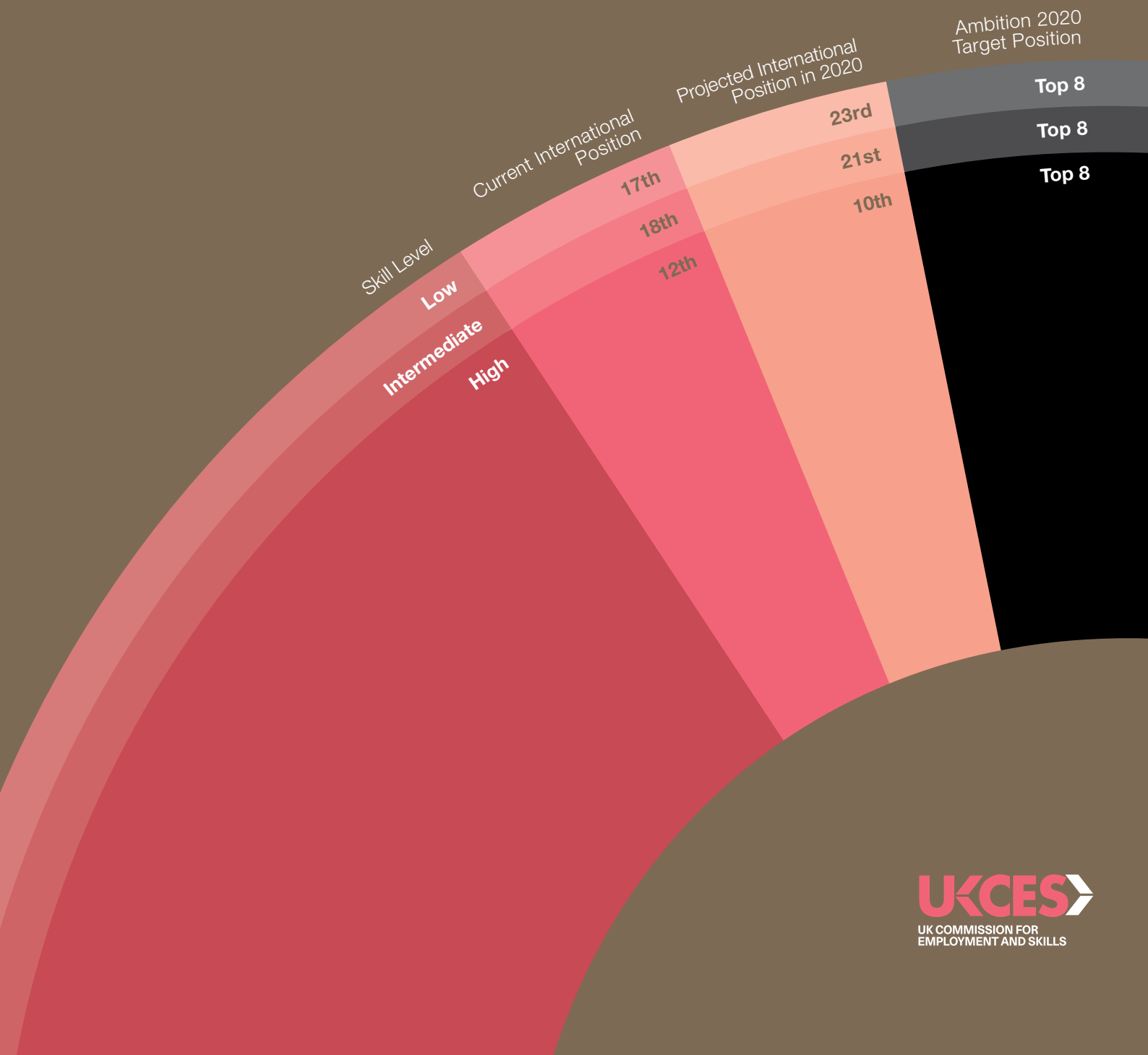
The 2009 Report

Ambition 2020: World Class Skills and Jobs for the UK



UKCES
UK COMMISSION FOR EMPLOYMENT AND SKILLS


“Our prosperity depends on the success of our economy. That depends on the jobs we are able to create; and having the skilled workforce we need to do them – and to do them well.”

Foreword

We are living through tough times. The recession is biting deep into businesses, jobs and communities, but we are where we are on the back of 15 years of growth, of new jobs and of growing prosperity. And we are perhaps a year away from recovery, from the current hard times. We must work to beat the recession but we must also prepare for that recovery, for the better times ahead. Indeed, we must actively seek to create the conditions to force sustainable recovery. We need to commit to investing in the skills of our people, to be ready for the opportunities, as well as the challenges, that lie ahead.

There can be little more important than equipping the UK with the skills it needs, for the jobs it needs, today and tomorrow. Our prosperity depends on the success of our economy. That depends on the jobs we are able to create; and having the skilled workforce we need to do them – and to do them well.

The UK Commission for Employment and Skills was established to advise Government on the policies, strategies, measures and targets that we need as a country to achieve our World Class Ambition of being one of the top eight countries in the world for skills, jobs and productivity.

One of our key tasks is to assess the UK's progress towards that goal. This report is the first of what will be an annual assessment of how well we are doing, and what we need to do, to achieve our ambition by 2020. It monitors our progress against our international competitors and in the context of both the Leitch Ambition for 2020 and the aims and priorities of the four nations of the UK. It aims to provide a sound evidence base for advice; a baseline from which to assess future progress; and an agenda on which future success can be built.

It provides the most thorough and comprehensive analysis available of the challenges and opportunities we face. It deserves to be made widely available to be read and talked about and to be used as a basis for building effective, sustainable solutions. That is why we are publishing in parallel with it, a short document, summarising its findings and drawing out the key messages, conclusions and actions we can take to make World Class skills and jobs more of a reality. We are also publishing at the same time our Strategic Plan, setting out what we, in the UK Commission, intend to do to help employers, Government and the people of the UK to realise their full potential and help the UK become a World Class country for skills and jobs, bringing prosperity to us all.

Sir Michael Rake
Chairman, UK Commission for Employment and Skills

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Mark Spilsbury and Mike Campbell
April 2009

In a Nutshell

This report assesses our progress towards making the UK a world leader in skills, employment and productivity by 2020.

THE CURRENT CHALLENGE

Today, we are facing unparalleled and unpredictable challenges. After 15 years of continuous growth, we are in a global recession that may be the deepest in 80 years. Employment is falling and unemployment is rising. The impact on the economy and society will be far-reaching. To secure economic renewal – to emerge from the recession stronger, more adaptable, more competitive – will demand bold and concerted action. We must focus not only on how to survive the recession, but on how we will thrive in the years ahead.

The challenge for the UK employment and skills system is formidable. We need to build a system to match the high skill, people-driven economy of the future – a system that responds well to business need while opening opportunity for all people. We must increase the ambition and aspiration of individuals to gain new skills – not just once, but throughout their working lives. We must transform the way that employers invest in their workforce and use the skills of their employees. And we must achieve this radical change in a way that delivers much higher performance at lower cost. The stakes are high and time is short, but if we set our sights high, adopt a common purpose and act together with determination and imagination, the prize is immense. In the following sections, we set out where we are now and what it will take to achieve our ambition for a World Class employment and skills system.

THE AGENDA AND OUR AMBITION

It is our ambition to be one of the top countries in the world – for jobs, for productivity and for skills. A World Class economy, built on World Class skills, supporting World Class jobs and businesses. **We should aim to be in the top quartile of OECD countries in all three – jobs, productivity and skills – by 2020.** This means being in the top eight countries of the world.

Our future prosperity depends ultimately on employment and productivity: how many people are in work and how productive they are when they are in work. Skills are essential to both. If we are to become World Class, we must raise our game to match the productivity, skills and jobs of the best. By this international standard, the UK has some way to go. **We rank 11th in the world in productivity levels and 10th in employment.** While our position has been improving in productivity, our employment level is deteriorating. **We rank 14th on income inequality** – in the gap between the highest and lowest earners. And within the UK, there are very substantial variations across the nations and regions in both productivity and jobs. Sectoral differences are also important.

We will not close the gap with our competitors unless employers and individuals place a high value on skills. Skills are vital to both employment and productivity. They increase the likelihood of individuals being in employment and the wages they can earn. They increase the chance of business survival and contribute to business growth and productivity. They are a critical driver of economic growth and development. In short, a strong skills base is pivotal to jobs, to productivity, to our national prosperity and to recovering inequality.

OUR PROGRESS: HOW ARE WE DOING?

The aim of achieving World Class employment and skills – of becoming one of the top countries in the world at every skill level – is highly ambitious. It means attaining more than 20 million additional qualifications, equivalent to more than one for every second adult of working age, by 2020. And, because current skill levels vary widely across the nations, regions and industries of the UK, this ambition is even more stretching in many parts of the country and in many sectors.

In international terms, our current position is little changed from that reported in the Leitch Review in 2006: **we are now ranked 17th on 'low' level skills, 18th on 'intermediate' level skills and 12th on 'high' level skills**. While the overall UK skills profile is improving over time, too many people are in danger of being left behind: one in eight adults of working age have no qualifications; more than a quarter are not qualified to Level 2; and just shy of a half are not qualified above Level 2. Moreover, other countries are improving their skills profile too so our *relative* position has changed little. Indeed, many are improving faster.

These international benchmarks are based on qualifications. Using other measures of skill development, notably training, we find that around two thirds of UK employers provide training to their staff and the overall volume seems high. However, this training is unevenly and unequally distributed. Low skilled employees and those in lower status occupations receive considerably less training. Managers also receive particularly low levels of training, together with employees in small firms and in a number of important sectors of the economy.

OUR PROSPECTS FOR ATTAINING THE 2020 AMBITION

We have assessed our likely progress and the prospects of achieving World Class standing in skills and jobs in the next decade. Our projections suggest that **the UK's relative international position is unlikely to improve by 2020, let alone to become World Class**. Indeed, overall, it may deteriorate slightly. **By 2020, we are likely to be ranked 23rd on low level skills (compared to 17th now); 21st on intermediate level skills (compared to 18th now); and 10th on high level skills (compared to 12th now). We will, therefore, not be in the top eight countries of the world at any skill level (see Table 0.1**). Overall, the international skills gap between the UK and the top countries is widening rather than closing.

Table 0.1:
The UK and World Class skills – international ranking

	Today	2020	Ambition
Low level skills	17	23	Top 8
Intermediate level skills	18	21	Top 8
High level skills	12	10	Top 8

If we translate our international ambition to reach the top quartile of countries into what this means for UK skill levels, we have an equally troubling picture. Our projections suggest that, with the exception of high level skills, we will not achieve our objectives, as can be seen in Table 0.2.

Table 0.2:
The qualifications of UK adults

	Today	2020	Ambition
Low level skills (% qualified to at least Level 2)	71	77	90+
Intermediate level skills (% qualified to at least Level 3)	51	58	68
High level skills (% qualified to at least Level 4)	31	41	40

We **will not** achieve the desired improvement at 'low' skill levels (we may achieve 77% qualified to Level 2 as against a 90% plus ambition); we **will not** achieve the desired improvement at intermediate skill levels (we may achieve 58% as against a 68% ambition); but **we will** achieve the higher level skill ambition (41% as against a 40% ambition). Even here, because we expect other countries to improve faster than previously anticipated, this skills improvement is not quite enough to move us into the top quartile of countries.

As far as **basic skills** are concerned, the Leitch Review proposed (and England has accepted) that 95% of UK adults should have functional literacy and numeracy skills by 2020. Our projections indicate that 95% of UK adults **will**, indeed, be literate by 2020, but that the numeracy ambition **will not** be attained, with an expected outcome of between 88% and 90% of UK adults achieving functional numeracy. International comparisons are not currently available.

The picture is not much more encouraging for employment. Even before the recession, the UK's comparatively strong position in employment had begun to slip. While the 80% employment goal is simply an aspiration, it was established to signal Government commitment to full employment. However, our current rate of around 74% has not increased significantly since 2001 and, since 2003, only Portugal has performed less well than the UK. The projected increase in employment to 2020 of perhaps 2 million jobs is expected to be slightly smaller than that of the working age population. Therefore, the employment rate is expected to actually *decline*.

JOBS: TODAY AND TOMORROW

Increasing skill levels make sense if jobs are available for individuals and employers to make use of these skills. Following almost 15 years of jobs growth and relatively low levels of unemployment, economic conditions and jobs prospects have deteriorated sharply in recent months. In the last three months of 2008, 180,000 people have been made redundant and unemployment has increased by nearly 140,000. However, training levels remain firm.

The current difficult conditions need to be placed in a longer run context. Over recent years, not only has there been sustained growth in jobs (over 3 million in the last 10 years) but these have, on the whole, been higher skilled. The proportion of jobs requiring higher levels of qualifications has been rising whilst the proportion requiring low or no qualifications has been declining. This trend is reflected in the substantial growth in 'white collar' professional, associate professional, technical and managerial jobs.

This trend has profound implications for vulnerable groups and people facing multiple barriers to employment. These individuals are least likely to be in stable employment – or *any* employment. Those not in work are likely to be at both ends of the age spectrum, particularly the young; they are likely to be low skilled; they are more likely to have a disability; and they are more likely to be from an ethnic minority group.

Making headway on the skills and jobs agenda during the current recession will be difficult. Some of the jobs that are being lost will not return; some skills will become obsolete; many industries and occupations will experience substantial restructuring. Future job growth will be slower than in the past. But growth will come with an expected 2 million new jobs between now and 2020 and most of them will demand higher skills. And, because of retirements and other labour market changes, a further 11 million job opportunities are likely to become available over the next decade.

So we must prepare now for the jobs of the future. We must ensure that people have the skills necessary to access the opportunities that will become available post-recession and that employers will be able to recruit workers with the skills necessary for success.

MISMATCHES BETWEEN SKILLS AND JOBS

In an efficient labour market, the skills of the workforce will be sufficient to meet employer needs and the supply of skills is aligned with market demand. If either supply, demand or the matching processes are deficient, several types of mismatches occur. The first is *skill shortages*. These arise when employers find it difficult to fill their vacancies with appropriately skilled applicants. Overall, skill shortages are actually low (around 170,000 across the UK) though they are more significant in small establishments, in some key occupations (eg skilled trades, associate professional and technical occupations), and in a number of sectors (eg construction and audio/visual) and localities (eg London).

Within this overall number, there are about 20 occupations, employing around 650,000 people, experiencing the most severe skill shortages.[1]

The second mismatch that occurs is *skill gaps*, where members of the existing workforce are seen to lack the skills necessary to meet business needs. These are more significant in the UK – perhaps 10 times greater, amounting to some 1.8 million people.

A third way of understanding the extent and nature of mismatch between the skills we need for jobs and the skills we have available for them is to draw on *international comparisons*, comparing the proportion of the workforce with high level skills and the proportion of the workforce in high skill jobs. The UK does, indeed, have more high skill jobs than high skill people (implying we have insufficient people with high level skills), but this gap is actually small relative to most countries. Moreover, the growth in our numbers of high skilled people significantly exceeds the growth in our numbers of high skill jobs. The growth in high skilled jobs is also occurring at a slower rate than in other countries. This growing mismatch is also seen from research which indicates an emerging gap between the supply of and demand for graduates as well as an increase in the proportion of workers who are 'over-qualified' for their current jobs.

Taken together, these findings are lead indicators of potential imbalances between the numbers of skilled jobs and skilled people; between the skills available and those in demand – which, in turn, may result in the 'over-skilling' or 'under-employment' of skilled workers. So far, this has had little impact on the relative earnings of those with higher skill levels whose wage premium remains high by international standards.

1 Migration Advisory Committee, Skilled, Shortage and Sensible: The Recommended Shortage Occupation Lists for the UK and Scotland, 2008.

This potential misalignment may arise either because demand for skills is too low or because supply is too great. Our view is that this problem lies largely on the demand side. The relatively low level of skills in the UK; the limited extent of skill shortages; and the potentially relatively low demand for skills relative to their supply taken together, imply a demand side weakness. The UK has too few high performance workplaces, too few employers producing high quality goods and services, too few businesses in high value added sectors. This means that in order to build an internationally competitive economy, the future employment and skills system will need to invest as much effort on raising employer ambition, on stimulating demand, as it does on enhancing skills supply. In this way, we can create a **'virtuous circle'** of skills development, between the skills available and the skills required.

The fourth dimension of mismatch between supply and demand, is *unemployment*. In the current recessionary conditions, the biggest 'mismatch' in the labour market is between a weak overall demand for labour and the available supply of labour, creating both unemployment and unused skills. Yet the unemployed and their skills are valuable resources that need to be nurtured in preparation for the recovery. We must use the recession to build the UK's skill base to prepare for the future.

RAISING EMPLOYER AMBITION

It is important, but not enough, just to **raise skill levels**. It is important, but not enough, to **align the skills available with skill requirements**. It is also necessary to **build an economy** that is internationally competitive and fit for the future, an **economy which drives a higher demand for skills.**

Higher skill levels are, of course, not the only driver of employment and economic development. Innovation, research, quality, high productivity and high value added goods and services are essential to sustained competitive advantage. But innovation and productivity will stimulate employer demand for skills. So raising skill levels is both a contributor to, and a consequence of, a 'high road' economic development path. The more that a post-recession recovery and renewal strategy is built around higher skills, the more likely it is to raise employer demand. In the end, the demand for skills is a **'derived' demand**. It depends on the shape of the economy and level of economic activity. This is why economic and industrial policy are crucial to achieving our 2020 employment and skills ambitions, and why achieving those ambitions are, in turn, a key route to a stronger economy.

