding Greece (split of gross value-added growth unavailable).
Note: Numbers may not sum due to rounding.
SOURCE: EU KLEMS; McKinsey Global Institute analysis

Elements that contribute to lagging multifactor productivity growth in local service sectors in Europe include the scale of operations; product, land, and labour market barriers; and a weaker entrepreneurial mind-set and talent gaps. Furthermore, from 1995 to 2005, Europe invested in R&D on average only 0.1 per cent of the value added in local services, compared with 1.2 per cent in the United States.

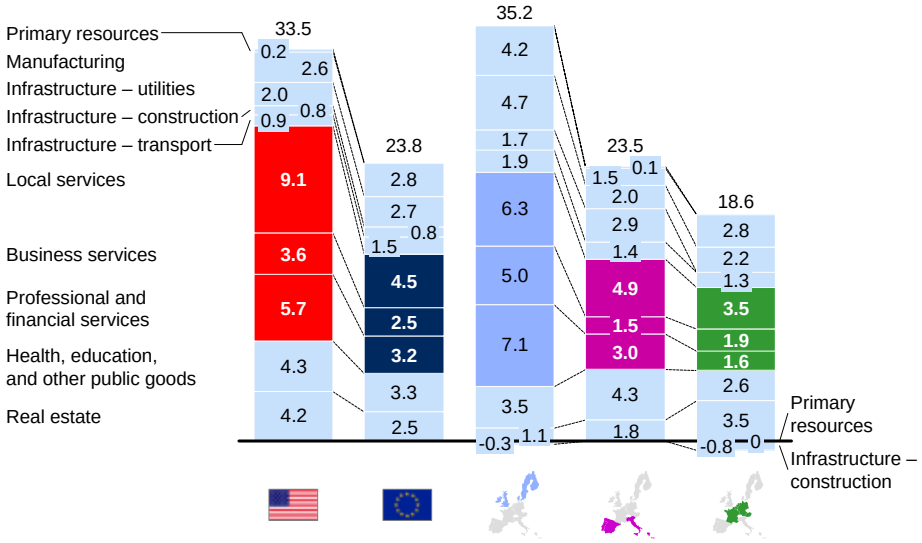
Service sectors have been growing at a slower rate in Europe than in the United States, are smaller in volume terms, and make a smaller contribution to value added. Local, business, and professional and financial services make up 38 per cent of the US economy, compared with 31 per cent in Europe, and delivered a 18 percentage point contribution to value-added growth in the US economy in 1995 to 2005, compared with only 10 percentage points in the EU-15 (Exhibits 35 and 36). Some of the factors constraining growth in European services are land and product market regulations, labour market barriers including tax wedges and wage regulations, and infrastructure and talent gaps (see chapter 3 for a detailed analysis of several service sectors).

Exhibit 35

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

Sector contribution to growth of value added in the United States and EU-15, 1995–2005

%



Note: Numbers may not sum due to rounding.

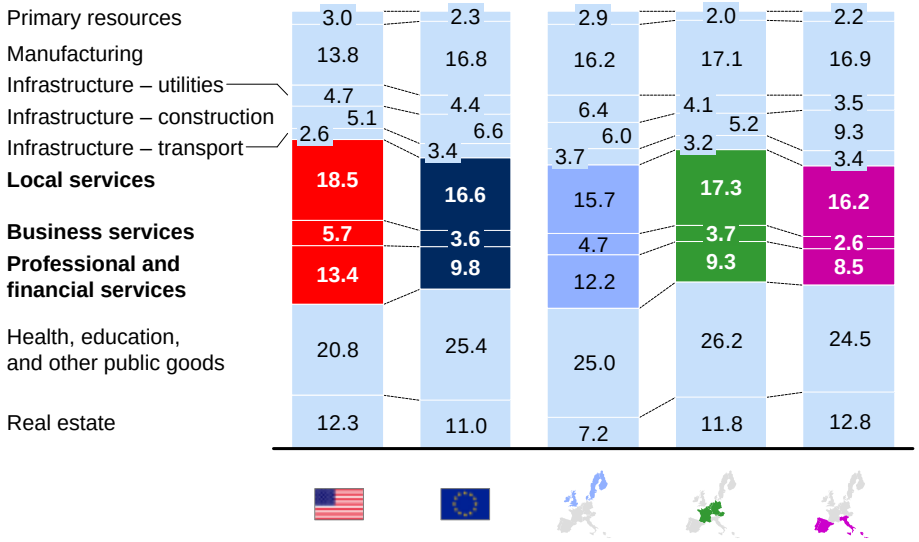
SOURCE: EU KLEMS; McKinsey Global Institute analysis

Exhibit 36

Service sectors are less developed in Europe than in the United States

Sector contribution to value added in the United States and EU-15, 2005

%



Note: Numbers may not sum due to rounding.

SOURCE: EU KLEMS; McKinsey Global Institute analysis

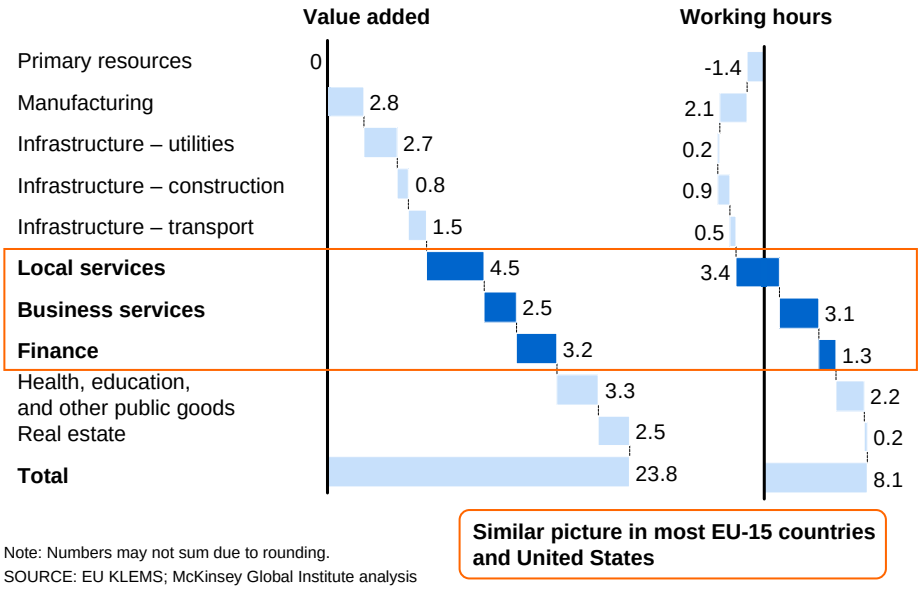
The relatively low share of services in the European economy and the lagging productivity of these sectors is an undoubted shortcoming for the region because, as in other developed regions of the world economy, it is these sectors that are solely responsible for employment growth in the EU-15 (Exhibit 37). While manufacturing contributes strongly—globally—to economy-wide productivity growth, manufacturing jobs are declining, and more developed economies typically generate employment from services. Services generated all net jobs growth in high-income economies and 85 per cent of net new jobs in middle-income countries from 1995 to 2005.

Exhibit 37

European jobs growth has come almost exclusively from services

Contribution to percentage growth of value added and working hours, EU-15, 1995–2005

%



Note: Numbers may not sum due to rounding.
SOURCE: EU KLEMS; McKinsey Global Institute analysis

□ □ □

There are promising signs that at least parts of Europe are embracing the vital agenda of structural reform, notably in the context of labour markets. But action needs to broaden and gain momentum if Europe is to overcome growth headwinds and tackle today's large economic imbalances. We now turn to a discussion of the potential to boost growth through structural reform in Europe.

3. Three broad growth opportunities should be the priority

Europe's aspiration should be to match instances of best practice within the region in order to meet its full growth potential. We see three major efforts that all the diverse economies of Europe still need to address:

- Pursuing further labour market reform
- Unlocking productivity and growth in services
- Aligning policies to growth and innovation

The precise mix and weight of policy prescriptions will vary in individual economies, but elements of each apply across all countries. It is crucial that all three of these be pursued in parallel. Further mobilisation of the labour force requires the conditions for growth in services to be in place to generate the required jobs; growth and innovation (in high-tech and manufacturing but also in services) will be at the core of long-term technological, procedural, and business model advances and productivity increases. We now look at these three broad areas in turn.

3.1 Europe needs further labour market reform in four areas

Europe has already demonstrated that it can undertake labour market reform in a "European way", as opposed to the deregulation-focused approach that has been typical in United States and about which many Europeans feel suspicious. Europe can do a great deal more to make its labour markets work more effectively and thereby enhance competitiveness, limit unemployment, and generate jobs.

Today, labour utilisation in the EU-15 lags significantly behind that of the United States (Exhibit 38). In 2008, the EU-15 worked 733 hours per capita, compared with 913 in the United States. The biggest contributor to this gap with the United States (51 per cent of the gap) was Europeans' societal choice for working a lower number of weeks. The next two most important reasons for the gap were lower weekly hours in Europe, driven by the incidence of female part-time work (18 per cent), and lower participation in the labour force by older workers (15 per cent).

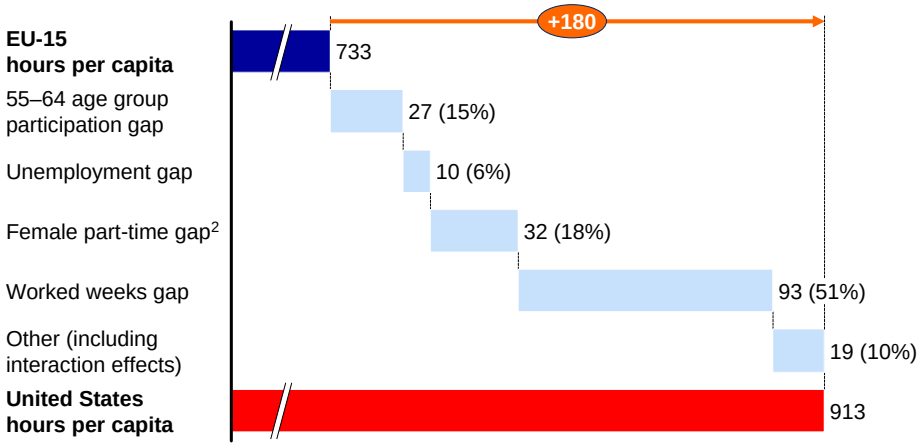
Exhibit 38

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

ESTIMATES

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

Annual hours per capita,[1] 2008



1 Standardised hours used for cross-country comparison. Official hours adjusted using the adjustment factors in OECD *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: OECD; Eurostat; McKinsey Global Institute analysis

We believe that there are sufficient instances of good practice within the EU-15 to add 4 to 11 per cent to Europe's per capita GDP without increasing working weeks.

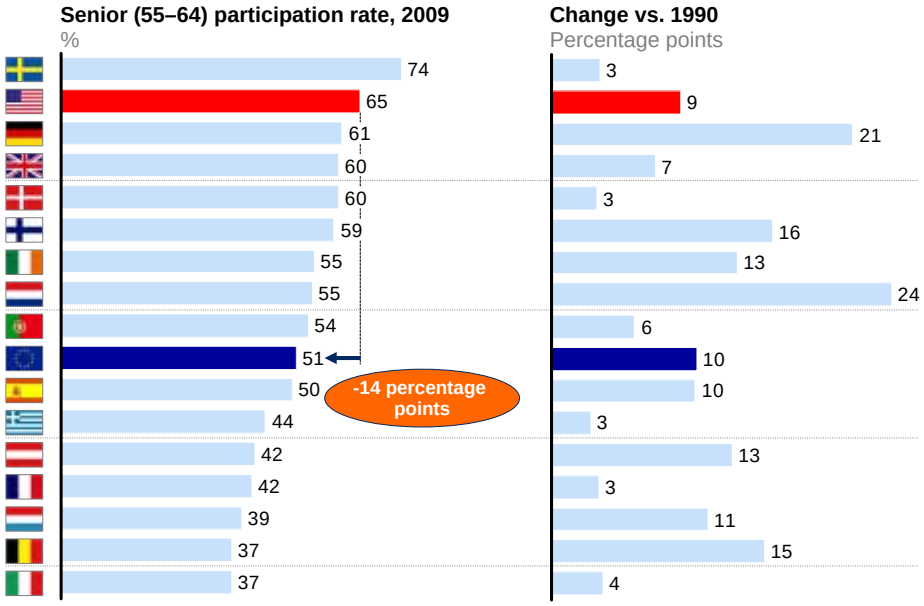
We now discuss four areas for action in further reforming labour markets, analysing examples of successful reforms in particular European countries that can serve as showcases for their European neighbours: (1) boosting participation among senior workers, spearheaded by Nordic countries as well as the Netherlands; (2) reducing structural unemployment as in Denmark or the United Kingdom; (3) reducing unemployment among younger workers as in the Netherlands; and (4) easing the transition from part-time to full-time work to increase the average number of hours worked.

3.1.1 BOOSTING PARTICIPATION AMONG SENIOR WORKERS TO THE LEVEL OF THE NORDICS

In the EU on average, 51 per cent of the 55 to 64 age group participates in the labour market. But within this average are huge variations (Exhibit 39). The Nordic countries cluster at the higher end; Sweden has the highest rate of participation in this age group at 74 per cent, Denmark's is 60 per cent, and the rate in Finland is 59 per cent. Also high up in terms of participation rates—and second only to Sweden—is Germany with 61 per cent after a boost of 21 percentage points between 1990 and 2008. The Netherlands ranks lower with a rate of 55 per cent but has also made huge strides in recent years; its 2008 participation rate is 24 percentage points higher than it was in 1990 (see box 7, "The Netherlands and Germany boost older workers' participation").

Exhibit 39

Senior participation in the US labour market far exceeds that of the EU-15



SOURCE: OECD

Box 7. The Netherlands and Germany boost older workers' participation

The Netherlands and Germany have undertaken similar reforms that raised the participation rate of the 55 to 64 age group by 24 and 21 percentage points, respectively, between 1990 and 2009. For the sake of brevity, here we describe only the Dutch reforms in detail:

- **Pension incentives.** Allowed pension schemes to include a minimum age of 63 but only with 40 years of contribution; established statutory age of retirement at 65 (2004); made early retirement less attractive (mid-1990s)
- **Non-pension financial incentives.** Revised disability pathway toward early retirement (1998, 2002); reduced the duration of unemployment benefits; introduced job-search requirements for the older unemployed (2004)
- **Employers' behaviour/incentives.** Introduced task force to change employers' perception of older workers (2001); introduced antidiscrimination legislation (2004); established new guidelines for redundancies (1995); encouraged civil society involvement
- **Employability.** Made training available for older workers (1998); decentralised and specialised employment services (2002)

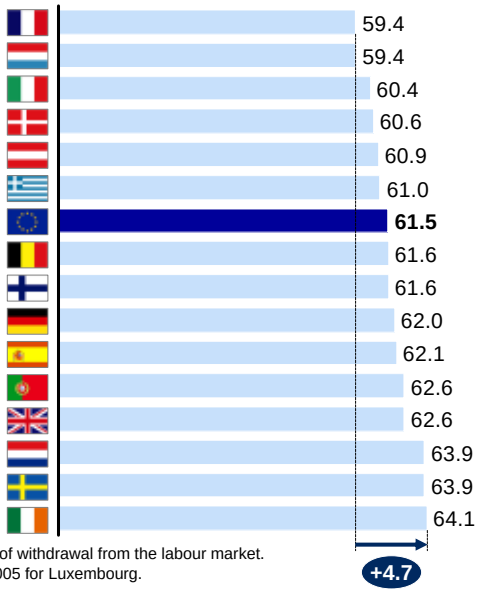
Europe could increase older people's participation in the labour market by employing a number of approaches pursued in parallel on both the supply and the demand sides.

On the supply side, a necessary part of any such effort would be reform of pension schemes and their incentives. Countries could adjust the retirement age in light of demographic trends—increasing the retirement age to avoid sharp rises in dependency ratios as the age profile of a population rises. The retirement age today varies widely across Europe. In 2007, the average exit age from the labour force in France (59.4) was the lowest of all EU countries, while Ireland's was the highest (in 2006) at 64.1 (Exhibit 40).[35] Countries could opt to align retirement legislation for men and women, make provision for "part-time" retirement, or, as Sweden has done, encourage longer working lives by accumulating higher retirement entitlement for each additional year worked after 61. Countries could also look at non-pension financial incentives for older-age participation such as reducing pre-retirement benefits. While embarking on such efforts, policy makers should acknowledge and accommodate for differences in type of work (e.g., hard physical work compared with cognitive work). That said, the increased incidence of knowledge work in advanced economies, and the spread of new technologies, make it very possible for workers to remain economically productive well into their 70s should they so choose.

Exhibit 40

Exit from labour force varies significantly across countries

Average exit age[1], 2007[2]



1 Weighted by the probability of withdrawal from the labour market.
2 2006 data for Ireland and 2005 for Luxembourg.
SOURCE: Eurostat

On the demand side, countries can act to encourage the employment of older workers through anti-discrimination legislation and programmes that promote age diversity. For instance, the United Kingdom's coalition government has recently proposed making it illegal for employers to force employees to retire at 65. In parallel, governments can extend the training-age limit for displaced workers

35 In September 2010, the lower house of France's parliament approved new legislation that would increase the retirement age from 60 to 62 by 2018; the senate was due to debate the reform in the autumn.

and provide older people with job-search support and the ability to participate in active labour market programmes. Or governments can design a more flexible way of determining wages for older age groups to take account of their potentially lower productivity. Some countries also have higher statutory severance pay for older employees. This is a well-meant form of social protection that, nonetheless, discourages employers from hiring older employees when applied independent of tenure and even to new hires.

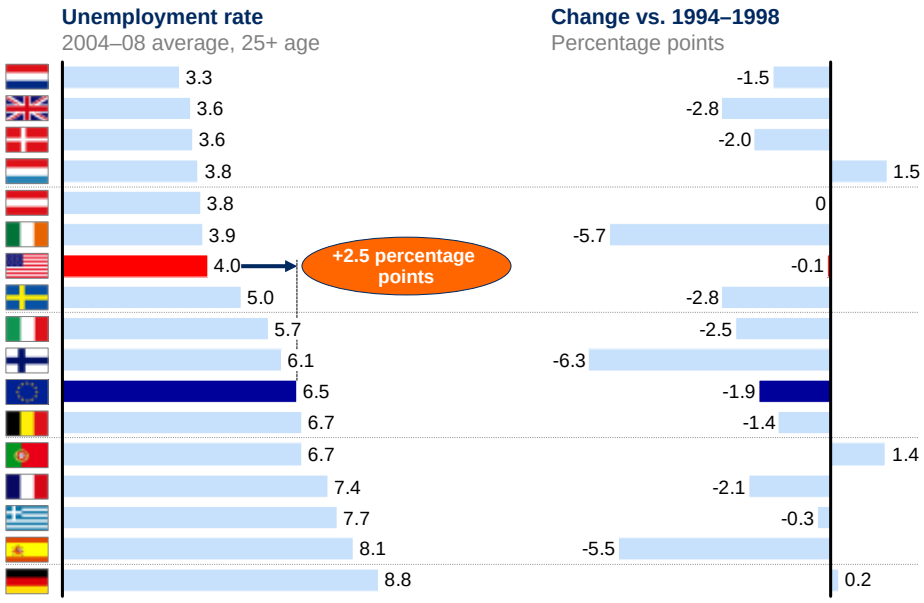
If Europe were to bring the participation rate for the 55 to 64 age group in countries currently lying below the EU-15 average up to that average, this would increase overall participation and utilisation by a full 1 per cent. If Europe could achieve a rise in the participation rate of those aged 55 to 64 from the EU-15 average to the best-practice level of Sweden, this could boost the overall participation rate and utilisation by approximately 6 per cent under *ceteris paribus* assumptions.

3.1.2 LEARNING FROM EUROPEAN NEIGHBOURS HOW TO REDUCE STRUCTURAL UNEMPLOYMENT

The average adult (aged 25-plus) unemployment rate in the EU-15 from 2004 to 2008 was 6.5 per cent, with wide differences from country to country (Exhibit 41).

Exhibit 41

Some European countries have reduced unemployment significantly



SOURCE: Eurostat

A number of broad policy changes can help to reduce unemployment, including efforts to encourage or enforce wage moderation, reforms to benefits systems, active labour market policies, and product and labour market liberalisation. With its "flexicurity" model, Denmark, for instance, has achieved a notable drop in adult unemployment in recent years (see box 8, "Cutting unemployment in Denmark"). Other countries, too, have embarked on broader reforms. The United Kingdom has succeeded in sustaining unemployment at a relatively low level; Germany has undertaken reform more recently and managed to decrease unemployment (from relatively high levels) despite the crisis.

Box 8. Cutting unemployment in Denmark

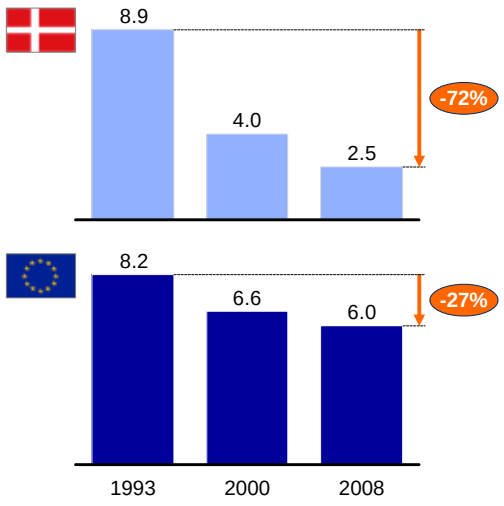
Between 1993 and 2008, Denmark's unemployment rate among adults fell from 8.9 to 2.5 per cent, a 6.4 percentage point reduction that was far larger than the 2.2 percentage point cut achieved on average by the EU-15 in that period (Exhibit 42).

Exhibit 42

Denmark cut its unemployment rate sharply

Unemployment rate, age 25+

%



SOURCE: Eurostat

Denmark already had an established tradition of flexible labour and product markets, but it was a series of labour market reforms in the 1990s that produced this large decline in unemployment. The major components were:

- **Decentralisation of wage bargaining.** During the 1990s, Denmark moved from a centralised/coordinated bargaining system to an intermediate position allowing for local and individual variations. In 2000, 85 per cent of contracts allowed scope for personal allowances or left the setting of wages to local negotiations between employer and employee, subject to minimum levels. Wage dispersion duly increased, in particular at the high and intermediate levels within firms. It is noteworthy that, despite the large decline in unemployment in Denmark, the average annual growth of real wages was only a moderate 1.9 per cent from 1993 to 2001.

- **Benefits reform.** Denmark also substantially tightened its unemployment benefits system but without direct reductions in transfer payments. Instead, Denmark improved the incentive structure of the system, cutting the duration of the entitlement from seven years to four years and limiting the passive collection of benefits—i.e., with no required job-seeking element—to only one year. By introducing an obligation to look for work after one year, Denmark encouraged active job search and discouraged voluntary unemployment and work in the shadow economy. At the same time, Denmark tightened the eligibility criteria for unemployment benefits, requiring applicants to demonstrate that they had been in regular work for one year within the previous three (formerly the rule was only six months within the three-year period). While the Danish unemployment insurance scheme is still very generous by international standards, the reforms are considered to have contributed to the reduction in unemployment.

- **Active labour market policies.** Denmark shifted toward more active labour market policies in the 1990s, focusing on upgrading the skills of the unemployed to equip them to take advantage of new job opportunities. In 2008, Denmark spent 1.3 per cent of GDP on such programmes.

- **Taxation.** Denmark also modestly reduced marginal tax rates on labour during this period, although they remain high. At the same time that Denmark managed to reduce rates, half of the countries of the EU were increasing the tax wedge on labour.

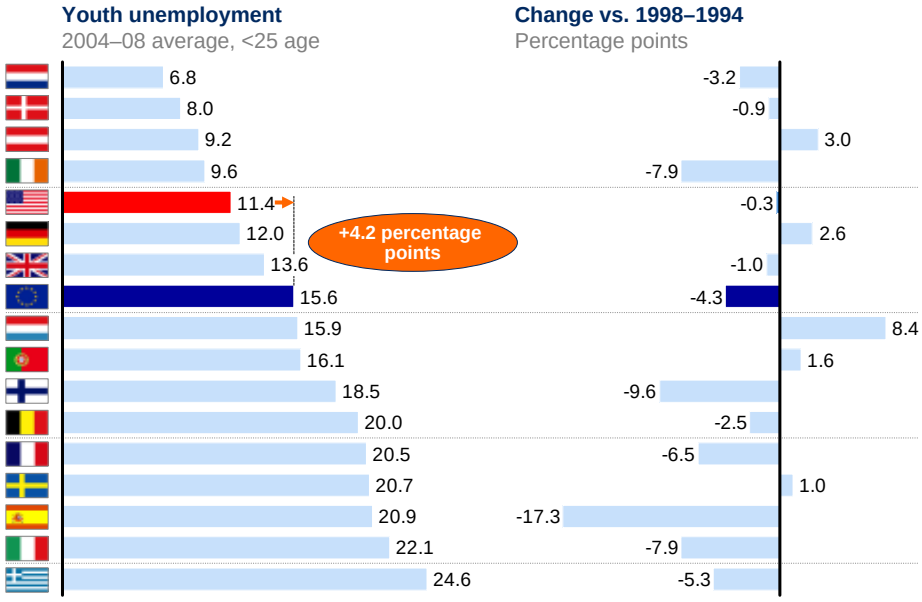
The Netherlands had the lowest average unemployment rate, at 3.3 per cent, from 2004 to 2008. If the rest of the EU-15 were to match that average—which would mean the creation of around 5 million jobs—labour utilisation could be increased by 2.6 per cent. Even if underperforming countries matched the EU average, labour utilisation would increase by 0.5 per cent under *ceteris paribus* assumptions.

3.1.3 EMULATING BEST PRACTICE IN MEETING THE CHALLENGE OF UNEMPLOYMENT AMONG THE YOUNGER GENERATION

Unemployment among young people (aged under 25) is a serious problem throughout Europe. Between 2004 and 2008, the average unemployment rate in this age group was 15.6 per cent, with large variations around that average. The highest unemployment rate for young people during that four-year period was in Greece, with a rate of 24.6 per cent, but Belgium, France, Italy, Spain, and Sweden also had average rates exceeding 20 per cent. The lowest unemployment rate for this age group during the period was in the Netherlands, with 6.8 per cent, followed by Denmark with 8.0 per cent (Exhibit 43). The young generation has been hit particularly hard during the global crisis. During the first quarter of 2010, unemployment of young people averaged 21 per cent in the EU-15, with peaks at 41 per cent in Spain, 31 per cent in Greece, and 29 per cent in Italy.

Exhibit 43

Some European countries have made large cuts in youth unemployment



SOURCE: Eurostat

One element of unemployment among young people that varies across the continent is the percentage of early school leavers—the share of people aged 18 to 24 with only lower secondary educational qualifications (and not in education). In 2009, the share of early school leavers ranged from around 10 per cent in Finland and Denmark to more than 30 per cent in Spain and Portugal. For students who leave school early, the adverse effect on their

subsequent employment has been well documented, including by the European Commission.[36]

Some countries, notably the Netherlands, have met the challenge of unemployment among young people more successfully than others. The Dutch have adopted a special focus on the unemployment of young people built around two approaches: programmes to reduce the incidence of students leaving school early and active labour market policies (see box 9, "Tackling unemployment among the younger generation in the Netherlands").

If the rest of the EU-15 could match the Netherlands' 6.8 per cent rate of unemployment for those under 25 in the period from 2004 to 2008, Europe would create almost 2 million jobs and increase labour utilisation by around 1 per cent. If Europe were to bring underperforming countries to the average EU-15 unemployment rate of young people, 0.5 million jobs would be created, with a positive impact on labour utilisation of some 0.3 per cent under *ceteris paribus* assumptions.

Box 9. Tackling unemployment among the younger generation in the Netherlands

The Netherlands launched a major programme in 2003 aimed at tackling unemployment of young people. The government's target was to halve the number of people leaving school without sufficient qualifications and to offer each young person training or a job before any of them was unemployed for six months. The government implemented the programme with the help of a high degree of cooperation from city councillors, companies, employers' organisations, and vocational training institutions. The major initiatives included:

- **Training.** The Netherlands put in place a system in which any young person who has received unemployment or social assistance benefits for more than six months gets an internship of three months. The trainee retains benefits, and the employer pays a wage of €450 a month. Companies receive a tax reduction for providing contracts for apprentices. Employers can make use of a sectoral training fund, financed from contributions from member companies' wage bills, to provide on-the-job training.

- **Work first.** The Netherlands set up projects in which those asking for social assistance are put to work directly—i.e., as soon as possible after submitting an application—in low-paid subsidised jobs. The idea is that this will provide an incentive to look for regular employment. Noncompliance leads to the loss of at least part of the benefits paid.

- **Variable pay.** The Dutch government invited social partners to introduce pay for low-skilled young people at the level of the statutory minimum youth wage.

- **Coordinating early school leavers.** The Netherlands created regional reporting and coordination centres for early school leavers within each municipality to improve institutional awareness and procedures related to early exit from education. The government gave schools increased responsibility, including the requirement to stay in contact with young people during their transfer from secondary school until they have settled down in the next stage of their education.

36 The effect seems less evident in Italy, Greece, and Portugal. See Charlene Ching and Eliza Kritikos, *Study on Access to Education and Training, Basic Skills and Early School Leavers: Final Report*, European Commission Directorate General for Education and Culture (DGEAC), September 2005.

3.1.4 INCREASING HOURS WORKED BY BUILDING ENABLERS FOR HIGHER LABOUR UTILISATION AMONG WOMEN

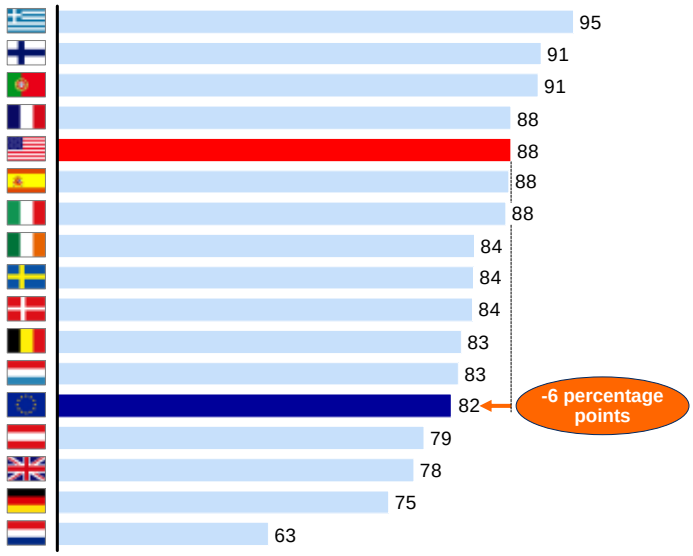
Most of the differences in annual working hours in Europe compared with the United States, for instance, appear to reflect Europeans' societal choice for a work-life balance that builds in more time off—a choice that has found voice in statutory paid leave, holidays, paid sickness, and maternity leave. However, Europe's governments still have plenty of scope to boost hours worked by adjusting a regulatory environment that, in some respects, discourages people who want to work more hours from doing so.

Consider the barriers facing women. In some European countries, there are disincentives to work, including high effective marginal tax rates on a second earner in a family, and barriers to working hours such as working-time regulations or the insufficient availability and relative lack of affordability of child care facilities (Exhibit 44).

Exhibit 44

Higher incidence of women's part-time work is a major reason for Europe's working hours gap with the United States

Average weekly hours worked as % of full-time weekly hours worked, women, 2008



SOURCE: Eurostat; US Bureau of Labor Statistics

Many women work part time—although the share varies widely across Europe. At one end of the scale lies the Netherlands, where 60 per cent of women work part time, and at the other is Greece, where the share is only 14 per cent.[37] The EU average is 31 per cent. While many women actively choose to work part time rather than full time, others might prefer to work full time, but it is not economically attractive for them because of disincentives in the tax system. Germany is a case in point (see box 10, "How Germany hinders the transition of women from part-time to full-time work").

According to the OECD, a 10 percentage point reduction in personal income tax rates or social security contribution rates on income of second earners at the margin could increase weekly hours worked by women by 3.5 per cent.[38] The OECD also calculates that the gap between Europe and the United States in average weekly hours worked by women could be closed if European countries were to align their marginal taxes on secondary earners to those in the United States.

MGI finds that Europe could add around 2 per cent to labour utilisation by aligning those countries that have below-average annual working hours per employee up to the EU-15 current average. This boost is achievable even without addressing Europe's societal choice for long holidays that we see evidenced in its low annual working weeks compared with the United States. However, matching the working hours per employee of the EU-15 with those of the United States could have an impact of up to 16 per cent on labour utilisation. To reap this reward in terms of higher GDP, Europe would need to make difficult choices on the length of working weeks and holiday and leave entitlements.