Action is needed at the level of the individual organisation as well as at the level of the economy too. **Leaders and managers are the key** to business strategy and competitive positioning. Organisational success depends on their vision, capability and effectiveness. Yet the UK has a relatively long tail of managers who are not well qualified and do not apply accepted management practices. Without improving UK leadership and management, we will struggle to improve economic performance.

Moreover, there is little value to an organisation having a skilled workforce if the skills are not used well. Effective managers turn the potential of a skilled workforce into improved organisational performance. **'High performance workplaces'** are an important contributor to increased productivity.

In the final analysis, allowing for both market and public failures which may reduce skills acquisition and availability, an economy broadly gets the skills it 'deserves'. The demand for skills is ultimately a 'derived' demand. The more companies move up the value chain, the more they produce innovative, high specification goods and services; the more organisations raise their game, the greater the demand for higher skills. Strong management and leadership and a powerful focus on skills use in the workplace will both require a more highly skilled workforce and will help ensure that one is provided.

SKILLS AND EMPLOYMENT POLICY: NEXT STEPS

The current system is often seen by users as complex, difficult to understand and hard to navigate. Whilst many of the policy initiatives and reforms developed in recent years have been designed to make the system work better, to be more responsive, to be more 'demand-led', the overall effect has also been often to complicate rather than simplify. The challenge we face is threefold: a **'policy gap'**, where a stronger emphasis on the 'demand' side is required to bring better balance to the policy agenda; **a 'policy to practice gap'**, where delivery and arrangements on the ground do not always fulfil the ambition of the policy promise; and a '**measurement gap'**, where developing a more appropriate suite of 'success measures' for the system would help better align policy with the 2020 Ambition, and policy with delivery.

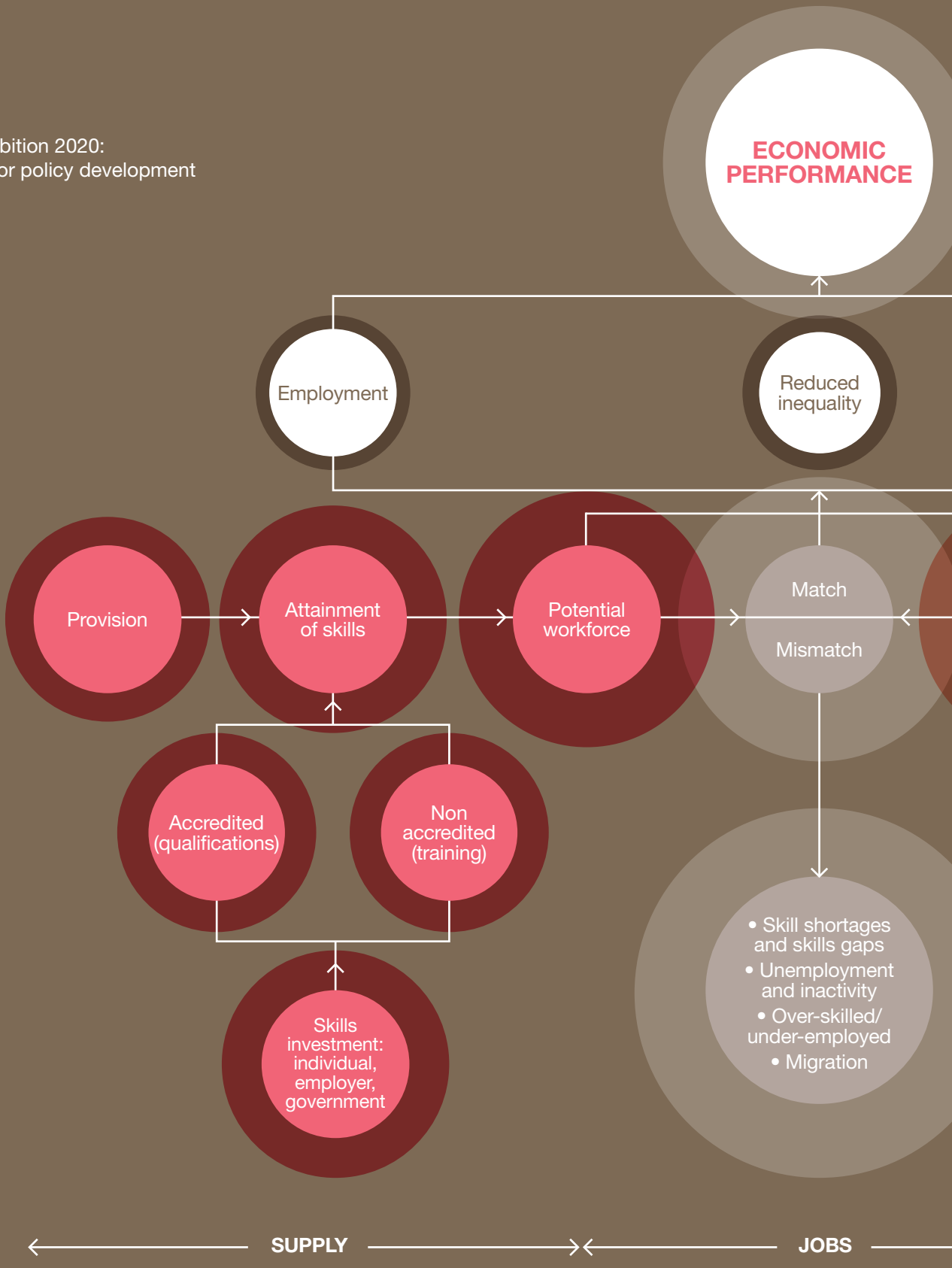
We propose **a new strategic framework** (see Chart 0.1) for thinking and action on the skills and employment agenda for achieving our 2020 Ambition. It crystallises the structure and narrative of the *Ambition 2020* report into a framework which connects the various dimensions of agenda and policy into a system and also points to the establishment of appropriate measures of success, to better connect skills, employment and economic development policy, in pursuit of Ambition 2020. Thinking and action based on this framework would provide greater alignment, coherence, balance and integration across the system and could generate enhanced synergy, effectiveness and impact.

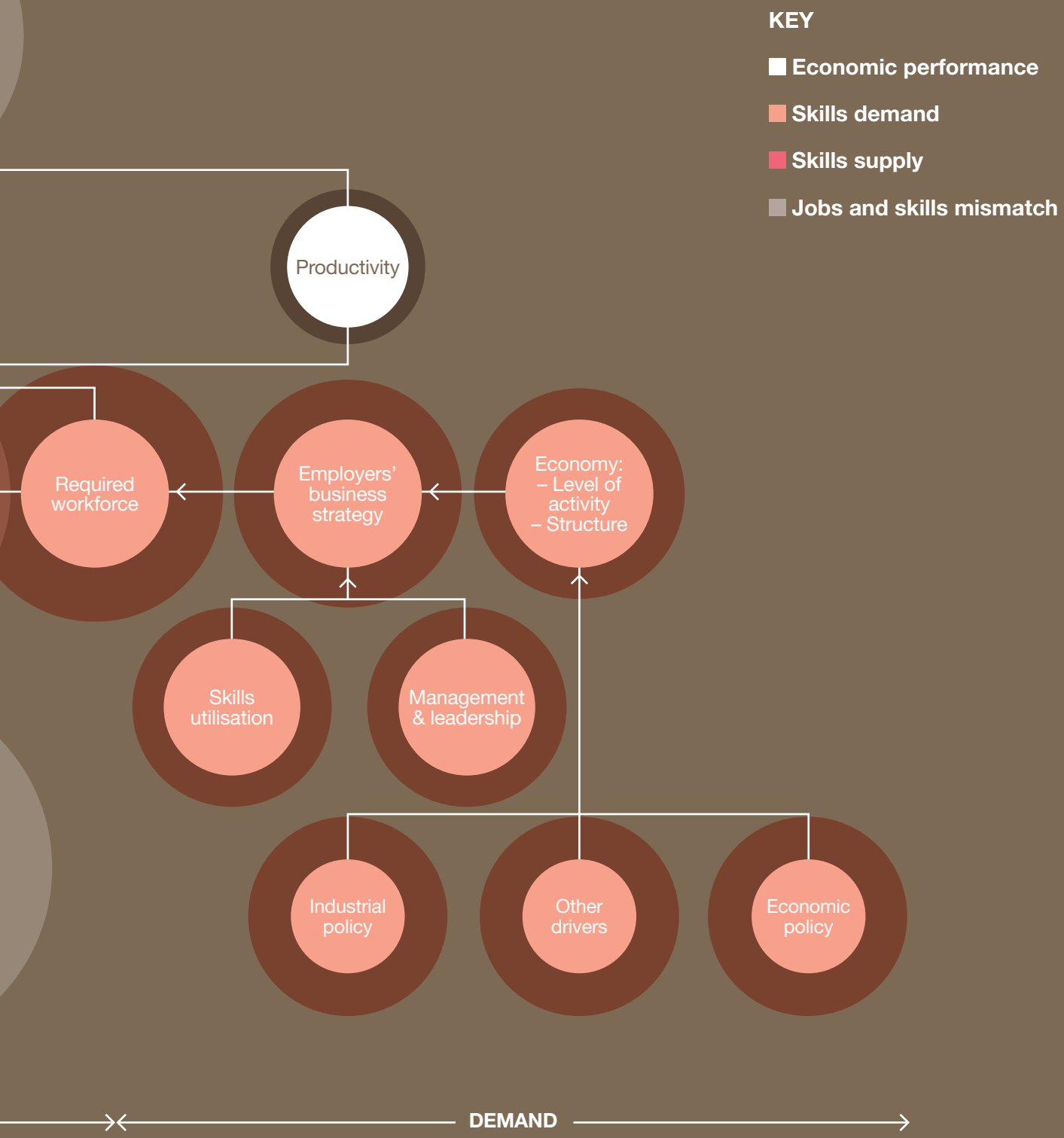
In short, superior economic performance is driven by high levels of productivity and employment. The prosperity achieved needs to be shared widely. To reach these goals, we need an economy, and more employers with business strategies, that compete on quality, on value added, on innovation and on the skills of our people. The jobs needed in such an economy will be more highly skilled and it is necessary to raise skill levels to ensure that the economy and labour market get the skills they need to sustain economic progress. Mismatches between the skills we need and the skills we've got must be reduced to enable businesses to get the skills they require to be successful. Alignment and synergy between all these components of policy are crucial to maximise effectiveness and impact.

As a first stage in using this framework, we propose **a series of goals and milestones**, associated with our vision and mission, to assess the progress of our own Strategic Plan, a plan built on the twin pillars of the evidence contained in the Ambition 2020 report and extensive consultation with our stakeholders.

Ambition 2020:
A framework for policy development

Chart 0.1: Ambition 2020:
A framework for policy development




KEY
Economic performance
Skills demand
Skills supply
Jobs and skills mismatch
Productivity
Required workforce
Employers' business strategy
Economy: – Level of activity – Structure
Skills utilisation
Management & leadership
Industrial policy
Other drivers
Economic policy
DEMAND

FIVE PRIORITIES FOR WORLD CLASS SKILLS AND JOBS

We believe that this report provides an agenda to take jobs, skills and productivity forward towards our ambition to be World Class – to be amongst the best in the world, by 2020.

The successful foundations to achieve our ambition lie in five key priorities that the UK Commission has identified for the next five years, which will underpin our work, which we believe should be the focus of joined-up government policy within and between the four nations (see Chart 0.2).

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1 To **create a clear and integrated strategy for economic transformation and renewal**, capable of sustaining the UK through periods of recession, recovery and growth, and that aligns policies and practices in industrial strategy, employment and skills in order to achieve that transformation.

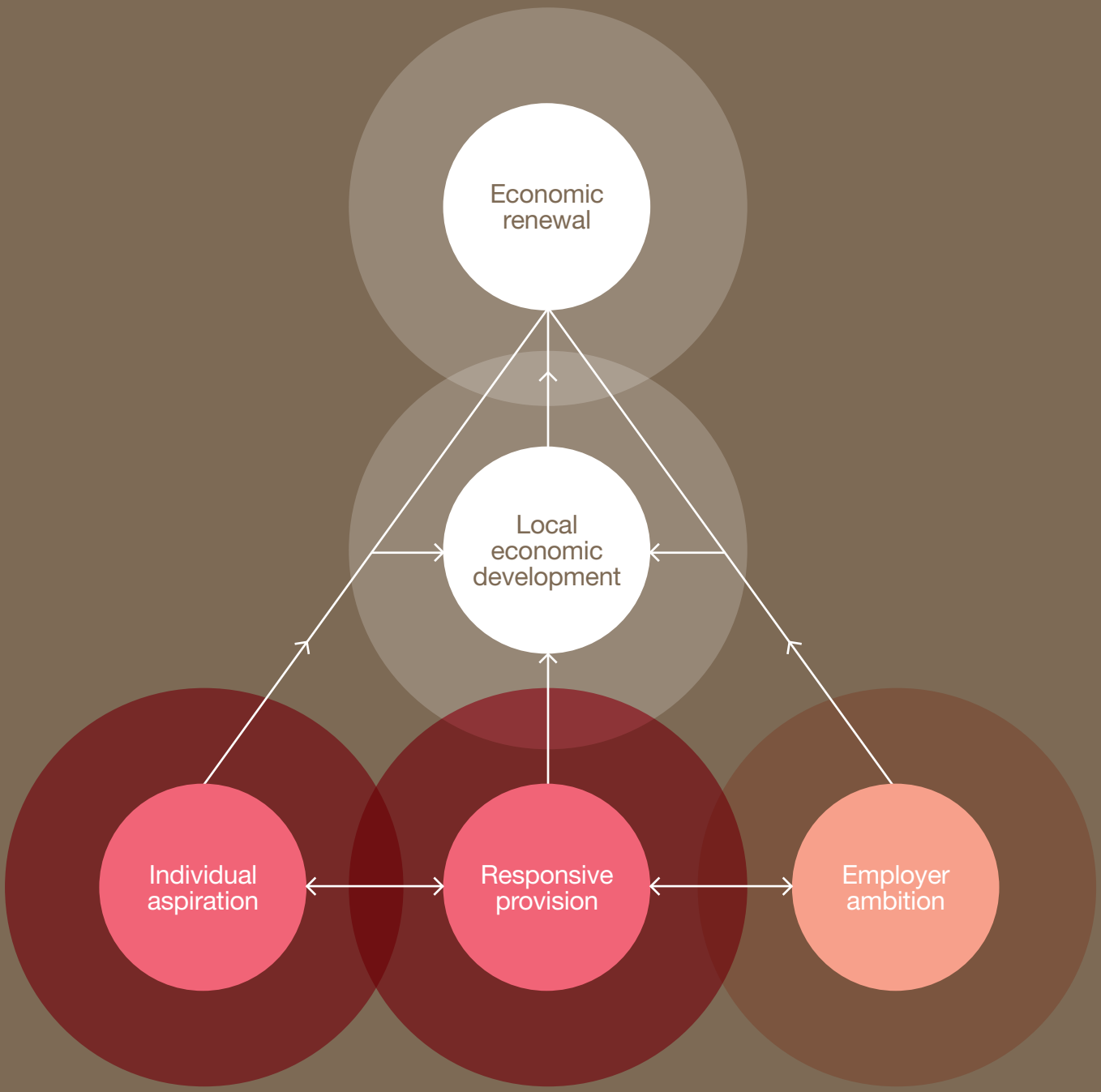
2 To **support effective economic development in cities and local communities**, built upon economic and labour market strengths and opportunities, and maximising the skills of the local working age population.

3 To **develop more agile and responsive skills and employment provision**, capable of anticipating and rapidly meeting employers' evolving skills and job requirements.

4 To **transform individual aspiration and skills into a World Class workforce**, maximising the motivation and opportunity for all people to develop and exploit their talents and skills to their full potential.

5 To **build employer ambition and capacity to be World Class**, capable of competing globally in the high skills, knowledge driven economy, by optimising the talent and skills of their people.

Chart 0.2:
Five priorities for World Class skills and jobs



Introduction

This 'Ambition 2020' Report is the UK Commission for Employment and Skills' first annual assessment of the progress towards making the UK a world leader in employment and skills by 2020. It monitors progress on our World Class Skills and Jobs Ambition and against our international competitors in the context of (i) the 'Leitch' Ambition for 2020; and (ii) the aims and priorities for the four nations of England, Scotland, Wales and Northern Ireland. It seeks to provide a sound evidence base for advice on strategies, policies and measures needed to increase skills, employment and productivity. This first report also provides a baseline from which to assess future progress.

Whilst our focus is on the long-term challenge and opportunities that we need to address, we have prepared this report against the immediate background of a sudden and sharp recession. Employment is falling and unemployment is rising. The near term prospects for many individuals and businesses are grim. But we must not only work to survive the recession, but to thrive in the subsequent recovery and beyond. We need to prepare for a renewed economy and develop a talented workforce equipped with the skills a successful economy needs to grow and prosper. To create the successful businesses, and the sustainable jobs of the future, we need to invest now in our people.

Our ambition is to be World Class in skills, jobs and productivity. We believe this means being one of the best eight countries in the world. This will be our benchmark.