The labour market reforms that some European countries undertook in the years before the global economic downturn have shown the way to a more concerted and broader programme that would stand the region's economy in good stead. We are confident that there is sufficient best practice within Europe for the EU-15 to add up to 11 per cent to labour utilisation, even while maintaining Europeans' societal choice to work fewer weeks a year than their American or Asian counterparts. One consideration that Europe's policy makers will need to take into account is timing—working to ensure that measures that boost participation occur when there are reasonable prospects for job creation through other reforms (e.g., in service sectors) or when the regional economy is in a cyclical upswing.

37 This calculation uses the OECD's common definition for 2008.

38 OECD, *Going for Growth*, 2008.

Box 10. How Germany hinders the transition of women from part-time to full-time work

Germany has achieved a great deal in bringing women into the labour force. Over the past 20 years, the share of women in the labour force has risen by some ten percentage points. And a very large proportion of women who work do so part time—38 per cent in 2008. This is one driver for Germany's average annual hours worked per person employed being about 19 per cent below the OECD average. To help close this gap and meet the aspirations of women who want to work full time, Germany would need to eliminate disincentives to moving from part-time to full-time employment.

Take child care. While more and more schools are offering afternoon classes and homework supervision to accommodate the needs of their (working) parents and caregivers, the norm is still that children go to school only in the morning from primary school throughout their schooling career up to their *Abitur*.

Another important disincentive for working longer hours is the effective tax burden on the second earner; taking into account taxes, social security contributions, and the withdrawal of cash benefits, this is particularly high in Germany. The country's joint taxation system with its income-splitting option for married couples (income tax is calculated by applying the tax function to half of the added incomes and then doubling the result) is designed so that the maximum advantage of splitting accrues to single-earner households and declines as the second earner's income increases.

This particular tax/benefits system makes Germany one of the few OECD countries that doesn't provide incentives for the equal sharing of paid work and helps explain why so many women work part time even after their child rearing responsibilities have eased or ceased.[39] Even in the 40 to 54 age group, part-time working among women is high at around 42 per cent. A balance needs to be struck between retaining flexibility for women to juggle family and work life and the loss to women arising from prolonged periods of part-time work that limits their career options and results in pensions that are lower than average.

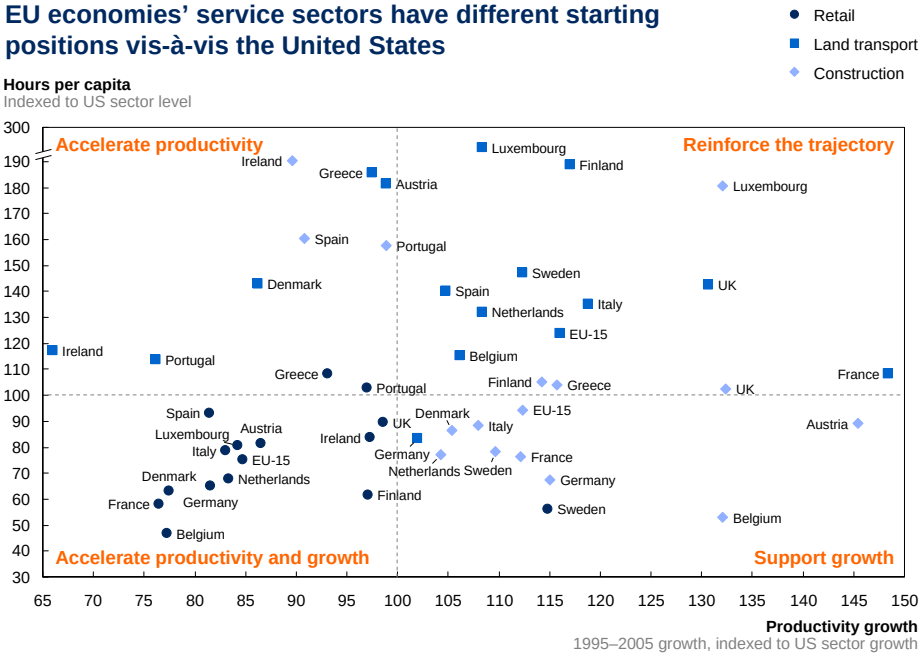
39 *OECD, Neutrality of Tax/Benefits System*, 2008

3.2. Unlocking the productivity and growth potential of Europe's service sectors

Governments around the world, including in Europe, have regained their enthusiasm for industrial policy activism in response to the rigours of the world economic downturn. Many policy makers are focusing on manufacturing as a source of new jobs. The full range of manufacturing sectors is important and a major driver of productivity growth, and sustaining, reinvigorating, and innovating in these sectors is key to a healthy and balanced economy (see section 3.3). However, these sectors will not be major creators of new jobs. For policy makers overseeing economic growth and job creation, services should therefore be the priority. In Europe, we believe that there is significant untapped growth potential in services in terms of both productivity and employment, although the starting points vary substantially in different countries and sectors (Exhibit 45).

Exhibit 45

EU economies' service sectors have different starting positions vis-à-vis the United States



SOURCE: EU KLEMS; McKinsey Global Institute analysis

Building on extensive MGI research over many years into what drives productivity, competitiveness, and growth at the sector level, in this paper we have looked in some detail at what drives productivity and growth in several service sectors and therefore the most effective potential role that government can play in each case.[40] For quantification, we strongly rely on data provided by EU KLEMS (see box 11, "Using the EU KLEMS database to compare productivity across countries").

Box 11. Using the EU KLEMS database to compare productivity across countries

Comparing productivity levels across countries requires the use of purchasing power parity ratios to take exchange rate fluctuations out of the equation and to account for differences in price and quality levels among countries. For instance, agricultural produce is significantly more expensive in Switzerland than in Germany, so the purchasing power parities adjust value added in nominal terms to derive a measure of real output quantities. Similarly, comparing productivity levels in a specific country over time requires use of deflators to cancel out inflation and take account of quality improvements. For instance, comparing a computer today with a computer ten years ago, it becomes obvious that the real output of the industry increased even beyond nominal value-added growth.

The EU KLEMS project provides such purchasing power parities and deflators at the sector level across all European member states as well as selected other countries. It also created a database of measures of economic growth, productivity, employment creation, capital formation, and technological change at the industry level from 1970. It was run by a consortium of research centres and universities until 2008 and was funded by the European Commission; successor projects such as World KLEMS are under way. This database is one of the most comprehensive available today at the sector level and is used in various sections of this report. It is a highly valuable resource for policy makers and researchers.

However, it is important to be aware that output is not always easy to define or measure, particularly in service sectors (e.g., how to measure the quality-adjusted output of a law firm). Sector-specific value-added and productivity data hence remain indicative only, and we use insight into industry structure and conduct and the external factors shaping it to analyse country differences in more depth.

40 MGI has undertaken productivity analysis in 26 countries and 30 sectors. For a broad discussion of the most effective government roles in enhancing the productivity and competitiveness of sectors around the world, see *How to compete and grow: A sector guide to policy*, McKinsey Global Institute, March 2010 (www.mckinsey.com/mgi).

Because of the domestic nature of many services, governments have a decisive role in defining and shaping the conditions for success. We see four broad types of action that will allow European governments to reap a service sector dividend:

1. **Further opening up competition** in those service sectors that remain constrained by a high level of regulation (e.g., professional services) and monopolistic structures (e.g., network industries). This includes alleviating restrictions such as market entry barriers (e.g., for pharmacies), price-fixing (e.g., for lawyers), and marketing prohibitions (e.g., for notaries), as well as an effective opening of markets (e.g., postal services).

2. **Boosting productivity by the continuing smart regulation** of product, land, and labour markets, and supporting greater operational efficiency and professionalism. Typical barriers to productivity include land-use restrictions (e.g., difficulties in establishing efficient sales formats in retail), and product market restrictions (e.g., cabotage limitations in road transport or incompatible standards and guidelines in rail transport).[41] Labour market regulation and informality can skew cost competitiveness toward subscale low-productivity operations in many service sectors. Public procurement practices can powerfully shape conduct in industries such as construction, sometimes exerting cost pressure on the basis of pure execution at the expense of design effectiveness and high fragmentation.

3. **Unlocking growth by setting the sector's direction and providing crucial enablers.** This includes coordinating the strategic direction of a sector (e.g., in tourism), setting clear standards for an ecosystem to develop (e.g., in GSM, or Global System for Mobile Communications), providing education and a skilled workforce (e.g., in IT services), building infrastructure (e.g., access to tourist areas), or creating demand (e.g., e-government). Regulation can also be a key determinant for investment and growth in such capital-intensive regulated industries as telecommunications.

4. **Ensuring European scale across national borders.** Cross-border competition is at a low level in the EU, with only 20 per cent of services provided having a cross-border dimension. The EU has already signalled its intention to address this issue with, for instance, an initiative to ensure the free movement of services throughout the EU to help reduce the fragmentation of service sectors, increase competition, and boost their productivity.

We now discuss these four dimensions, illustrating the challenges and opportunities through several case studies.

41 Cabotage is the carriage of goods between two points in one country by a vehicle registered in another country.

3.2.1 OPENING UP COMPETITION IN HIGHLY REGULATED SERVICE SECTORS

It is widely known that the liberalisation of monopolistic network industries such as telecoms has consistently led to very large productivity increases because of both efficiency and innovation. Indeed, a combination of consistent standards developed for GSM, successful liberalisation, and regulations aimed at heightening competitive intensity has made the telecoms sector one of Europe's productivity success stories (we will examine GSM in detail later in this paper). Yet several sectors such as postal services and rail transport are not yet fully open to competition in many European countries. Other service sectors continue to be largely shielded from full competition. In this section, we specifically look at professional services such as law and accounting firms where a persistently high level of regulation (from advertising restrictions to direct price controls) hinders competition and productivity growth.

Professional services

Although Europe has rolled back its own product market regulation in these sectors somewhat in recent years, the level of regulation remains high. It also varies a great deal among European countries. The 2008 OECD product market regulation index is nearly twice as high for the European average in professional services as for the United States (2.0 versus 1.1). Within Europe, Italy is the most highly regulated country with an index of 3.7, compared with only 0.7 in the United Kingdom, the European country with the lowest level of regulation in this sector.

The most pronounced examples of regulation that continue to hinder competition in European professional services include:

- **Entry barriers.** Regulation that effectively creates regional monopolies for notaries and pharmacies is still common in Europe. This type of regulation grants exclusive rights to these businesses either in terms of geography (for example, most European countries limit the number of pharmacies) or in terms of scope of business (in most European countries, only notaries can approve a change in title for real estate; pharmacies have the monopoly on retail sales of medicinal products). Although entry restrictions and reserved rights for specific tasks ensure a certain standard—only practitioners with adequate qualifications are allowed to handle specific tasks—excessive regulation is likely to reduce consumer choice and the supply of service providers, and to hinder competition from more innovative formats (such as online pharmacies in the case of retail sales of medicinal products).

- **Price-fixing.** Some European countries introduce price ceilings or floors (as is the case for architects and lawyers in Italy and Germany). While many professional associations argue that fixed prices protect the quality of services and ensure low prices, such structures cannot prevent providers from offering poor-quality services. Instead, fixed and minimum prices are the regulatory instruments likely to have the most detrimental effects on competition because they remove incentives to improve efficiency and they prevent consumers from gaining the benefit of price competition.

- **Regulations on business conduct.** A large number of professional services are subject to strict regulations on advertising and marketing or even the outright prohibition of advertising as in the case of notaries in France and Spain or pharmacies in Greece. The rationale of these restrictions is consumer protection, but in practice they limit competition and sector growth.

There has been significant progress in recent years in liberalising service sectors, particularly at the national level. Many European countries have abolished advertising and price restrictions in professional services—without apparently imposing damage on these markets. And the Greek government has already announced plans to open up notaries and pharmacies as well as road freight and taxi services. However, there is considerable scope to push liberalisation even further.

3.2.2 EUROPE CAN BOOST SERVICE SECTOR PRODUCTIVITY BY CONTINUING TO PUSH FOR SMART REGULATION, AND GREATER OPERATIONAL EFFICIENCY AND PROFESSIONALISM

A number of barriers to productivity growth in service sectors remain in Europe. Land and product market regulations often still militate against higher productivity. Examples include zoning laws in retail that prevent the entry and growth of modern, high-productivity formats; cabotage limitations in road transport that lead to a higher share of empty routes; or price and advertising restrictions in professional services. Labour laws that encourage informality and a lack of scale, as they do in construction or private domestic services, are another hindrance. Finally, a range of operational factors act as a barrier to higher productivity, including a lack of standardisation, for example. While it is up to the private sector to address operational inefficiencies, policy makers can have a positive influence through, for instance, their own procurement practices in construction.

In this section, we look in detail at retail, land transport, and construction.

Retail

Productivity in the European retail sector has been growing at a rate of around 1.5 per cent a year and, although some individual European countries outperform US productivity levels, the continent in aggregate lags behind the productivity of US retail by 30 per cent.[42] The major barriers to higher productivity are restrictive land-use barriers coupled with strict product market and labour regulation; and operational factors such as underinvestment in IT.

Regulation, including labour market laws

Retail is a largely domestic sector in which local regulation can, and does, directly determine the rules of the game and the sector's productivity and growth. Previous MGI analysis of retail around the world shows that wide variations in the productivity from country to country are largely due to different regulatory approaches. Restrictive regulation tends to have a direct negative impact on competitive intensity and productivity. Zoning laws that limit store size and density put more efficient hypermarket outlets at a competitive disadvantage. In the United Kingdom, the rate of new stores opening has slowed because of limited reform to planning laws. In France, the introduction of more restrictive rules on the size of retail outlets in the 1990s halted the sector's productivity growth (for instance, opening of new stores larger than 6,000 square metres became virtually impossible); eventually, restrictions had to be eased again. In Germany, it is almost impossible to open a hypermarket in a small village.[43] The Netherlands has a range of product market regulations that restrict the efficiency of trade. For instance, diversification regulation (*Brancheverva*ging) enables authorities in municipalities and provinces to limit portfolio expansions (e.g., prohibit the sale of televisions in furniture stores).

Labour laws are an important strand of overall regulation and can have a significant impact on the productivity of a retail sector. In the Netherlands, collective labour agreements typically include clauses calling for 50 per cent higher wages after 9 p.m. In many parts of Europe, restrictions on opening hours put a further hurdle in the way of growth and employment, although these limits can have a positive influence on productivity by concentrating traffic in shorter time windows. Germany, for instance, restricts Sunday opening to convenience stores, including bakeries, gas stations, or shops in stations. French regulation limits Sunday openings exclusively to tourist areas and some parts of large cities (food retailers can open on Sunday mornings).

Operational factors

Among a number of operational factors that hinder higher productivity in retail is the fragmentation of the industry in several markets and the resulting inability to capture the productivity advantages of economies of scale. In the Netherlands, high levels of rent protection, including long leasing periods, prevent consolidation. Another factor hindering productivity is insufficient investment in IT, which limits the efficiency of supply chains and process management. This is one reason that France and Germany lag behind the United States in retail sector productivity. Both countries are less advanced in their use of IT throughout the value chain. For instance, labour-scheduling systems are used in only a limited

42 We use EU KLEMS' simplified double-deflated PPPs to compare value added across countries (based on ICP [international comparison programme] sales prices for output and industry output prices for input).

43 Planet Retail (www.planetretail.net).

number of stores, and innovative systems are still underdeveloped at channel level, such as RFID (radio frequency identification), which helps to improve the tracking and forecasting of inventories, and m-commerce, such as the use of mobile phones to offer targeted promotions to customers.

Catching up with European best practice will deliver a significant productivity dividend in retail

If the EU-15 set itself the goal of achieving on average the productivity levels of its top-quartile countries today—not an easy task in many countries—the region could achieve a 44 per cent boost in food retail productivity. This would translate into a 21 per cent increase in productivity in EU-15 retail and a 0.75 per cent increase in the value added generated by the European economy. These estimates (and those in other case studies in this paper) assume that the hours freed up as a result of improved productivity are reallocated to the rest of the economy at current sector productivity levels.

Individual countries in Europe have shown that reform in retail can help achieve best practice and produce significant boosts in sector productivity in a relatively short period. Deregulation of zoning and foreign investment is a case in point. In France, the recent Law for the Modernisation of the Economy has increased, from 300 square metres to 1,000, the tolerance threshold for new store openings without the need to request permission, making it easier to open larger store formats. Allowing suppliers to individually negotiate prices with different retailers instead of being forced to charge the same price to all customers is expected to foster competition and result in lower prices for consumers. Comparatively open competition allowed hypermarket champions such as Carrefour to emerge and succeed on a global scale. After Russia opened its retail sector to foreign investors—and more modern formats—Russian retail productivity has more than doubled in the past ten years, from 15 per cent of the US level to 31 per cent. In Sweden, the liberalisation of zoning regulation and the entrance of new players has unleashed competition, and productivity increased at an average of 4.6 per cent in the ten years after 1995 (see box 12, “Sweden’s retail productivity revolution”).[44] In the United Kingdom, flexible hiring laws, lower minimum wages, and part-time employment arrangements have boosted retail employment and service levels.[45] Operational change, such as the growth of private labels and enhanced investment in IT, has delivered higher productivity, too.

Reform in retail will involve trade-offs. Easing zoning restrictions and other forms of deregulation tend to favour the development of large hypermarkets rather than small specialised stores. For some European countries, that may not be a national preference. Another trade-off that policy makers need to acknowledge is that longer opening hours lead to higher growth in value added but that productivity declines because more labour is necessary. In France and Germany, for instance, we estimate that short opening hours have a positive impact on their retail productivity but a negative impact on their overall contribution to employment and economic growth. Another trade-off is that between higher employment and

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44 *Sweden’s economic performance*, McKinsey Global Institute, September 1995, and *Sweden’s economic performance: Recent development, current priorities*, McKinsey Global Institute, May 2006 (www.mckinsey.com/mgi); *Lean Russia: Sustaining economic growth through improved productivity*, McKinsey Global Institute, April 2009 (www.mckinsey.com/mgi).

45 Nicholas Lovegrove et al., “Why is labor productivity in the United Kingdom so low?” *McKinsey Quarterly*, November 1998.

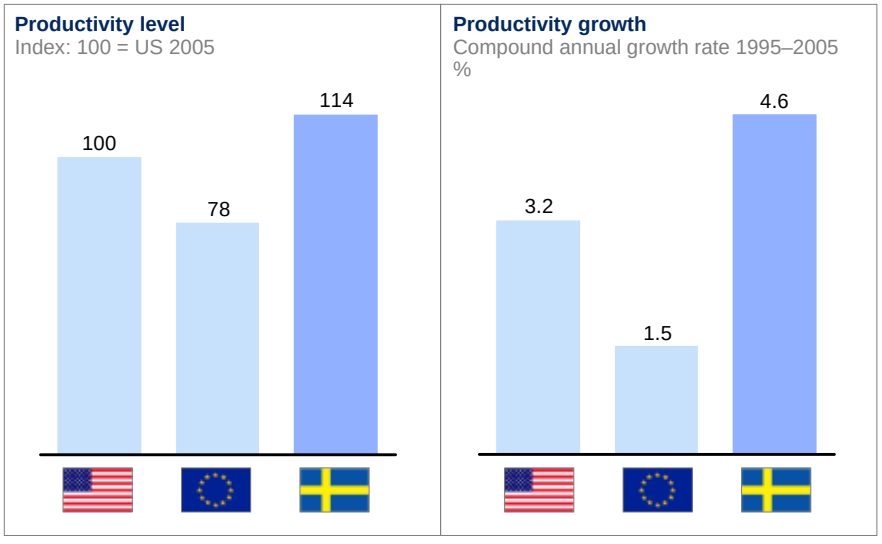
superior service in some retail formats (such as the use of baggers at checkouts) and lower productivity. That said, these low-productivity retail jobs have proved an important source of employment in the United States for low-skilled workers and young staff.

Box 12. Sweden's retail productivity revolution

Swedish retail had the highest productivity growth in Europe between 1995 and 2005 and outperforms US retail productivity by 14 per cent (Exhibit 46). Sweden's retail productivity revolution began with the easing of zoning laws in the 1990s. This reduced the power of municipalities over new store openings, which led to a more than doubling in the average size of new food retail outlets between 1990 and 2000. This boost in the size of stores was part of a transformation in the structure of Sweden's retail that included an expansion in the number of shopping centres and a trend toward integrated chains such as IKEA and H&M, which took advantage of scale advantages in purchasing, supply chain and store management, and marketing. This, together with an influx of discounters and the rise of new channels such as Internet shopping, intensified competition. The trend of growth in private labels has increased margins to some extent as retailers capture a larger part of the value chain, eliminating relatively unproductive steps in that chain such as the manufacturer's sales force. Finally, greater use of IT in Sweden has significantly improved the efficiency of the supply chain and improved assortment and inventory management.

Exhibit 46

By embracing reform, Sweden has achieved the highest productivity growth in Europe in the retail sector



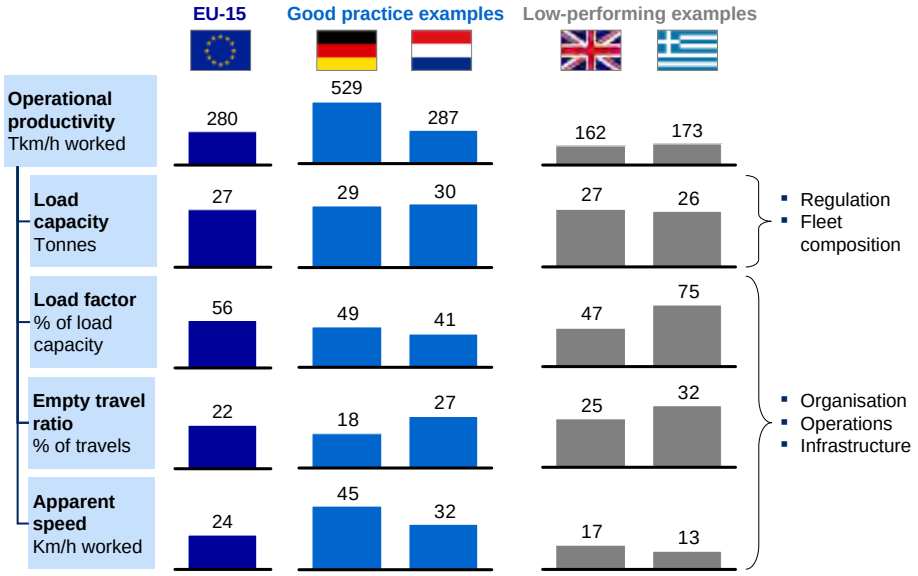
SOURCE: EU KLEMS; McKinsey Global Institute analysis

Land transport

The productivity of land transport has been growing at a rate of around 2.2 per cent a year, rather faster than the 0.6 per cent we have witnessed in the US sector. However, the productivity of European road and rail transport is still 30 per cent lower than the US industry.[46] Part of the gap is due to the lower share of passenger transport in the United States (passenger transport being less productive than freight), as well as geography and distances travelled. However, there are also a number of hurdles that stand in the way of higher productivity in European land freight transport, including regulation (such as restrictions on cabotage), the fragmented structure of the industry, shortcomings in transport infrastructure, and a relative lack of standardisation (e.g., railroad systems or swap bodies). Comparisons in this section will focus on freight transport in European countries (Exhibit 47).

Exhibit 47

A range of factors contributes to the productivity gap in road freight between high and low performers



SOURCE: Eurostat; McKinsey Global Institute analysis

46 We use 2005 data from EU KLEMS, using production PPPs adjusted for volumes transported (tonne kilometres, or Tkm, for freight and passenger kilometres, or pkm, for passengers).

Regulation

Productivity in the sector is limited by a range of regulations, including the lack of uniform regulation across Europe's internal borders—the EU-15 has 11 separate signalling systems for rail freight. Deployment of the European Railway Traffic Management System is patchy and varies across Europe; while Spain uses the system on 650 kilometres of track, Germany today covers only 164 kilometres. Despite an increasing economic advantage in freight by rail rather than road with greater distance, Europe's share of rail in land transport peaks at 2,000-kilometre hauls and then declines.[47]

Some labour regulations also decrease road freight productivity. Calculating weekly working time on a weekly basis instead of a four-month average increases the amount of unproductive paid time. Cabotage restrictions (in 2009, European regulation limited freight firms to three national hauls in another country after completing an international haul) increases the industry's share of empty hauls.

Product market regulation (such as pricing guidelines in Greece) also limits competition among firms, according to the OECD's product market regulation scorecard.

Industry organisation and structure

In European rail freight, cross-country integration and liberalisation are in their early stages. State-owned national integrated players dominate the sector to such an extent that they prevent the development of competitive intensity. In France and Italy, for instance, incumbents hold a market share of more than 90 per cent. Further competition would drive the industry toward higher productivity and market share.

In road freight, the European industry is highly fragmented, with a large number of small operators lacking the productivity advantages of scale. On average, operators employ fewer than five people. In Spain, companies with more than 50 employees account for 19 per cent of employment, while firms with fewer than ten employees account for 44 per cent of jobs, according to Eurostat. This fragmentation bears down on productivity. Larger companies employing more people have the advantage of smaller overheads per driver and can decrease the share of empty trucks through improved planning systems to reduce idle time and more substantial investments in IT. Thus far, however, European road transport has failed to capture these scale benefits. One reason for this is the high level of self-employment in the sector and its related "self-exploitation" circumventing labour regulation (the self-employed working more than would be allowed if they were employees), which is keeping small and less efficient players in the business.

47 Jose Manuel Vassallo and Mark Fagan, *Nature or Nurture: Why Do Railroads Carry Greater Freight Share in the United States than in Europe?* John F. Kennedy School of Government, Taubman Center Research Working Paper Series WP05-15, December 2005.

One option for Europe to reduce empty hauls—and unnecessary pollution—would be to increase the penetration of shared fleets (i.e., trucks owned by freight companies, as opposed to a retail chain that owns its trucks, for example). On average, transporters using dedicated fleets (e.g., retail chains, material manufacturers) have an empty haul ratio 33 per cent higher than freight companies. Even if part of the gap is likely to be unavoidable (e.g., refrigerated trucks in retail), a significant reason for such a high share of empty hauls is the (economically suboptimal) choice by companies to keep transport in-house.

After freight owners have outsourced their fleet to freight companies, the next step in capacity utilisation optimisation is to externalise haul management by transporters to brokers or freight forwarders. This is likely to reduce further the share of empty hauls and increase load factor (although the separation of hauliers and forwarders makes it difficult to show this statistically).

Standardisation and vehicle types

The type of vehicle used also drives productivity. The use of swap bodies—standardised road freight containers—instead of lorries or truck trailers leads to longer vehicles and increased productivity (at a cost to the flexibility of loads). Using swap bodies also has the advantage that they are easily transferrable from a road tractor to a train and has the potential, therefore, to drive an increased share for rail in land transport. Longer, modular trucks such as those used in Scandinavia would also increase productivity (but at the expense, opponents argue, of increased accidents and road wear).

Catching up with Europe's land transport best practice could have a significant economic impact

If the EU-15 were to reach on average the productivity level of its top-quartile member countries in road freight, this would boost the sector's productivity by 30 per cent and add 0.4 per cent to incremental GDP in Europe (see box 13, "Germany and the Netherlands have outperformed in road transport" for examples of best practice that could be replicated across Europe).

Box 13. Germany and the Netherlands have outperformed in road transport

Germany excels in operational productivity in road transport with 529 Tkm per hour compared with an EU-15 average of 280 Tkm.[48] The Netherlands has an above-average operational productivity with 287 Tkm per hour. In both countries, the sector enjoys a range of advantages that together carry more weight than some shortcomings:

Productivity advantages

- In both countries, the sector has a high average apparent speed of 32 kilometres per hour in the Netherlands and 45 kilometres per hour in Germany, compared with an average of 24 in the EU-15.[49] This is partly due to the fact that the industry is more consolidated, with 13 employees on average in the Netherlands and 9 in Germany, compared with the average of 5 in the EU-15, and it also has a lower share of administrative to driving staff. Higher IT penetration allows many freight companies to reduce administration and improve planning. The ratio of driving time over paid time is higher in the Netherlands (82 per cent) and Germany (80 per cent) than other countries (e.g., 74 per cent in France) because of increased driver flexibility.[50]

- The use of swap bodies, containers, and trailers—which can be loaded and unloaded without the truck waiting—is more developed in Germany and the Netherlands than in Southern Europe. They were the only two countries in Europe in 2005 to have greater than a 10 per cent share of containerisation. They also each had 7 to 8 per cent of lorries used without a trailer, compared with 45 per cent in Italy and 31 per cent in Greece.[51]

- Owing to the Netherlands' position as an entry point in Europe (at the port of Rotterdam), the sector has a higher average distance per haul of 156 kilometres, compared with the European average of 107 kilometres.

- In both the Netherlands and Germany, the highway infrastructure is extensive compared with that of Southern Europe. The two countries are in Europe's top three for motorway density, with 36 kilometres of motorway per 1,000 square kilometres in Germany, compared with, for instance, 27 in Spain and 23 in Italy.

- In Germany, small players cooperate to avoid having a high share of empty hauls. Germany also widely uses brokers' platforms.

Productivity weaknesses

- In both countries, the sector has a low average load factor by EU-15 standards, partly due to the types of goods transported—e.g., a higher share of finished goods.

- The Netherlands also has a high empty travel ratio of 27 per cent; only Greece (32 per cent) and Ireland (34 per cent) have higher ratios. Indeed, the Dutch share of laden journeys fell by ten percentage points between 2001 and 2005 due partly to congestion.

48 Germany is surpassed only by Luxembourg, which we exclude because its results do not appear comparable.

49 Apparent speed is the ratio between kilometres of hauls and total hours worked, including non-driving time (driving breaks and administrative time).

50 L. Guihery, *International road freight transport in Germany and the Netherlands: Driver costs analysis and French perspectives*, European Transport Conference, 2008.

51 S. Pasi, "Unitisation of freight transport in Europe, 2005," *Statistics in Focus*, Eurostat, 2008.

Construction

Construction is one of the biggest sectors in Europe, accounting for 7 per cent of GDP, but its productivity has stagnated over a prolonged period. If the industry can cut out inefficiencies and emulate best practice within some European construction sectors, there is high potential for productivity improvements that could have a substantial impact on EU-15 GDP.

McKinsey's work in a number of European economies has commonly observed delays of up to 50 per cent above project plans, cost overruns of up to 40 per cent, and inefficiencies that amount to the equivalent of 20 to 30 per cent of the total cost of production. Individual countries in Europe have shown that a stronger government emphasis on improving productivity in construction can make a genuine difference (see box 14, "The UK construction industry," for an example of how a government has intervened to encourage the adoption of best practice).

The real estate boom of the past decade has meant that most industry players have had little interest in pursuing productivity improvements. But this is changing as firms have come under pressure from a precipitous drop in construction volumes and increased price pressures as a result of the global economic downturn.

One major barrier to a higher degree of professionalism and increased productivity in the sector is the complexity of the value chain in a highly fragmented industry. Other issues include tendering and contracting structures that put little emphasis and incentive on productivity improvements, as well as the comparatively low level of management skills in end-to-end process optimisation and lean techniques.

Box 14. The UK construction industry

In March 1999, the UK government launched its Achieving Excellence in Construction initiative, establishing demonstration projects in which it focused on instituting best practices in the construction process—an approach that other European governments could emulate. Best practices examined in the UK initiative included switching focus to life-cycle project costs instead of lowest initial offer prices as well as requiring cost transparency and cost effectiveness measurements such as material usage and productivity data. The UK government expected each construction project to use a coordinated team approach during implementation to include different parts of the value chain at an early stage and to try to eliminate waste. For the latter, an attempt was made to use, to the greatest extent possible, computer modelling, standardised components, and preassembly. The government set clear improvement targets for its demonstration projects, demanding, for instance, a cut in building time of 10 per cent and a 10 per cent rise in productivity. The government also emphasised improving education and skills. Some universities developed building-design degrees to react to the growing need for interdisciplinary thinking in construction projects.

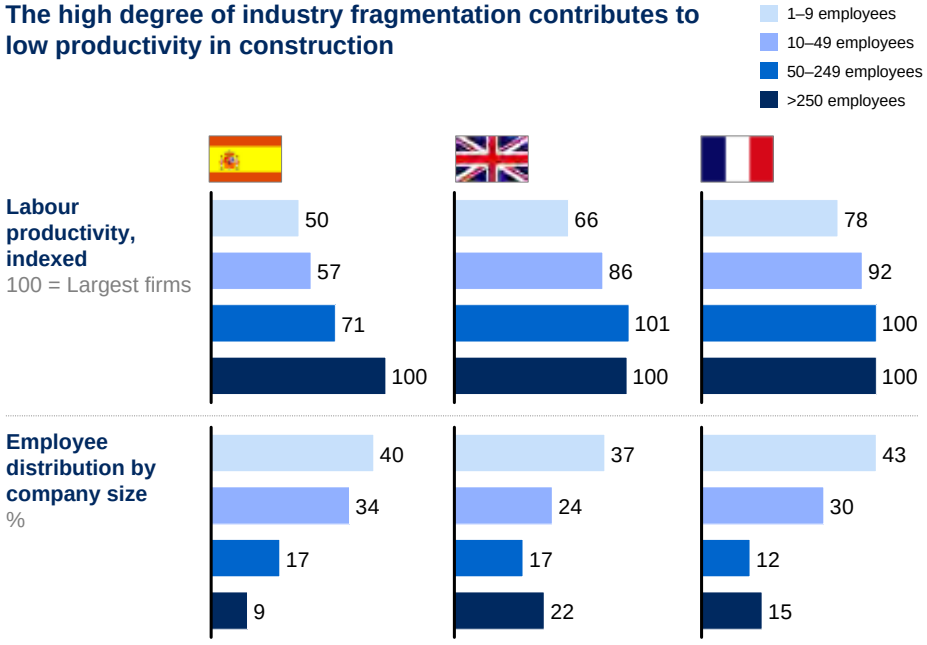
These initiatives have had quite a measure of success. In 2009, the demonstration projects displayed nearly twice the productivity of the industry average and higher qualifications and skills while simultaneously improving the predictability of construction time and project cost. Overall, the United Kingdom has achieved one of the highest productivity growth rates in construction in Europe between 1995 and 2005 at 1.7 per cent per annum, substantially outperforming other EU-15 countries such as Germany at 0.3 per cent, France at 0.1 per cent, and Spain at minus 2.0 per cent.

Industry fragmentation

Although data indicate that larger firms tend to be more productive, the European construction industry remains highly fragmented (Exhibit 48). In Spain and France, more than 70 per cent of construction companies employ fewer than 50 people, according to Eurostat. The top ten players in Europe account for only 6 per cent of the market, similar to the United States but well short of the 18 per cent in Japan. The top three players globally account for only 3.1 per cent.[52] This fragmentation is due largely to the tendency of the industry to subcontract most parts of a construction project for flexibility and risk-sharing purposes. Strict labour regulation also plays a role, encouraging informality as firms have an incentive to stay smaller to avoid greater scrutiny and the application of stricter regulations on dismissals, for instance. Informal labour accounts for a significant share of the hours worked in European construction sectors; in Portugal, the share is more than one-quarter in residential construction.

Exhibit 48

The high degree of industry fragmentation contributes to low productivity in construction



SOURCE: Eurostat; McKinsey Global Institute analysis

The problem is that subcontracting means high complexity in the construction value chain, leading to inefficiency as it becomes more difficult to manage large and interdependent construction projects.

Incentives in public and private construction projects

In public construction tenders, the main criterion for awarding a contract is typically the lowest offering price for an individual task. Reputation, long-term value, and overall project costs are seldom taken into account. This can mean that contractors strive to offer the lowest possible price and sacrifice quality or try to increase revenue in other ways after getting the contract. Furthermore, the industry traditionally tends to have separate tenders for each stage of the construction process, such as design, engineering, and the actual construction. This, too, leads to inefficiency and a lack of coordination—for instance,

52 We use 2008 data from KHL and Global Insight.

contractors are rarely involved in the design phase to discuss cost-efficient construction specifications and materials.

Even in private construction projects, the structure is such that individual participants focus mainly on their own tasks and have no incentive to optimise the overall outcome of a project. These structures largely comprise fixed-price arrangements designed to mitigate risks for individual players and to push the responsibility of delivering that set price onto the next step of the value chain. However, the small players one steps on in the chain often react simply by squeezing their own margins; they don't have access to—or time to even explore—the best practices required to boost productivity instead.

By changing their procurement and tendering processes, governments can directly help institutionalise construction best practices. The public sector tends to account for a high share of the total demand; in Germany, the share is 33 per cent, and in the United Kingdom, it's 25 per cent. Governments can, for instance, require cost and productivity transparency in construction projects, select contractors in a more integrated way, and push for standardisation and cost-efficient materials.

Management and supervisor skill level

Productivity in the industry also suffers from the generally low skill level among construction workers, supervisors, and management staff. Many employees at supervisory levels lack crucial planning and project-management skills. The consequence is often unrealistic planning, which requires frequent rework and reduces value-added time during a project. Formal training for construction employees is often very limited because of the small size of most companies. To address these issues, education and training initiatives should be a major focus for the industry. Universities could adapt their construction curricula to include classes on performance-management and productivity-improvement techniques.

Lack of standardisation

The high labour intensity and fragmentation of the construction industry hinder the diffusion of organisational best practice and standardised processes. Standardisation in the industry overall is rather low. A great variety of product specifications exists (e.g., ceiling heights and staircase areas in residential housing vary by more than 40 per cent for individual construction companies within one country), resulting in large differences among construction projects in terms of efficiency and cost. Building efficiencies can vary by more than 50 per cent between different construction projects of the same type. This makes it more difficult to achieve efficiency improvements. Moreover, the degree of prefabrication varies widely. Northern European regions such as Scandinavia tend to have a higher share of prefabrication, allowing them to build more cost efficiently. One reason for this is that Scandinavia has higher on-site labour costs than in Southern European countries such as Portugal where traditional on-site assembly still dominates. Policy makers could push for standardisation and prefabrication in public construction projects.

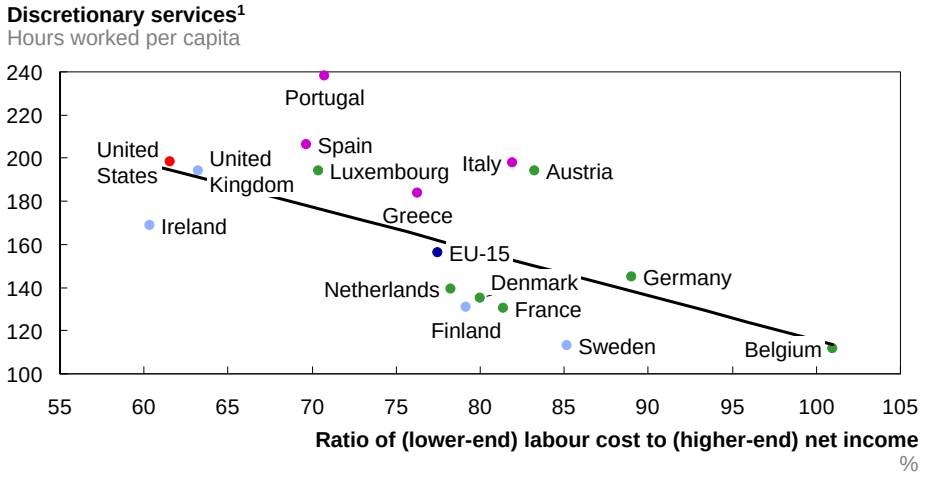
3.2.3 BUILDING THE INPUTS AND ENABLERS TO UNLOCK FURTHER SERVICE SECTOR GROWTH

Several service sectors have healthy growth prospects as long as the required enablers are in place. Here we briefly discuss six important areas to get right:

- **Regulation. Regulation still puts up barriers against growth in Europe, whether from the unclear** appropriation of value in the build-out of telecom fibre or from entry restrictions on tourists from outside the EU. Lowering such regulatory barriers is a prerequisite for growth in service sectors.[53] It appears that labour market regulation such as tax wedges and wages regulations is a particular inhibitor to growth across a set of service sectors such as restaurants, hotels, recreational activities, or household employment (Exhibit 49). For illustration, take the simplified example of a trade-off facing an employee going to a restaurant for dinner. Assume the restaurant staff needs a net income of €7 per hour.[54] With a median EU-15 tax wedge of around 40 per cent, staff would need €12 per hour gross, and the employee €20 per hour gross to pay for this service with one hour of the employee's own work.[55]

Exhibit 49

Growth in some service sectors appears to be dependent on tax wedges and wage regulations



1 Wholesale trade and commission trade (except for motor vehicles and motorcycles); retail trade (except for motor vehicles and motorcycles); repair of household goods; hotels and restaurants; media activities; other recreational activities; other service activities; private households with employed persons – 2005 EU KLEMS data.
2 Defined as the ratio between after-tax net income resulting from 67 per cent of average gross income and fully loaded labour cost of a 67 per cent of gross income.

SOURCE: OECD Taxing Wages 2009; EU KLEMS; International Monetary Fund; McKinsey Global Institute analysis

53 See *How to compete and grow: A sector guide to policy*, McKinsey Global Institute, March 2010 (www.mckinsey.com/mgi).

54 66 per cent of median EU-15 net income.

55 Single, no child.

- **Infrastructure.** An effective infrastructure is vital for the growth of a broad range of service industries. In tourism, for instance, becoming an attractive destination requires the construction of large-scale airport and road infrastructure alongside hotels and restaurants. Knowledge-intensive business services such as software and IT services require reliable electricity and telecoms services. Freight transport is contingent on a dense road and rail infrastructure.

- **Skills.** Because business services typically require a skilled workforce, the quality of education and research funding also matters for competitiveness and growth. India, Ireland, and Israel, all countries with exceptionally rapid IT services export growth, had a pool of skilled engineers available at a globally competitive cost.

- **Sector direction.** Many service sectors such as tourism are highly fragmented yet require strong coordination of different actors across infrastructure, service providers, and marketing.

- **Standardisation.** Clear standards are a key prerequisite for a strong ecosystem to develop, as was the case for GSM.

- **Demand generation.** Public demand can be a key trigger to develop an industry such as e-government for IT services.

In this section, we analyse IT services and software, tourism, and telecoms with respect to the growth constraints they face and consider how improvements along these levers could generate growth in each.

IT services and software

The IT services sector has been an important driver of growth in Europe. The sector's value added grew at an annual rate of 8 per cent from 1995 to 2005, far outstripping the 2 per cent rate of annual GDP growth during this period (although lagging behind the 11 per cent growth posted by the US sector). In 1995, the sector accounted for only 2 per cent of European GDP; between 1995 and 2005, it accounted for 5 per cent of GDP growth.

However, within Europe there has been a very wide variation in the growth of IT services among countries. While Ireland enjoyed growth of 21 per cent per year between 1995 and 2005, Denmark had 14 per cent growth and Austria 13 per cent; other economies, including France, Italy, and Portugal, posted growth of only 5 per cent per year. Today, IT services account for very different weights from economy to economy; the sector accounts for only 0.5 per cent of GDP in Greece but 3.1 per cent in Denmark.

Economies that have developed successful IT services sectors, including Ireland, Singapore, and South Korea, show that governments have been most effective when they have confined their policy intervention to setting the overall ground rules or regulation of the sector as well as creating enablers. MGI analysis finds that four key policy levers have proved important:

- **Talent development and attraction.** World-class education systems, increases in higher education enrolment (especially in science and engineering), and investments in R&D are all important for supplying the sector with the talent it needs. Developing the attractiveness of technology institutions and their curricula compared with those of other countries could help unleash the potential. Both Ireland and India have invested strongly in this area.

- **Communication infrastructure.** Singapore and South Korea show us that the expansion of broadband and wireless technologies attracts and supports growth in the IT services sector. Putting in place the right incentives for these networks to develop is important.

- **Pro-entrepreneur environment.** Intellectual property regulations, support for entrepreneurism including venture capital and university-centred development of start-ups, and light-touch regulation that ensures streamlined bureaucratic procedures (cutting the cost and time frame needed to start a business, for instance) can be powerful incentives to create and grow companies. European policy makers have an opportunity to foster a keener sense of entrepreneurial drive in Europe from today's rather weak levels.

- **Stimulation of domestic demand.** Governments can boost growth in their local software sector quite directly by creating demand through the development of e-government services or by providing easy access to working capital for domestic software firms. Norway, Singapore, the United States, and Canada have all successfully taken this approach. The governments of China and Brazil have played a significant role in boosting direct demand for domestic firms' goods and services by procuring all their supplies from local firms.

We expect new applications for software to fuel the sector's growth in the years ahead. Between 2009 and 2013, software sales are expected to grow 7 per cent a year in health care, government, and media and telecommunications, compared with 5 per cent per annum for software application in more traditional end-use sectors such as financial services.

Tourism

Europe's tourism sector grew steadily at a rate of 2 per cent per annum from 1995 to 2005. The sector accounts for 2 per cent of GDP in the EU-15 and 5 per cent of employment, but these shares vary widely across different European economies.[56] For instance, tourism accounts for around 8 per cent of GDP (and around 7 per cent of employment) in Spain and Greece, but it contributes only about 1 per cent to GDP in Belgium and Finland.

Across Europe, the tourism industry now faces a significant challenge in the face of a sharp drop in global demand as consumers and businesses have reined in spending in the face of the financial crisis. Furthermore, demand for tourism services is increasingly fragmenting. Traditional holiday patterns are changing, and the rise of emerging-market consumers is creating a new class of customers with different needs and preferences.

Government can make a decisive difference to the productivity of tourism, coordinating the disparate industries relevant to services and enabling growth. Today, the challenge is to act boldly to prevent a further decline in the sector in difficult demand conditions. The following should be the major components of such an effort:

- **Coordination and strategy.** In many countries, responsibilities for tourism have historically been split among different government bodies. This has hindered the development of a focused and coherent tourism vision and strategy. Denmark is one European government that has taken a different approach, centralising tourism responsibilities in one agency that handles every aspect from strategy to branding and communication. Governments also need to think about strategies to reposition tourism so as to capture new growth opportunities. Portugal successfully shifted away from mass-market tourism by focusing on golf to attract affluent customers. Graz in Austria used its cultural riches to market itself as a city-break destination to benefit from the growing short-break segment.

- **Demand and sourcing.** One of the most important growth opportunities will be tapping into a new wave of tourists from emerging tourism source regions such as Eastern Europe, Latin America, and Asia. The share of tourists from Eastern Europe to the EU-15 increased from 3.4 per cent in 2004 to 5.5 per cent in 2008; during the same period, the share of tourists coming from Latin America rose from 1.3 to 1.8 per cent. Visitors from BRIC countries are forecast to grow at double-digit annual rates in each of the next five years, according to Euromonitor. To capture this demand, Europe needs to adapt its offering. A simple example is the special map for Chinese visitors and Chinese-speaking tour guides that the German city of Köln publishes. Countries should also think about adjusting visa regulations to make it easier for people from these countries to visit. For instance, Schengen countries require Chinese visa applicants to go through a personal interview and prove minimum bank savings of $5,000.[57]

56 We use 2005 EU KLEMS data only for hotels and restaurants.

57 The Schengen Agreement in 1985 removed border controls from many European countries.

- **Education.** Tourism strategies also need a long-term plan for education and training as the industry faces the challenge of attracting and retaining the skilled labour necessary for high-quality and efficient service. In the United Kingdom, 5 per cent of employers in the hotels and restaurants industry reported hard-to-fill vacancies in 2010 despite higher unemployment due to the crisis (down from 8 per cent in 2007), and 26 per cent reported employing people who lacked the required skills. Of these, 36 per cent cited management skills as a key area of concern. Only half the managers in the industry possess managerial-level skills.[58]

- **Infrastructure.** A lack of high-quality, cost-efficient infrastructure can hamper demand. France has substantially boosted tourism in some areas by expanding access infrastructure such as airports and high-speed rail. Allowing low-cost airlines to access Carcassonne airport in Languedoc in Southern France in 1998, for example, boosted the sector by an estimated $500 million per year and created more than 3,000 jobs. Take a contrasting example from the United Kingdom. Since 1989, investment in visitor infrastructure to relieve road pressure around Stonehenge, a UNESCO World Heritage Site, has been subject to delay and cancellation. Many visitors do not even pay the £7 entry fee, as the visitor paths are not much closer than the view from the road.

Telecoms

The United States began to liberalise its telecommunications sector as early as the 1970s in anticipation of the economic benefits that would accrue from the innovation revolution that was sweeping through the industry. The United Kingdom followed in the 1980s. Continental Europe began to smartly regulate a decade later still in the 1990s. But today European mobile telephony is more advanced than in other regions and is one of the great success stories of European smart regulation and economic liberalism.

Europe's mobile phone penetration stands at an estimated 130 per cent, compared with 90 per cent in the United States. Moreover, productivity and value added in the European telecoms industry has been growing more rapidly than in the United States. From 1995 to 2005, the value added and productivity of European telecoms each grew at a rate of 9 per cent, compared with an estimated 6 per cent on both measures in the United States (Exhibit 50). Two elements have been the foundation of Europe's success: standardisation and competition.

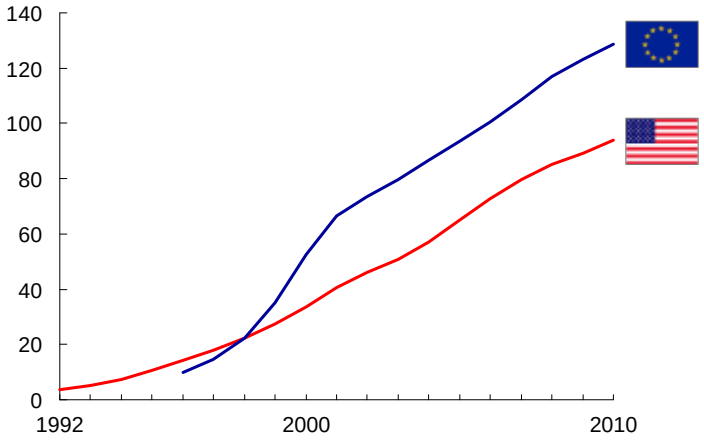
58 People 1st, *State of the Nation Report*, 2010.

Exhibit 50

Europe has developed GSM into a major success through effective standardisation and liberalisation

ESTIMATES

Mobile phone penetration
Subscribers per 100 inhabitants



SOURCE: Pyramid; McKinsey Global Institute analysis

- **Standardisation.** Groupe Spécial Mobile pioneered what became known as the Global System for Mobile Communications (GSM) in the 1980s—and the system that has become the most popular standard for mobile telephony in the world. The system was initially deployed in seven European countries in 1992; by 2004, GSM was used by 4 billion people worldwide (but not in large parts of the United States). Standardisation has enormous benefits. Unlike code division multiple access phones in the United States, GSM phones are compatible with any operator. This has created scale effects that have allowed the rapid adoption of best practice throughout the industry; innovative ideas can be developed without risk of the technology changes. Contrast these benefits with the story of the videocassette market. Competition in the 1980s between standards—largely VHS and Betamax—hindered development of the sector for as long as it took for VHS to emerge as the “winning” technology.

- **Competition.** European regulation has created greater competitive intensity in telecoms than in the United States. The United States opted to auction the licenses on a regional basis in 1996 when it designed its initial regulatory framework. This led to a large number of underscale local operators, most of which went bankrupt, leaving power to the incumbents. In contrast, Europe more actively sought to promote competition, auctioning three or four licenses on a national level as well as encouraging mobile virtual network operators. These MVNOs provide mobile phone services without necessarily owning a licensed frequency and the full infrastructure necessary to mobile telephone service. As such, they have lower overheads and offer price competition with full-service mobile network operators. Scandinavia embraced the MVNO model early on as regulators sought to drive competition into a market where pioneering mobile network operators were considered to have strong incumbent advantages. Another feature of the European market that favours competition is “asymmetrical interconnect”. By regulating termination rates at different levels (i.e., the incumbent obtains lower interconnection rates

for incoming calls), regulators give more space to new entrants to propose attractive tariffs. Europe also lowered switching barriers through number-portability regulations (i.e., the ability to keep the same number when switching operator), hardware standardisation, and limits on the duration of contracts.

The broadband challenge

Many studies and the experience of countries around the world have shown that broadband stimulates economic growth.[59] Cross-country analysis of the effects of broadband penetration points to a 0.6 to 0.7 per cent boost to GDP for every 10 per cent of additional penetration.[60] This boost includes direct effects from investments as well as indirect effects such as e-government benefits and improved health, energy efficiency, and job creation in related sectors. In the years ahead, the deployment of next-generation networks will be a key growth driver in Europe.

Fixed broadband

Europe's policy makers face a considerable challenge if they are to encourage the widespread development of next-generation networks. The continent starts from a low base, employing fibre far less than other regions. Take FTTH/B (fibre to the home/building). In South Korea, 52 per cent of households subscribe to this technology; in Japan, the share is 34.5 per cent. In Europe, only Northern European economies boast a share of 10 per cent or more. Sweden is the EU-15's leader with 12 per cent. But the rest of the EU-15 has very low or close to zero penetration.

If Europe is to increase the penetration of fibre networks, the investment needs are considerable. Overall, we estimate that a fibre upgrade across the EU-15 would cost €200 billion to €250 billion. This would be quite a financial stretch for the industry, representing an estimated cost per household of €1,000 to €1,400.

Given these hurdles to the rollout of next-generation telecoms, regulators will need to play a decisive enabling role. So far only two regulatory models—regulation that protects the investor, and public investment—have been effective around the world and resulted in large-scale fibre deployment.

The first approach incentivises private investment and limits government intervention. Regulation allows operators to earn profits on their investments by, for example, not forcing network sharing with competitors too quickly. Hong Kong and the United States have followed this approach. This model is particularly effective in cases where rollout costs are low or where an alternative fixed infrastructure such as cable is available and potential income from fibre networks is high. If European governments want to support the development of broadband using this approach, they need to lift regulatory uncertainty as rapidly as possible. This approach should work in large cities where the economics work for the private sector, and one would therefore not expect the government to have to intervene.

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59 Scott Beardsley, Luis Enriquez, Sheila Bonini, Sergio Sandoval, and Noëmie Brun, "Fostering the economic and social benefits of ICT," *Global Information Technology Report 2009–2010*, World Economic Forum, March 2010.

60 This takes into account the direct and indirect effects as well as productivity growth.

The second approach has been the provision of public investment to develop networks. Japan and South Korea have achieved coverage of 80 per cent of households by providing subsidies; Malaysia, too, has used subsidies to achieve 35 per cent coverage. In the case of Singapore, the fibre network is publicly owned for large-scale rollout.

Thus far in Europe, France and Portugal have opted for the second of the two models—making public investments in fibre. France has announced subsidies worth €2.88 billion to build high-speed Internet networks in smaller cities and rural areas where there is no economic case for private investment and where therefore policy needs to step in.

In some smaller cities, there may be a case for collaboration—and infrastructure sharing—between the public and private sectors. In unattractive areas where rollout costs are high and potential income low, the economics don't work for the private sector, and only governments can justify fibre investments on the basis of wider social and economic benefit beyond selling telecom subscriptions and services.

Mobile broadband

In mobile broadband, European regulation is already broadly adapted to the sector's requirements. But policy makers could help accelerate deployment of this technology, for example by widening the spectrum available for telecom purposes (Exhibit 51). The objective of reallocating the "digital dividend" (i.e., spectrum released when switching off analogue terrestrial television) to telecom usage is widely accepted and supported. However, in many countries, no clear plans of implementation have been chosen or deadlines set despite the fact that mobile broadband projections show that the frequencies could be needed as soon as 2012. Belgium, Ireland, and Italy have no clear plans for frequency allocation and haven't yet defined the auctioning for the digital dividend. In Ireland, Italy, and Portugal, analogue switch-off is not expected before 2012. In France and the United Kingdom, digital switchover should happen in 2011 and 2012; France should auction 800 MHz by the end of 2010, while the United Kingdom is preparing a wide auction (on multiple frequencies) for 2011. In Germany, reuse of GSM frequencies for broadband is under discussion.

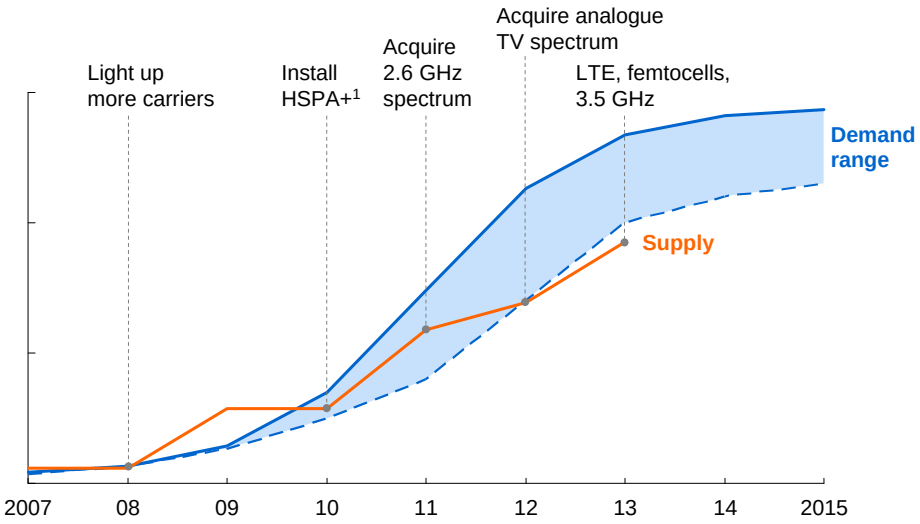
The frequency band drives the number of base stations and the level of investment, and allocated spectrum determines the capacity per base station and the required density of infrastructure. McKinsey simulations have shown that using lower frequencies (from 700 to 900 MHz instead of 2.1 to 2.6 GHz) could lead to a 45 per cent decrease in cost per user. Infrastructure and spectrum sharing is useful, too, because it reduces high capital expenditure on base stations; this approach is crucial in rural and sparsely populated areas.

Exhibit 51

The timing of availability of spectrum is critical to ensuring sufficient capacity

EUROPEAN INCUMBENT EXAMPLE

MB/month per base station



1 HSPA+ = Evolved High-Speed Packet Access; available in 2009 but takes up to ~3 years to reach full capacity.
SOURCE: JPMorgan; literature review; Deutsche Bank; McKinsey proprietary capacity model

3.2.4 ENSURING EUROPEAN SCALE ACROSS BORDERS

The Services Directive of the EU has been introduced to foster cross-country competition in service sectors through removing regulatory hurdles such as nationality restrictions. Cross-border competition in services is currently at a very low ebb with only 20 per cent of services provided in the EU having a cross-border dimension. This is a low level given the extensive economic integration that has occurred in Europe under the banner of efforts to create the Single Market.

The EU has recognised the need to push the Single Market achievements even further. In his report to the European Commission, Mario Monti, former commissioner for the Internal Market, Financial Services and Financial Integration, Customs, and Taxation, and commissioner for Competition, has outlined initiatives to strengthen the Single Market such as improving the EU-level framework for service standardisation. Free movement of services would help to reduce fragmentation in service sectors and, in turn, should boost productivity by increasing competition. We know from the liberalisation of some sectors that the potential gains for consumers of greater competition can be very significant indeed. Smart regulation and harmonisation across borders from 1988 to 1998 led to annual productivity gains of more than 5 per cent throughout the 1990s in road transport in Germany and France (Exhibit 52).

Several service sectors have promising growth prospects as long as governments remove any remaining hurdles to competition and put in place the right enablers for the private sector to prosper. In these largely domestic sectors, government regulation and enablers often play a decisive role and set the rules of the game—all without much government funding, which is a large potential advantage in a time of constrained public finances. These discussions give only a modest indication of the vast potential that European service sectors still have for

productivity increases and growth. Successful approaches by governments in specific sectors can lead the way for their neighbours, providing best practice for them to emulate.

Exhibit 52

Deregulation and cross-border harmonisation had a strong impact on productivity in road freight

GERMANY ROAD FREIGHT SECTOR EXAMPLE

Key changes	Regulated industry	Deregulation			Impact
	Pre-1988	1989–92	1993–94	1995–98	
Capacity restrictions	▪ Varied by country		▪ Change in regulation governing size and weight of trucks	▪ Harmonisation of capacity restrictions	**Increase in average truck size from 17.2 t in 1995 to 20.2 t in 2000**
Tariffs and taxes	▪ Mandatory price lists for domestic and international freight	▪ Freedom granted to set prices for international freight	▪ Domestic price lists abolished	▪ Full harmonisation of road taxes and VAT	**Productivity improvements after 25–50 per cent price decline from 1993–97**
Market access and cross-border trade	▪ Domestic traffic confined to domestic haulers ▪ International traffic regulated by bilateral agreements	▪ Introduction of EU rules for cross-border trucking and cabotage[1] ▪ Beginning of European single market in 1992	▪ Gradual rise of cross-border trucking	▪ Cross-border trucking completely liberalised ▪ Distinction between local and long-distance traffic abandoned	**Increase in average length of hauls and reduced paperwork for cross-border shipments**

1 Cabotage refers to a trucking company from one country transporting goods in another country, hence competing with that country's domestic providers of trucking services.

SOURCE: BAG; Aberle; McKinsey Global Institute analysis

3.3. Aligning policies to growth and innovation

If Europe succeeds in boosting labour market utilisation and productivity across sectors, including services, the region will enhance its medium-term growth prospects. But sustained long-term growth will require Europe to take advantage of the major growth opportunities in three areas—the rapid growth of emerging markets, demand for cleantech solutions, and technological innovation.

European companies have ambitions in all three, and their success—or otherwise—will be the critical determinant of the region's growth. But government can play a vital role in creating the conditions in which the odds of success are higher than they would otherwise be. Despite many strengths and examples of best practice and innovation, Europe still suffers from institutional and structural weaknesses that government can, and should, work to overcome.

3.3.1 EUROPE IS WELL POSITIONED TO GRASP THREE MAJOR OPPORTUNITIES

Emerging markets

The first major opportunity comes from rapidly growing developing economies, including not only the BRIC quartet of Brazil, Russia, India, and China but also Eastern Europe, Africa, Turkey, and the rest of Latin America. More than 50 per cent of global GDP growth will come from developing economies. Up to $9 trillion will be spent on core infrastructure projects worldwide by 2015, an increase of 25 per cent over the previous five years, with much of this spending

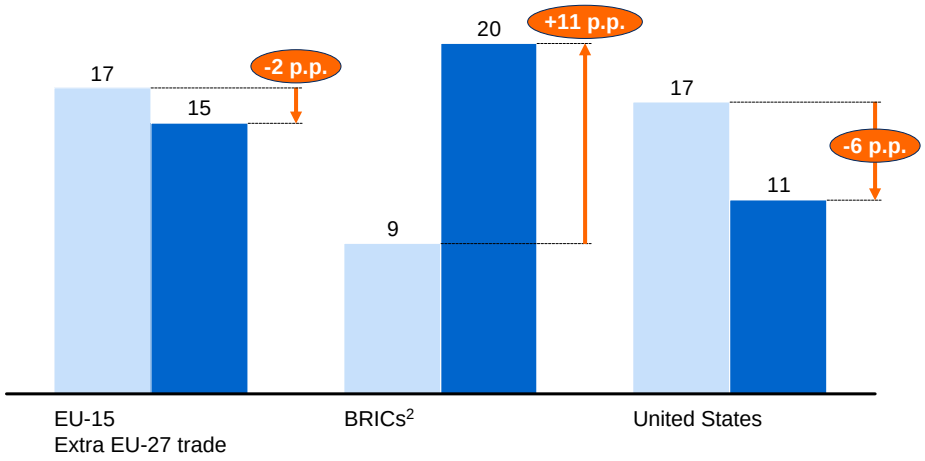
taking place in emerging markets.[61] The number of Fortune 500 companies hailing from BRIC countries has more than tripled in four years.[62]

Over recent years, Europe has slowly lost export market shares as new international players such as the BRICs have risen in prominence. However, this loss of share has been considerably less than in other regions, notably the United States (Exhibit 53). Many European companies have strong brands, are leading players in their respective fields, have robust established ties with emerging economies, and are making significant headway in these markets. For Mercedes-Benz, for instance, China is already the third-largest market after Germany and the United States.

Exhibit 53

Europe has largely defended export market shares despite the rise of the BRICs

Market share of total world exports[1]
%



1 Excluding intra-EU-27 trade.
2 Brazil, Russia, India, and China.
SOURCE: Eurostat

Cleantech

The prospect of high energy prices in the long term and a political desire to combat climate change are combining to shape substantial market opportunities related to the goal of higher energy efficiency. Clean technology solutions, including renewable energy, mobility, buildings, industrial high tech, and smart grid and other IT solutions, are expected to develop a global market potential of around €2 trillion in 2020, growing at an average 13 per cent per annum.

Again, Europe is in a strong position in emerging cleantech markets, thanks to the global leadership of its companies in most of the relevant industry segments and to policy makers' attention to the development of a green industry (Exhibit 54). For example, German companies are the leading producers of solar cells and operate successfully in all areas of the value chain—albeit they will be challenged

61 This estimate draws on gross fixed capital expenditure projections by Global Insight in utilities, transport, storage, and telecommunications. A forthcoming MGI report on the impending global investment boom and the supply of and demand for capital will investigate this in more detail.