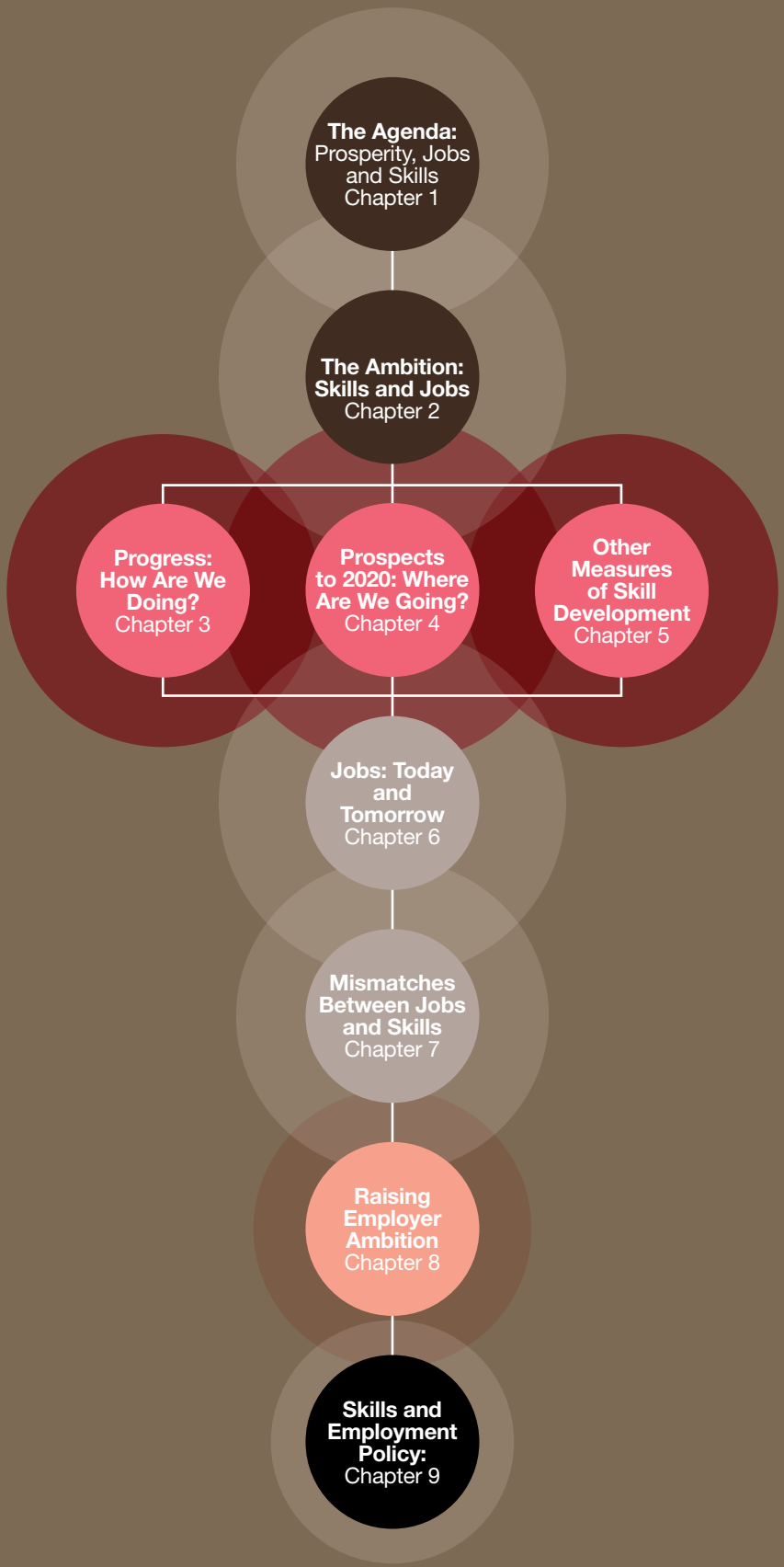
The contents, structure and broad narrative of the report are set out in Chart 0.3 opposite.

We first set out the economic performance **agenda**, the high level outcomes which we seek to influence primarily: productivity, jobs and income equality and how we compare on these measures of success against other leading countries, before considering both the effect of recessionary conditions and the contribution of skills to improving economic performance. Next, we set out our **ambition** for the UK to achieve World Class skills and jobs by 2020 as articulated in the Leitch Review and the responses in each of the four nations.

We then go on to examine the UK's **progress** towards attaining the ambition to become a world leader by 2020. We define this being in the top eight countries in the world at every skill level and in terms of jobs and we assess the likely attainment of this ambition by 2020. We then consider other measures of skills development, in particular, training.

We then move on to look at the **'demand'** side of the agenda: the **jobs** in the economy, how these have been changing and how they are likely to change in the future, as it is essential that the development of skills connects to the evolution of skill requirements. We also examine the characteristics of those **not in work** and the prospects for jobs and skills in the current recession.

Chart 0.3:
Ambition 2020: Contents and structure



It is not enough, however, only to seek to secure the right skill levels in the workforce. It is also important to ensure that they align with the skills the economy needs so the next section provides evidence on the extent of **skills 'mismatch'**, examining whether or not there are insufficient skills to meet our needs. We then go on to consider the important question of the employer demand for skills – of how these skills can actually be **used in the workplace** and the role of **management and leadership** in shaping the skills and economic performance agenda.

We conclude by examining the role of **public policy** in enhancing employment and skills where we present a framework which we hope will inform future action on our 2020 Ambition through providing a 'framework' which can be used to assess future progress; set and analyse the agenda; and give coherence to policy development.

Throughout, we report the UK position across a wide range of measures of progress, where possible, in terms of our relative international position and where appropriate, we refer to the position in each of the four nations.

In addition to this full report, a separate short document 'Key Findings and Implications' is also available at www.ukces.org.uk.

1 The Agenda: Prosperity, Jobs and Skills

1.1 INTRODUCTION

Skills and jobs are vital to prosperity. This chapter outlines the UK's international economic position, using the widely accepted measure of GDP together with the relevant World Economic Forum (WEF) and Institute of Management Development (IMD) competitiveness indices, before turning to an assessment of the co-determinants of our prosperity – employment and productivity – and outlining the contribution of skills to achieving these.

1.2 THE UK POSITION

1.2.1 PROSPERITY AND PERFORMANCE: LEVELS AND GROWTH IN GDP

The UK is the 6th largest economy in the world and the 4th largest in the OECD.[2] In recent years it has enjoyed robust growth, averaging around 3% per annum (see Table 1.1), a performance which overall exceeds that of the OECD and Euro Area.

Table 1.1:
Annual growth in real GDP, 1994 to 2007

Year	UK %	OECD %	Euro %
1994	4.3	3.3	2.5
1995	2.9	2.6	2.5
1996	2.8	3.0	1.4
1997	3.1	3.6	2.6
1998	3.4	2.6	2.7
1999	3.0	3.3	2.9
2000	3.8	4.0	4.0
2001	2.4	1.1	1.9
2002	2.1	1.6	0.9
2003	2.8	1.9	0.8
2004	3.3	3.2	1.8
2005	1.8	2.7	1.7
2006	2.9	3.1	2.9
2007	3.0	2.7	2.6

Source: OECD, Economic Outlook 2008/1, http://dx.doi.org/10.1787/367585824028

However, within the UK, **London and the South East together account for over a third of the UK's GDP** (see Table 1.2). Recent trends in growth across the UK have led to little change in the distribution of UK GDP across the regions and nations: unequal growth has served to further consolidate the level of UK value added produced in Southern England with a declining share in the North West, Scotland and West Midlands, inter alia, whilst London and the South East have been increasing their share. Evidence[3] shows that London has the highest GVA per hour worked, (some 29.7% higher than the UK average) and the highest levels of gross disposable household income.

The table also draws attention to the fact that improved (or worsening) performance in some regions and nations will have a disproportionately large impact on UK performance.

2 *OECD (2009) OECD Factbook 2009, OECD, Paris. P.35. http://dx.doi.org/10.1787/534570242112*

3 *Wosnitza, B. et al, 'Regional Economic Indicators, November 2008, With a Focus on Skills', 2008*

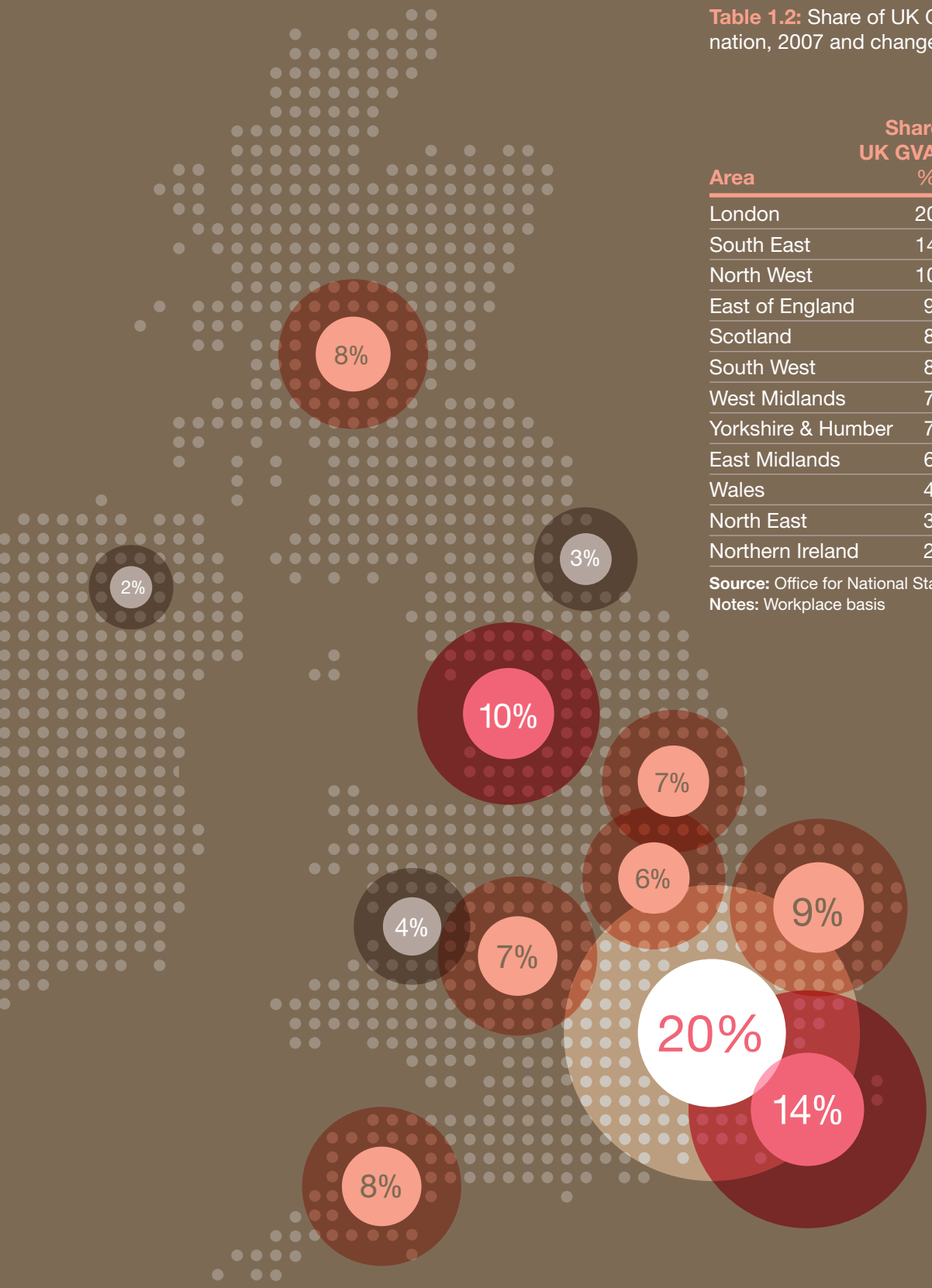


Table 1.2: Share of UK GDP by region and nation, 2007 and change 1997–2007

Area	Share of UK GVA, 2007 %	Percentage point change in share of GVA, 1997–2007 %
London	20	+ 1.7
South East	14	+ 0.4
North West	10	- 0.5
East of England	9	+ 0.2
Scotland	8	- 0.4
South West	8	0.0
West Midlands	7	- 0.8
Yorkshire & Humber	7	- 0.4
East Midlands	6	- 0.2
Wales	4	- 0.3
North East	3	- 0.2
Northern Ireland	2	+ 0.1

Source: Office for National Statistics, Regional Accounts, *2008*.
Notes: Workplace basis

4 *Schwab, K. and Porter, M.E. (eds.) Global Competitiveness Report 2008-2009.*

5 *Ibid. p. 338*

6 *We use the measure of GVA per hour because this takes account of differences in the average length of working week, part-time working, double job holding, and holidays, all of which affect the measure of GVA per worker.*

1.2.2 OTHER MEASURES OF PERFORMANCE

The Global Competitiveness Report, produced by the World Economic Forum, ranks countries according to a range of measures and on the basis of a **'global competitiveness'** index.[4] It uses a balance of measures including the institutional framework under which public and private agents operate, the nations' physical infrastructure, the stability of the macroeconomic environment, the performance of the health and primary education systems and higher education and training, efficiently functioning labour and goods markets, sophisticated financial markets, technological readiness, market size, systems of production, and innovation. On these rankings, the World Economic Forum currently rates the UK economy as the 12th most competitive in the world, a fall of three places from the previous year (see Table 1.3). It is worth noting that, on the most relevant measures contributing to this index, from the point of view of the focus of this report, the UK is ranked 8th on labour market efficiency and 18th on higher education and training.[5]

Table 1.3: WEF global competitiveness index rankings

Country/economy	Rank 2008–09	Rank 2007–08
United States	1	1
Switzerland	2	2
Denmark	3	3
Sweden	4	4
Singapore	5	7
Finland	6	6
Germany	7	5
Netherlands	8	10
Japan	9	6
Canada	10	13
United Kingdom	**12**	**9**

Source: Schwab, K. and Porter, M.E., The Global Competitiveness Report 2008–2009.

'Higher education and training' includes a range of eight indicators including secondary and tertiary enrolment; measures of quality (based on an executive opinion survey); and staff training. On all bar one, the UK is adjudged to be at a 'competitive disadvantage'. Indeed, an 'inadequately educated workforce' is identified in the survey as the fourth most problematic factor for doing business in the UK.

The IMD World Competitiveness Yearbook also provides an annual report on the competitiveness of nations. The 2008 report ranks the UK 21st in the world (it was ranked 20th for the previous four years in succession). It identifies four factors (economic performance, business efficiency, infrastructure and government efficiency), and a range of sub factors of which the most relevant to this report are set out below (each of the sub factors comprise between 10 and 20 criteria).

Table 1.4: UK competitiveness rankings (2008)

Employment	29
Productivity	20
Labour market	27
Management practices	27
Education	20

Source: IMD, World Competitiveness Yearbook, 2008.

Like the WEF 'rankings', the IMD work is based on a combination of hard statistical data and executive 'opinion'. Two of the most relevant 'opinion' criteria in respect of the labour market sub factor are employee training being a high priority for companies and the extent to which skilled labour is readily available. These, in turn, rank the UK at 35th and 32nd.

1.3 ROUTES TO PROSPERITY: JOBS AND PRODUCTIVITY

The UK's prosperity ultimately depends on two things: (i) how many people are working which, in turn, depends upon **the employment rate** and the numbers of people in the potential workforce; and (ii) the value of how much they produce when in work – **the productivity rate**. The UK's relative international position here is set out in Table 1.5 and Chart 1.1. To summarise the UK position, we rank slightly higher on employment than productivity:

- **the UK ranks 10th** out of the 30 OECD countries with an (internationally comparable) employment rate of 72.3%. The best performing countries tend to be the Nordic economies: Iceland (1st), Norway (3rd), Denmark (4th), and Sweden (5th). This outcome puts the UK just outside the top quartile of OECD performance; and
- **the UK ranks 11th** out of the 30 OECD countries in terms of productivity, GVA per hour worked.[6] This puts us outside the top quartile of OECD performance.

There is an overall positive relationship between employment and productivity (see Chart 1.1). **High productivity countries also tend to be high employment countries**.

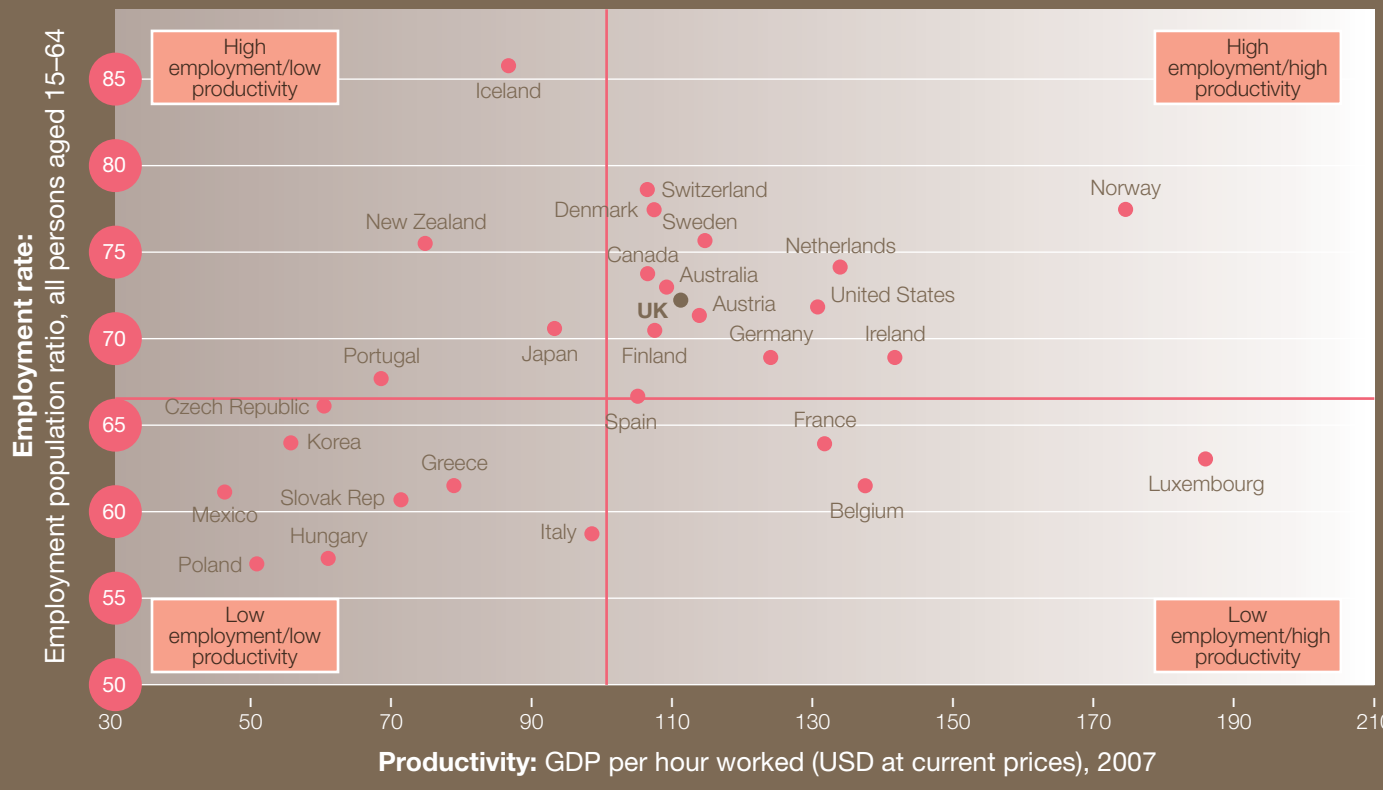
The UK is above the OECD average employment and productivity rates and so sits in the 'top' quadrant of countries who are above average on both dimensions of prosperity. We, nevertheless, are below the 'arc' of countries to our 'North East' in the chart – the USA, the Nordic countries (except Finland), Netherlands and Ireland.