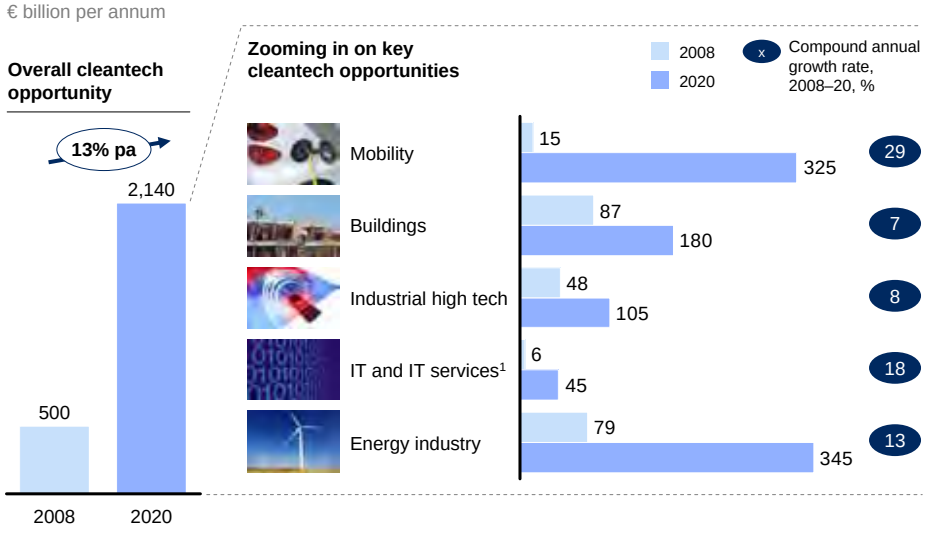
62 Peter Bisson, Elizabeth Stephenson, and S. Patrick Viguerie, "Global forces: An introduction," *McKinsey Quarterly*, June 2010.

by the vast investments being made in China. German policy choices (such as the Renewable Energy Sources Act) are supporting the development of a 300,000-job industry in this area. Companies such as Siemens are at the forefront of "green engineering" solutions; Siemens generates almost a third of its revenue from clean products and solutions. Portugal is aggressively pursuing opportunities in electric vehicles. The government plans to install a network of 1,350 charging points in 25 towns and cities by mid-2011 and requires that 20 per cent of new vehicles purchased by the public administration from 2011 be electric.

Exhibit 54

The cleantech opportunity offers a global market potential of €2 trillion in 2020

€ billion per annum



1 Includes energy-efficient IT, IT for energy management, smart grid, and IT-based traffic systems.

SOURCE: *Wettbewerbsfaktor Energie als Chance für die deutsche Wirtschaft (Competitiveness in energy: A chance for the German economy)*, McKinsey, April 2009

New technology

Disruptive, innovative sectors such as biotechnologies and nanotechnologies have the potential to deliver hugely significant economic benefits across a broad front in the long term, just as electricity, computers, and mobile phones have done in the past. Over the next decade, annual growth rates of 30 per cent in biotech products and 20 per cent in nanomaterials are expected. In the pharmaceutical/biotech sector, five of the nine leading firms are based in Europe. In nanotechnologies research, Europe is also in a good position with 420 patents in 2007, compared with 465 in the United States. It is vital that governments and private firms foster the transposition of research and patents into economic activities (see box 15, "How France supports the development of new technologies").

Innovation-driven productivity growth, whether derived from technological advances or improved business operations, is crucial to sustaining multifactor productivity growth that drives overall economic growth and productivity. Timelines are, however, longer than many people imagine. For example, it took 14 years from the formation of the Group Spécial Mobile to reach 10 per cent GSM penetration in Europe.

Box 15. How France supports the development of new technologies

In 2006, France led Europe in terms of the number of biotech firms to which it was host. In that year, France had 824 firms in the biotech R&D sector employing around 237,000 people. France has used a range of effective tools to develop this successful industry:

- Dedicated investment funds aimed at developing biotech companies have totalled €140 million euros. France's *Fonds Stratégique d'Investissement* provided 37 per cent of the finance for these funds with the rest coming from private partners.
- Start-up support is available to incubate young firms with measures including a fiscal exemption for the first five years amounting to 100 per cent for the first three years and 50 per cent for the last two.
- France allows tax reductions for R&D investments of 30 per cent for investments of up to €100 million and 5 per cent for investments above that threshold.
- OSEO, a fund that supports entrepreneurship, and the National Research Agency, both facilitate access to capital for small and medium-sized enterprises with capital guarantees up to 70 per cent and project financing of up to €3 million.

Similar policies support the development of innovative clusters such as the micro-nanotechnology cluster in Grenoble. The key to such successful cluster formation is the development of strong partnerships among the central government, local authorities, private sector, and research institutions. Government can usefully support the development of centres of innovation through enabling regulation including the removal of planning barriers and can support R&D and the development of necessary skills.[63]

3.3.2 EUROPE NEEDS TO OVERCOME SOME WEAKNESSES TO CAPTURE NEW GROWTH OPPORTUNITIES

Despite its relatively strong trading links with emerging economies and its sound start in innovative new sectors from cleantech to biotech, Europe faces stiff competition from other regions and suffers from some structural and policy weaknesses that may hinder the private sector's race to capture large global growth opportunities. Yet examples of best practice in Europe abound. We believe that policy makers should focus on the following areas in a bid to strengthen Europe's launch pad for growth:

Inadequate allocation of funds to innovation

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 (Exhibit 55). Only 8 per cent of the funds go to R&D and innovation. Europe spends substantially less on R&D than Japan and the United States and even

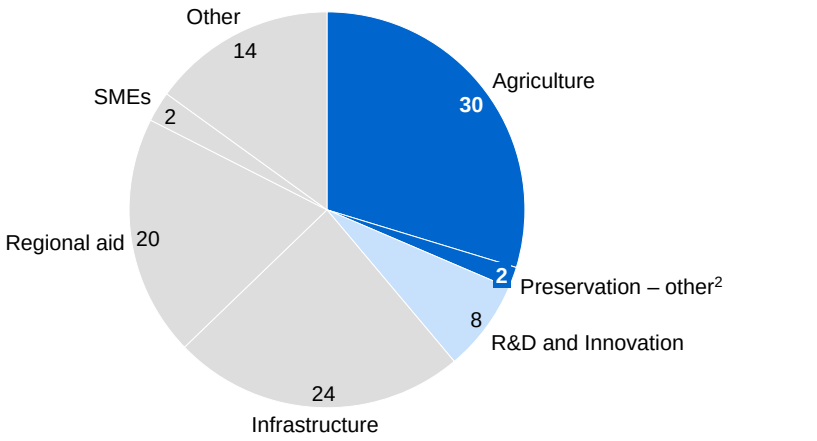
63 OECD, *Clusters, Innovation and Entrepreneurship*, 2009

lies below the OECD average. In 2008, Europe spent only 1.9 per cent of GDP on private sector or government R&D, compared with around 2.7 per cent in the United States (Exhibit 56). 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.[64]

Exhibit 55

Europe[1] allocates a large share of funds to preserving slow-growth industries

2008; includes EU-level and member country subsidies
100% = €211 billion

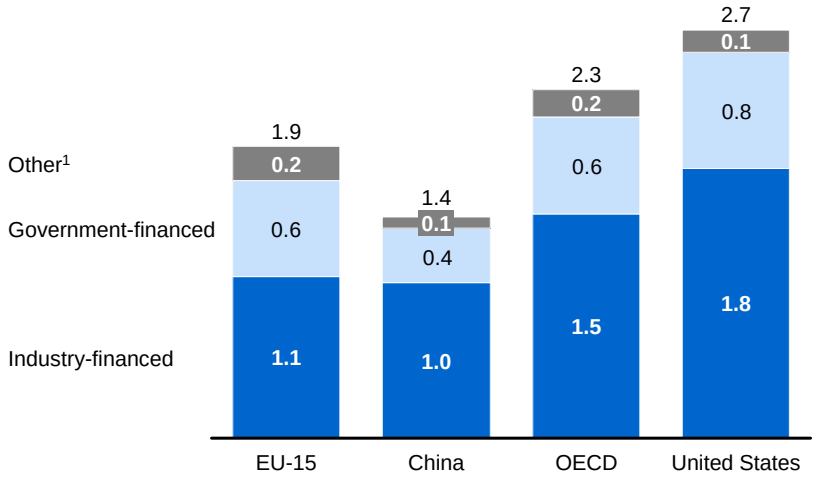


1 EU-27.
2 Includes fisheries and coal.
SOURCE: European Commission State Aid Scoreboard; European Union budget; McKinsey Global Institute analysis

Exhibit 56

EU-15 spending on R&D is lower than in many developed economies

% of GDP, 2007



1 Includes other national sources of funding and foreign funding.
Note: Numbers may not sum due to rounding.
SOURCE: OECD

64 EU-27.

But Europe can build on home-grown as well as international examples of making innovation a priority and dedicating funds accordingly (see box 16, "How Israel strengthened R&D," for another example). As we have discussed, France set up a €1 billion government fund with the explicit aim of directing financing to growth sectors such as high-tech industries and services, with a focus on R&D and research labs. To allocate the funds in an efficient and transparent way, a competitive bidding process was set up with clear criteria based on the viability of the project (e.g., the ability to reach critical mass; high potential of the technology). The initiative created 71 clusters (only a few of which were defined as "global clusters"), and a second phase was approved with €1.5 billion funding for the 2009 to 2012 period. The jury is still out on the long-term success of this initiative, but this type of experiment offers potentially interesting lessons for other European countries, as long as they objectively and rigorously assess the results of such innovations before attempting to emulate them.

Box 16. How Israel strengthened R&D

Israel spends 4.7 per cent of GDP on R&D—the highest R&D "intensity" in the world and more than twice the OECD average of 1.9 per cent in 2008. Israel's business R&D spending is higher than that of any other developed economy. The country has the highest concentration of start-ups per capita in the world.

Critical to these achievements has been Israel's establishment of a legal framework to support private industrial R&D. One element of the framework has been encouraging the formation of consortia between academia and industry. Under the Magnet programme, consortia of industrial firms and at least one academic institution are entitled to multiyear grants of three to five years, for up to 66 per cent of the total approved R&D budget (with no royalty payment) to develop pre-competitive generic technologies. Another element of the framework has been an innovative grant scheme that provides R&D grants for 66 to 90 per cent of R&D budgets to private companies in exchange for royalty payments on future product sales.

Israel also has a highly developed venture capital (VC) industry to back up innovation with 70 VC funds and 24 technology incubators to encourage the commercialisation of knowledge in the form of start-up companies. Israel established many incubators in the 1990s, offering grants, and management and marketing guidance to scientists and smaller companies in the early stages of R&D. These incubators started life in public ownership, but by 2009 only 2 of the 24 operating incubators were still in state hands.[65]

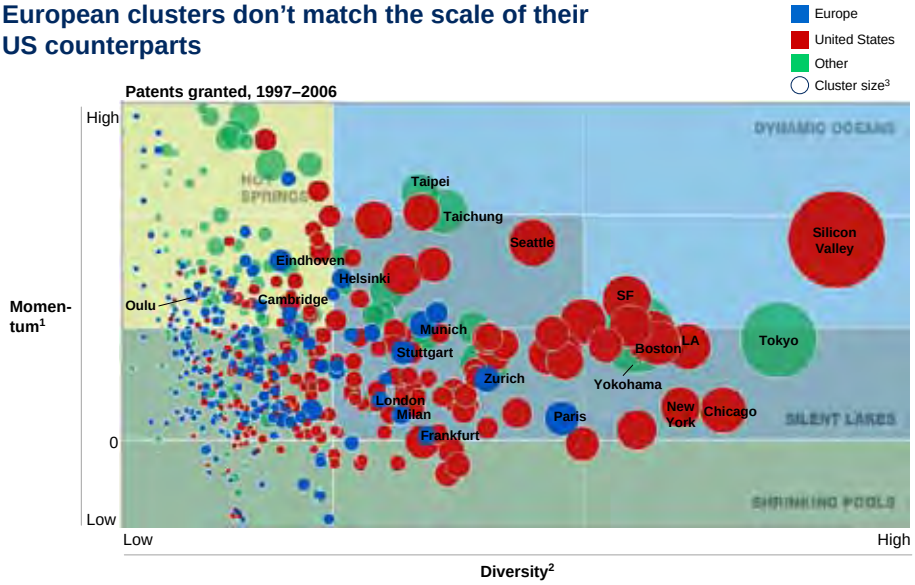
65 OECD; World Economic Forum.

Insufficient cluster development

European clusters are much smaller than their North American counterparts (Exhibit 57). In high tech, two potential reasons that European clusters remain comparatively small are misguided government policies and land-use restrictions. European governments tend to favour several smaller clusters over one large concentrated one, driven by the idea of equally promoting growth across different regions (e.g., five regional bioscience clusters exist in the United Kingdom). The experiences of Cambridge and Brighton in the United Kingdom show that land-use restrictions can prevent existing successful clusters from gaining further scale. In Cambridge, restrictive land regulations have not only limited the growth of the university and the science and business parks but also increased the cost of housing for people working in these clusters. Europe boasts exceptions in cluster development. In Finland, a world-class technology cluster focused on mechanical and electrical engineering grew up around the small university of Oulu, driven by a combination of early government R&D contracts, a new science park, and the dynamism of companies such as Nokia. Even though the Oulu cluster is increasingly challenged by players in Asia, it has proved that even the economy of a relatively isolated region can turn into a world centre for knowledge and innovation.

Exhibit 57

European clusters don't match the scale of their US counterparts



1 Growth of patents in a cluster per year from 1997 to 2006.
2 Patents' industry and firm diversity in a cluster in 2006.
3 Patents granted in 2006.

SOURCE: Juan Alcacer, Harvard University; McKinsey Innovation Heat Map

Underdeveloped entrepreneurial mind-set

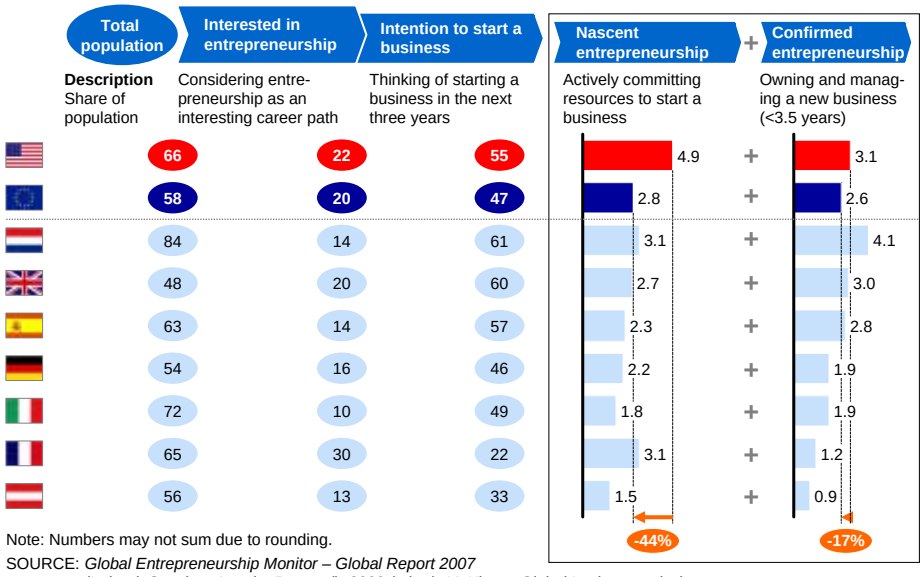
Compared with Americans, Europeans are not particularly entrepreneurial (Exhibit 58). The share of the European population interested in entrepreneurship is eight percentage points lower than in the United States, and the share of Europeans trying to start a business is nearly half that in the United States.[66] But Europe has potential—the rate of conversion from being interested in entrepreneurship and actually starting a business is nearly on a par with that in the United States—and it is worth Europe's trying to foster a more entrepreneurial mind-set to support innovation. Several European countries are already trying to do so. The Netherlands, for instance, has created a special commission to promote pilot entrepreneurship projects from primary schools to universities. Ireland has embedded activities based on "learning by doing" (e.g., students running mini-companies) in state education.

Exhibit 58

Europe has an under-developed entrepreneurial mind-set

Entrepreneurship funnel, 2009

% of adult population



Note: Numbers may not sum due to rounding.

SOURCE: *Global Entrepreneurship Monitor – Global Report 2007* (Ireland, Sweden, Austria, Portugal); 2009 (other); McKinsey Global Institute analysis

Inconsistent links between academia and industry

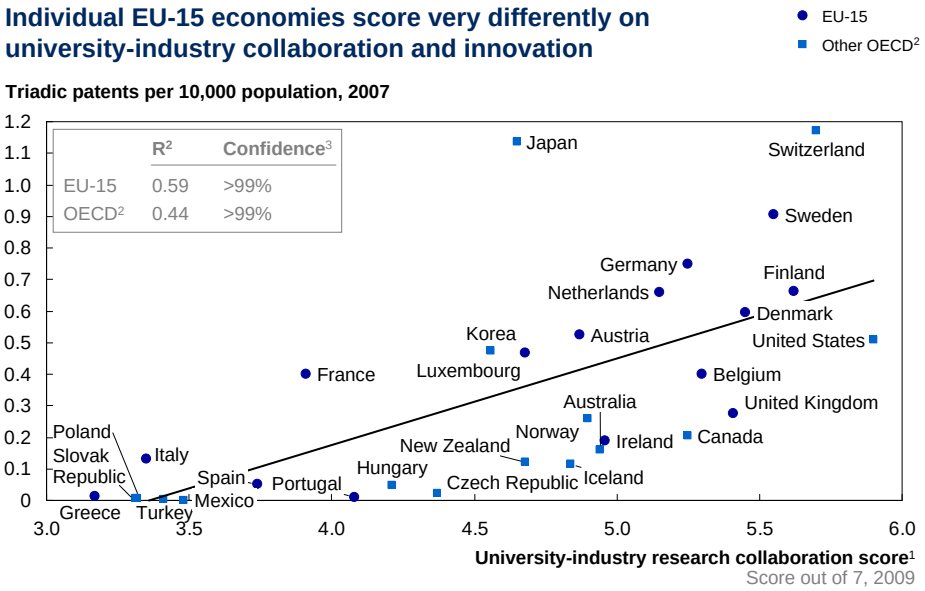
The links between the EU-15's academic institutions and industry tend to be much weaker than in other countries, including Switzerland and the United States (Exhibit 59). We know well that US industries such as bioscience have grown up around universities such as Harvard and MIT. In North Carolina, the Research Triangle Park, which was formed around high-quality universities such as Duke and the University of North Carolina and which involved high-profile companies such as IBM, led to such critical discoveries as 3-D ultrasound technology. The OECD has long argued that Europe needs to rethink how to regard universities as key drivers of innovation and grant them more autonomy. Again, Europe boasts positive approaches. In the United Kingdom, the University of Sunderland participated in an alliance to make Nissan's new car plant the most productive in Europe. In Spain, the University of Valencia helped to transform the traditional SME-based ceramic tile industry into a global leader. And, as we have noted, in

66 *Global Entrepreneurship Monitor*, 2007, 2009.

Finland the University of Oulu's science park helped form a cluster employing 18,000 people with a €5 billion turnover.

Exhibit 59

Individual EU-15 economies score very differently on university-industry collaboration and innovation



1 Based on responses from 13,000 business leaders on a scale from 1 = minimal or non-existent to 7 = intensive and ongoing.
2 Sample of 30 OECD countries.
3 P-value < 0.001.

SOURCE: OECD; WEF; McKinsey Global Institute analysis

□ □ □

Europe has clear opportunities to benefit from, and drive, major growth trends. To do so, government should step up efforts to enable the private sector to capture this potential, overcoming some weaknesses and emulating effective examples of best practice and innovation—both in companies and in governments—that already exist in the region.

4. Emulating existing best practice within Europe can solve the growth challenge

The growth outlook in Europe looks difficult—as it does in many other economies around the world in the aftermath of the global downturn. But if Europe seizes the moment, using today's pressures as a spur to structural reform, the continent has every potential of achieving a healthy rate of sustained long-term GDP expansion.

In this paper, we have suggested a three-pronged plan of actions that need to be pursued in parallel: first, continued, concerted, and broad reform to labour markets; second, action to boost productivity across sectors and in particular large service sectors; and third, policies geared toward helping the private sector make the most of the major growth and innovation opportunities of the period ahead.

Europe is peppered with examples of best practice among companies and governments. On a number of selected indicators important to the plan of action, EU member countries outperform the United States (see Exhibit 60, which shows the top three performers on each indicator out of the EU-15 and the United States). If all of Europe were to emulate such approaches, the continent would have every potential to maintain and accelerate growth—and even close today's 24 per cent per capita income gap with the United States.

Reaching the average or even the top European performers in terms of participation and unemployment alone could lift labour utilisation by 2 to 9 per cent without reducing vacation or absence times or changing weekly hours worked.[67]

Boosting service sector productivity to the European average or to European best-practice levels per sector could add around 3 or 20 per cent, respectively, to the region's productivity. While growth at the top end of this range may prove unattainable, our calculation illustrates the scale of the opportunity open to European economies through concerted service sector reform. This should be the first priority for the new "industrial policy" in many European countries.

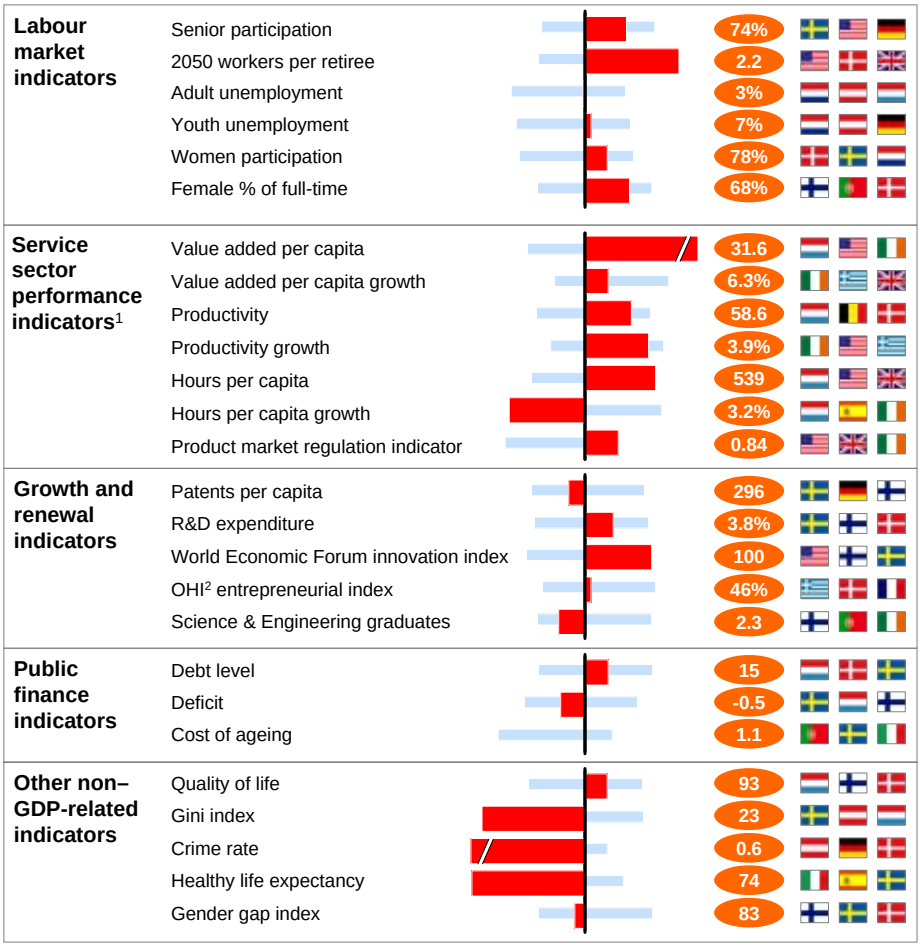
If European companies can capture global growth opportunities in manufacturing and beyond, including innovation—with a helping hand from public policy in creating the conditions to enable private sector success—any remaining per capita GDP gap with the United States could be closed over the next 10 to 20 years.

67 This range could be 4 to 11 per cent if weekly hours in Germany, France, and the Netherlands were aligned to the EU-15 average.

Exhibit 60

For most indicators, EU member countries define the best practice

Best practice indicator values and top three performers



1 Local, business, and professional and financial services. Range and values indicated exclude Luxembourg due to the small economy strongly skewed to financial services. Both Greece and Ireland performed strongly on productivity and value added growth prior to the crisis, but are now suffering from a difficult economic situation overall.
2 Organizational Health Index.

SOURCE: Conference Board; OECD; Eurostat; EU-KLEMS; World Economic Forum; *Newsweek*; CIA; UNODC; IMF; European Commission; McKinsey Global Institute analysis

The economic crisis in Sweden in the early 1990s offered an opportunity to reform the Swedish welfare state and its institutions as well as to liberalise a wide range of product markets.[68] Even before the crisis, Sweden's economy was facing several issues: private sector employment had stagnated since the 1960s; the country had famously generous welfare benefits that reduced incentives to work; slow productivity growth was affecting the country's position relative to other OECD countries in terms of real per capita GDP; and recurring current account deficits and at least a decade of inflation rates higher than many other countries led to frequent currency devaluations. By the early 1990s, the Swedish economy was imploding. Financial markets deregulation and a rapid credit expansion had led the rise and burst of a real estate bubble, with the consequent crisis spreading from the banking system to the entire economy. Government spending had risen to more than 70 per cent of GDP; the annual budget deficit was 12 per cent of GDP. Unemployment hit Depression-era levels. This toxic brew

68 Espen Erlandsen and Jens Lundsgaard, *How Regulatory Reforms in Sweden Have Boosted Productivity*, OECD Economics Department Working Papers Number 577, September 2007.

may sound familiar to many European countries today. So Sweden's reaction is a useful object lesson.

In a few short years, Sweden slashed public spending and eliminated its budget deficit (in the face of criticism in some quarters that such action would compromise growth), undertook sweeping reform to tax and pension systems, and initiated broad smart regulation of traditional monopolies in aviation, telecommunications, electricity, and post, alongside new competition laws. Asked how such change was possible within a decade, one finance minister referred to "the crisis mood" among the Swedish population. Sweden transformed its economy and its long-term growth prospects in a decade. The rate of productivity growth nearly doubled from 1.2 per cent a year between 1980 and 1990 to 2.2 per cent from 1991 to 1998, and from 1999 to 2005 it increased further to 2.5 per cent. After falling from seventh place in per capita income among OECD countries in 1980 to 14th place by the early 1990s, Sweden managed through structural reforms to climb up again to 8th place in 2007. During the current crisis, Sweden's GDP initially contracted more sharply (5.1 per cent in 2009) than the eurozone's GDP did (4.1 per cent), but its peak of unemployment was lower than in the eurozone. Moreover, Sweden's GDP has bounced back strongly and the economy is set fair, according to the OECD, for faster growth than the eurozone average (at 3.3 per cent in 2011, compared with the eurozone's 1.9 per cent).

□ □ □

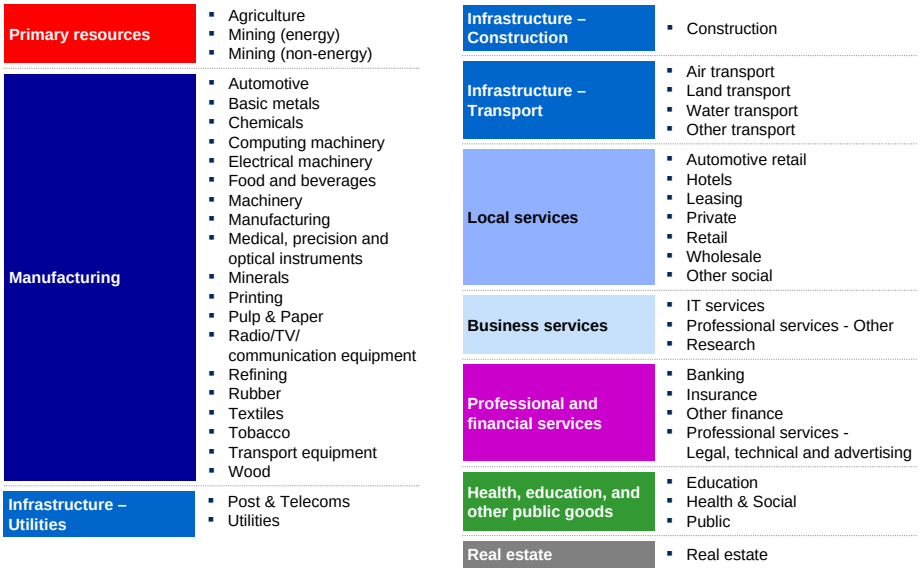
Sweden has shown on a national level how to turn a crisis into an opportunity for far-reaching structural reforms as a basis for long-term sustained growth. European leaders now need to carefully design and rigorously implement reforms on a regional scale to lead their countries back to a viable path of growth and renewal.

Appendix 1: Sector clusters

Economic sectors exhibit a variety of profiles in terms of their productivity and productivity growth. MGI defines ten sector groups based on the type of activity performed and tradability of the output (Exhibit A1.1).[69]

Exhibit A1.1

Groups of sectors have been chosen on the basis of characteristics, trends, and sizes of industry sectors



SOURCE: EU-KLEMS; McKinsey Global Institute

- Primary resources includes all extractive industries.
- Manufacturing includes all goods manufacturing industries.
- Infrastructure/utilities groups network industries such as electricity, gas, water, post, and telecoms.
- Infrastructure/construction includes all activities related to construction and the maintenance of buildings.
- Infrastructure/transport includes freight and passenger transport as well as storage activities (it does not include road or railway building, which belongs to the construction group, nor train or aircraft manufacturing, which belongs to the manufacturing group).

69 MGI uses the NACE 1.1 classification used by EU KLEMS to define these sectors.

- Local services groups activities that are local by nature such as hotels, restaurants, retail and wholesale trade, and personal services (e.g., leisure, private household personnel, and media).

- Business services groups all services that are provided to other companies, with the exception of financial services (see next item).

- Professional and financial services groups activities related to financial services. This group also includes professional services, as these sectors show similar productivity levels and include finance-related activities such as accounting, auditing, and tax. Technical and advertising should be classified as business services, but granular data is not available for these activities.

- Health, education, and other public goods groups all activities that are usually provided or (partly) funded by governments such as education, health, public administration, defence, and public services (e.g., police, fire services, and justice).

- Real estate includes real estate activities. The accounting of real estate value added includes imputed rent (i.e., imputing a value added to buildings used by their owner equivalent to the value added they would generate if they were leased). This leads to sector productivity numbers that are difficult to interpret.

Appendix 2: EU-15 profiles

In this appendix, we offer brief profiles of each country that makes up the EU-15. In each case, we compare the country's performance to the EU-15 average as well as to the range of countries within the EU-15. We structure this appendix as follows:

A. Indicators

B. Profile of the EU-15

C. MGI's geographic clusters

D. Country profiles

A. Indicators

In this section, we define the indicators we examine for each country, detailing the statistical sources for each:

LABOUR MARKET

- Senior participation: share of population ages 55–65 participating in the labour market (2009, OECD)
- 2050 worker per retiree: ratio between labour force and inactive retirees ages 65 and older in 2050 (European Commission 2009 ageing report)
- Adult unemployment: share of participating population ages 25 and older looking for a job (2009, OECD)
- Youth unemployment: share of participating population ages 15–25 looking for a job (2009, OECD)
- Female participation: share of women ages 15–65 participating in the labour market (2009, OECD)
- Female per cent of full time: average working time of women (including non-participating women) as a percentage of full-time equivalent (2008, Eurostat and 2009, OECD)

SERVICES SECTORS

- Value added per capita: 2005 $ PPP value added per capita in local, business, and professional and financial services (EU KLEMS)
- Value added per capita growth: 1995–2005 value added per capita growth in those sectors (EU KLEMS)
- Productivity: productivity in 2005 $ PPP in those sectors (EU KLEMS)
- Productivity growth: 1995–2005 productivity growth in those sectors (EU KLEMS)
- Hours per capita: 2005 hours per capita in those sectors (EU KLEMS)
- Hours per capita growth: 1995–2005 hours per capita growth in those sectors (EU KLEMS)
- Product market regulation indicator: overall OECD product market regulation index (2008, OECD)

GROWTH AND RENEWAL

- Patents per capita: 2007 patents per million inhabitants (Eurostat)
- R&D expenditure: 2008 R&D expenditure as a percentage of GDP (Eurostat)
- WEF innovation index (2009, WEF)
- OHI entrepreneurial index (McKinsey Organizational Health Index survey)
- Science and engineering graduates: graduates per 1,000 inhabitants (OECD)

PUBLIC FINANCE INDICATORS

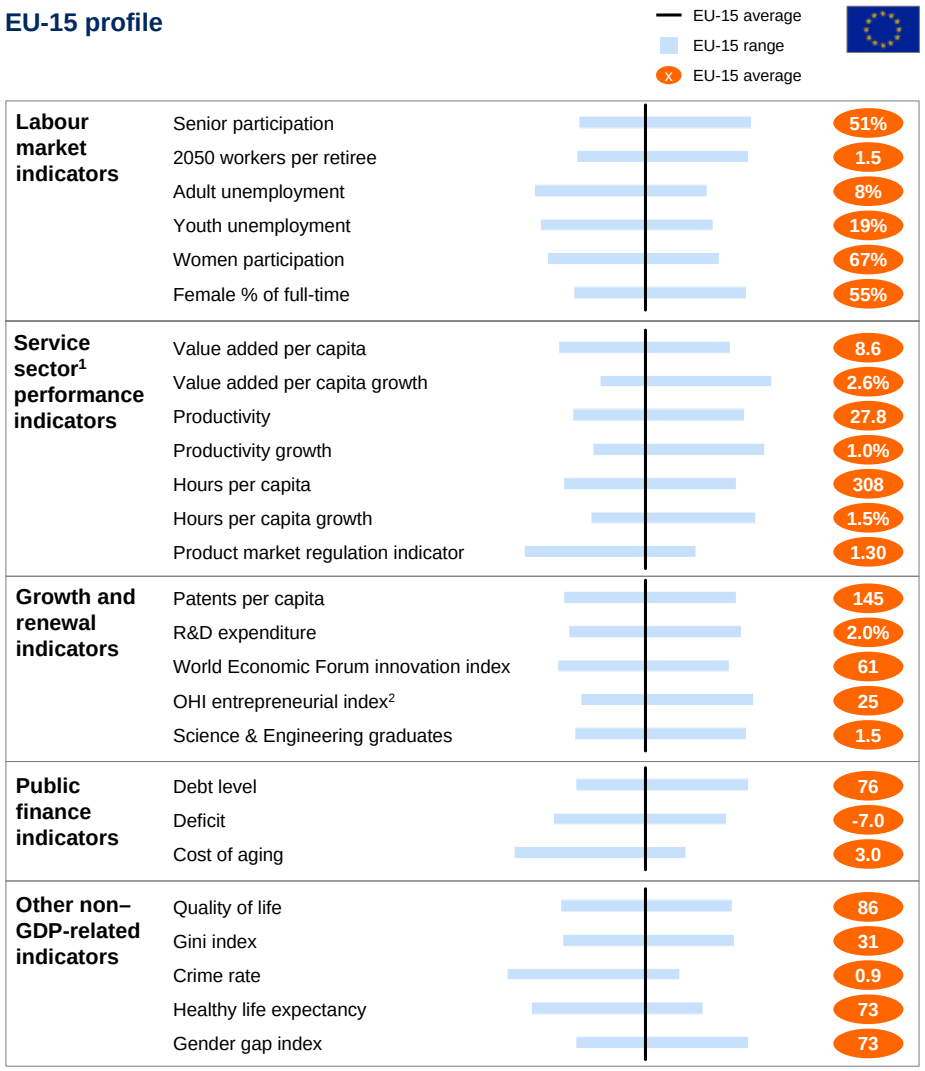
- Debt level: end 2009 gross government debt as percentage of GDP (Eurostat)
- Deficit: 2009 general government deficit as percentage of GDP (Eurostat)
- Cost of ageing: additional age-related public expenditures 2007–35 as a share of GDPs (European Commission)

OTHER NON–GDP-RELATED INDICATORS

- Quality of life: *Newsweek* quality of life index
- Gini index: index measuring the degree of inequality in the distribution of family income in a country (0 = total equality; 100 = maximum inequality) (CIA)
- Crime rate: homicides per 100,000 population (United Nations Office on Drugs and Crime)
- Healthy life expectancy: healthy life expectancy (HALE) at birth in years (World Health Organization)
- Gender gap index: index (0 = complete inequality, 1 = no gender gap) measuring the magnitude and scope of gender-based disparities in terms of economic participation and opportunity (outcomes on salaries, participation levels, and access to high-skilled employment), educational attainment (access to basic and higher-level education), political empowerment (representation in decision-making structures), and health and survival (life expectancy and sex ratio at birth) (WEF)

B. Profile of the EU-15

Exhibit A2.1
EU-15 profile

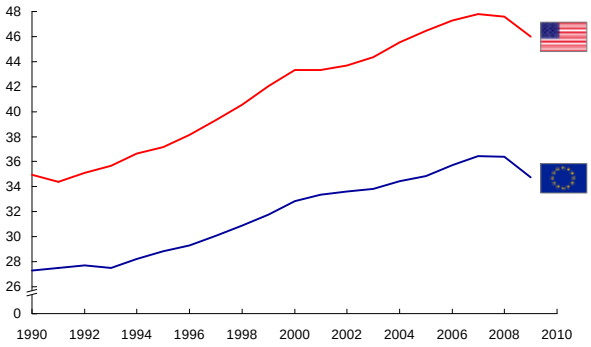


1 Local, business, and professional and financial services. Range and values indicated exclude Luxembourg due to the small economy strongly skewed to financial services.
2 Organizational Health Index.

SOURCE: Conference Board; OECD; Eurostat; EU-KLEMS; World Economic Forum; *Newsweek*; CIA; UNODC; IMF; European Commission; McKinsey Global Institute analysis

EU-15 per capita GDP

2009 $ PPP, thousand

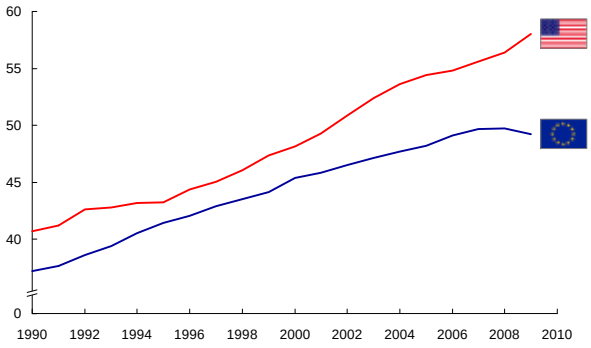


SOURCE: Conference Board; International Monetary Fund; McKinsey Global Institute analysis

Per capita GDP in the EU-15 has grown at the same pace as in the United States since 1990 but has lagged behind US per capita GDP by approximately a constant 25 per cent. Two diverging trends are responsible for this constant gap: a widening productivity gap compensated by improving employment.

EU-15 productivity

2009 $ PPP per hour worked, thousand

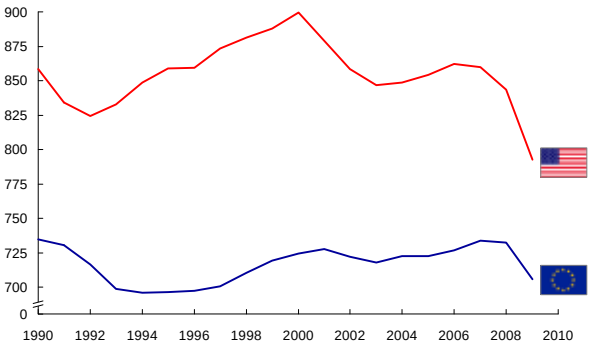


SOURCE: Conference Board; International Monetary Fund; OECD; McKinsey Global Institute analysis

EU-15 productivity was catching up with US productivity until the late 1990s. Since then, the productivity gap has widened again.

EU-15 labour input

Hours worked per capita

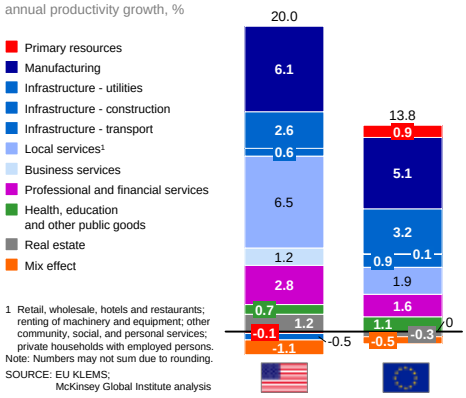


SOURCE: Conference Board; International Monetary Fund; OECD; McKinsey Global Institute analysis

Many EU economies improved their labour markets since the mid-1990s. The EU-15 per capita employment grew by nine percentage points from 1995 to 2007, while hours per employee fell by 7 per cent. During the world economic crisis, EU labour markets outperformed those in the United States—but at the expense of productivity.

EU-15 productivity growth decomposition

Sector contribution to 1995–2005 annual productivity growth, %



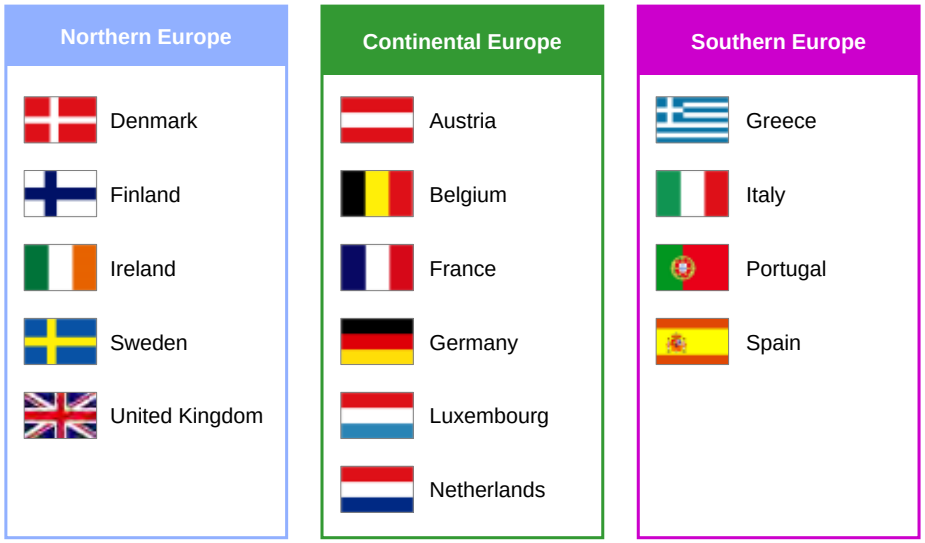
1 Retail, wholesale, hotels and restaurants; renting of machinery and equipment; other community, social, and personal services; private households with employed persons.
Note: Numbers may not sum due to rounding.
SOURCE: EU KLEMS; McKinsey Global Institute analysis

EU-15 productivity growth was dominated by manufacturing and infrastructure. But the EU-15 lagged behind the United States in local, business, and professional and financial services. These service sectors, as well as manufacturing and primary resources, also lag in productivity levels.

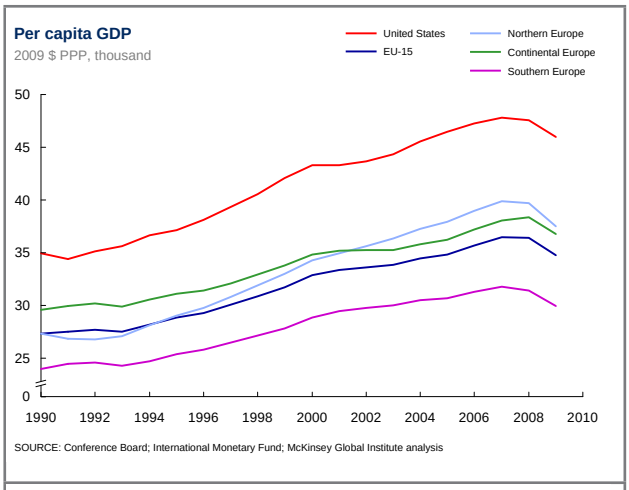
C. MGI's geographic clusters

Exhibit A2.2

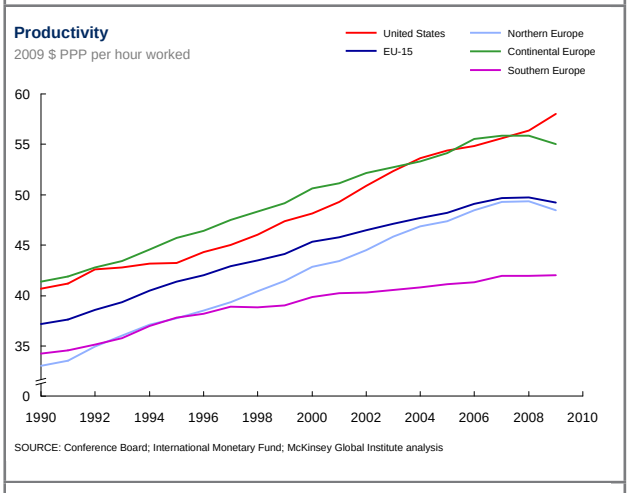
EU-15 – MGI's geographic clusters



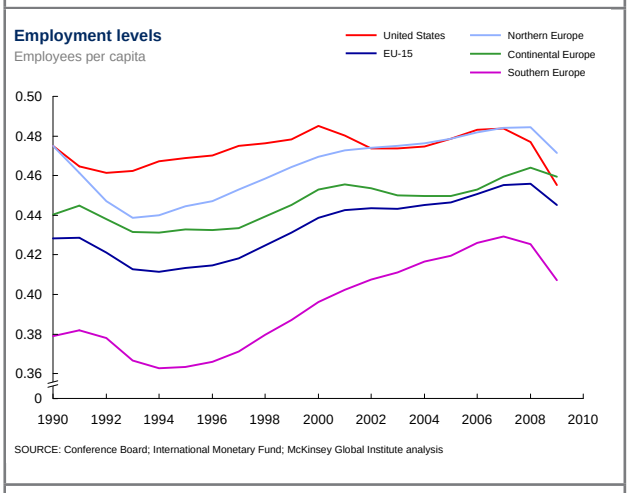
The geographical clusters of Northern Europe, Continental Europe, and Southern Europe show largely distinct patterns of aggregate performance.



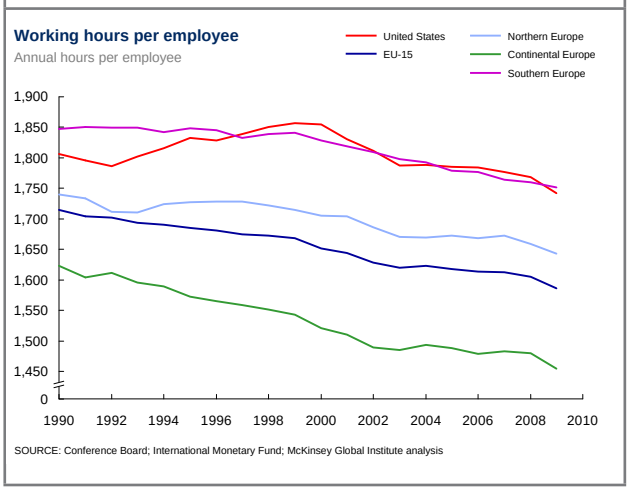
Northern European countries have posted higher growth in per capita GDP than the EU-15 average since 1990 and as a group have overtaken Continental Europe in the past decade.



Continental Europe enjoys high productivity, in line with US levels (with the exception of Austria). While Northern Europe has closed part of its productivity gap with the United States (and Ireland has overtaken the United States), Southern Europe has continued to lag behind with productivity growth particularly slow in Italy and Spain.



After the difficult economic period in the early 1990s, most Northern European countries reformed their labour markets and increased their employment levels. Southern Europe, particularly Spain, also posted high employment growth, albeit from low levels and partially reversed during the most recent crisis.



Employees in Southern Europe continue to work longer hours than do those in the rest of Europe.

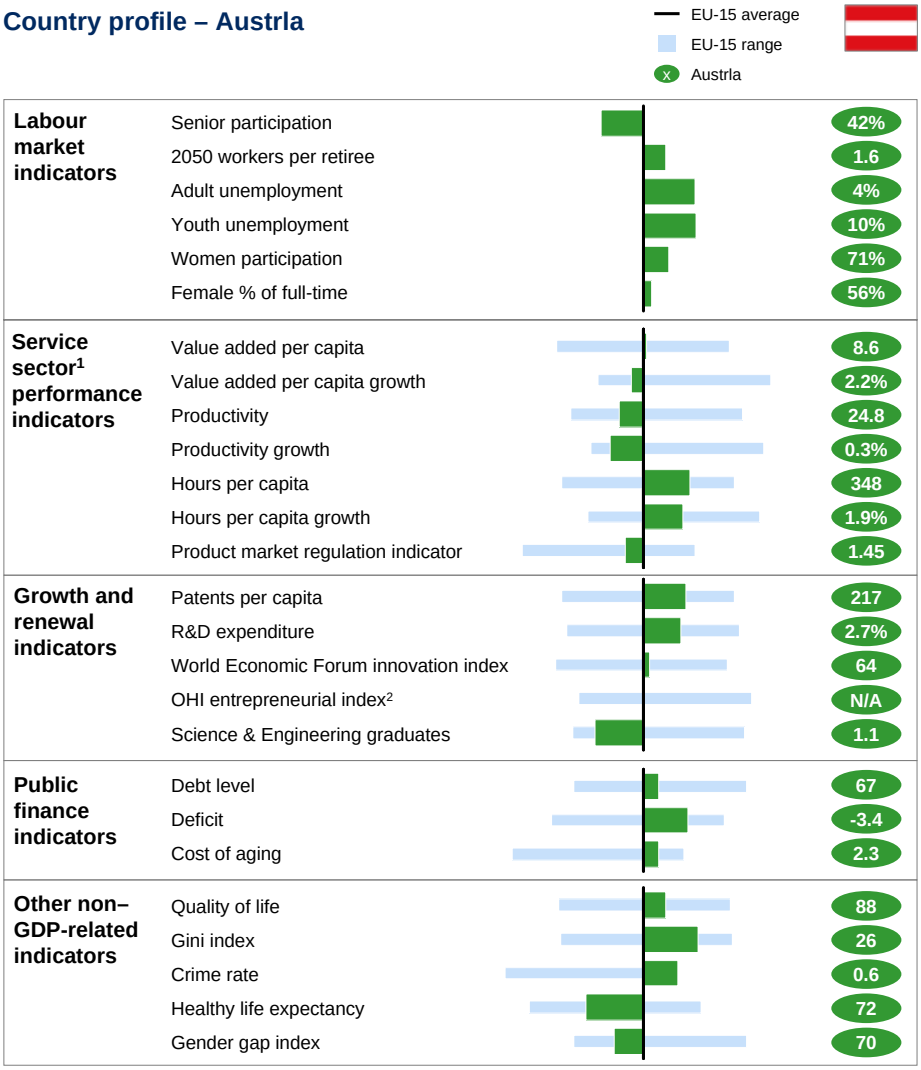
D. Country profiles

AUSTRIA

Austria scores comparatively well on labour market indicators but could further increase senior participation and female full-time work. In its service sectors, both productivity growth and level lag behind the EU-15 average.

Exhibit A2.3

Country profile – Austrla

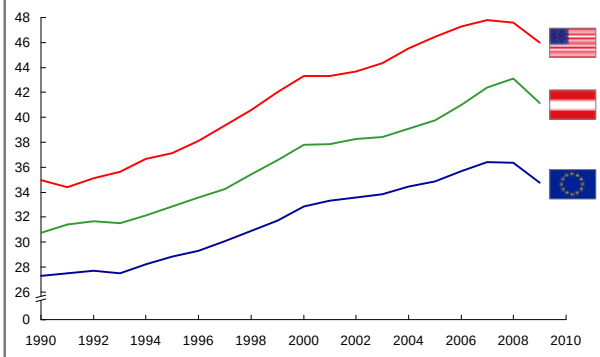


1 Local, business, and professional and financial services. Range and values indicated exclude Luxembourg due to the small economy strongly skewed to financial services.
2 Organizational Health Index.

SOURCE: Conference Board; OECD; Eurostat; EU-KLEMS; World Economic Forum; *Newsweek*; CIA; UNODC; IMF; European Commission; McKinsey Global Institute analysis

Per capita GDP – Austria

2009 $ PPP, thousand

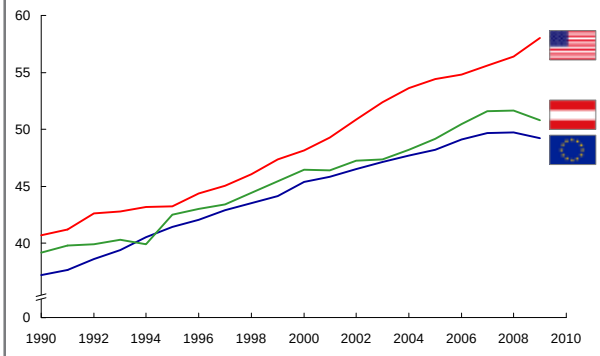


SOURCE: Conference Board; International Monetary Fund; McKinsey Global Institute analysis

Austria's per capita GDP is about 18 per cent higher than the EU-15 average (up from 12 to 14 per cent in the early 1990s), driven by unusually high labour utilisation for a Continental European country.

Productivity – Austria

2009 $ PPP per hour worked, thousand

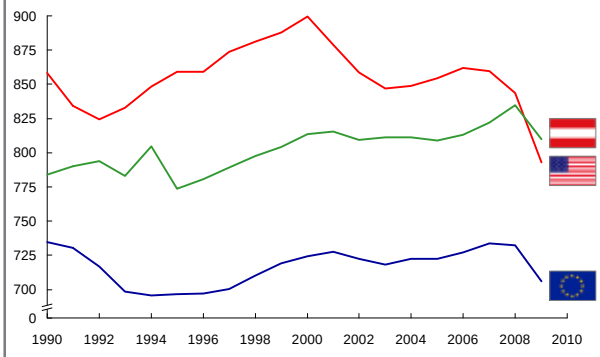


SOURCE: Conference Board; International Monetary Fund; OECD; McKinsey Global Institute analysis

Productivity grew in line with the EU-15 average at a relatively constant slight advantage.

Labour input – Austria

Hours worked per capita

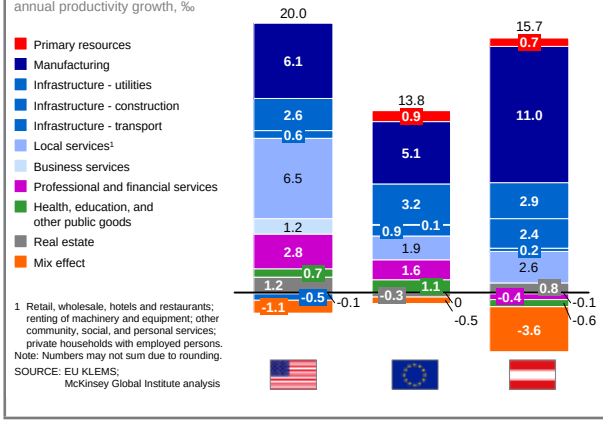


SOURCE: Conference Board; International Monetary Fund; OECD; McKinsey Global Institute analysis

Austria has increased its advantage in labour input against the EU-15 since 1990 and has exceeded the United States in hours worked per capita since the crisis. While hours per employee decreased in line with the EU-15 average, employment grew faster than in the rest of Europe.

Productivity growth decomposition – Austria

Sector contribution to 1995–2005 annual productivity growth, ‰



1 Retail, wholesale, hotels and restaurants; renting of machinery and equipment; other community, social, and personal services; private households with employed persons.
Note: Numbers may not sum due to rounding.
SOURCE: EU KLEMS; McKinsey Global Institute analysis

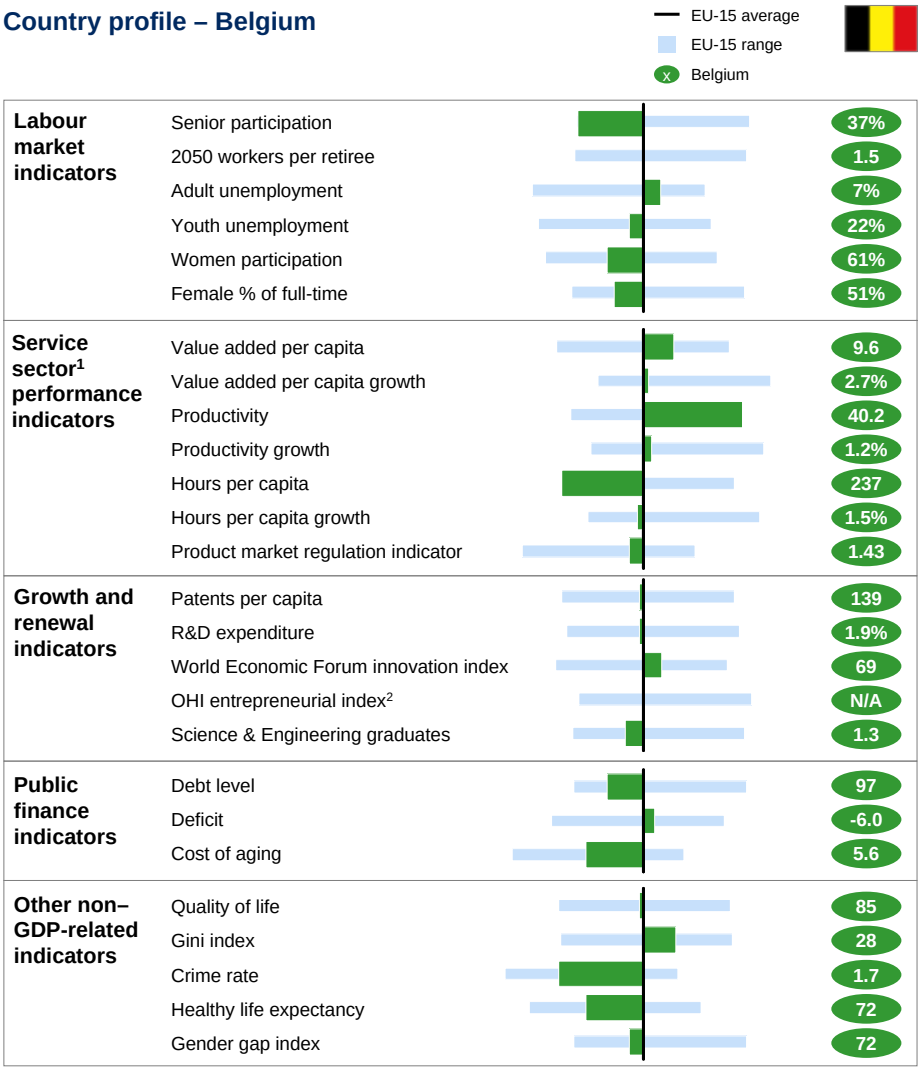
Productivity grew at almost the same pace as the rest of the EU-15 between 1995 and 2005, driven by manufacturing and partly balanced by a mix effect.

BELGIUM

While Belgium performs at or around the EU-15 average on most chosen labour market indicators, it has the lowest senior participation rate of the 15 economies. In services, its productivity is the highest but employment (in terms of hours) is the lowest of any EU-15 country. Belgium scores poorly on fiscal indicators with high public debt and a further high impact on public finances from ageing.

Exhibit A2.4

Country profile – Belgium

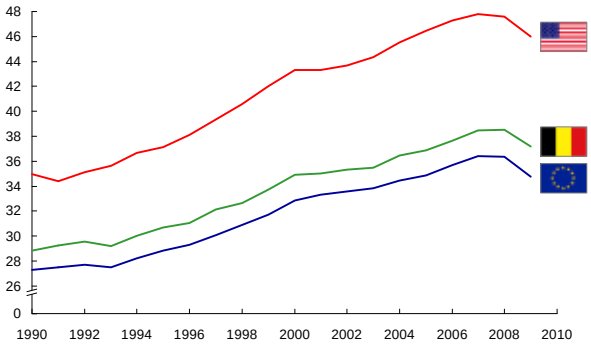


1 Local, business, and professional and financial services. Range and values indicated exclude Luxembourg due to the small economy strongly skewed to financial services.
2 Organizational Health Index.

SOURCE: Conference Board; OECD; Eurostat; EU-KLEMS; World Economic Forum; *Newsweek*; CIA; UNODC; IMF; European Commission; McKinsey Global Institute analysis

Per capita GDP – Belgium

2009 $ PPP, thousand

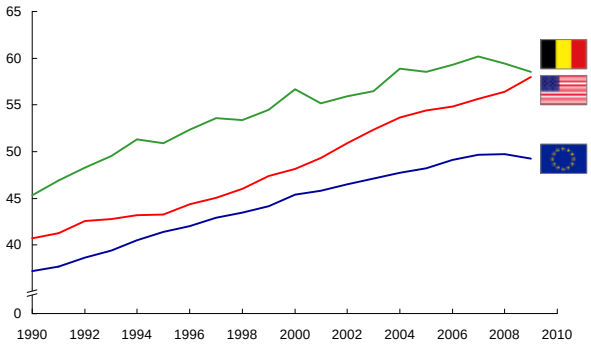


SOURCE: Conference Board; International Monetary Fund; McKinsey Global Institute analysis

Belgium's per capita GDP is 7 per cent higher than the EU-15 average. Its productivity advantage has fallen since the early 1990s, while hours per capita have increased (versus rough stability in the EU-15).

Productivity – Belgium

2009 $ PPP per hour worked, thousand

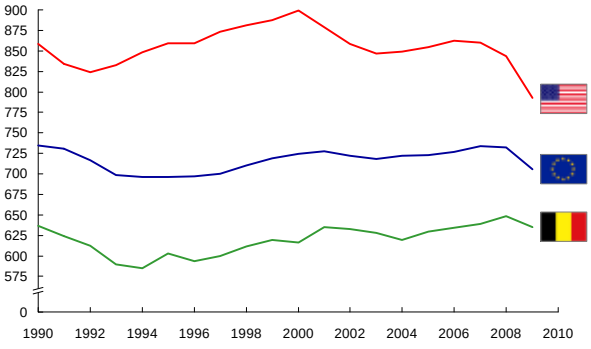


SOURCE: Conference Board; International Monetary Fund; OECD; McKinsey Global Institute analysis

Productivity has historically been higher than the EU-15 average and US levels. However, this advantage has decreased from around 25 per cent in the early 1990s to around 20 per cent in recent years.

Labour input – Belgium

Hours worked per capita

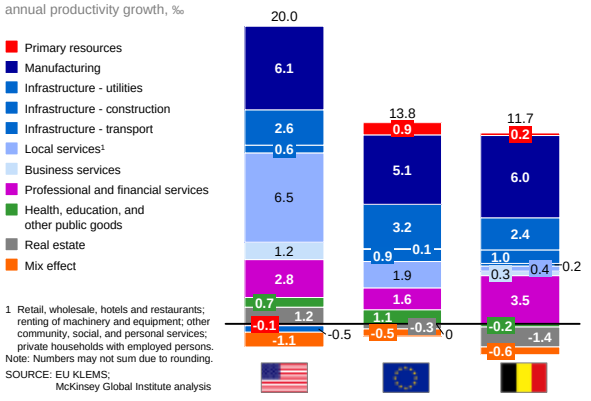


SOURCE: Conference Board; International Monetary Fund; OECD; McKinsey Global Institute analysis

Belgium's employees per capita and hours per employee are lower than the EU-15 average, resulting in an hours per capita gap of 10 per cent in 2009. The gap was even wider—15 per cent—in the early 1990s; the decrease since then is due to increased employment and a slower decline in working hours.

Productivity growth decomposition – Belgium

Sector contribution to 1995–2005 annual productivity growth, ‰



1 Retail, wholesale, hotels and restaurants; renting of machinery and equipment; other community, social, and personal services; private households with employed persons.
Note: Numbers may not sum due to rounding.
SOURCE: EU KLEMS; McKinsey Global Institute analysis

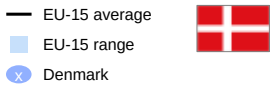
Productivity growth in Belgium has been slower than in the EU-15, but with a relatively similar sector contribution as in the rest of Europe. A major difference between 1995 and 2005 was the larger contribution from financial services to productivity growth combined with a low contribution from local services.

DENMARK

Denmark scores well on most indicators we examine.