Table 1.5: Relative rankings of GVA/hour worked and employment rates

	GVA		Employment	
	GDP per hour worked at current prices in US dollar, 2007 (OECD=100)	**Ranking**	**Employment/ population ratio, all persons 15–64**	**Ranking**
Australia	108.4	12	72.9	9
Austria	112.9	10	71.4	12
Belgium	136.5	4	61.6	23
Canada	105.7	15	73.6	8
Czech Republic	59.6	26	66.1	19
Denmark	106.7	14	77.3	4
Finland	106.9	13	70.5	14
France	130.8	6	64	20
Germany	123.1	8	69	15
Greece	78.2	21	61.5	24
Hungary	60.3	25	57.3	28
Iceland	86.1	20	85.7	1
Ireland	140.9	3	69	16
Italy	97.5	18	58.7	27
Japan	92.6	19	70.7	13
Korea	55.1	27	63.9	21
Luxembourg	184.9	1	63	22
Mexico	45.7	30	61.1	25
Netherlands	133.0	5	74.1	7
New Zealand	74.2	22	75.4	6
Norway	173.7	2	77.5	3
Poland	50.1	29	57	29
Portugal	67.7	24	67.8	17
Slovak Republic	70.7	23	60.7	26
Spain	104.2	17	66.6	18
Sweden	113.9	9	75.7	5
Switzerland	105.7	16	78.6	2
Turkey	53.3	28	45.8	30
United Kingdom	**110.4**	**11**	**72.3**	**10**
United States	130.0	7	71.8	11

Source: OECD, Employment Outlook 2008 (http://ocde.p4.siteinternet.com/publications/doifiles/812008091P1T035.xls) and OECD Productivity Database, version of December 2007 (www.oecd.org/statistics/productivity)

Chart 1.1:
Productivity and employment in the OECD countries



Source: OECD, Employment Outlook 2008 (http://ocde.p4.siteinternet.com/publications/doifiles/812008091P1T035.xls) and OECD Productivity Database, version of December 2007 (www.oecd.org/statistics/productivity)

Employment and productivity levels also vary across the UK (see Table 1.6 and Chart 1.2). We can see that while **London** has the **highest productivity**, it also has the **lowest employment rate**. Wales and Northern Ireland, on the other hand, suffer from both low productivity and a low employment rate and the South enjoys both high productivity and high employment. It should also be noted that, London apart, there is a close relation between productivity and employment 'performance' – ie high levels of productivity are associated with high levels of employment.

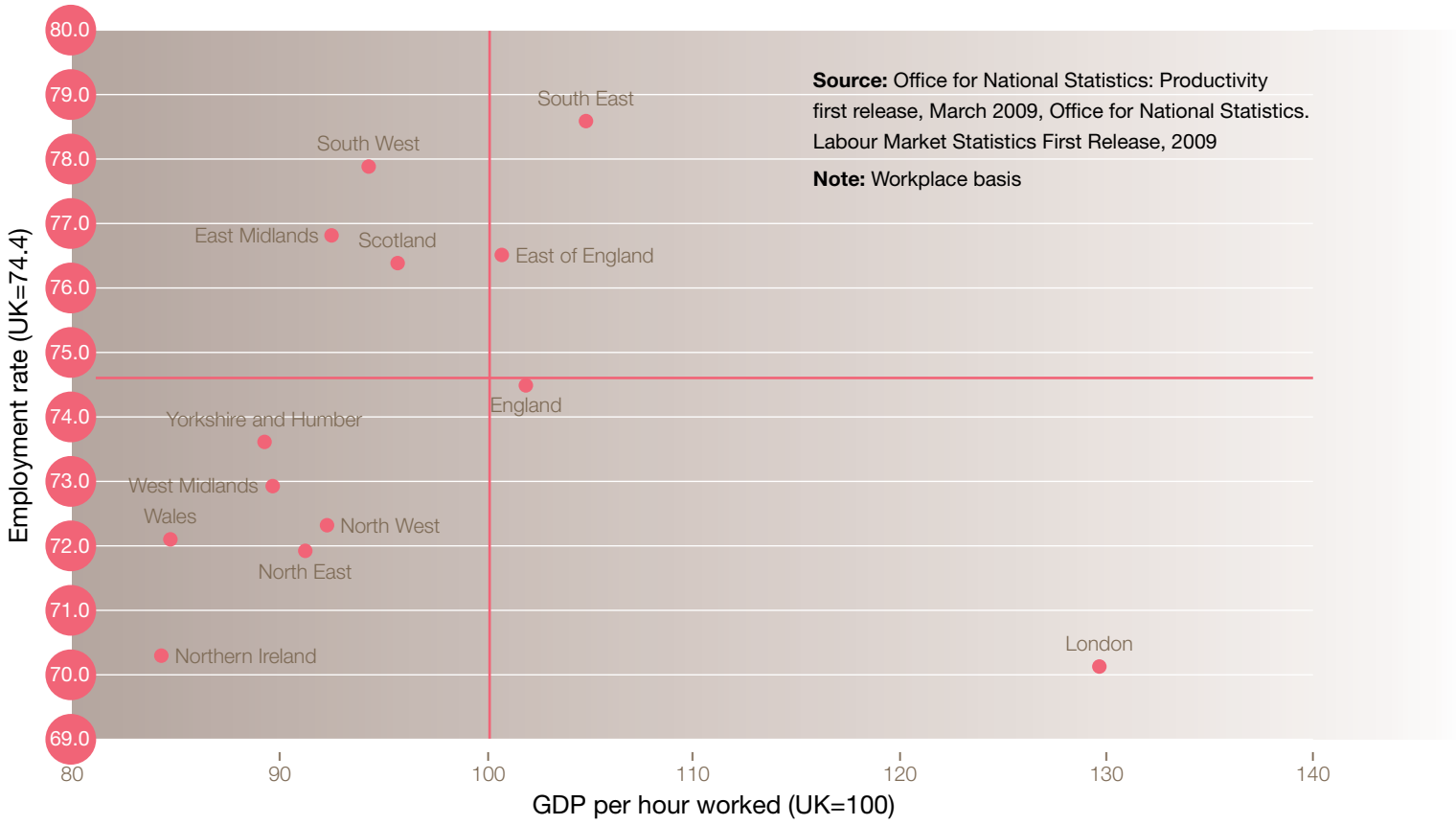
Table 1.6:
Productivity and employment in the nations and regions of the UK

	GVA per hour worked (UK=100)%	Employment rate (Jan 2007)%
London	129.7	70.1
South East	104.7	78.6
England	**101.8**	**74.5**
East of England	100.6	76.8
South West	94.2	77.9
East Midlands	92.3	76.6
Scotland	**95.6**	**76.4**
North East	91.2	71.9
West Midlands	89.6	72.9
North West	92.2	72.3
Yorkshire and Humber	89.2	73.6
Wales	**84.6**	**72.1**
Northern Ireland	**84.1**	**70.3**

Source: Office for National Statistics, Productivity First Release, March 2009; Office for National Statistics, Labour Market Statistics First Release, 2009.

Notes: Workplace basis

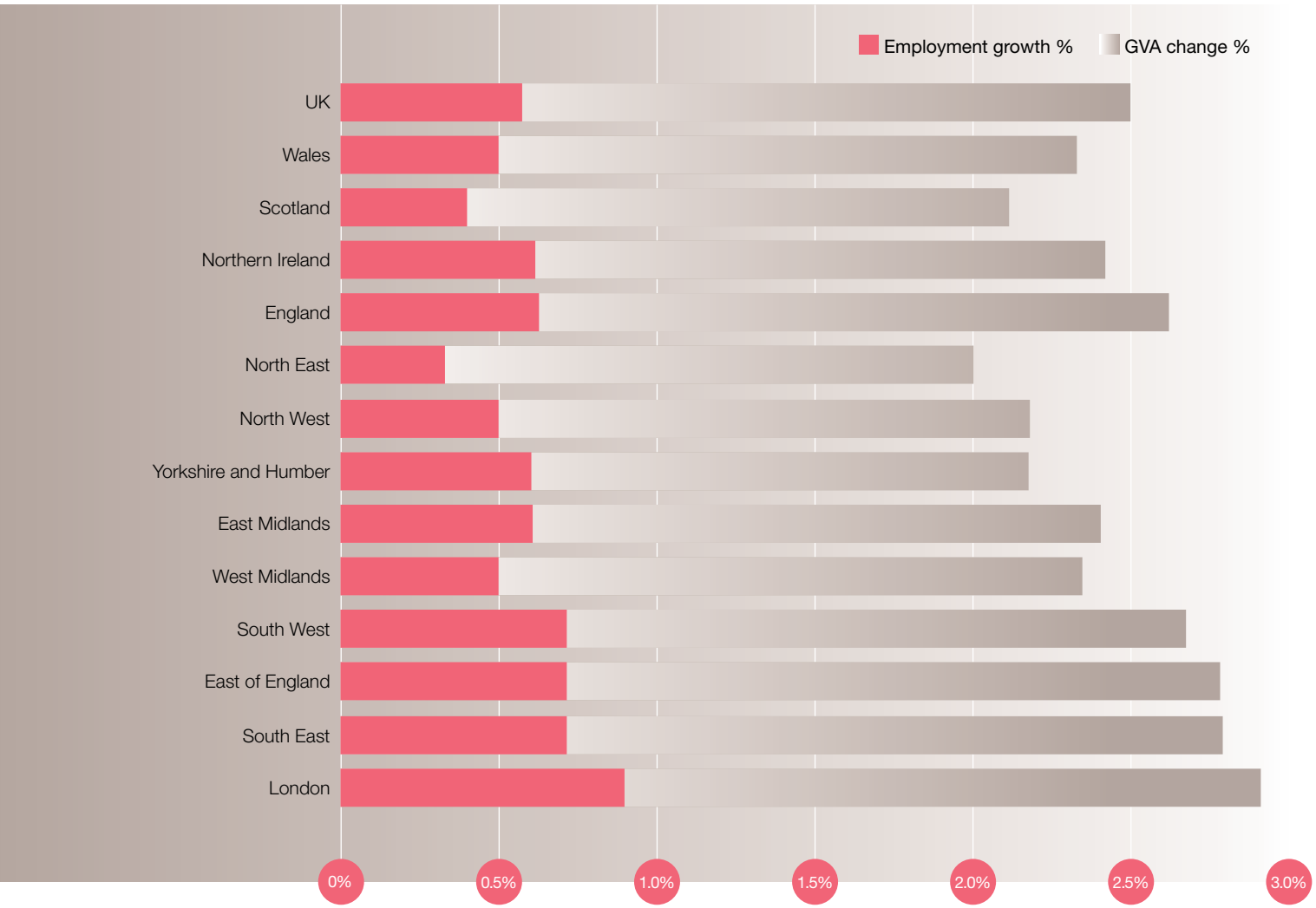
Chart 1.2: Productivity and employment in the nations and regions of the UK



As for the future, Chart 1.3 sets out the **prospects for jobs and output growth over the next 10 years**. In short, **both are expected to be strongest in Southern England**.

In the rest of this section, we examine how these two key drivers of prosperity – productivity and employment – have changed over time and how this varies across the UK.

Chart 1.3: Expected changes in employment and productivity 2007–17



Source: UKCES, Working Futures 2007-17, January 2009

1.3.1 PRODUCTIVITY TRENDS

Whilst **the level of UK productivity is only moderate, UK productivity growth has been relatively strong in recent years** (see Table 1.7). Indeed, productivity has increased by more than the OECD average in 10 of the last 14 years, and has increased by more than the Euro Area average in 12 of those years. Because of this, **our productivity position has improved from 13th to 11th in the OECD** rankings in recent years.

However, there are indications that as we move into recession, productivity growth is tailing off. Most recent data[7] shows that the growth in output per hour worked was flat in the third quarter of 2008, down from 1.7% growth in the previous quarter.

Performance relative to several of the large competitor economies is less strong. Recent data shows that on a GDP per hour worked basis, the UK still lags behind Germany, France and the United States. France and the United States both have a GDP per hour worked 14% above the UK level.[8]

Productivity growth has, however, been highly uneven across the UK, with London, the South East and the South West performing better than the UK average and particularly weak performance in Wales, the North East, Scotland and East Midlands.

Table 1.8 shows the percentage point difference between productivity growth in the regions and nations in the UK. There are substantial differences in performance and, on the whole, are reinforcing of existing differences in both productivity and growth. Moreover, evidence exists to suggest that these differences are not due primarily to differences in economic structure, but to differences in the performance of sectors in different regions.[9]

There are also **significant differences in productivity performance on a sectoral basis** (see Table 1.9). For example, if we look at the productivity of individual sectors in the UK compared to the EU (15) average, we can see that the UK underperforms against the majority and indeed only outperforms the EU average in just over a third of sectors. Similarly, when compared to the USA, the UK underperforms in the majority of sectors. The UK only outperforms both the EU and USA in four sectors: Other manufacturing, Post and telecommunications, Vehicle maintenance, and Mining and quarrying.

Table 1.7:
Annual percentage change in labour productivity, 1994 to 2007

	UK %	OECD %	Euro Area %
1994	3.5	1.7	2.9
1995	1.7	1.2	1.8
1996	1.8	1.7	0.8
1997	1.3	2.0	1.8
1998	2.3	1.2	0.9
1999	1.7	1.9	1.0
2000	2.6	2.4	1.5
2001	1.5	0.6	0.3
2002	1.3	1.7	0.1
2003	1.8	1.7	0.4
2004	2.2	2.1	0.9
2005	0.8	1.4	0.6
2006	2.0	1.5	1.3
2007	2.4	1.3	0.8

Source: OECD, Economic Outlook 2008/1, http://dx.doi.org/10.1787/368015733825

Table 1.8:
Workplace GVA per hour worked by region and nation change 1996–2007

	Percentage change in GVA/hour worked relative to the UK average, 1996–2007
London	4
South East	3.6
England	1.1
East of England	3.2
South West	2.7
East Midlands	-5.1
Scotland	-4.4
North East	-7.6
West Midlands	-1.3
North West	-0.8
Yorkshire and Humber	-4.2
Wales	-9.5
Northern Ireland	-2

Source: Office for National Statistics, Regional Accounts, 2008. **Notes:** Workplace basis.

7 Office for National Statistics First Release, Productivity, December 2008

8 Office for National Statistics First Release, International comparisons of productivity, February 2009 2008

9 Dickerson, A., 'Regional Productivity and Skills', 2006

10 It is worth noting that more recent data (using an internationally comparable basis) puts the UK's employment rate at 74.7%. However, this data is not available on such a wide comparative basis as that shown above.

11 Kent, K., 'Employment Changes Over 30 Years', 2009

And productivity matters. A lot. Other things remaining equal, just a **one percentage point increase in productivity generates around £11 billion additional GDP**.

1.3.2 EMPLOYMENT RATE TRENDS

Raising the employment rate matters, not only to the individuals brought into paid work but to the economy. **A one percentage point increase in the employment rate also adds between £8–11 billion to GDP**.

Table 1.9:
Productivity gap: UK as a % of EU and USA, 2003

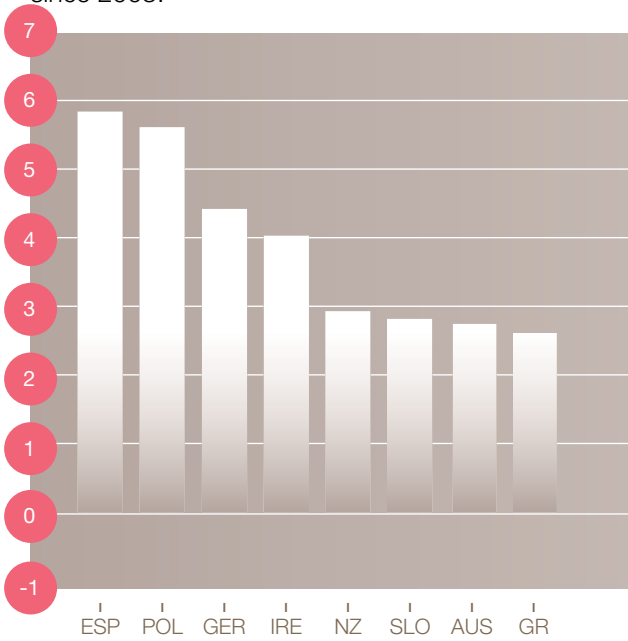
	EU	USA
Real estate etc	54	68
Wood, pulp etc	58	50
Basic metals and metal products	61	55
Hotels and restaurants	61	61
Retail trade	74	49
Transport equipment	75	43
Financial services	77	58
Wholesale trade	79	62
Community, social and personal service activities	79	94
Publishing, printing etc	82	100
Construction	82	87
Health and social work	82	116
Chemicals etc	85	81
Transport	85	57
Professional and business services	89	66
Education	91	231
Computer and related activities	103	61
Food, drink and tobacco	104	94
Public admin etc	110	64
Textiles and textile products	115	63
Post and telecommunications	124	140
Agriculture etc	137	63
Other manufacturing	150	149
Electricity, gas and water supply	153	69
Sale, maintenance, etc of motor vehicles	154	149
Mining and quarrying	170	244
Machinery, electrical and optical equipment	185	65

Source: Experian (2007) Groningen Growth and Development Centre, 60 industry database (www.ggdc.net)

As indicated in Table 1.5 on page 21, the UK's employment rate (calculated on an internationally comparable basis) was 72.3% – 10th in the OECD rankings – some 5.6 percentage points above the OECD average and 5.3 percentage points above the average for the OECD's European members.[10] However, change in the UK's employment rate has been relatively weak in recent years, as shown in Chart 1.4.

While it is more difficult for countries with already high employment rates, like the UK, to continue to improve relative to other countries, **the UK has actually experienced a decline since 2003**, whilst countries such as the USA, Netherlands and some Scandinavian countries, also with high rates, have continued to improve. It should be noted, of course, that this relative deterioration began well before the current recession. The deterioration in the UK position is reflected in our ranking, going from 8th to 10th in recent years.

Employment performance across the regions and nations of the UK has, however, differed – with several of those with low employment rates (ie Northern Ireland, Scotland and the North East) making gains over the period. Table 1.10 shows changes in the employment rate for each of the regions since 2003.



The gap in employment rates between men and women has closed considerably in recent years so that today, the male rate is only 8.2% higher than the female rate (78.3% compared to 70.1%) – it was 35.7% in 1971.[11] In terms of age, the biggest recent change is the growth in the employment rate amongst those aged over 50 (it has increased by 8.6%) for those aged between 50 and the state pension age since 1992.[12]

It should be noted in passing that the proportion of those in work who are self employed has been steady (at around 13%) since 1992, whilst the proportion working part-time has slightly increased (from 23.6% in 1992 to 25.5% in 2008). The numbers of workers on temporary contracts, at a high of 1.8 million in 1997, has actually declined to 1.4 million in 2008. In terms of their share of total employment (at 5.4%), it is at an all time low since records began in 1992).[13]

The employment rate also varies considerably across different groups of people in the population. The Department for Work and Pensions (DWP) has Public Sector Agreement (PSA) targets to reduce the employment rate 'gap' for a range of disadvantaged groups: the over 50s, ethnic minorities, lone parents, the lowest qualified, and people with a disability.[14]

Chart 1.5 overleaf shows the employment rates for these groups[15], how they have been changing over time and how these employment rates have compared to that of the employment rate for the whole working age population over the period. It is noticeable that the gaps have been closing for all these groups except for the lowest qualified.

12 Ibid. p. 32.

13 Ibid. p. 34

14 There is also a target to close the employment rate gap for those deprived areas with the lowest rates of employment

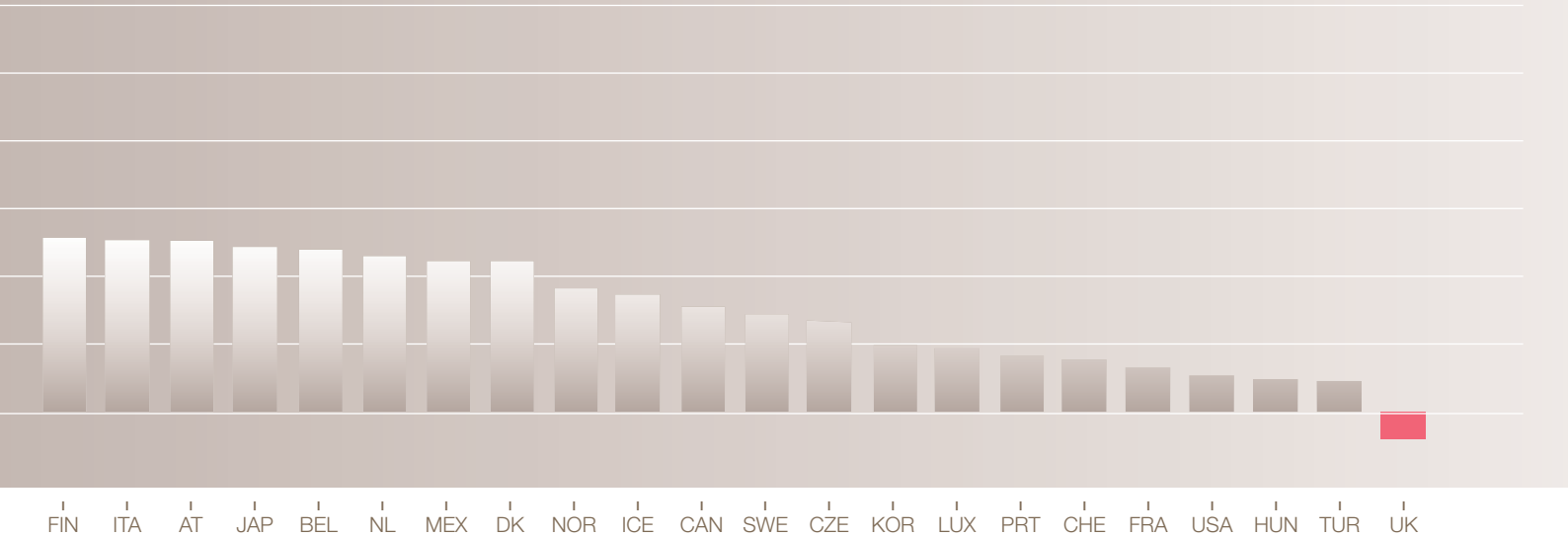
15 Department for Work and Pensions, Opportunity for all: Indicators update 2007, 2007, p. 52-55.

Table 1.10:
Employment rate by region and nation, 2008 and change 2003–2008

	Employment rate (2008) %	Change in employment rate since 2003, %
South East	78.7	0.0
South West	78.1	- 0.1
East	77.5	0.5
Scotland	75.7	- 0.8
East Midlands	76.2	- 0.3
Yorkshire and Humber	72.3	- 1.4
West Midlands	71.8	- 1.2
North West	71.0	- 1.8
North East	70.1	- 0.8
Wales	70.7	- 1.1
Northern Ireland	68.8	- 1.1
London	71.6	1.6

Source: Office for National Statistics, First Release.
Note: Data is for October–December, 2008.

Chart 1.4: OECD countries, change in employment rate 2003-2007



16 *Age 60 for women and 65 for men*

17 *Kent, K., 'Employment Changes Over 30 Years', 2009, p.33.*

18 *National Skills Assessment, 2007, SSDA (unpublished)*

19 *Kent, K., 'Employment Changes Over 30 Years', 2009, p. 30.*

- **People from ethnic minorities:** although still well below average, the ethnic minority employment rate has risen by 3.7 percentage points since 1997. Non-whites form a higher proportion of the unqualified too, and non-whites who have no qualifications are much less likely to be in work than their qualified counterparts. The Mixed and Asian/Asian British groups who are unqualified have particularly low employment rates at 17% and 35% respectively.
- **People with a disability:** again, the employment rate is below average, but the rate for disabled people has increased by almost seven percentage points since 1999. Those with no qualifications are also more likely to be DDA disabled than those with at least one qualification, and that those who have a DDA disability are less likely to be in employment. Those who are unqualified and have a DDA disability have a particularly poor employment rate of 25%.
- **The over 50s:** those over 50 form a higher proportion of the unqualified and around half are not in work. The employment rate of people aged 50 to pension age[16] has increased by over seven percentage points since 1997, now representing an extra 1.4 million people in employment. Older workers are an increasingly important source of employment, given that fewer young people are entering the employment market due to demographic changes. They are also an important source of skills (if sometimes in need of updating) and experience.
- **The low qualified:** here the employment gap between the low qualified and the average working age population is continuing to widen and, most alarmingly, is actually broadly declining over time. Only 46% of those without qualifications are in work compared to 86%, for example, of people with a degree or equivalent.[17]

1.3.3 THE LABOUR FORCE

The number of people working depends not only on the employment rate but also on the total number of adults in the population, so changes in population size are important to the potential for rising prosperity. In recent years, the UK population, and the working age population have grown, primarily due to increased net inward migration, such that:

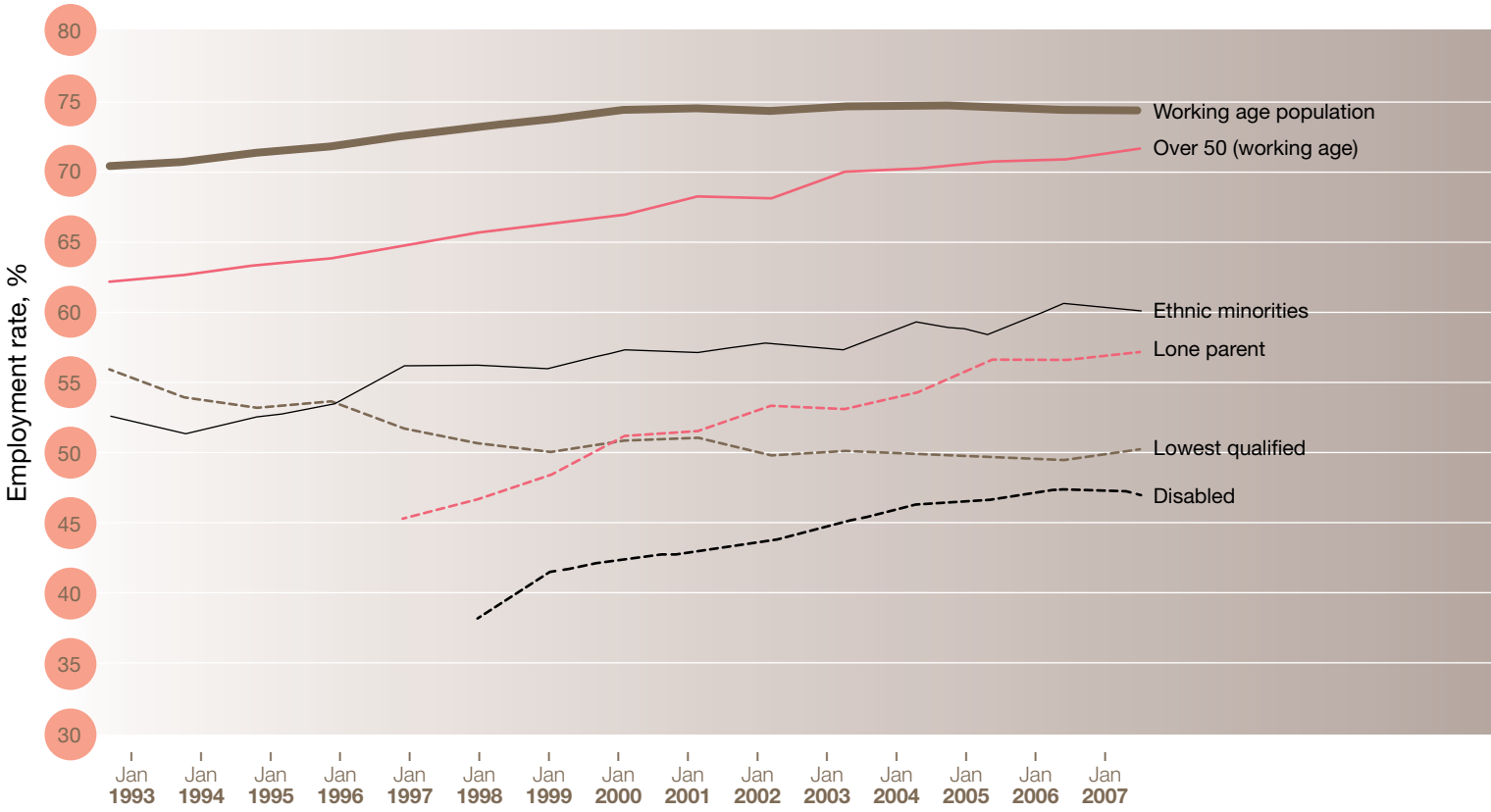
- between 1991 and 2000, UK population growth averaged 0.28% per annum and the working age population grew by 0.29% per annum. Net immigration added, on average, 75,000 people each year to the total population; however
- over the period 2000–2005, population growth averaged 0.46% and working age population growth averaged 0.7%. In this period, net immigration more than doubled to 180,000 per year (on average).

This means that the working age population increased by 3.5% between 2000 and 2005 compared to 2.7% between 1991 and 2000.[18] These trends have accelerated further in the last three years. The total population grew by 0.61% and the working age population by 0.65% per annum. Net immigration averaged 197,000.

Population projections expect that population growth will be sustained in the medium term. Growth in the working age population will increase to 0.67% per annum. Net immigration is expected to increase to 220,000 per year, after which it will ease a little but is still expected to be 194,000 per annum to 2020 – accounting for around half of expected population growth.

The future growth in the working age population will be mainly driven by women and migrants. Over 2007–20, the growth in male working age population is expected to average 0.38% per annum. Over the same period, the female working age population will grow at just over 1% per annum, because between 2010 and 2020 the state pension age will change from 60 to 65 for women. This means that of 269,000 additions to the working age population each year between 2007 and 2020 (on average), 185,000 (or 69%) will be women.

Chart 1.5:
Employment rates for disadvantaged groups



Source: DWP using Labour Force Survey

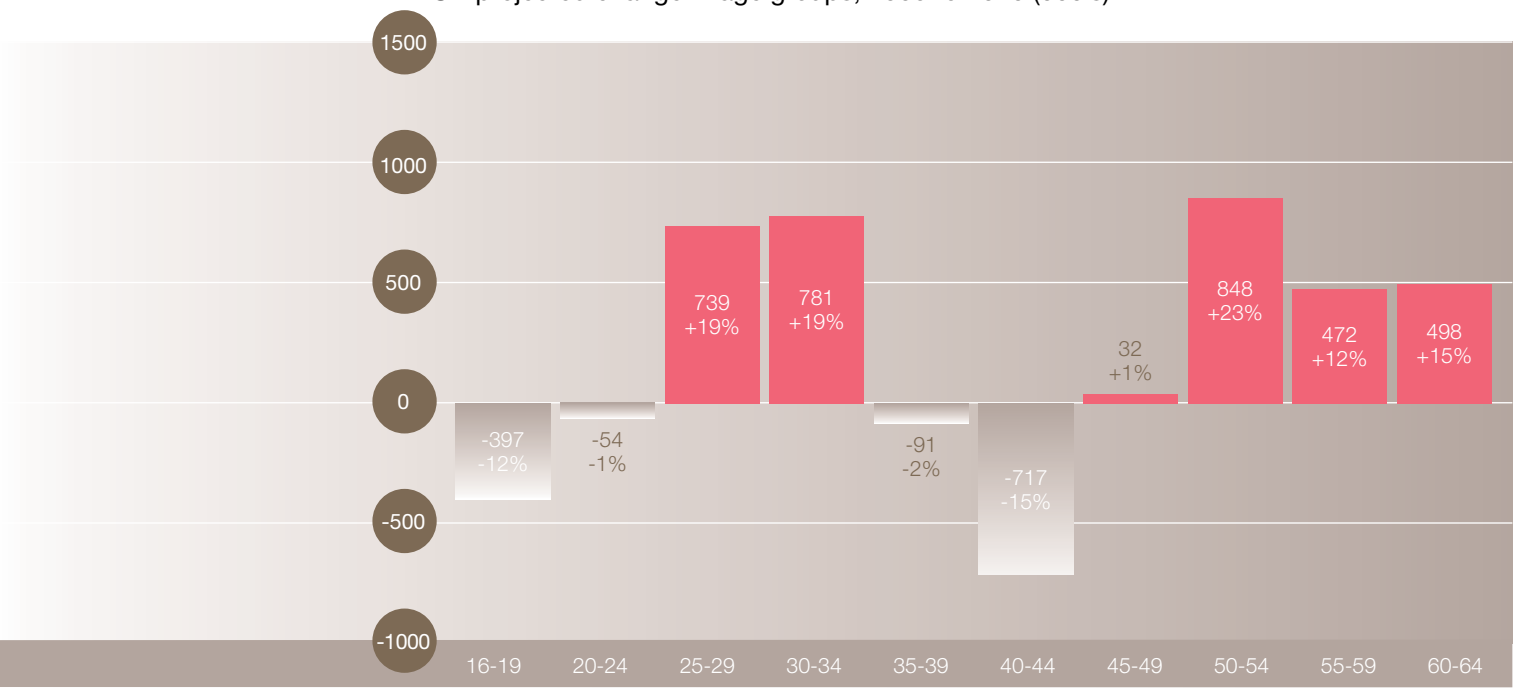
At the same time, immigration is forecast to add 192,000 persons each year to the working age population – ie 71% of the yearly increase in the working age population.

The current stock of 'foreign born' adults of working age is some 4.7 million, or 13% of the working age population, up from 8% in 1993. The increase in this number has, in recent years, been broadly equivalent to the total increase in the population of working age as a whole. For example, since 1997 both have risen by around 1.1 million. Gross immigration flows have grown considerably from around 350,000 per annum in 2002–03 to around 600,000 in 2007. Although there has been a recent growth in net migration from the A8 countries (those East European countries that joined the EU in 2004), they still account for a very small proportion of the foreign born population, at around 1%.