Exhibit A2.5

Country profile – Denmark



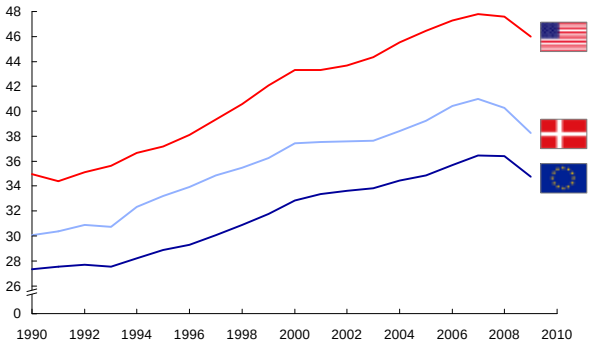
Labour market indicators	Senior participation	60%
	2050 workers per retiree	2.0
	Adult unemployment	5%
	Youth unemployment	11%
	Women participation	78%
	Female % of full-time	66%
Service sector[1] performance indicators	Value added per capita	10.9
	Value added per capita growth	2.9%
	Productivity	37.8
	Productivity growth	1.2%
	Hours per capita	288
	Hours per capita growth	1.7%
	Product market regulation indicator	1.06
Growth and renewal indicators	Patents per capita	194
	R&D expenditure	2.7%
	World Economic Forum innovation index	80
	OHI entrepreneurial index[2]	39%
	Science & Engineering graduates	1.6
Public finance indicators	Debt level	42
	Deficit	-2.7
	Cost of aging	3.6
Other non–GDP-related indicators	Quality of life	91
	Gini index	29
	Crime rate	0.7
	Healthy life expectancy	72
	Gender gap index	76

1 Local, business, and professional and financial services. Range and values indicated exclude Luxembourg due to the small economy strongly skewed to financial services.
2 Organizational Health Index.

SOURCE: Conference Board; OECD; Eurostat; EU-KLEMS; World Economic Forum; *Newsweek*; CIA; UNODC; IMF; European Commission; McKinsey Global Institute analysis

Per capita GDP – Denmark

2009 $ PPP, thousand

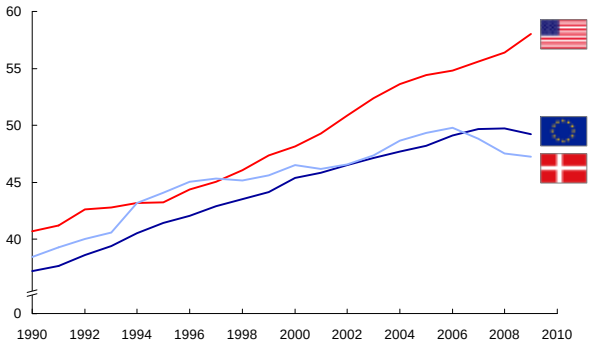


SOURCE: Conference Board; International Monetary Fund; McKinsey Global Institute analysis

Denmark's per capita GDP advantage against the EU-15 has ranged from 10 to 16 per cent over the past 20 years. A fast increase in labour utilisation compensated for slow growth (and a recent decline) in productivity.

Productivity – Denmark

2009 $ PPP per hour worked, thousand

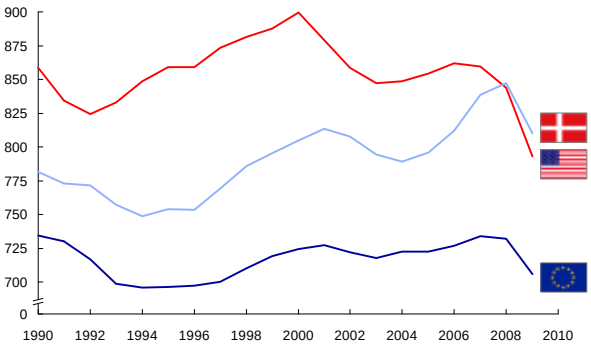


SOURCE: Conference Board; International Monetary Fund; OECD; McKinsey Global Institute analysis

Productivity has grown more slowly than the EU-15, and, since 2006, has declined sharply at the same time as a substantial increase in employment.

Labour input – Denmark

Hours worked per capita

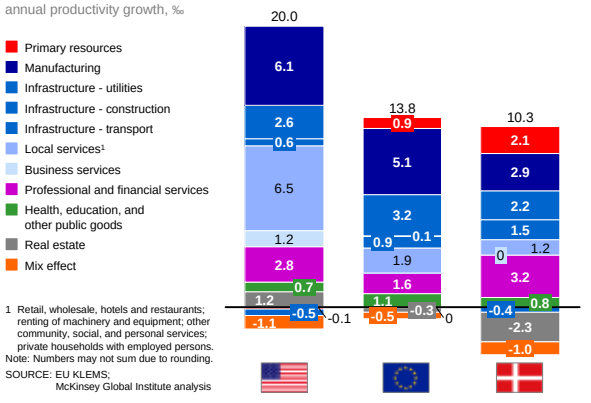


SOURCE: Conference Board; International Monetary Fund; OECD; McKinsey Global Institute analysis

Denmark's labour market has had employment rates at 17 per cent above EU-15 levels, and employment has recently surpassed US levels. Denmark was the only EU-15 country apart from Sweden to increase hours per employee since 1990.

Productivity growth decomposition – Denmark

Sector contribution to 1995–2005 annual productivity growth, ‰



1 Retail, wholesale, hotels and restaurants; renting of machinery and equipment; other community, social, and personal services; private households with employed persons.
Note: Numbers may not sum due to rounding.
SOURCE: EU KLEMS; McKinsey Global Institute analysis

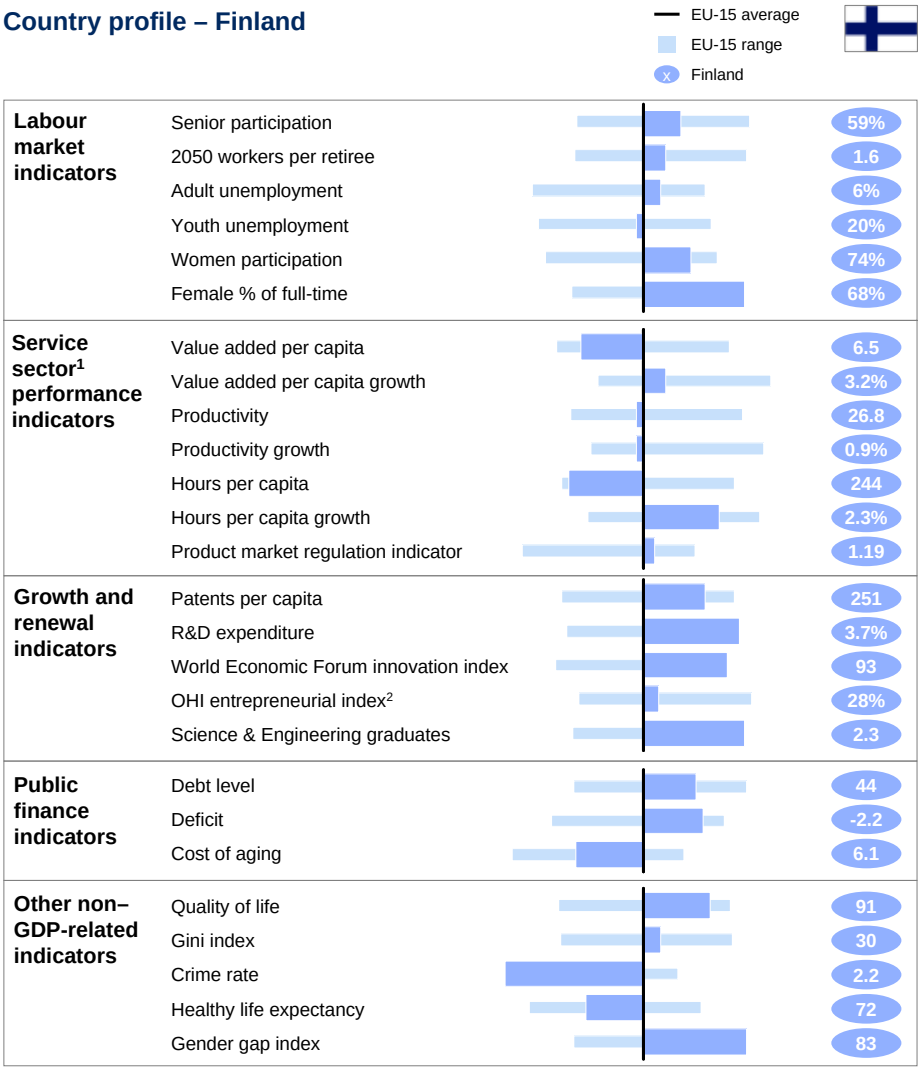
Productivity growth in Denmark from 1995 to 2005 was slower than in the EU-15. Manufacturing and utilities contributed less than in other EU-15 countries, and real estate had a negative impact. But professional and financial services performed strongly on productivity.

FINLAND

Finland scores well on most of the indicators we survey, with the exception of service sector value added and hours worked per capita.

Exhibit A2.6

Country profile – Finland

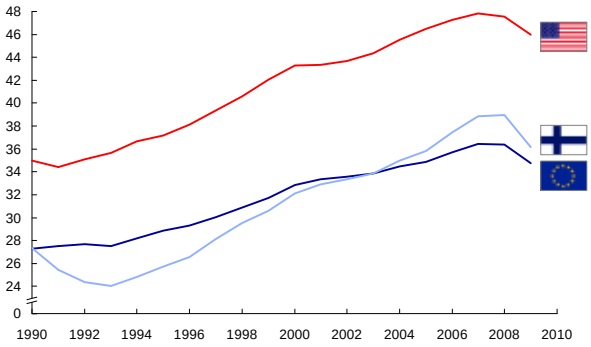


1 Local, business, and professional and financial services. Range and values indicated exclude Luxembourg due to the small economy strongly skewed to financial services.
2 Organizational Health Index.

SOURCE: Conference Board; OECD; Eurostat; EU-KLEMS; World Economic Forum; *Newsweek*; CIA; UNODC; IMF; European Commission; McKinsey Global Institute analysis

Per capita GDP – Finland

2009 $ PPP, thousand

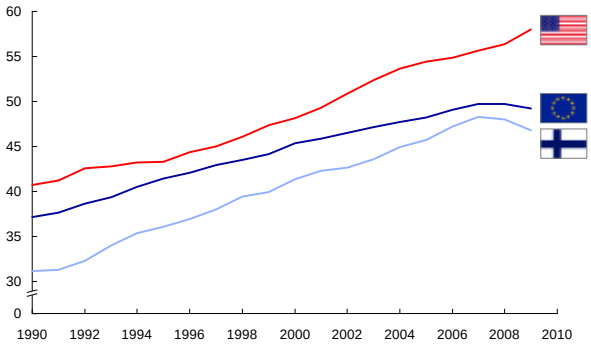


SOURCE: Conference Board; International Monetary Fund; McKinsey Global Institute analysis

Finland's per capita GDP surpassed EU-15 levels in the early 2000s, catching up on productivity and growing labour input faster (after the 1990s crisis). Per capita GDP was 7 per cent ahead of the EU-15 average prior to the recent global economic downturn.

Productivity – Finland

2009 $ PPP per hour worked, thousand

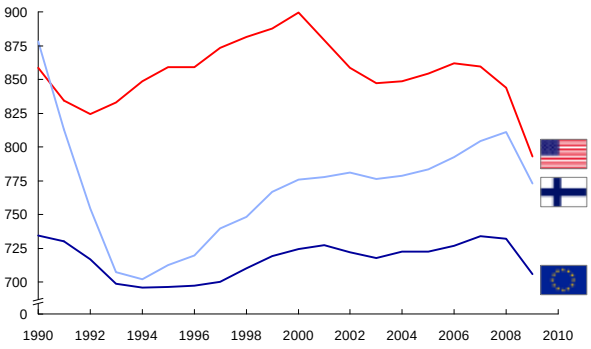


SOURCE: Conference Board; International Monetary Fund; OECD; McKinsey Global Institute analysis

Productivity has been catching up to the EU-15 average but still lags behind by 3 to 5 percentage points.

Labour input – Finland

Hours worked per capita

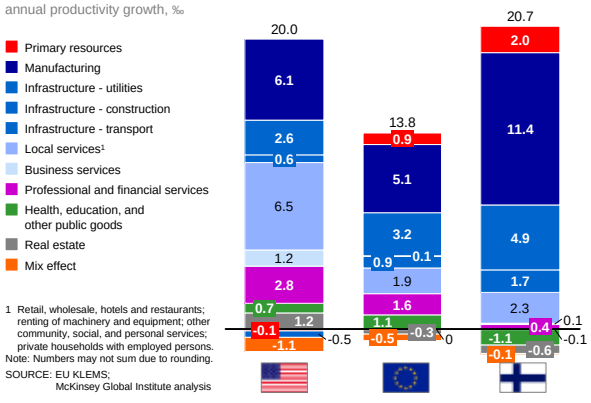


SOURCE: Conference Board; International Monetary Fund; OECD; McKinsey Global Institute analysis

After a major employment crisis in the early 1990s, Finland recovered. It gained a 10 per cent labour utilisation advantage over the EU-15 and almost matched US levels. The key driver was a strong increase in employment, in particular in the public sector (with 148,000 new jobs out of a total of 503,000), complemented by a slower decrease in hours worked than in other European countries.

Productivity growth decomposition – Finland

Sector contribution to 1995–2005 annual productivity growth, ‰



1 Retail, wholesale, hotels and restaurants; renting of machinery and equipment; other community, social, and personal services; private households with employed persons.
Note: Numbers may not sum due to rounding.
SOURCE: EU KLEMS; McKinsey Global Institute analysis

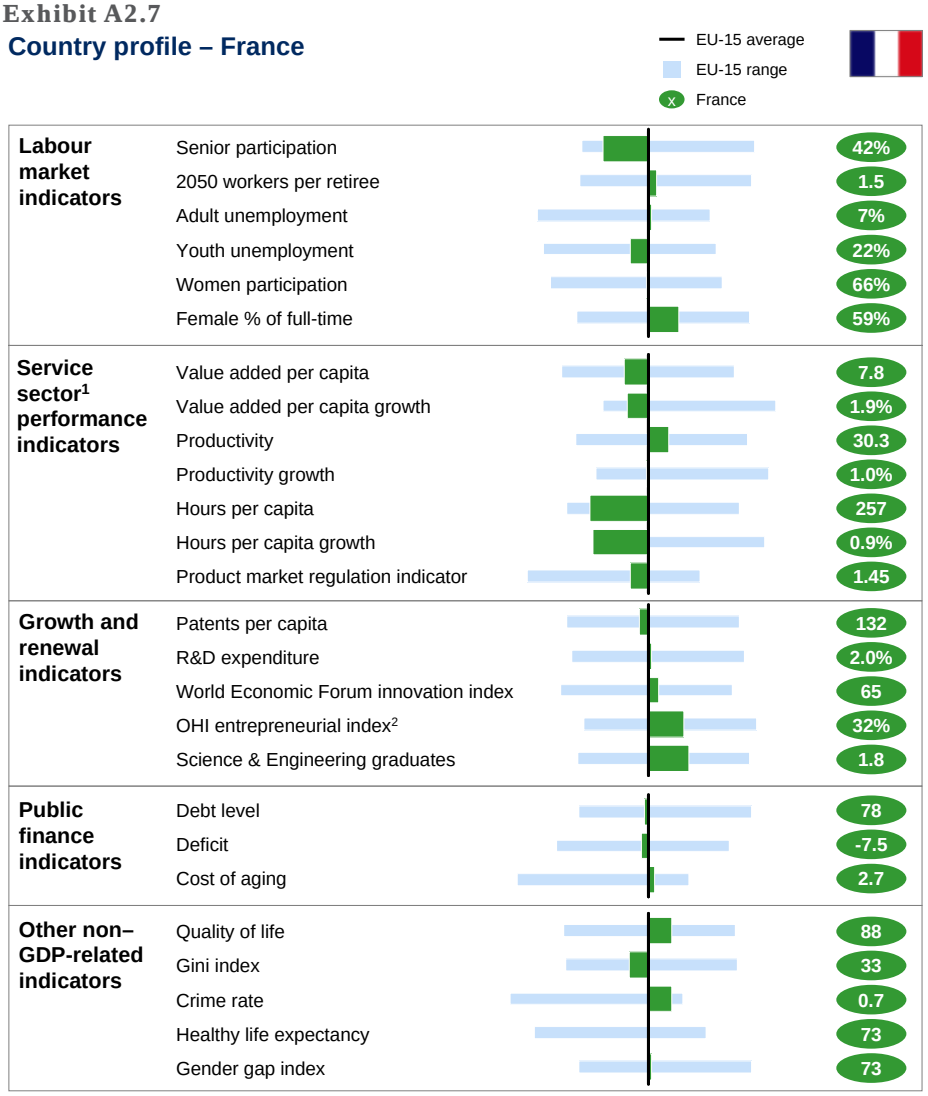
More than 50 per cent of productivity growth in 1995 to 2005 was driven by manufacturing; 42 per cent of manufacturing productivity growth came from communications equipment, with wood, pulp, and paper contributing an additional 19 per cent. Local services, utilities, and transport contributed more to overall productivity than those sectors did in the EU-15.

FRANCE

For most of the indicators, France is in line with the EU-15 average. France scores relatively well on its projected dependency ratio and female full-time employment but lags significantly behind on senior participation and the development of its service sectors.

Exhibit A2.7

Country profile – France

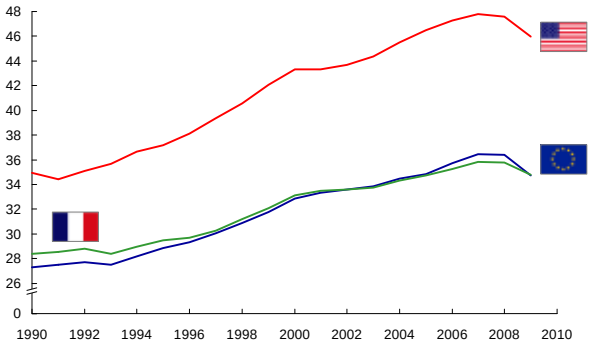


1 Local, business, and professional and financial services. Range and values indicated exclude Luxembourg due to the small economy strongly skewed to financial services.
2 Organizational Health Index.

SOURCE: Conference Board; OECD; Eurostat; EU-KLEMS; World Economic Forum; *Newsweek*; CIA; UNODC; IMF; European Commission; McKinsey Global Institute analysis

Per capita GDP – France

2009 $ PPP, thousand

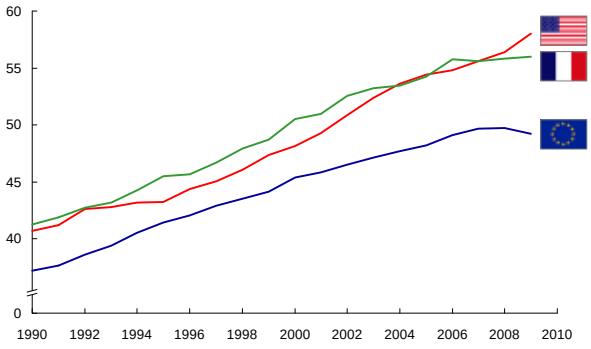


SOURCE: Conference Board; International Monetary Fund; McKinsey Global Institute analysis

France's per capita GDP has developed in line with the EU-15 average. Higher productivity growth than the EU-15 average was compensation for a faster decline in working hours. A sizable gap of around 25 per cent persists with the United States.

Productivity – France

2009 $ PPP per hour worked, thousand

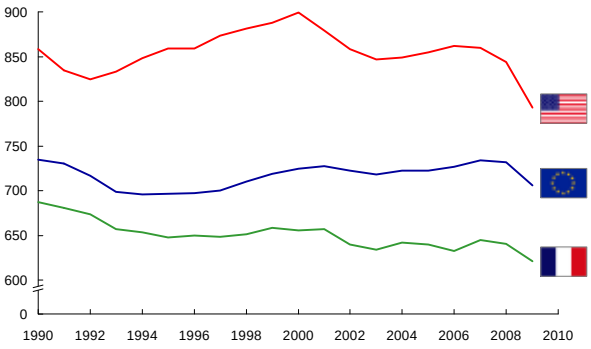


SOURCE: Conference Board; International Monetary Fund; OECD; McKinsey Global Institute analysis

French productivity remains significantly higher than the EU-15 average. Until the crisis, it had been at par with or even ahead of the United States.

Labour input – France

Hours worked per capita

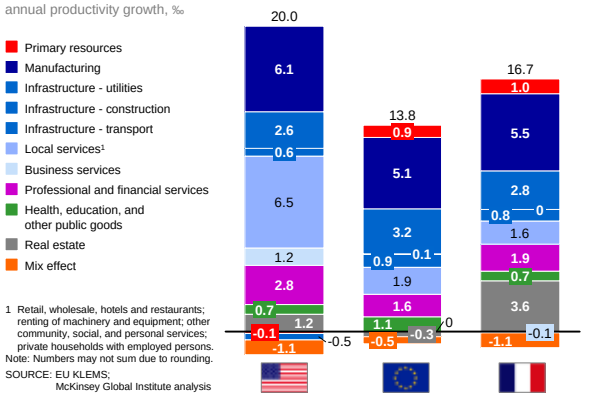


SOURCE: Conference Board; International Monetary Fund; OECD; McKinsey Global Institute analysis

France's labour utilisation has had a large and widening gap with the EU-15 over the past two decades, lagging behind the EU-15 average by 12 per cent in 2009 and the United States by 22 per cent.

Productivity growth decomposition – France

Sector contribution to 1995–2005 annual productivity growth, ‰



1 Retail, wholesale, hotels and restaurants; renting of machinery and equipment; other community, social, and personal services; private households with employed persons.
Note: Numbers may not sum due to rounding.
SOURCE: EU KLEMS; McKinsey Global Institute analysis

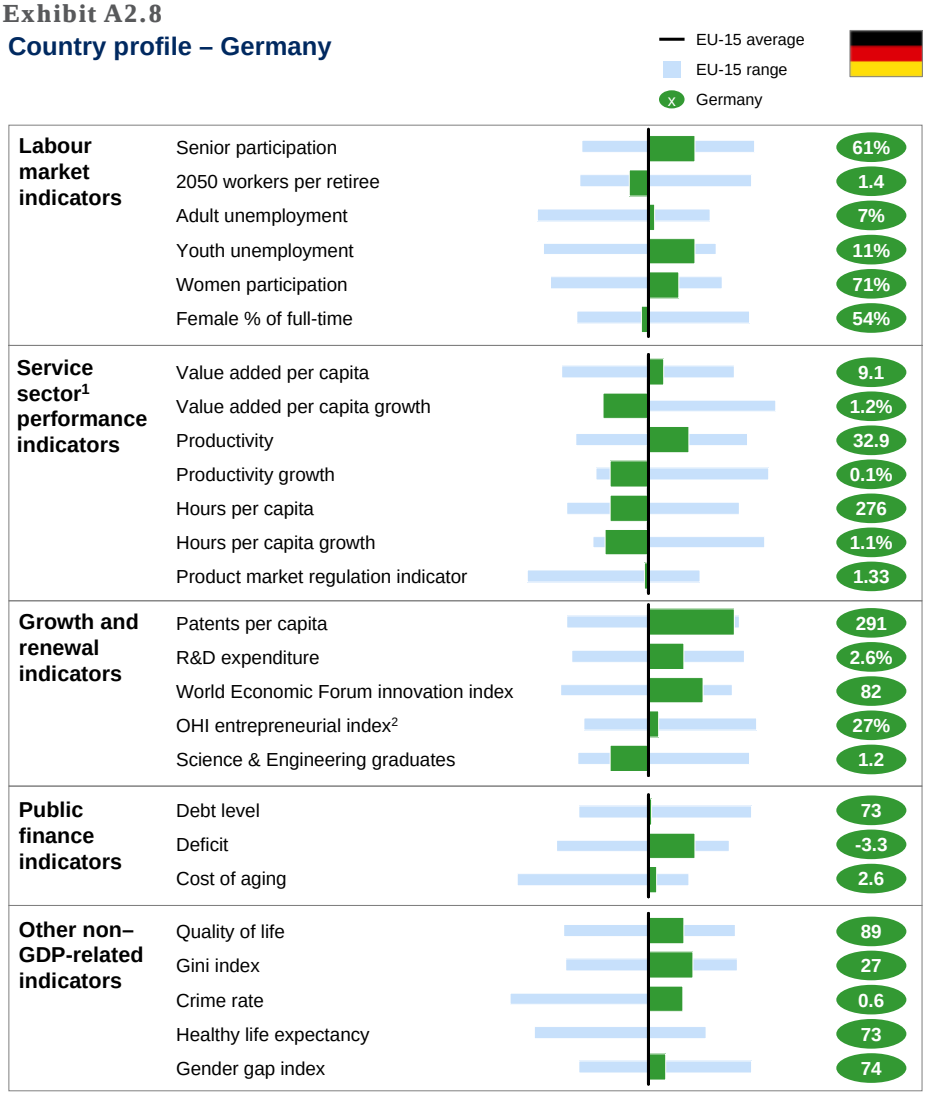
Productivity growth has been driven by manufacturing and infrastructure, in line with EU-15 average. France has lagged behind the United States in local, business, and professional and financial services.

GERMANY

Compared with the EU-15, Germany scores particularly well on unemployment of young people, patents, and innovation. Germany also had one of the smallest public deficits in 2009. In contrast, it lags behind in female full-time employment, hours per employee, and the development of its service sectors.

Exhibit A2.8

Country profile – Germany

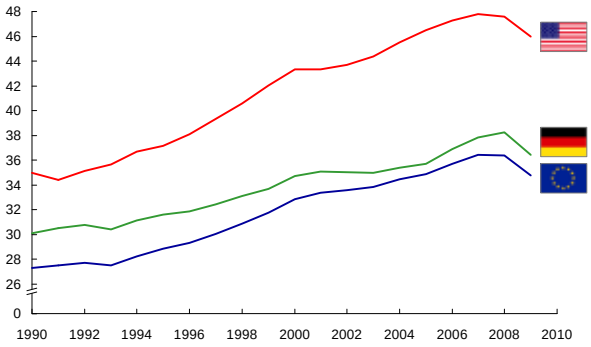


1 Local, business, and professional and financial services. Range and values indicated exclude Luxembourg due to the small economy strongly skewed to financial services.
2 Organizational Health Index.

SOURCE: Conference Board; OECD; Eurostat; EU-KLEMS; World Economic Forum; *Newsweek*; CIA; UNODC; IMF; European Commission; McKinsey Global Institute analysis

Per capita GDP – Germany

2009 $ PPP, thousand

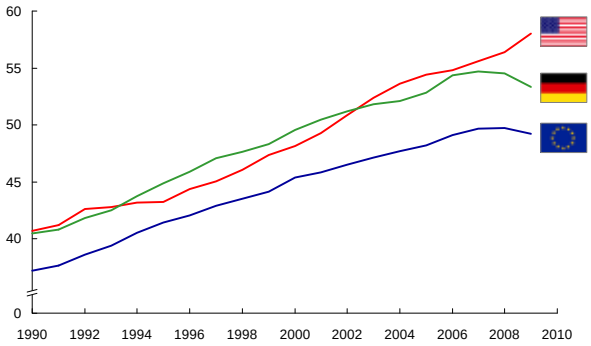


SOURCE: Conference Board; International Monetary Fund; McKinsey Global Institute analysis

Germany's per capita GDP is converging down to the EU-15 average. The economy's historically high productivity has been losing steam in recent years. A trend of falling working hours has only partly and recently been compensated for by improvements in employment.

Productivity – Germany

2009 $ PPP per hour worked, thousand

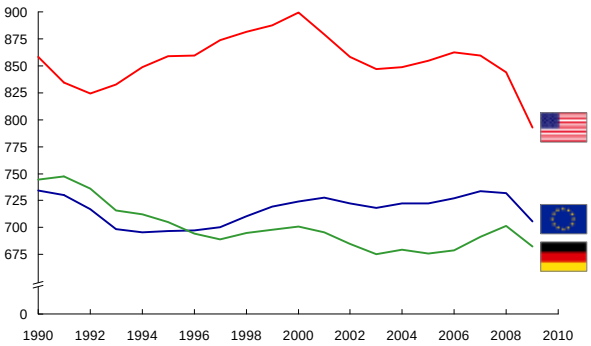


SOURCE: Conference Board; International Monetary Fund; OECD; McKinsey Global Institute analysis

Until recently, productivity has been in line with US levels. But it has lost steam over recent years, lowering Germany's productivity advantage against the EU-15.

Labour input – Germany

Hours worked per capita

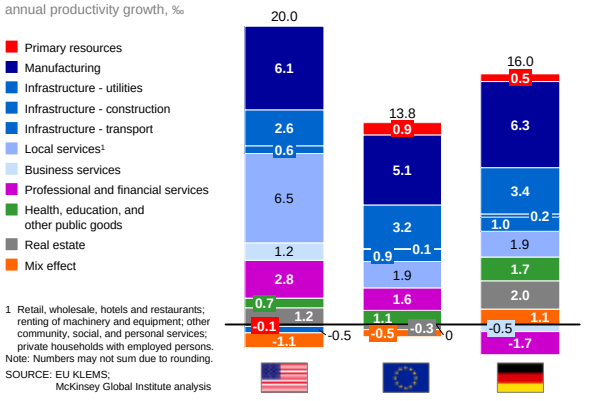


SOURCE: Conference Board; International Monetary Fund; OECD; McKinsey Global Institute analysis

Germany's comparatively low labour utilisation is driven by very low working hours per employee (1,400 against 1,600 in the EU-15). Partially compensating is an above-average employment ratio of 0.49 employees per capita, compared with 0.45 in the EU-15.

Productivity growth decomposition – Germany

Sector contribution to 1995–2005 annual productivity growth, ‰



1 Retail, wholesale, hotels and restaurants; renting of machinery and equipment; other community, social, and personal services; private households with employed persons.
Note: Numbers may not sum due to rounding.
SOURCE: EU KLEMS; McKinsey Global Institute analysis

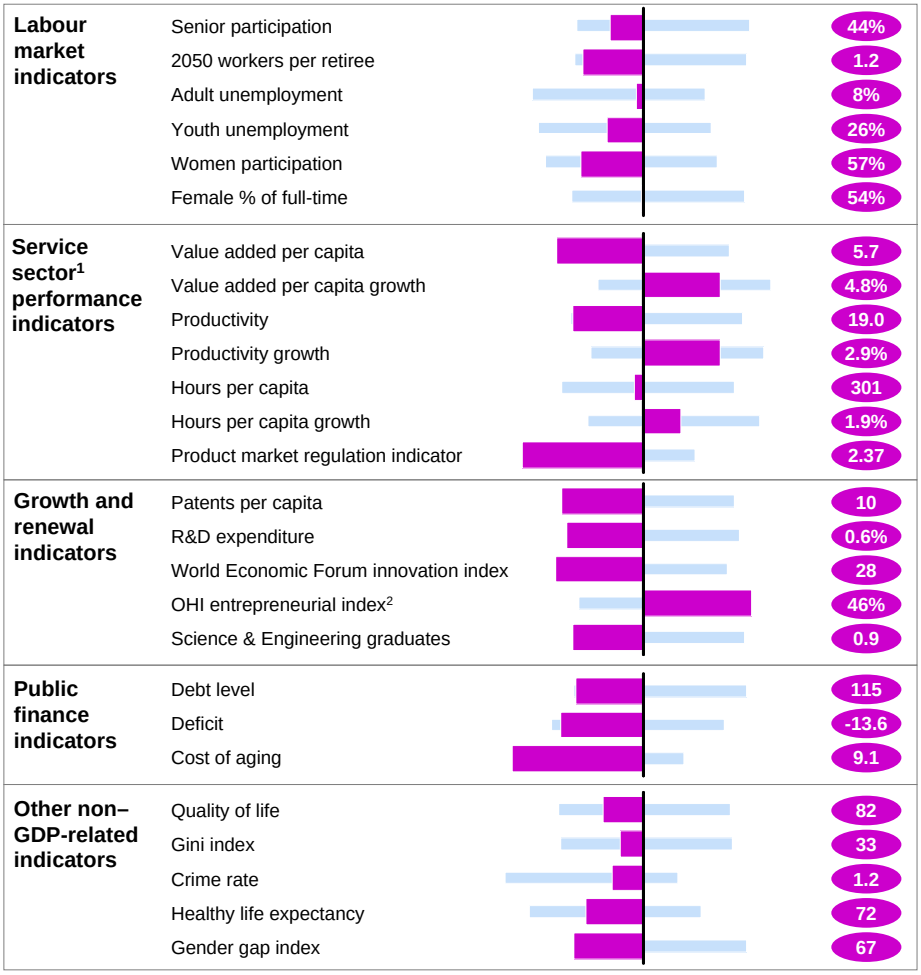
Productivity growth has been dominated by manufacturing and infrastructure in line with the EU-15 average. Germany has lagged behind the United States in local, business, and professional and financial services.

GREECE

Greece is currently facing a severe financial and economic crisis reflecting the fact that strong economic growth over the past decade went hand in hand with soaring debt that is now at an unsustainable level. An ageing population will place additional strain on the country's public finances. Greece appears to have opted implicitly for a trade-off between very high working hours per employee and very low participation of senior workers and women. Greece has the strictest product market regulation in the EU-15.