The structure and composition of the workforce is also changing (see Chart 1.6) as the age structure changes – there is likely to be a growth in older workers and a decline in workers aged 40–44 and also amongst the youngest group of workers, a trend exacerbated by the raising of the 'school leaving' age. Around 70% of our 2020 workforce are already in work.

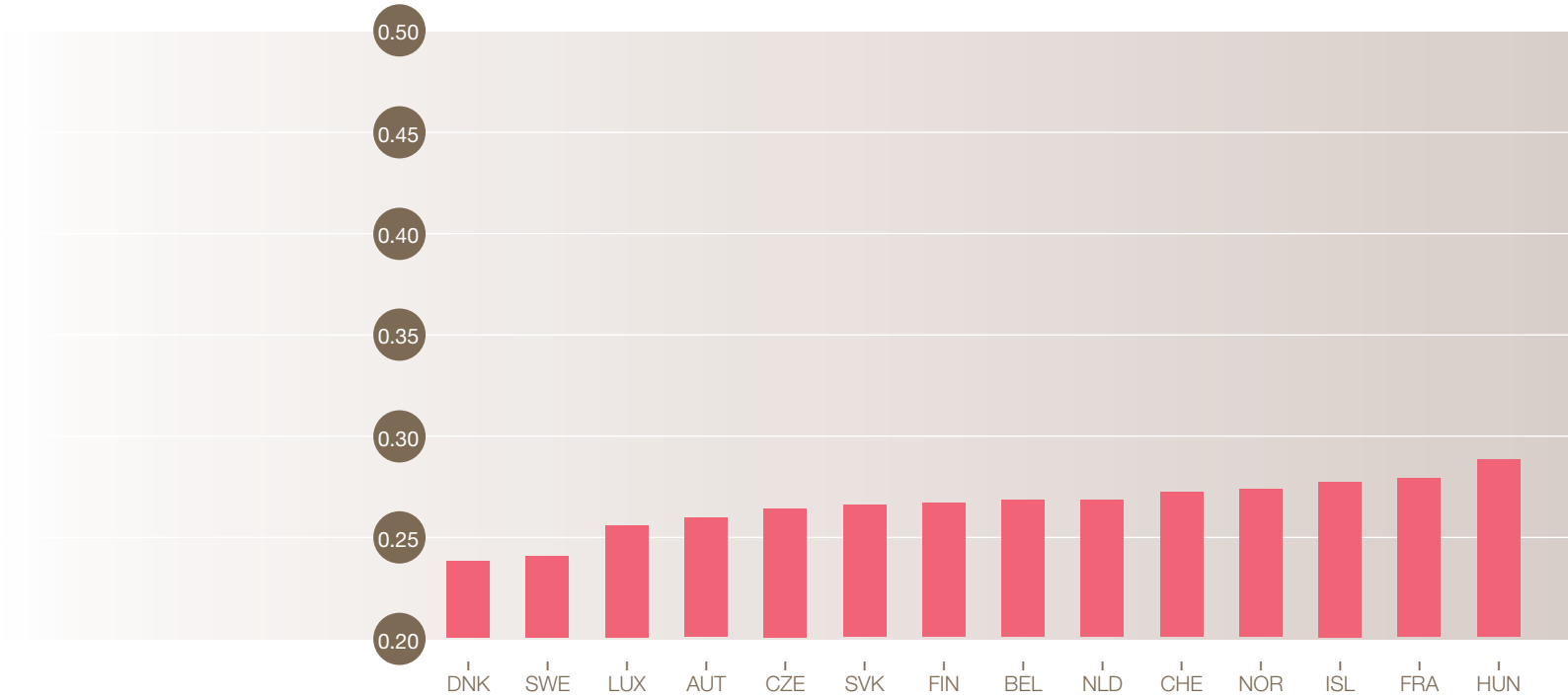
Currently (2007) there are more people aged between 16 and 39 than there are aged between 40 and pension age. By 2020, however, the reverse will be true and the average age of the population will increase from 39.7 to 42.6 by 2031. Nonetheless, the overall number of people aged between 16 and state pension age is likely to rise (from 37.9 million in 2007 to 43.4 million in 2031 – an increase of nearly 15%).[19]

Chart 1.6:
UK projected change in age groups, 2006 to 2020 (000's)



Source: ONS, Population projections, 2006 based.

Chart 1.7:
Gini coefficients of income inequality in OECD countries, mid-2000s

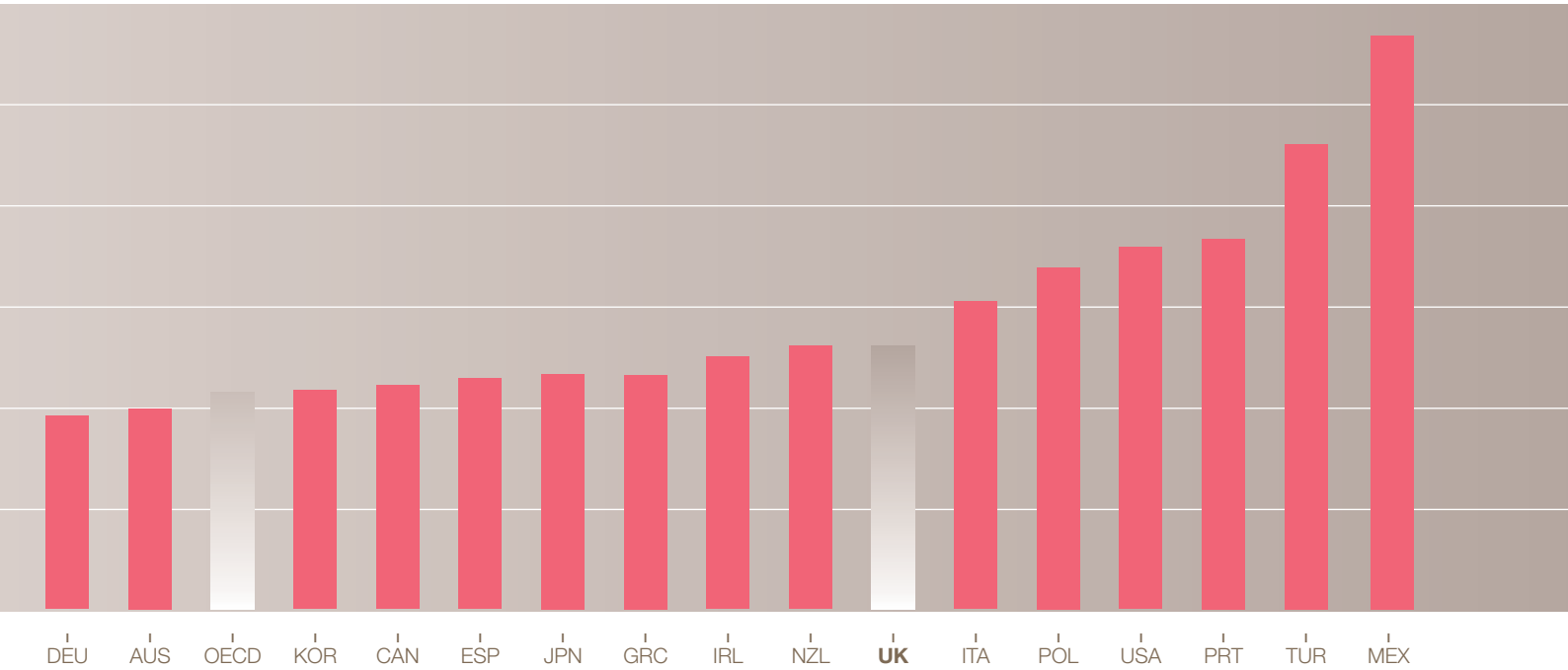


Source: OECD, Growing Unequal? Income Distribution and Poverty in OECD Countries, 2008, p. 25

1.3.4 MEASURES OF INEQUALITY

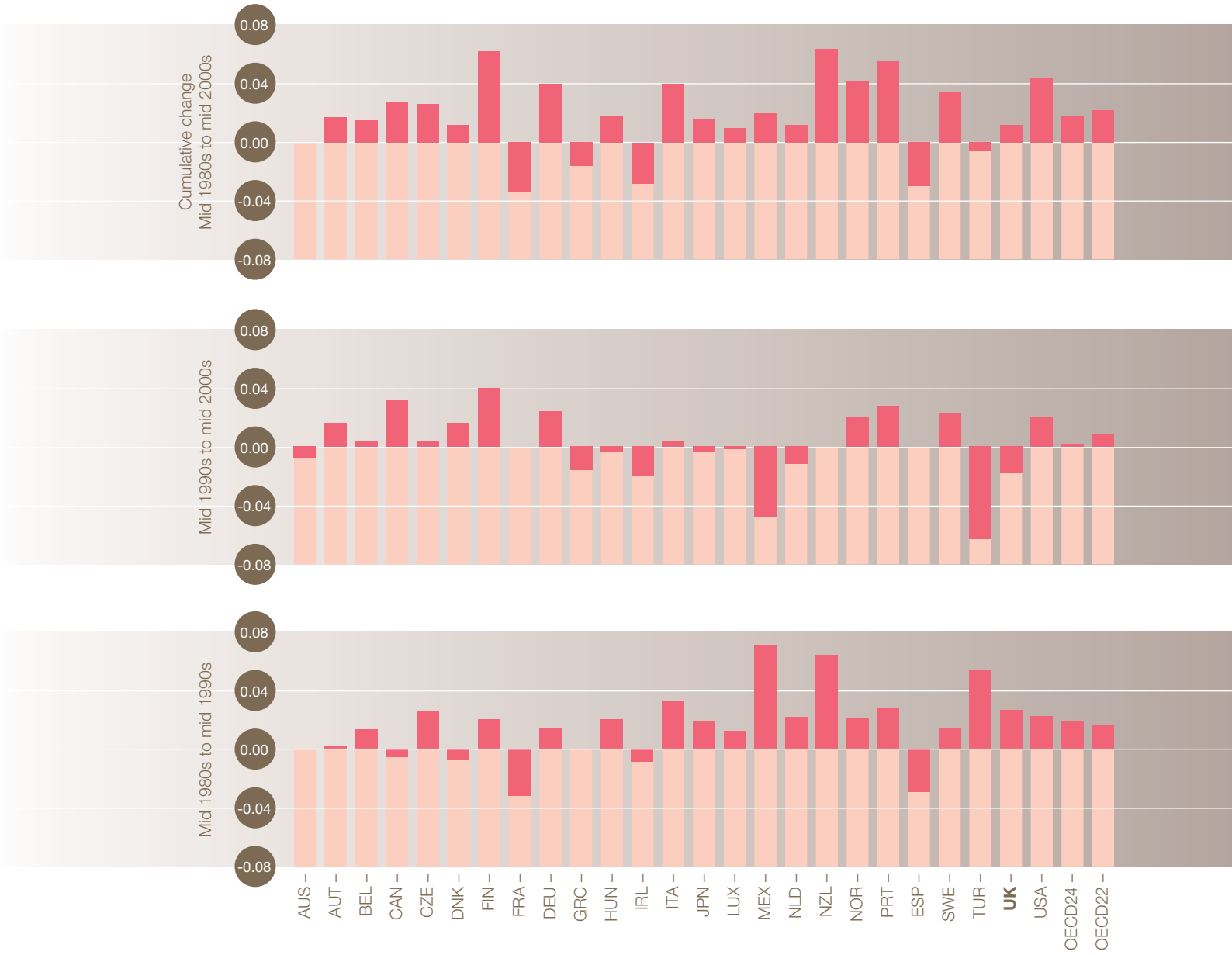
How is the prosperity generated by employment and productivity growth distributed? How polarised are people's incomes?

Chart 1.7 shows the Gini coefficients of income inequality (disposable income) across the OECD countries, with the most equal countries being on the left and least equal on the right. **The UK is the 24th least equal**, or 7th most unequal, **of all the countries**. Recent trends in the UK show, however, that inequality widened from the mid 1980s to 1990s and then narrowed (indeed, at a faster rate than most other OECD countries) from the mid 1990s to the mid 2000s (see Chart 1.8).



Except for those in the poorest tenth of income earners (who have enjoyed very low increases in income over the last 10 years) and those in the richest tenth (who have enjoyed very large increases in income over the last 10 years), those on below average incomes have enjoyed larger proportional increases in income than those with above average incomes (New Policy Institute, www.poverty.org.uk/09).

Chart 1.8:
Trends in income inequality (point changes in the Gini coefficient over different time periods)



Source: OECD, Growing Unequal? Income Distribution and Poverty in OECD Countries, 2008, p. 27

If we compare the incomes of different groups of individual earners, we gain an understanding of people's 'returns from work' and how this compares (see Table 1.11). For example, if we compare the incomes of the top and bottom 10% of earners, we can see that the UK earnings dispersion is relatively high compared to other OECD countries. Of the 20 countries for which comparable data is available, the UK is the 14th least equal in terms of the ratio of the top 10% of earners to the bottom 10% of earners. The Scandinavian countries, Switzerland, Netherlands and France are amongst the most equal and the USA, Poland and Korea the least equal. This earnings dispersion, amongst both full time men and women in the UK, has been also increasing over time (OECD (2008), op cit pages 80–2).

Table 1.11:
Earnings dispersion, in OECD countries

	9th to 1st earnings deciles	
	1996	2006
Australia	2.95	3.26
Austria	..	..
Canada	3.53	3.74
Czech Republic	2.80	3.10
Denmark	2.49	2.67
Finland	2.29	2.49
France	3.09	2.91
Germany	2.91	3.26
Hungary	4.01	4.56
Ireland	3.93	3.92
Japan	3.00	3.11
Korea	4.04	4.56
Netherlands	2.78	2.91
New Zealand	2.53	2.86
Norway	1.95	2.11
Poland	3.50	4.21
Spain	4.22	3.53
Sweden	2.27	2.31
Switzerland	2.41	2.65
United Kingdom	**..**	**3.63**
United States	4.63	4.84
OECD*	**3.12**	**3.33**

Source: OECD, Employment Outlook 2008, 2008, p. 358

20 *Cabinet Office, Getting On, Getting Ahead: A Discussion Paper: Analysing the Trends and Drivers of Social Mobility, 2008.*

21 *Goldin, C.and Katz, L.F., The Race Between Education and Technology, 2008.*

22 *Heckmann, J., Schools, Skills and Synapses, 2008.*

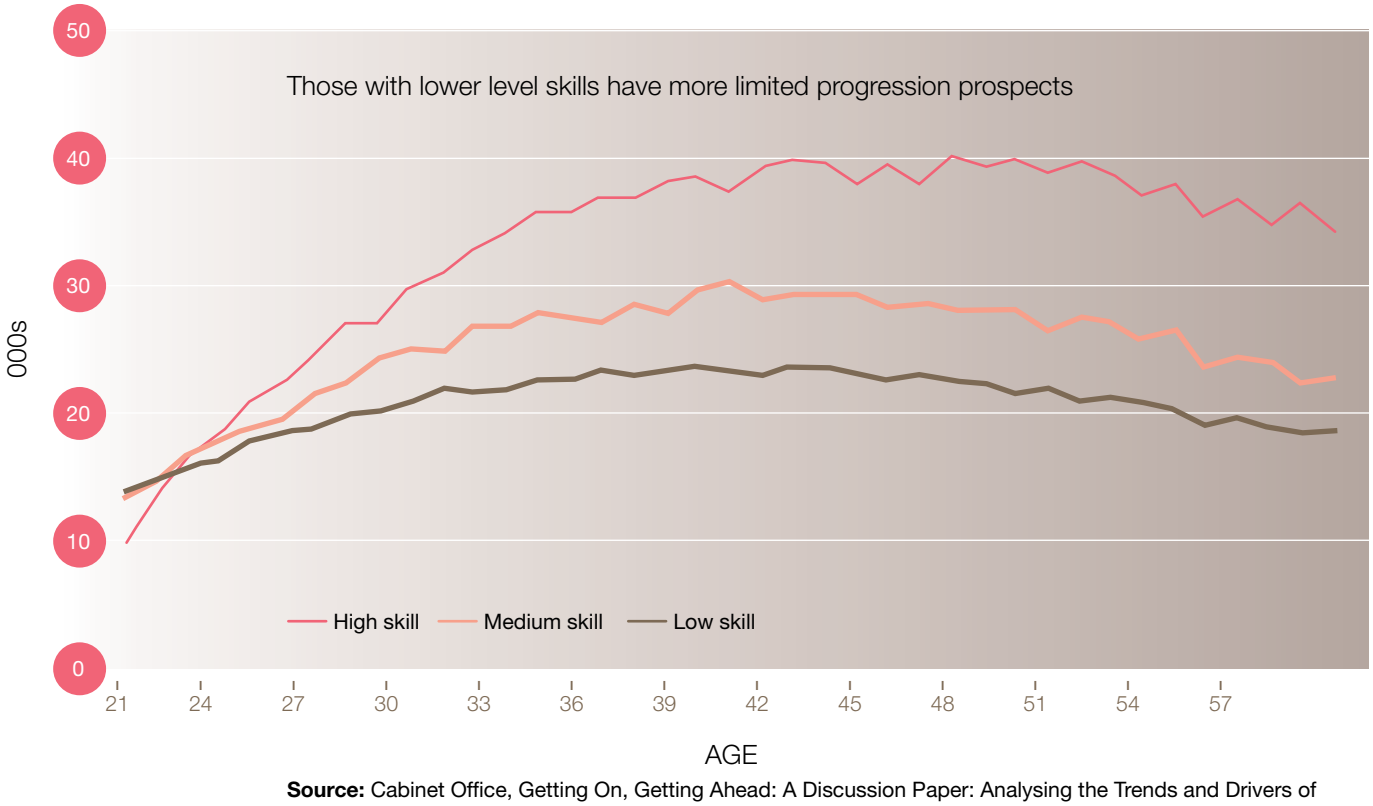
So income inequality is relatively high. But what of the **prospects for social mobility**, poor people on low incomes becoming people on higher incomes, across generations and through the course of an individual's life? A recent Cabinet Office report[20] draws attention to the central role that better jobs and access to those jobs, especially through improved qualifications and skills, play in increasing inter and intra-generational mobility.

For example, whilst the proportion of men and women getting better jobs than their parents rose throughout most of the 20th century, since the early 1980s, this mobility has flattened out with probably no change in 'relative' occupational mobility since the early 1980s. Moreover, mobility has been less in the UK than in several other countries, such as the Netherlands and Scandinavia.

One key driver of social mobility is education – qualifications and skills are vital, especially in an era where jobs growth is 'skill biased'.[21] A more capable workforce ensures that workers are better able to respond to increases in the demand for higher skilled labour and this development of capability starts early – 'learning begets learning'.[22]

There is also a close relationship between the socio-economic background of children and the qualifications they achieve at school and between qualifications obtained at school, and access to further post-16 qualifications and skills acquisition. **Those with fewer skills therefore have more limited career progression prospects through their working life (see Chart 1.9).**

Chart 1.9:
Gross median annual earnings (£) by age for men, disaggregated by skill level, 1994–2006



Source: Cabinet Office, Getting On, Getting Ahead: A Discussion Paper: Analysing the Trends and Drivers of Social Mobility, 2008

Furthermore, recent evidence suggests income inequality may be associated not only with inequalities in respect of a range of social problems but with the existence of national problems. In other words, **it may be that it is not just those on low incomes who 'suffer' from inequality, but everyone.**[23] For example, in more equal countries those in highly educated families are more literate than in less equal countries. Reducing inequality may, in other words, benefit us all. Increased prosperity needs to benefit the many, not the few.

Each of the four nations has developed national indices of deprivation which show the differing levels of deprivation across each of the nations. Although the indices are constructed differently across the four nations (making direct comparisons difficult), the detailed geographic nature of the indices is useful in identifying the broad geography of deprivation.

- In England, the results of the 2007 indices of deprivation show specific concentrations of deprivation in cities, 'one industry' towns and former coal mining areas. Approximately one third of the population in the North East of England live within the 20% most deprived areas in England, as do 31% of the population in the North West and 28% of those living in London.
- The Scottish Indices of Deprivation (2006) show that deprivation is also concentrated in urban areas. Evidence from the 2006 index shows that just over a third of the top 15% most deprived areas in Scotland are in Glasgow, with high concentrations of deprivation also found in Edinburgh (7%), North and South Lanarkshire (9% and 6% respectively) and the City of Dundee (5%).
- The Welsh Indices of Deprivation (2005) display similar urban concentrations, and also demonstrate the continuing levels of deprivation in former mining towns. 17% of the top 10% most deprived areas in Wales are in Cardiff, 15% in Rhondda Cynon Taff and 12% in Swansea. Outside of these areas other locations in Wales suffer disproportionate levels of deprivation with high proportions of some areas registering in the top 15% such as Merthyr Tydfil (36%) and Blaenau Gwent (26%).
- In Northern Ireland the Indices of Deprivation (2005) show that the urban areas of Belfast and Londonderry face the brunt of deprivation, with around a third of the data areas of both Belfast and Londonderry falling within the top 10% most deprived areas.

1.4 THE ROLE OF SKILLS

Skills have a crucial role in (i) raising employment and productivity and (ii) in addressing inequalities between groups in the UK. We address each of these below.

1.4.1 THE ROLE OF SKILLS IN RAISING EMPLOYMENT AND PRODUCTIVITY

Improving the skills base of the UK economy is crucial to boosting productivity, employment and international competitiveness and exploiting new opportunities in high value-added activities directly by increasing human capital; and indirectly through spillover effects and encouraging greater investment and innovation.

Increasing workers' skills makes it easier for firms to adapt to change (technological or otherwise) and compete in new markets. Increased worker productivity boosts firm efficiency and allows firms to grow and create new jobs. Skills are expected to be a key driver of future growth for many parts of the economy.

23 Wilkinson, R. and Pickett, K., The Spirit Level: Why More Equal Societies Almost Always Do Better, 2009.

There is an extensive body of evidence which shows that more skilled workers are more productive, more flexible and adaptable.[24] Improving skills raises the human capital of the individual concerned. Higher skill levels increase a firm's confidence in its employees' ability to adapt, so encouraging greater investment and innovation.

There is broad agreement that improvements to skills bring a boost to growth and are associated with higher levels of national income in the long term.

The UK Commission's review of the available evidence on the economic value of skills will be published separately in the summer[25], but, in summary, skills contribute at several levels: the individual, the firm or the whole economy.

For the **individual**, an increase in skills can have a two-fold effect. It can:

- increase the likelihood of an individual being in employment (and to help them remain in the labour market); and
- increase the wage returns that individuals can earn. The UK has, by international standards, high returns to qualifications (especially higher level ones) and this appears to be stable over time, although they do vary according to (i) the level of qualifications, (ii) the nature of the qualifications (ie whether they are academic and vocational) and (iii) different sectors and across different parts of the UK.

For the **firm**, higher levels of skills are associated with a range of positive benefits, including (i) increased job satisfaction and lower absenteeism and quit rates, (ii) improving chances of survival ('non training' firms are two and a half times more likely to go out of existence than 'training' firms[26]), (iii) providing returns (financial institutions with higher than average training expenditures per employee had better performance than the competitor institutions on measures of return on assets, return on equity, net income per employee, total assets per employee and stock return), (iv) improve productivity and contribute to overall productivity (more productive companies in the UK had workforces with on average two years more schooling than less productive firms) and (v) are associated with high added value product strategies and through this to higher growth in sales and high levels of capacity utilisation. High levels of skill and knowledge are prerequisites for success in high value added production.

For the **wider economy**, skill levels (through the contribution of education) are important in explaining differences in economic growth and national productivity, in that it exerts a positive impact on the growth of income per capita, boosts economic growth rate and GDP. It has been suggested that increasing the proportion of workers trained by five percentage points could result in a four percentage point increase in value added per worker. Such a rise in productivity amounts to an additional £40 billion on GDP.

It is not only high levels of qualifications that generate a return to people. Research[27] has identified substantial wage returns associated with a range of generic/employability skills: eg people with computing skills could command wage premiums of around 13% more than those without such skills. Professional communication and problem solving skills also secured higher wage returns. Furthermore, research[28] has indicated that basic and literacy skills are highly valued in the labour market: eg individuals with Level 1 numeracy and/or literacy skills earned around 15–19% more than those with skills below this level and were around five percentage points more likely to be employed.

Raising skill levels can help those with no or low skills to move into work and to stay in work, by making them better placed to find other work when they leave their current job, helping to break the 'low pay – no pay' cycle that many experience.

24 See for example, Tamkin, P. et al, Skills Pay: The Contribution of Skills to Business Success, 2004; Campbell, M., Learn to Succeed: The Case for a Skills Revolution, 2002.

25 The Value of Skills, UKCES (forthcoming).

26 Collier, W. et al, Training and Establishment Survival, SSDA Research Report 20, 2007.

27 Felstead, A. et al, Work Skills in Britain 1986-2000, 2002.

28 Dearden, L. et al, Who Gains When Workers Train? Training and Corporate Productivity in a Panel of British Industries, 2000; Dearden, L. et al, The Returns to Academic, Vocational and Basic Skills in Britain, 2000.

29 Meager, N. (2009) 'The role of training and skills development in active labour market policies, in International Journal of Training and Development, Vol. 13, No. 1.

30 Dearden, L. et al, Who Gains When Workers Train? 2000; Dearden, L. et al, The Impact of Training on Productivity and Wages: Evidence from British Panel Data, 2005.

31 Green, D. et al, 'The Impact of Training on Labour Mobility', 2000.

Whilst some evidence[29] suggests that training interventions generally have relatively poor outcomes for unemployed and disadvantaged people, certain types of training intervention – small scale, targeted, on-the job, coupled with work experience – are more likely to pay off for some of these target groups.

There is sometimes a misconception that it is workers that benefit from training and not the business, particularly if the training leads to a formally recognised qualification. However, research[30] indicates that increased wage costs are outweighed by the productivity and profit gains made by firms that provide job related training. There are substantial pay-offs to firms in terms of higher performance: increasing the training rate by five percentage points is associated with a four percentage point gain in productivity. This more than offsets the increase in wages. Added to this, it is by no means clear that increased training does indeed lead to increased staff turnover. There are two competing theoretical arguments: (i) that training (especially if certificated) may add to worker mobility and (ii) that training, especially if supported by the current employer, may cement workers' loyalty to their current employers and thus reduce labour turnover. An estimate[31] of the net effects of training on mobility found that training had no impact on mobility in three out of every five cases; the remaining cases are split equally between those where training increases and those where it decreases mobility.

It is clear, however, that qualifications do not fully capture all aspects of skills development. Not all successful skill acquisition involves acquiring qualifications and not all skills are equally valuable. This has implications for how we could frame our 2020 Ambition in the future.

1.4.2 THE ROLE OF SKILLS IN TACKLING INEQUALITY

(Non) employment is a key determinant of poverty. Whilst skills can play a role in helping people to access work and, once there, to stay in and progress in employment, it is also clear that skills are not the only enabler for accessing employment and that many people face multiple barriers. Because of this, the relationship between skills and inequality is complex and is an area which would benefit from further research.

What is clear is that of the 4.6 million people with no qualifications, 3.5 million fall into at least one of the other DWP PSA target groups who experience low levels of employment (ie they are disabled, aged 50 or over, a lone parent, from an ethnic minority).[32] These multiple disadvantages do impact: lone parents with qualifications have an employment rate of 63%, and those without have an employment rate of 30%. However, women with no qualifications but who are not lone parents have an employment rate of 72%.[33] This suggests that the lack of qualifications or the fact of being a lone parent on its own is not the determining factor preventing access to employment, but the combination of the two significantly reduces employability. In fact the lack of skills combined with being a lone parent creates one of the most disadvantaged groups.[34] Employment penalties associated with other disadvantaged groups (including ethnic minorities, disabled, older workers, and single parents) are greater for those who are poorly qualified (below NVQ Level 2).[35] It seems to be the case that disadvantage may be additive, ie the more disadvantages faced by an individual, the greater the likelihood of being unemployed. Berthoud found that the non-employment rate among the sample in his research ranged from just 3%, for those with none of the six disadvantages studied[36], to 91% of those who faced all six.

32 This analysis doesn't take account of the other types of disadvantage that are not measured by the LFS eg homelessness, drug or alcohol abuse, ex-offenders. Estimates are that 50% of ex-offenders have no qualifications and 40% of those living in temporary accommodation. No figures are available on the qualification levels of benefit recipients with drug or alcohol problems.

33 These comparisons look at a base case lone parent who is white and non-DDA disabled. DfES and DWP, A Shared Evidence Base: The Role of Skills in the Labour Market, 2007.

34 Berthoud, R., Multiple Disadvantage in Employment: A Quantitative Analysis, 2003.

35 Skills Strategy Division, Explaining the Employment Gap Between High and Low Educational Attainers, 2007.

36 The six disadvantages studied by Berthoud included: family structure; low skill level (indicated by qualification level and type of occupation); disability; aged over 50; high regional unemployment rate (above 9.5%); and being from an ethnic minority

Mason and Salverda (2009)[37] report that in 2005 an estimated 22% of UK employees were low-paid, defined as earning less than two thirds of median gross hourly wages. This was a slightly lower rate of low pay than in the US (25%) and Germany (23%) but high compared to 18% in the Netherlands, 11.1% in France and 9% in Denmark.

The incidence of low pay in the UK economy stopped rising in the mid-1990s[38] but was not forced into reverse, even after the introduction of the National Minimum Wage. They attribute this in part to policies which have tended to reinforce the growth of low-paid employment by promoting higher rates of labour force participation and encouraging a 'paid work' route out of poverty (eg through in-work benefits). Low-skilled people re-entering employment following periods of inactivity or unemployment are particularly vulnerable to low pay and many of them will also prove vulnerable to unemployment when the recession worsens.

1.5 CONCLUSIONS

Our prosperity and our competitiveness, in the long run, depends on jobs and productivity: how many people are in work and how productive they are when they are in work. And skills are vital to both. If we are to become World Class and be amongst the top eight countries in the world, we must raise our game to match the productivity, jobs and skills of the best in the world. We are not yet World Class by these standards nor are we World Class in terms of competitiveness nor in our ability to spread the benefits of prosperity widely amongst our people.

We will not be able to become World Class without a substantial improvement in the skills of our people. Skills increase people's chances of sustainable employment and higher earnings; they increase the chances of business survival, growth and productivity; and they are a key driver of economic growth. In short, skills matter a great deal, to jobs, to productivity and to our national prosperity.

37 Mason, G. and Salverda, W. 'Low Pay, Living Standards and Employment', 2009 (forthcoming).

38 G. Mason, K. Mayhew, M. Osborne, Low-paid work in the UK: an overview, in C. Lloyd, G. Mason, K. Mayhew (eds), Low-Paid Work in the UK, New York: Russell Sage Foundation, 2008.

2 The Ambition: Skills and Jobs

2.1 INTRODUCTION

This chapter sets out the World Class Skills Ambition set out in the Leitch Review and then outlines the response to it in each of the four countries in the UK. We then set out a developed 'fivefold' qualification ambition for the UK, how such an ambition might be translated across the UK and what progress would need to be made in order to achieve it. We conclude by drawing attention to the issue of using qualifications as a 'proxy' for skills and why therefore we seek in this report to assess the UK's position on other dimensions of skill later in the report.

2.2 THE AMBITION RESTATED

2.2.1 THE LEITCH AMBITION

The Leitch Review set out a clear agenda for change which can be summarised as defining a single ambition for the UK – to become a world leader in skills by 2020. The ambition was that the UK should commit itself to **achieving World Class skills by moving the UK into the top eight in the world, at every skill level, by 2020, ie being in the top quartile of the OECD countries**. To enable it to achieve this ambition, the UK needed to commit to achieving by 2020 the four objectives set out on the opposite page.

THE LEITCH AMBITION: TO BECOME A WORLD LEADER IN SKILLS BY 2020

95% of adults[39] to have functional literacy and numeracy (basic skills), up from 85% literacy and 79% numeracy in 2005.

More than 90% of the adult population qualified to at least Level 2, with a commitment to achieving World Class skills (currently projected to be 95%).

Shifting the balance of intermediate skills from Level 2 to Level 3, with a boost to the number of Apprentices to 500,000 and a total of 4 million adult Level 3 attainments over the period.

World Class high skills, exceeding 40% of the adult population qualified to Level 4 and above, with an increased focus on Level 5 and above skills.

39 Adults defined as 19 to retirement age.

This would represent, and require, a substantial improvement in the UK's skills. Over the period to 2020, the improvements in basic skills will require a trebling of projected rates of improvement to achieve a total of 7.4 million adult attainments (2.3 million literacy attainments, 5.1 million numeracy attainments); those at Level 2 will require 5.7 million adult attainments; those at Level 3 will require 4 million adult attainments; and those at Level 4 a total of 5.5 million attainments over the period. This is **equivalent to over 20 million additional attainments, more than one for every second adult of working age in the UK**.

In addition to these four skills-related objectives, **the UK has a long-term aspiration of achieving an 80% employment rate**, though no milestones/ targets have been set in terms of timing.

Achieving the skills ambition, and ensuring that these skills are effectively used, would yield enormous benefits for the UK. It is estimated that it could deliver a possible net benefit (on conservative assumptions) of at least £80 billion over 30 years, driven by increased productivity and improved employment. If attained, the employment improvement would suggest an extra 200,000 people in work by 2020 – giving people a fairer chance to progress, leading to less deprivation and potential wider impacts on health, crime and social cohesion, as well as benefiting individual and family income.[40]

2.2.2 WIDER AMBITIONS: THE LISBON STRATEGY

The prosperity, employment, productivity and skills agenda is not unique to the UK: countries across the European Union are facing similar issues. The European Council in 2000 set out the **'Lisbon Strategy'** or the **'Lisbon Agenda'** for growth and jobs. It had the ambitious goal to make the EU 'the most competitive and dynamic knowledge-driven economy by 2010, capable of sustainable economic growth with more and better jobs and greater social cohesion.' [41]

In order to achieve this goal, the strategy proposed a range of different targets and reporting mechanisms. The Lisbon Strategy was simplified and relaunched in 2005 with a priority to achieve 'more and better' jobs.[42] Within this, the European Union has set five benchmarks in the education and training field in particular, which it aims to achieve by 2010 – reducing the proportion of young people not in education/training; increasing the proportion of young people completing an upper secondary education; increasing the proportion of adults participating in lifelong learning; an increase in Maths/Science/ Technology Graduates; and reducing the number of young people with poor reading skills. The Commission has presented a 'Community Lisbon programme'[43], to complement the National Reform Programme (NRP) that member states have to present. The programme consists of some 50 initiatives at EU level to refocus the EU's economic reform agenda on growth and jobs.

In December 2008, the European Commission also launched its 'New Skills for New Jobs' agenda, putting the development of skills at the heart of the European jobs and prosperity agenda.[44]

40 Leitch Review of Skills, Final Report 2006.

41 European Council, Lisbon Extraordinary European Council: Presidency Conclusions 23rd and 24th March 2000.

42 Lisbon Extraordinary European Council: Presidency Conclusions 22nd and 23rd March 2005.

43 Commission of the European Communities, Common Actions for Growth and Employment: the Community Lisbon Programme, 2005.

44 European Commission, New Skills for New Jobs: Anticipating and matching labour market and skills needs, Communication from the Commission, COM(2008) 868, 16 December 2008.