Exhibit A2.9

Country profile – Greece

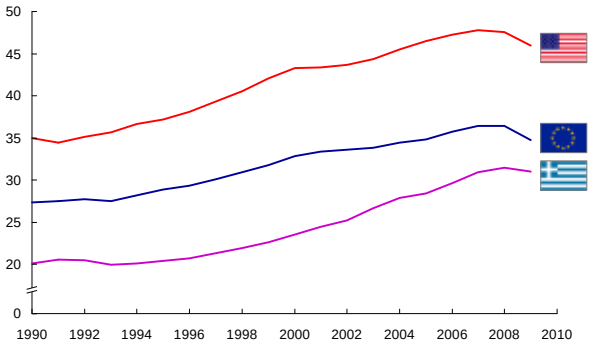


1 Local, business, and professional and financial services. Range and values indicated exclude Luxembourg due to the small economy strongly skewed to financial services.
2 Organizational Health Index.

SOURCE: Conference Board; OECD; Eurostat; EU-KLEMS; World Economic Forum; *Newsweek*; CIA; UNODC; IMF; European Commission; McKinsey Global Institute analysis

Per capita GDP – Greece

2009 $ PPP, thousand

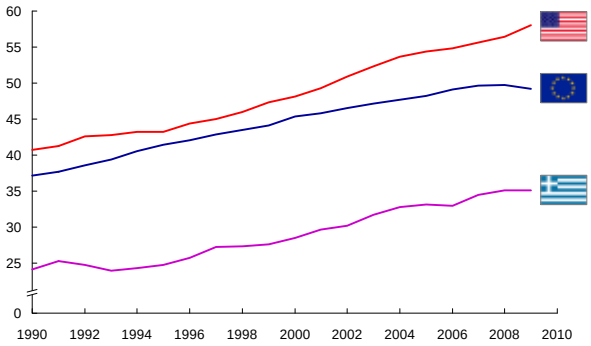


SOURCE: Conference Board; International Monetary Fund; McKinsey Global Institute analysis

Per capita GDP has continuously caught up with the EU-15 average from the mid-1990s through to 2009, closing the gap from more than 25 per cent to around 10 per cent. Part of this growth seems to have been fuelled by high debt.

Productivity – Greece

2009 $ PPP per hour worked, thousand

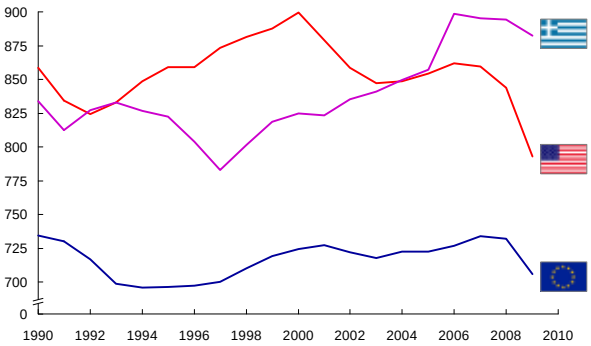


SOURCE: Conference Board; International Monetary Fund; OECD; McKinsey Global Institute analysis

After a period of stagnation in the early 1990s, Greece cut its productivity gap with the EU-15 from 40 per cent in 1995 to between 26 and 29 per cent recently.

Labour input – Greece

Hours worked per capita

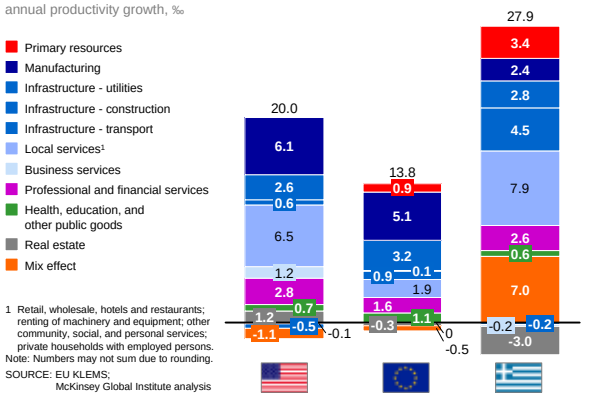


SOURCE: Conference Board; International Monetary Fund; OECD; McKinsey Global Institute analysis

Labour utilisation was 25 per cent above EU-15 levels in 2009, driven by the fact that Greece's reported hours per employee was 33 per cent higher than the EU-15 average. In contrast, employment rates were below the EU-15 average by 7 per cent.

Productivity growth decomposition – Greece

Sector contribution to 1995–2005 annual productivity growth, ‰



1 Retail, wholesale, hotels and restaurants; renting of machinery and equipment; other community, social, and personal services; private households with employed persons.
Note: Numbers may not sum due to rounding.
SOURCE: EU KLEMS; McKinsey Global Institute analysis

Greece caught up on productivity across almost all sectors from 1995 to 2005 and also enjoyed a positive mix effect.

IRELAND

While Ireland scores well on service sector indicators, it lags behind in several innovation indicators and needs to tackle its high deficit.

Exhibit A2.10

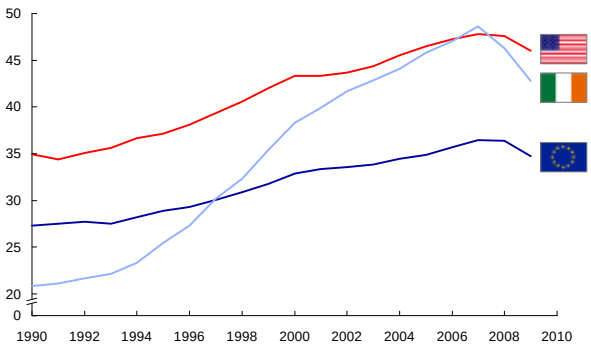
Country profile – Ireland

1 Local, business, and professional and financial services. Range and values indicated exclude Luxembourg due to the small economy strongly skewed to financial services.
2 Organizational Health Index.

SOURCE: Conference Board; OECD; Eurostat; EU-KLEMS; World Economic Forum; *Newsweek*; CIA; UNODC; IMF; European Commission; McKinsey Global Institute analysis

Per capita GDP – Ireland

2009 $ PPP, thousand

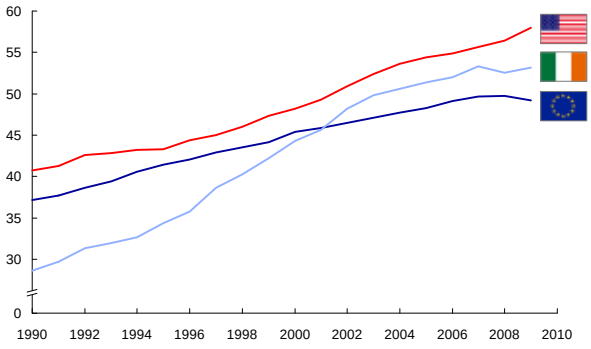


SOURCE: Conference Board; International Monetary Fund; McKinsey Global Institute analysis

Ireland has significantly outpaced the EU-15 on per capita GDP, productivity, and employment, overtaking the EU-15 average by a wide margin. Per capita GDP grew at a 5 per cent annual rate from 1990 to 2007, compared with 2 per cent for the EU-15 average. But Ireland has been hard hit by the crisis: its per capita GDP fell 6 per cent per annum from 2007 to 2009, compared with a 2 per cent decline on average in the EU-15.

Productivity – Ireland

2009 $ PPP per hour worked, thousand

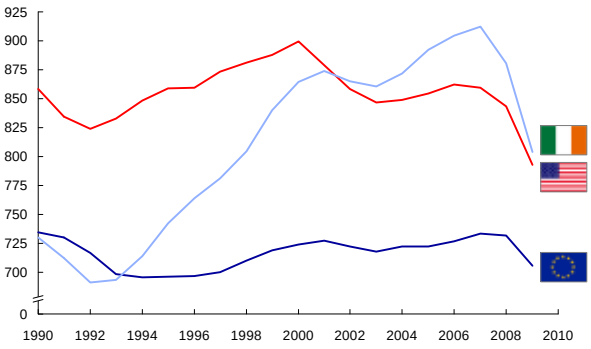


SOURCE: Conference Board; International Monetary Fund; OECD; McKinsey Global Institute analysis

Productivity grew at a faster pace than in the EU-15, turning a 20 per cent gap in 1990 into an 8 per cent advantage in 2009.

Labour input – Ireland

Hours worked per capita

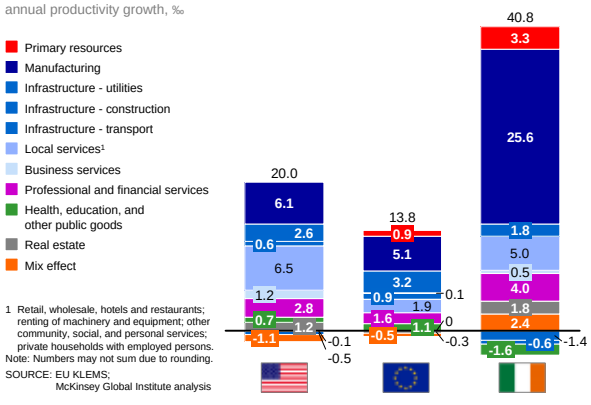


SOURCE: Conference Board; International Monetary Fund; OECD; McKinsey Global Institute analysis

While hours per employee declined faster in Ireland than the EU-15, they remain at 15 per cent above average levels. Between 1990 and 2007, Ireland turned a 24 per cent gap in employees per capita into an 8 per cent advantage, before falling back sharply to 2 per cent below EU-15 levels in 2009.

Productivity growth decomposition – Ireland

Sector contribution to 1995–2005 annual productivity growth, ‰



1 Retail, wholesale, hotels and restaurants; renting of machinery and equipment; other community, social, and personal services; private households with employed persons.
Note: Numbers may not sum due to rounding.
SOURCE: EU KLEMS; McKinsey Global Institute analysis

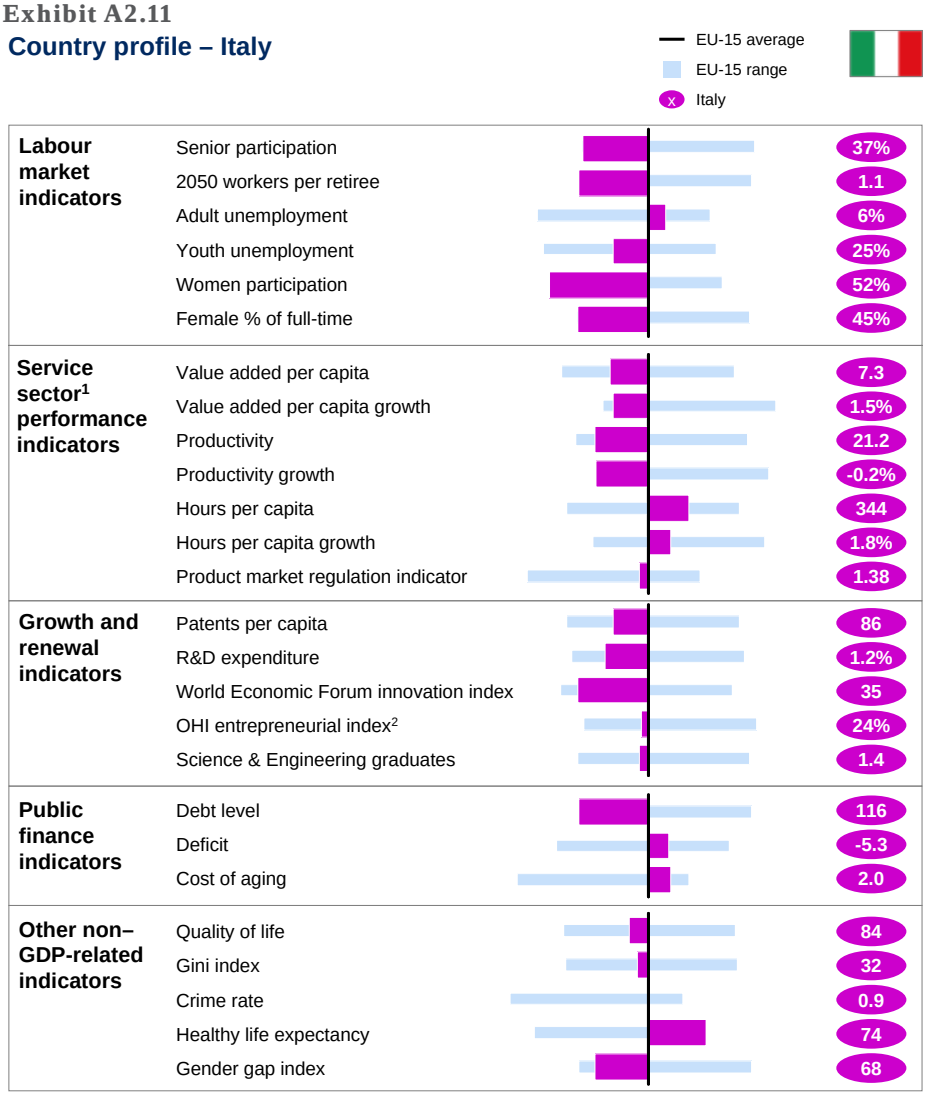
From 1995 to 2005, productivity growth was most pronounced in manufacturing; chemicals and pharmaceuticals accounted for 24 per cent of manufacturing productivity growth. Services productivity also contributed more to Ireland's overall productivity growth than in the rest of the EU-15.

ITALY

Compared with the EU-15 average, Italy has very high hours per employee but very low senior and women participation. It lags behind the EU-15 on services productivity as well as innovation, and it also had the highest public debt of any EU-15 country in 2009.

Exhibit A2.11

Country profile – Italy

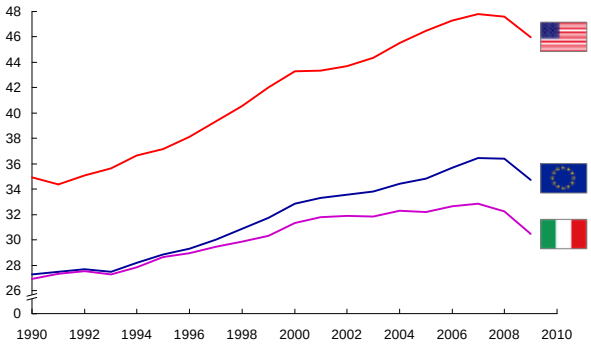


1 Local, business, and professional and financial services. Range and values indicated exclude Luxembourg due to the small economy strongly skewed to financial services.
2 Organizational Health Index.

SOURCE: Conference Board; OECD; Eurostat; EU-KLEMS; World Economic Forum; *Newsweek*; CIA; UNODC; IMF; European Commission; McKinsey Global Institute analysis

Per capita GDP – Italy

2009 $ PPP, thousand

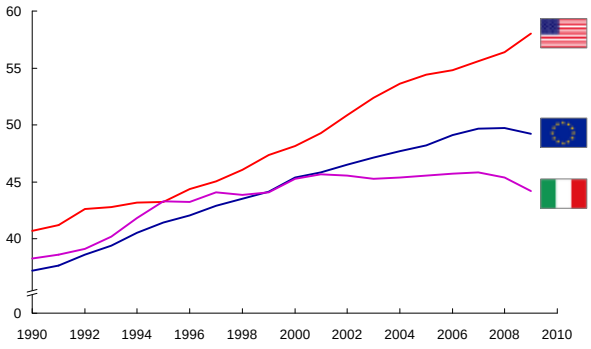


SOURCE: Conference Board; International Monetary Fund; McKinsey Global Institute analysis

Italy's per capita GDP has lost ground against the EU-15 average per capita since the late 1990s as productivity has stagnated and participation rates among women and senior workers have remained low. The per capita GDP gap stood at 9 per cent in 2009.

Productivity – Italy

2009 $ PPP per hour worked, thousand

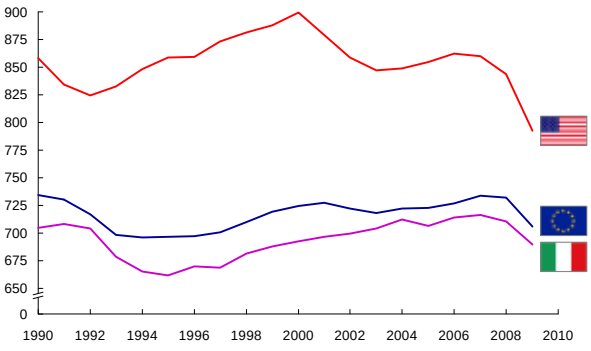


SOURCE: Conference Board; International Monetary Fund; OECD; McKinsey Global Institute analysis

Productivity matched the EU-15 average until 2000, but it then started stagnating and has declined since the global economic downturn.

Labour input – Italy

Hours worked per capita

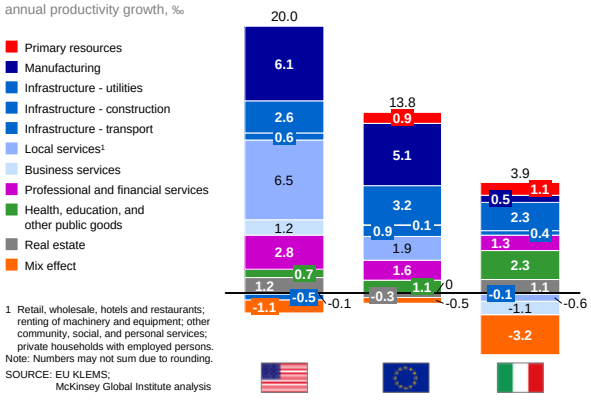


SOURCE: Conference Board; International Monetary Fund; OECD; McKinsey Global Institute analysis

Labour utilisation lags behind the EU-15 average. Although annual hours per employee are high (1,800 compared with 1,600), the participation of women and senior workers is the lowest of any EU-15 economy.

Productivity growth decomposition – Italy

Sector contribution to 1995–2005 annual productivity growth, ‰



1 Retail, wholesale, hotels and restaurants; renting of machinery and equipment; other community, social, and personal services; private households with employed persons.
Note: Numbers may not sum due to rounding.
SOURCE: EU KLEMS; McKinsey Global Institute analysis

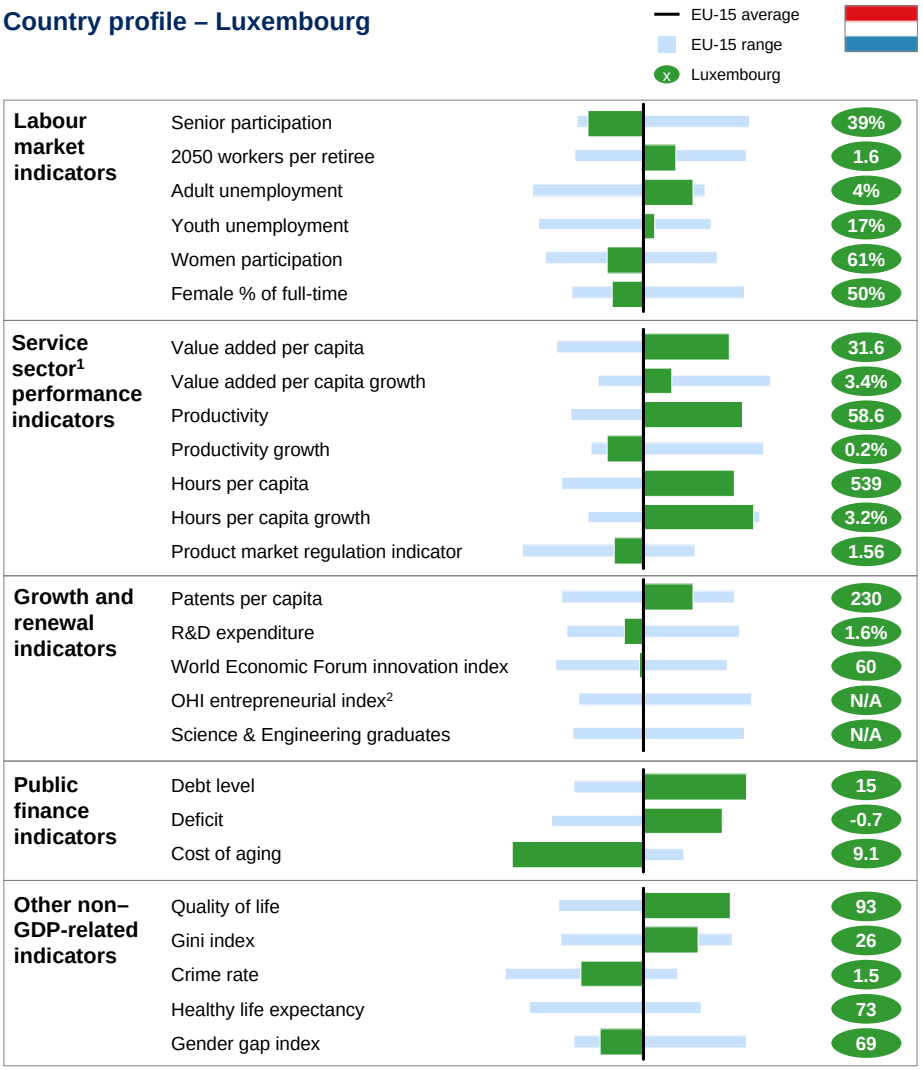
Productivity growth has been only one-third of the EU-15 average. In addition, an unfavourable sector mix weighed on slow productivity growth in most sectors. Only utilities developed in line with the EU-15 average.

LUXEMBOURG

Because of its small size, high share of non-resident workforce, and the specific characteristics and skews of its economy, Luxembourg needs to be treated as an outlier in many respects.

Exhibit A2.12

Country profile – Luxembourg

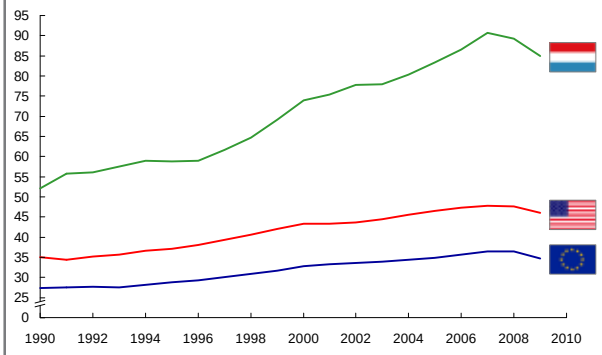


1 Local, business, and professional and financial services. Range and values indicated exclude Luxembourg due to the small economy strongly skewed to financial services.
2 Organizational Health Index.

SOURCE: Conference Board; OECD; Eurostat; EU-KLEMS; World Economic Forum; *Newsweek*; CIA; UNODC; IMF; European Commission; McKinsey Global Institute analysis

Per capita GDP – Luxembourg

2009 $ PPP, thousand

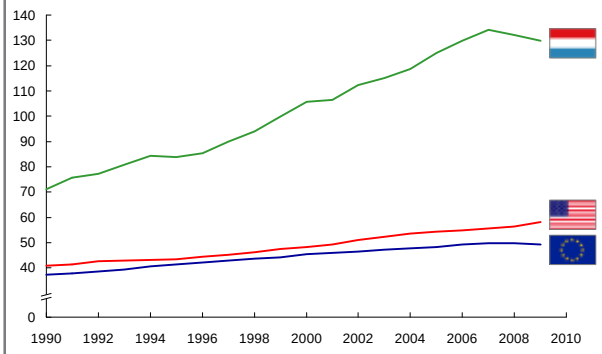


SOURCE: Conference Board; International Monetary Fund; McKinsey Global Institute analysis

Luxembourg enjoys the highest per capita GDP in the EU-15. This is driven by a high share of very productive sectors (e.g., financial services, business services). Per capita GDP is skewed upward by a high share of non-residents who contribute to the GDP of this small nation.

Productivity – Luxembourg

2009 $ PPP per hour worked, thousand

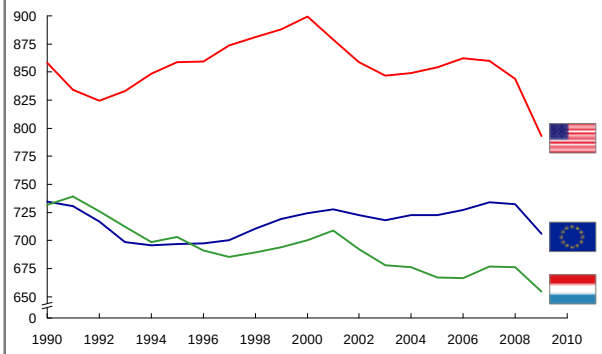


SOURCE: Conference Board; International Monetary Fund; OECD; McKinsey Global Institute analysis

Productivity in Luxembourg is 160 per cent higher than the EU-15 average and has grown faster than the EU-15. A large part of the gap can be explained by the overrepresentation of financial services in Luxembourg's economy and by the share of non-residents (about 30 per cent of the labour force) whose hours are not entering national accounts.

Labour input – Luxembourg

Hours worked per capita

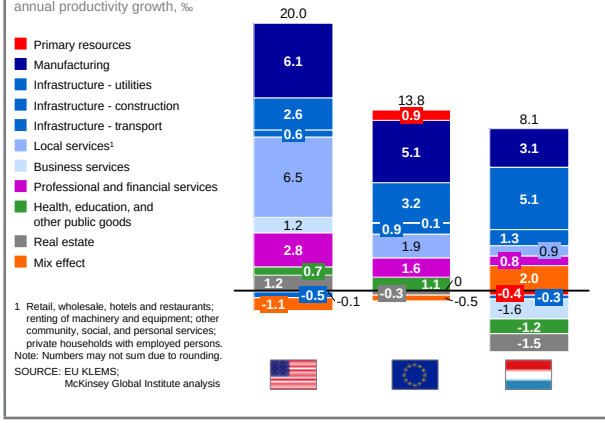


SOURCE: Conference Board; International Monetary Fund; OECD; McKinsey Global Institute analysis

In line with its neighbours, Luxembourg's labour input is below the EU-15 average. The difference is also increasing because of the growing gap in terms of employees per capita.

Productivity growth decomposition – Luxembourg

Sector contribution to 1995–2005 annual productivity growth, ‰



1 Retail, wholesale, hotels and restaurants; renting of machinery and equipment; other community, social, and personal services; private households with employed persons.
Note: Numbers may not sum due to rounding.
SOURCE: EU KLEMS; McKinsey Global Institute analysis

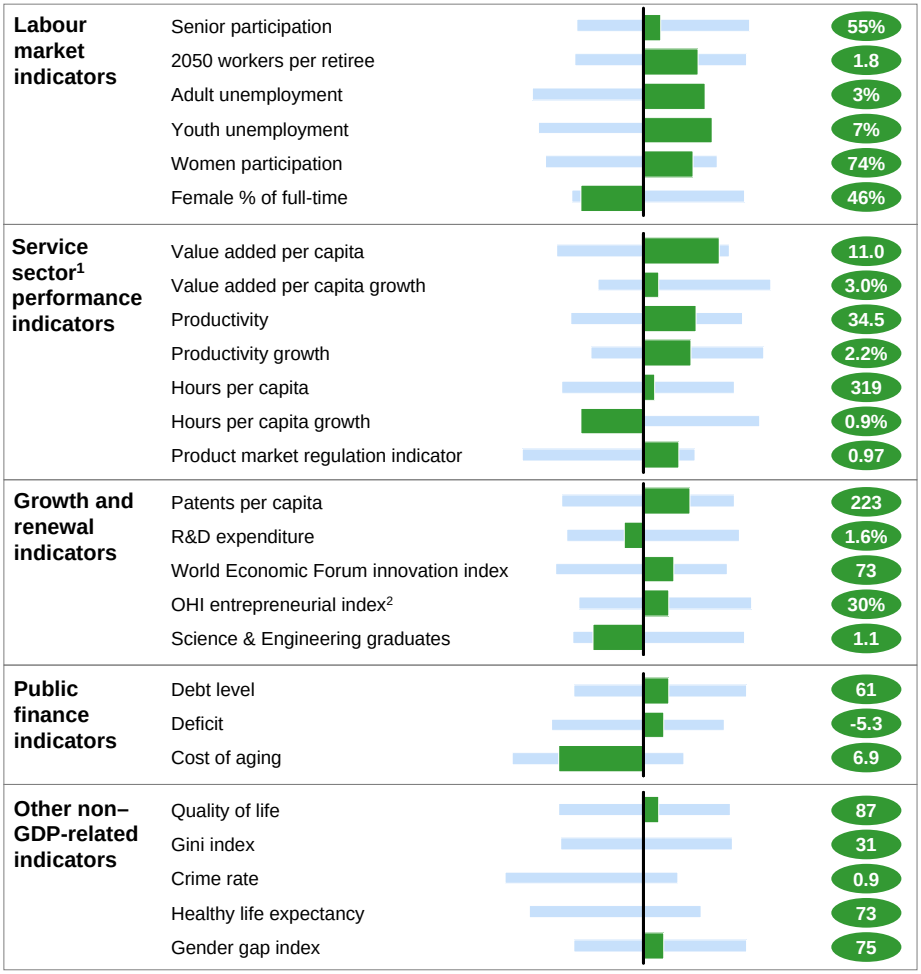
Productivity growth in Luxembourg was smaller than in the EU-15 and was dominated by the positive development of utilities. It is worth noting that while financial services form a major share of the economy, they did not contribute to productivity growth.

THE NETHERLANDS

The Netherlands ranks above average of very high along most indicators shown. Low female percentage of full-time employment and low hours per employee are partially explained by very successful part-time options.

Exhibit A2.13

Country profile – Netherlands

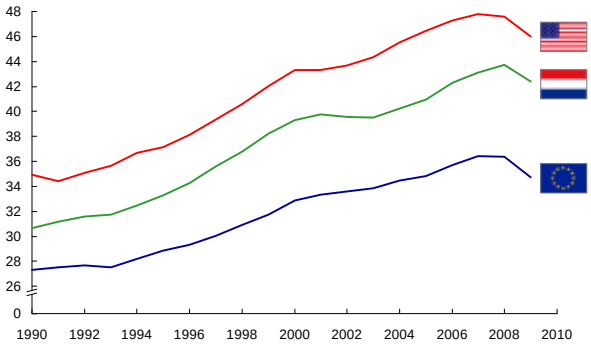


1 Local, business, and professional and financial services. Range and values indicated exclude Luxembourg due to the small economy strongly skewed to financial services.
2 Organizational Health Index.

SOURCE: Conference Board; OECD; Eurostat; EU-KLEMS; World Economic Forum; *Newsweek*; CIA; UNODC; IMF; European Commission; McKinsey Global Institute analysis

Per capita GDP – Netherlands

2009 $ PPP, thousand

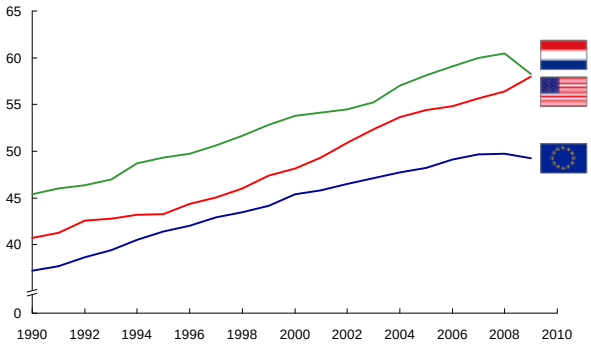


SOURCE: Conference Board; International Monetary Fund; McKinsey Global Institute analysis

The Netherlands' per capita GDP, which is 22 per cent higher than the EU-15 average, has grown from a 12–13 per cent advantage in the early 1990s.

Productivity – Netherlands

2009 $ PPP per hour worked, thousand

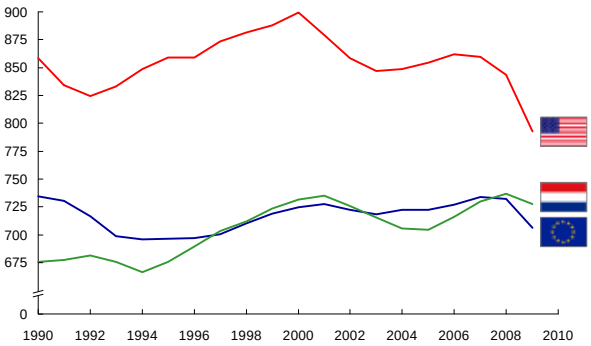


SOURCE: Conference Board; International Monetary Fund; OECD; McKinsey Global Institute analysis

Productivity in the Netherlands has grown in line with EU-15, maintaining an advantage of 18 to 22 per cent and even exceeding US levels.

Labour input – Netherlands

Hours worked per capita

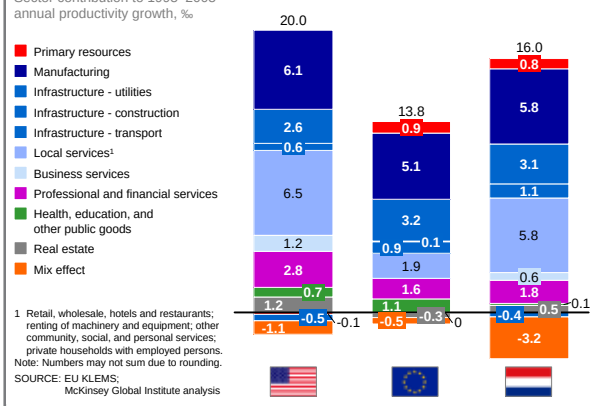


SOURCE: Conference Board; International Monetary Fund; OECD; McKinsey Global Institute analysis

While decreasing the hours per employee in line with the EU-15 (the gap remains at 13–14 per cent), the Netherlands managed to boost employment (its employees per capita advantage grew from 5 per cent in 1990 to 18 per cent in 2009).

Productivity growth decomposition – Netherlands

Sector contribution to 1995–2005 annual productivity growth, ‰



1 Retail, wholesale, hotels and restaurants; renting of machinery and equipment; other community, social, and personal services; private households with employed persons.
Note: Numbers may not sum due to rounding.
SOURCE: EU KLEMS; McKinsey Global Institute analysis

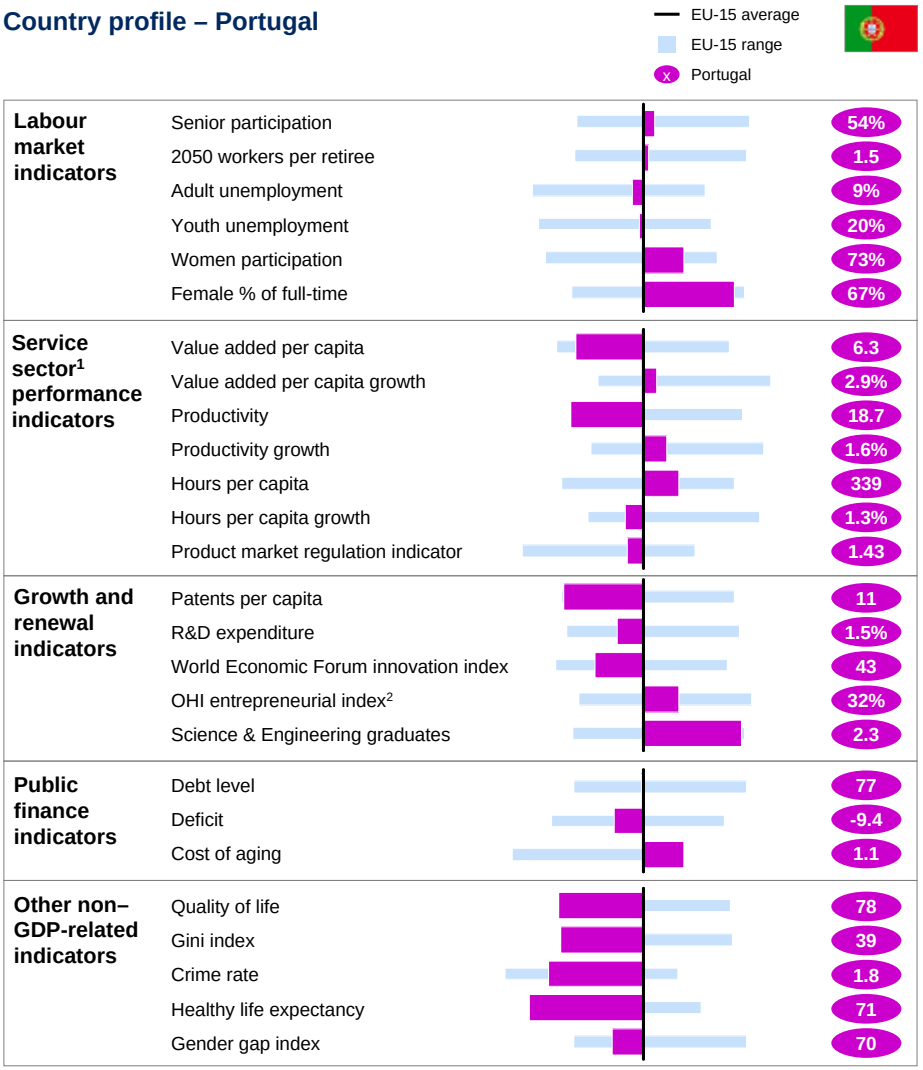
Productivity grew slightly more than the EU-15 average from 1995 to 2005, boosted by local services.

PORTUGAL

While Portugal scores from average to very well on many labour market indicators, the economy is not performing as strongly on productivity and also posts low scores on innovation indicators.

Exhibit A2.14

Country profile – Portugal

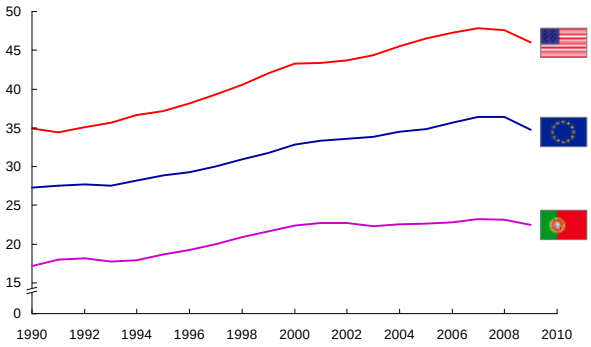


1 Local, business, and professional and financial services. Range and values indicated exclude Luxembourg due to the small economy strongly skewed to financial services.
2 Organizational Health Index.

SOURCE: Conference Board; OECD; Eurostat; EU-KLEMS; World Economic Forum; *Newsweek*; CIA; UNODC; IMF; European Commission; McKinsey Global Institute analysis

Per capita GDP – Portugal

2009 $ PPP, thousand

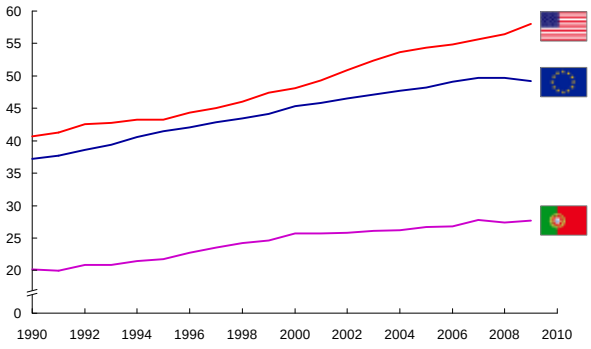


SOURCE: Conference Board; International Monetary Fund; McKinsey Global Institute analysis

Portugal's per capita GDP gap declined from 37 per cent in 1990 to 32 per cent in 2000, but it grew again to 35 per cent after 2000. Low productivity at around 55 per cent of the EU-15 average is only partially compensated for by high labour utilisation.

Productivity – Portugal

2009 $ PPP per hour worked, thousand

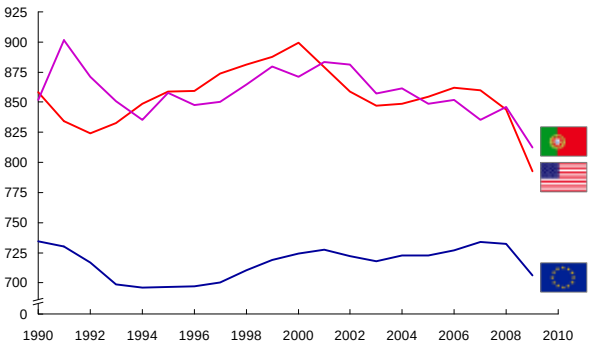


SOURCE: Conference Board; International Monetary Fund; OECD; McKinsey Global Institute analysis

Productivity has grown slightly faster than the EU-15 average, from 54 per cent of the EU-15 level in the mid-1990s to 56 per cent in 2009.

Labour input – Portugal

Hours worked per capita

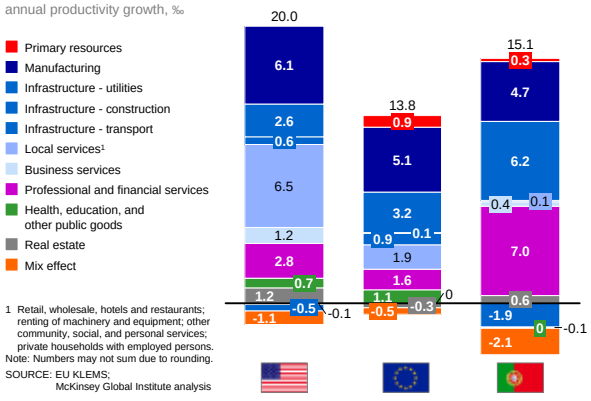


SOURCE: Conference Board; International Monetary Fund; OECD; McKinsey Global Institute analysis

While employment rates are still slightly higher than across the EU-15, the positive gap has declined. In parallel, annual hours worked per employee have decreased in line with the EU-15 average and in line with those in the United States.

Productivity growth decomposition – Portugal

Sector contribution to 1995–2005 annual productivity growth, ‰



1 Retail, wholesale, hotels and restaurants; renting of machinery and equipment; other community, social, and personal services; private households with employed persons.
Note: Numbers may not sum due to rounding.
SOURCE: EU KLEMS; McKinsey Global Institute analysis

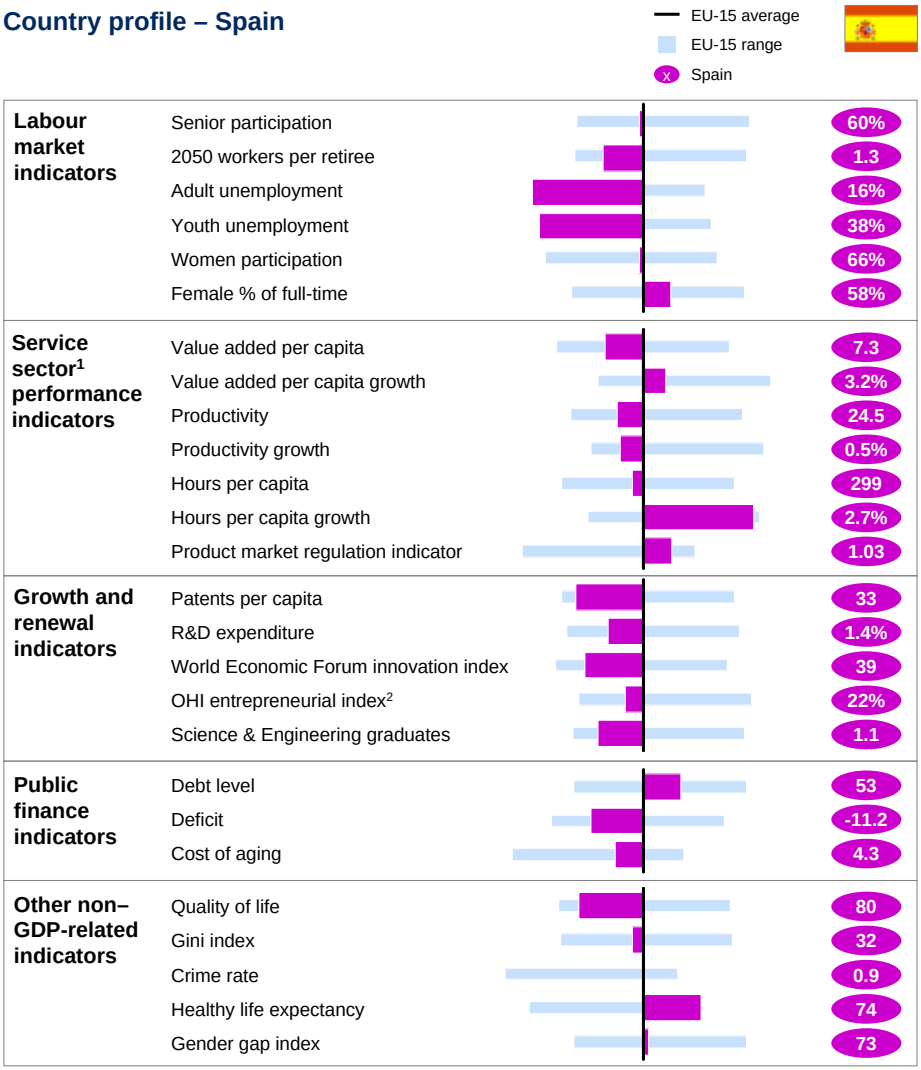
A large share of productivity growth has been driven by professional and financial services as well as utilities.

SPAIN

Spain has developed services faster than the EU-15 average, but they remain less developed and productive. Spain has been severely hit by the global crisis, which triggered very high deficit levels and the highest unemployment rates in the EU-15. As a consequence, austerity measures and broad labour market reforms were announced in September 2010.

Exhibit A2.15

Country profile – Spain

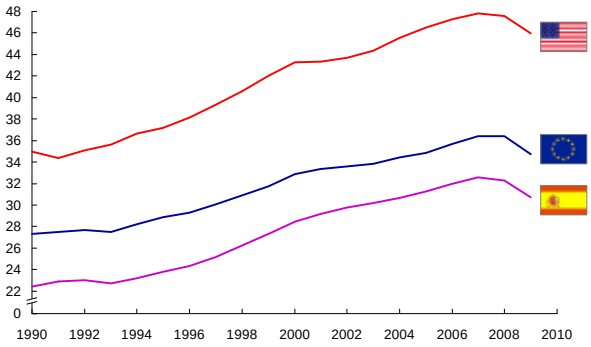


1 Local, business, and professional and financial services. Range and values indicated exclude Luxembourg due to the small economy strongly skewed to financial services.
2 Organizational Health Index.

SOURCE: Conference Board; OECD; Eurostat; EU-KLEMS; World Economic Forum; *Newsweek*; CIA; UNODC; IMF; European Commission; McKinsey Global Institute analysis

Per capita GDP – Spain

2009 $ PPP, thousand

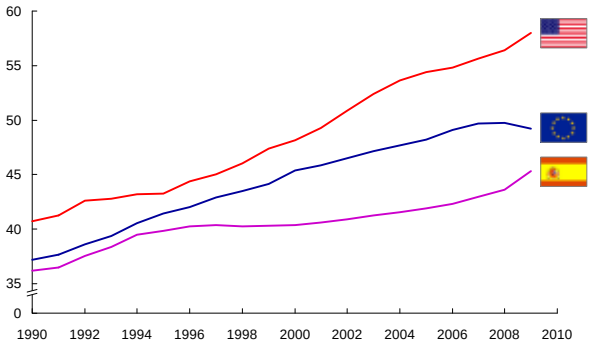


SOURCE: Conference Board; International Monetary Fund; McKinsey Global Institute analysis

Booming employment helped Spain narrow its per capita GDP gap with the EU-15 over the past 20 years, decreasing it from 18 per cent in 1990 to 11 per cent in 2002. But its economy has been severely hit by the global crisis.

Productivity – Spain

2009 $ PPP per hour worked, thousand

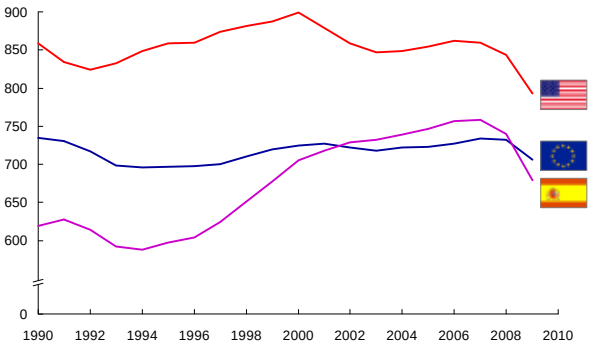


SOURCE: Conference Board; International Monetary Fund; OECD; McKinsey Global Institute analysis

Productivity has largely stagnated since 1994, while employment has grown rapidly. Productivity has begun to catch up with the EU-15 average over the past four to five years.

Labour input – Spain

Hours worked per capita

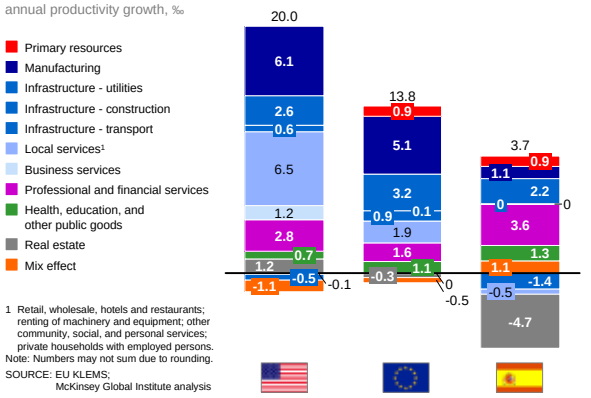


SOURCE: Conference Board; International Monetary Fund; OECD; McKinsey Global Institute analysis

Working hours per capita have caught up with the EU-15 average because of increases in employment that has, in turn, been driven by reduced unemployment and higher female participation. Hours per employee are slightly higher than the EU-15 average.

Productivity growth decomposition – Spain

Sector contribution to 1995–2005 annual productivity growth, ‰



1 Retail, wholesale, hotels and restaurants; renting of machinery and equipment; other community, social, and personal services; private households with employed persons.
Note: Numbers may not sum due to rounding.
SOURCE: EU KLEMS; McKinsey Global Institute analysis

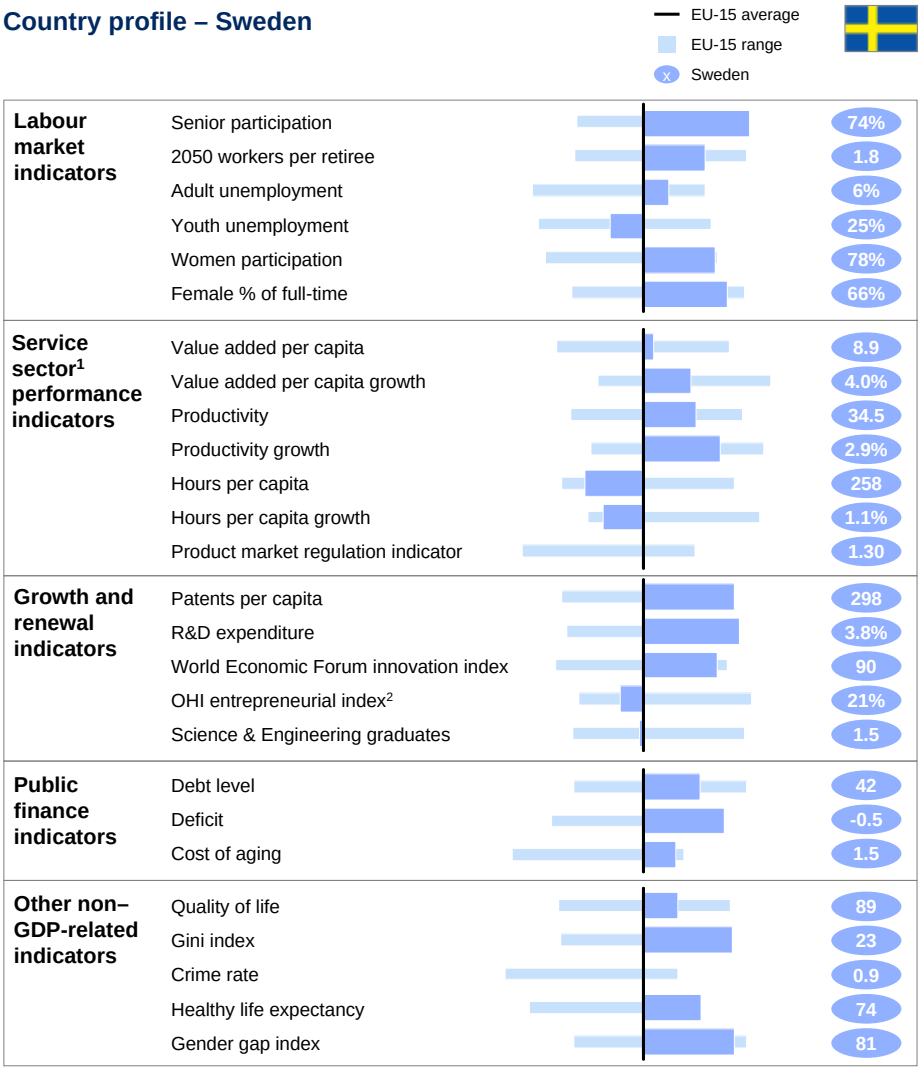
Productivity growth was low from 1995 to 2005, especially in service sectors.

SWEDEN

Sweden scores very well on most of the indicators we examined but has not yet developed a very strong service sector.

Exhibit A2.16

Country profile – Sweden

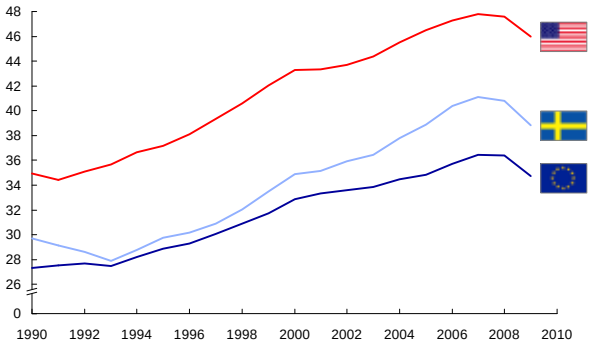


1 Local, business, and professional and financial services. Range and values indicated exclude Luxembourg due to the small economy strongly skewed to financial services.
2 Organizational Health Index.

SOURCE: Conference Board; OECD; Eurostat; EU-KLEMS; World Economic Forum; *Newsweek*; CIA; UNODC; IMF; European Commission; McKinsey Global Institute analysis

Per capita GDP – Sweden

2009 $ PPP, thousand

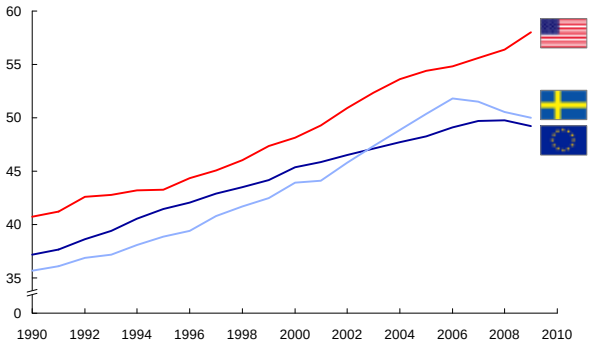


SOURCE: Conference Board; International Monetary Fund; McKinsey Global Institute analysis

Since Sweden's economic crisis in the 1990s, its labour market has grown faster than the EU-15 average, allowing the economy to build a 12 to 13 per cent lead in per capita GDP.

Productivity – Sweden

2009 $ PPP per hour worked, thousand

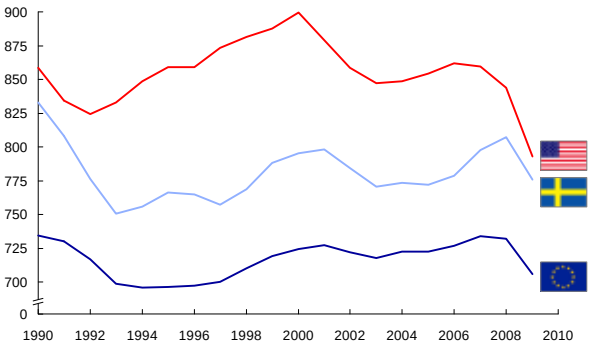


SOURCE: Conference Board; International Monetary Fund; OECD; McKinsey Global Institute analysis

Productivity grew faster than the EU-15 and overtook the EU-15 average in the early 2000s.

Labour input – Sweden

Hours worked per capita

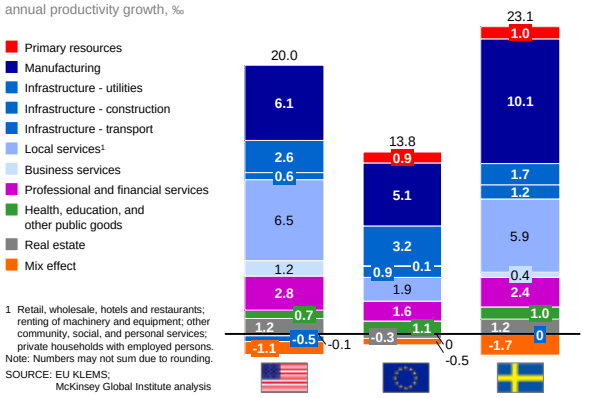


SOURCE: Conference Board; International Monetary Fund; OECD; McKinsey Global Institute analysis

After a sharp drop during the early 1990s crisis, Sweden increased employment until the economy was hit by the latest global crisis. Hours per capita remain above the EU-15 average.

Productivity growth decomposition – Sweden

Sector contribution to 1995–2005 annual productivity growth, ‰



1 Retail, wholesale, hotels and restaurants; renting of machinery and equipment; other community, social, and personal services; private households with employed persons.
Note: Numbers may not sum due to rounding.
SOURCE: EU KLEMS; McKinsey Global Institute analysis

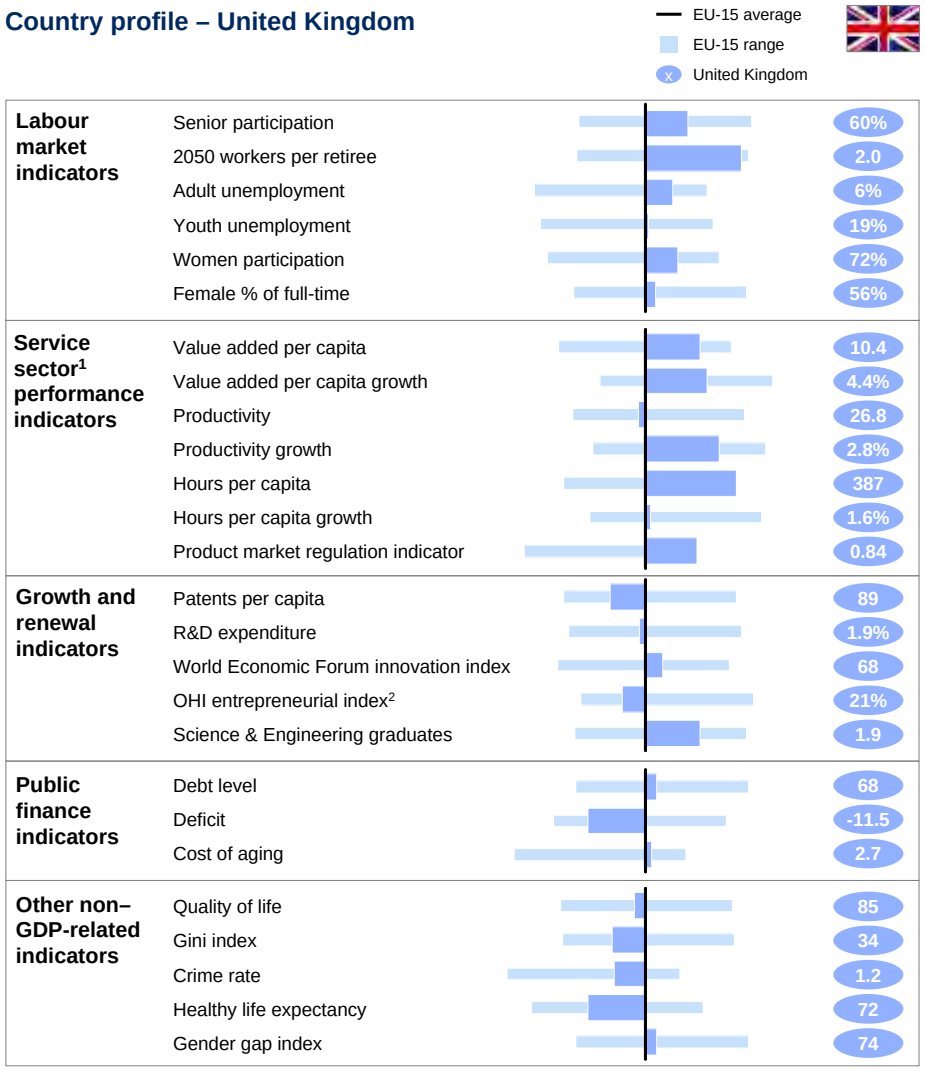
Productivity growth has been closer in its trajectory to that of the United States than to the average in the EU-15. Swedish manufacturing productivity outpaced that of the United States. The contribution to productivity from local services was much higher on average than in the EU-15.

UNITED KINGDOM

Although the United Kingdom needs to grapple with a large deficit, it scores well on most of the chosen indicators. However, total productivity and service sector productivity remain only at the EU-15 average, and the United Kingdom lags behind on several innovation indicators.

Exhibit A2.17

Country profile – United Kingdom

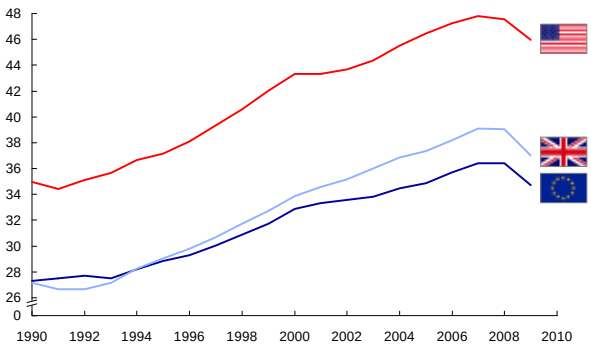


1 Local, business, and professional and financial services. Range and values indicated exclude Luxembourg due to the small economy strongly skewed to financial services.
2 Organizational Health Index.

SOURCE: Conference Board; OECD; Eurostat; EU-KLEMS; World Economic Forum; *Newsweek*; CIA; UNODC; IMF; European Commission; McKinsey Global Institute analysis

Per capita GDP – United Kingdom

2009 $ PPP, thousand

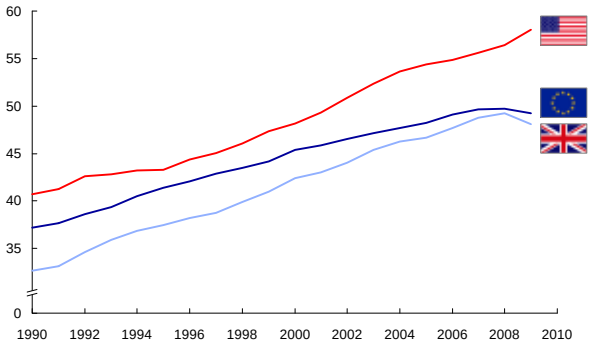


SOURCE: Conference Board; International Monetary Fund; McKinsey Global Institute analysis

The United Kingdom has outpaced the EU-15 average in terms of per capita GDP since the mid-1990s, due largely to robust productivity growth and service sector development.

Productivity – United Kingdom

2009 $ PPP per hour worked, thousand

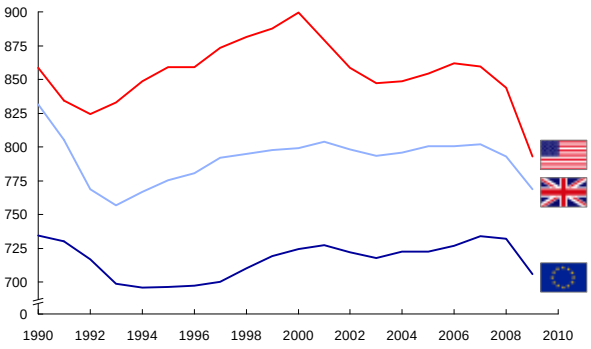


SOURCE: Conference Board; International Monetary Fund; OECD; McKinsey Global Institute analysis

Productivity has almost caught up with the EU-15 average.

Labour input – United Kingdom

Hours worked per capita

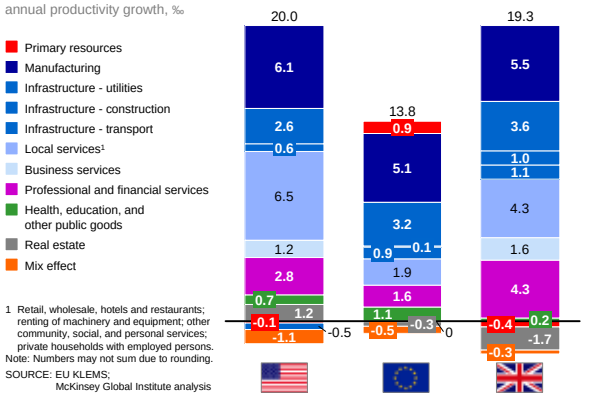


SOURCE: Conference Board; International Monetary Fund; OECD; McKinsey Global Institute analysis

Labour utilisation has remained well ahead of EU-15 levels because of both higher employment and longer average annual working hours per employee.

Productivity growth decomposition – United Kingdom

Sector contribution to 1995–2005 annual productivity growth, ‰



1 Retail, wholesale, hotels and restaurants; renting of machinery and equipment; other community, social, and personal services; private households with employed persons.
Note: Numbers may not sum due to rounding.
SOURCE: EU KLEMS; McKinsey Global Institute analysis

Total productivity and the contributions of different sectors were similar to those observed in the United States. The major difference was the lower contribution of local services and the higher contribution of utilities and professional and financial services.

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