2.3 RESPONSES TO THE LEITCH AMBITION

Following publication of the Leitch Report, governments across the UK responded in a variety of ways as skills policy is a devolved responsibility in the UK. These reflected individual governments' concerns that differences in labour markets and economic conditions may require different skill strategies to achieve a World Class Skills Ambition.

The **UK Government** embraced the Leitch Targets for England and the recommendations were converted into PSA Targets for the current Comprehensive Spending Review period (to 2010-11), and for long-term targets to 2020 (whilst noting[45] that the 2020 Ambition is very stretching). The approach focuses on:

- delivering significantly improved basic and intermediate skill levels by (i) ensuring that vocational qualifications are of economic value and (ii) expanding opportunities for work-based learning;
- delivering improved higher skill levels by broadening learning opportunities beyond traditional full-time provision, improving the interaction between higher education institutions and employers, and driving up teaching quality and individual choice; and
- integrating the employment and skills systems with a greater emphasis placed on sustainable employment as a priority outcome.

The **Scottish Government** published *Skills for Scotland: A Lifelong Skills Strategy* in September 2007. The strategy sets out the Scottish Government's ambitions for skills throughout life within the context of its economic approach. The strategy articulates three main guiding principles – individual development, economic pull and cohesive structures. It highlights a direction of travel. What it did not seek to do was develop the detail: the document sits at the strategic level, deliberately being the 'what' not the 'how'.

In February 2009, the Scottish Government published an update to *Skills for Scotland: A Lifelong Skills Strategy* (www.scotland.gov.uk/skills). Significant developments have been made since the publication of the strategy to address the challenges outlined in it, including in respect of skills utilisation. The strategy update contains much of this progress. The Scottish Government have developed a performance measurement system (www.scotland.gov.uk/about/scotperforms) to track its overall success. Several of the 'purpose targets', national outcomes and 'indicators of progress' are of relevance, particularly in regard to productivity, labour market participation and income in equality. The skills related indicators of progress relate to: reducing the numbers of working age people with severe literacy and numeracy problems; increasing the proportion of graduates in positive destinations and reducing the proportion of school leavers in positive and sustained destinations.

In **Northern Ireland**, the Government had already broadly adopted similar aims to those outlined in the Leitch Review and is developing a detailed strategy to be published in 2009. However, it is worth noting that existing Northern Ireland targets[46] do largely align with the Leitch Ambition setting out over a 10 year timeframe (ie to 2015) the intention to:

- support the essential skills learning for 100,000 adults;
- increase to 90% the proportion of adults in the workforce with a Level 2 qualification;
- increase to 60% the proportion of adults with at least a Level 3 qualification; and
- demonstrate a significant progress on increasing the employment rate, especially among disadvantaged groups taking account of the economic cycle.

45 DIUS, World-Class Skills: Implementing the Leitch Review of Skills in England, 2007.

46 DELNI, A Statement of Skills in Northern Ireland, 2008

The **Welsh Government** published a new skills and employment startegy in June 2008: *Skills that Work for Wales.*[47] It adopted the ambition to have a World Class skills profile by 2020 and confirmed the existing number of short-term targets for qualification attainment by 2010, namely:

- the percentage of working age adults with Level 1 or above basic skills in literacy to be 80% by 2010[48];
- the percentage of working age adults with Level 1 or above basic skills in numeracy to be 55% by 2010;
- the percentage of adults of working age with a qualification equivalent to Level 2 or above to be 70% by 2010;
- the percentage of adults of working age with a qualification equivalent to Level 3 or above to be 50% by 2010; and
- the percentage of adults of working age with a qualification equivalent to Level 4 to be 30% by 2010.

It also pledged to review the targets in line with the longer-term ambitions on advice from the new Wales Employment and Skills Board (WESB).

The new skills and employment strategy for Wales focuses on:

- **bringing together** interventions for skill, business development and employment;
- **improving** levels of basic literacy and numeracy;
- **ensuring** that people are equipped with a platform of skills that will help them to enter and remain in employment;
- **increasing** the supply of, and demand for, intermediate and higher-level skills – including the management and leadership skills essential for business success;
- **addressing** skills gaps and shortages in priority sectors of the Welsh economy; and
- **transforming** the network of learning providers to offer improved choice and opportunity for learners.

Overall, we can see that, whilst the individual countries do have somewhat different approaches, all except Scotland have adopted, for now, a qualifications type of ambition.

2.4 REFRESHING THE AMBITION

Building on the initial Leitch Ambition and the objectives in each of the countries, the UK Commission has developed the Ambition for the UK but expanded it to give a fuller fivefold qualifications structure rather than the threefold one in Leitch[49], where:

- the 'shift of balance to intermediate skills from Level 2 to Level 3' suggests that the appropriate division between Level 2 and Level 3 is 28% at Level 3 and 22% at Level 2. This gives us separate ambitions then, for Level 2 and Level 3;
- the 10% target for 'below Level 2' (the obverse of 90% to be qualified to at least Level 2) is divided into 4% with no qualifications and 6% with qualifications below Level 2.

This gives a fivefold articulation of the skills ambition of qualification attainment which is set out in Table 2.1. The current distribution of qualifications attainment is set out in the first column, the 2020 Ambition in the second column, and the 'gap' between the two is identified in the final column. The gap between the existing 2007 levels and the Ambition for 2020 for the UK shows that **there needs to be progress at Levels 3 (an increase of eight percentage points) and 4 (nine percentage points). There also need to be reductions in the proportions with no qualifications (a decrease of eight percentage points) and with only very low levels of qualification (11 percentage points)**.

47 DCELLS, Skills that Work for Wales: A Skills and Employment Strategy and Action Plan, 2008.

48 It needs to be noted that WAG have adopted a different definition of functional basic skills, being attainment at Level 1 for both literacy and numeracy.

49 A description of the qualification structure and how this links to international comparisons is given at Annex 1.

50 We recognise that skills policy is a devolved responsibility and we are not suggesting that these are the existing ambitions in each part of the UK.

It is also important to note that existing **skill levels**, as measured by qualifications, **vary widely across the UK** (see Chart 2.1). Skill levels are highest in London and Scotland, with the South East also being above average. Some regions are positioned relatively better at the higher level skills end (eg the North West) and others at the lower skills end (eg the South West). Others are relatively weak on both counts (eg West Midlands).

Moreover, it is clear that these skill levels are associated, right across the UK, with variations in the employment rate – higher skill levels generally mean a higher probability of employment – this is discussed further in section 6.4 in our consideration of the unemployed and inactive.

It would not be appropriate for each nation in the UK to adopt the same scale of ambition, starting as they do from rather different positions.[50] These current positions are set out in Table 2.2 in the first column. What may be seen as stretching for one may not be for another because of their different starting point and different rates of progression required to achieve a UK-wide ambition. Column 2 therefore provides some stylised calculations, created by the UKCES, which show the impact of adopting a common (UK) **rate of progression**.

Table 2.1:
Changing distribution of qualifications in the UK (%)

	2007	2020 Ambition	Gap
Level 4 and above	31	40	+9
Level 3	20	28	+8
Level 2	20	22	+2
Below Level 2	17	6	-11
No qualifications	12	4	-8
Total	**100**	**100**	**100**

Source: ONS, Labour Force Survey **Note:** Working age people 19–59/64

Chart 2.1:
The regional skills gap across the UK, 2007

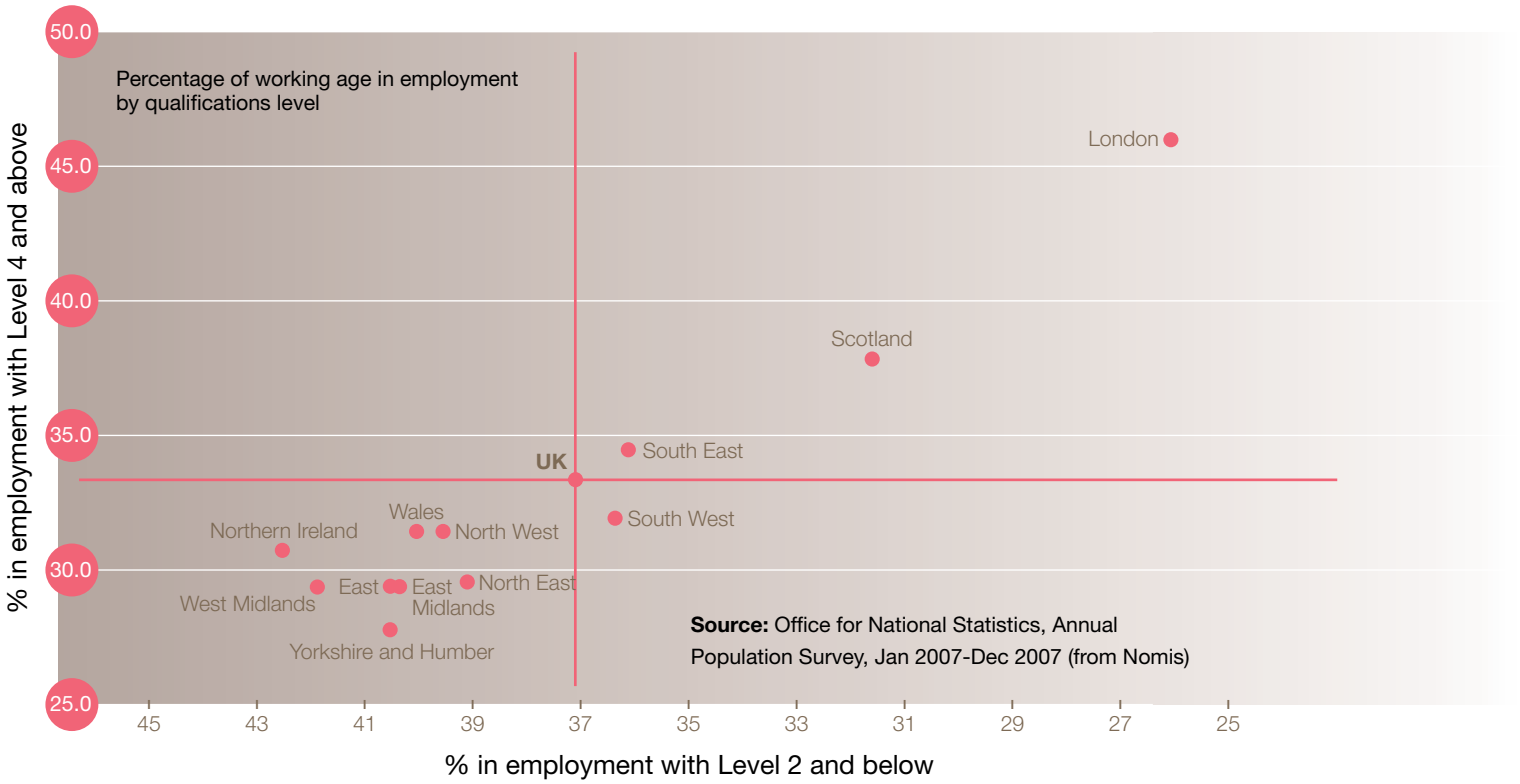


Table 2.2: Changing distribution of qualifications in the UK and four countries %

	2007	2020 Ambition	Gap
UK			
Level 4	31	40	+9
Level 3	20	28	+8
Level 2	20	22	+2
Below Level 2	17	6	-11
No qualifications	12	4	-8
England			
Level 4	31	40	+9
Level 3	20	28	+8
Level 2	20	22	+2
Below Level 2	18	6	-12
No qualifications	11	4	-7
Wales			
Level 4	28	36	+8
Level 3	20	29	+9
Level 2	22	24	+2
Below Level 2	16	6	-10
No qualifications	15	5	-10
Scotland			
Level 4	36	46	+10
Level 3	20	27	+7
Level 2	17	18	+1
Below Level 2	13	5	-8
No qualifications	13	4	-9
Northern Ireland			
Level 4	27	36	+9
Level 3	20	29	+9
Level 2	21	23	+2
Below Level 2	11	4	-7
No qualifications	20	7	-13
Total	**100**	**100**	**100**

Note: Working age people 19–59/64
Source: ONS, Labour Force Survey

The importance of different ambitions can be seen by illustration in relation to Level 4 and above. Scotland already has 36% of its working age population qualified to Level 4 and above and so an ambition of 40% by 2020 would not be sufficiently stretching. Similarly, it could be argued that the progress implied by adherence to a UK ambition is too high for Northern Ireland and Wales, which have the lowest proportions qualified at this Level 4 (27 and 28% respectively). The ambition for England in this is, in effect, similar to that for the UK as a whole, simply because the English working age population is such a large proportion of the UK's (about 86%).

However, such progress towards, and achievement of, the 2020 Ambition would leave the **relative position** of each nation within the UK unchanged. So, if an ambition is to reduce UK-wide inequalities in skill levels, we should perhaps work towards faster rates of improvement in lower skilled parts of the UK. On the other hand, as skill levels should reflect the pattern of demand for skills, it may be that some nations with already relatively high levels of skills want or need to improve faster than the average implied here.

The point of drawing attention to these national differences is to raise the issue and recognise the potentially differential rates of progress required in different parts of the UK to achieve an ambition of World Class skills for the UK and to secure appropriate progress across the UK. The calculations do not imply that these are, or should be, the ambitions for each part of the UK.

2.5 QUALIFICATIONS AND SKILLS

While qualifications can be (and usually are) used as a proxy for skills, and are particularly useful in being able to compare 'skills' over time and across nations and regions in the UK and globally, not all skills are captured by measurement through qualifications.

There are, in practice, a range of different definitions and meanings of 'skills'. In broad terms, skills are the capabilities and expertise in a particular occupation and/or activity. An

individual's skills comprise (i) qualifications and knowledge acquired through formal education and work, (ii) competences and expertise acquired through training and experience whilst in work; and (iii) innate ability. By and large we use (i) above as it is widely comparable and the data is readily available, but we also use various measures of (ii) such as training, later in this report. Moreover, occupation, also used later, is another valuable measure of skill.

Some skills are generic to a wide range of jobs and situations, and some basic skills such as literacy and numeracy (and possibly including communication and basic ICT skills) are both generic and a prerequisite to acquisition of others. Specific technical skills are less transferable between occupations, and in some cases cannot even be transferred between employers. Most occupations require a mix of different skills and at different levels of ability.

There is no one ideal measure of skills and a range of measures can potentially be used in practice. There are three inter-related measures:

- how competence is used (eg occupation);
- achievement of competence (eg as certified by a qualification); and
- level of competence (eg relative ability and levels of execution).

The use of occupations and qualifications as measures of skills does have its limitations. With regard to occupations, there are often significant differences across jobs in the same occupational category in terms of the extent to which formal qualifications are held and the levels of competence and ability of the individuals undertaking the jobs. With regard to qualifications, there are many people who do not have qualifications, but are able to do a job as well as an individual with formal qualifications, drawing upon unaccredited work experience. It is true that qualifications measure only part of skills held, rarely gauging generic or employability skills.

Despite these limitations, qualifications are the most readily and widely used measure of skill – both in terms of their use in the labour market and in analytical terms. Recent research has shown that the majority (60%) of large employers think that qualifications are a good indicator of the skills that they required when recruiting. More significantly, this is even more the case amongst occupational groups which usually required a high level (Level 4) qualification (81%).[51]

It is known that much formal training is uncertified and the vast amount of informal skills training that takes place is almost always so. Research[52] has suggested that the bulk of skill upgrading needs in several sectors in England and Wales relates to gaps in skills of existing employees which could be filled through reasonably short courses of training without necessarily being certified. Many of the workers in need of such skills improvement and updating training already hold qualifications at NVQ Levels 2 or 3. The stock of qualifications held by the adult workforce may therefore be underestimating the stock of skills. We therefore, in later sections, extend as far as possible the range of measures to include non-certified skills.

2.6 CONCLUSIONS

We aim to be World Class, to be in the top eight countries in the world in skills, by 2020. This goal is highly ambitious and stretching. According to the Leitch Review, it would entail achieving over 20 million additional attainments, equivalent to more than one for every second adult of working age in the UK. The UK also has a long-term aspiration of achieving a 80% employment rate.

An ambitious agenda for skills and jobs is not unique to the UK. The European Union's Lisbon agenda aims to make the European Union more competitive and knowledge driven with 'more and better jobs'. It has recently launched its 'New Skills for New Jobs' agenda putting skills, for the first time, at the heart of its jobs and prosperity agenda.

The precise aims and priorities of England, Scotland, Wales and Northern Ireland differ in respect of their articulation of the World Class ambition, though all (except Scotland) have, to date, adopted measures of progress which are qualifications based.

51 Bates, P. et al, Recruitment and Training Among Large National Employers: Final Report, 2008, p. 3.

52 Mason, G et al, Raising Sector Skills Levels – How Responsive is Local Training Supply?, 2005

3 Progress: How Are We Doing?

3.1 INTRODUCTION

This section of the report examines how the UK is currently performing against the ambition to be in the top quartile of OECD countries at all skill levels.

3.2 OUR CHANGING INTERNATIONAL POSITION

The Leitch Review found that (using 2003 data) the UK came 17th out of the 30 OECD countries on 'low' skills, 20th on 'intermediate' skills and 11th on 'higher' level skills. Since then, our overall relative international position has not improved.

We are now rated 17th, 18th and 12th respectively (see Table 3.1 opposite), **well outside the top quartile at each skill level**, indeed being in the third quartile on lower level (below upper secondary) and intermediate level (upper secondary) skills and in the second quartile on higher level (tertiary) skills.We have also separately indicated the rankings of each of the four UK nations.

However, it should be noted just how difficult to achieve is the ambition to be in the top quartile at **all** skill levels.[53] No country is in that position. Even the USA falls just short of that ambition. Most high performing countries do well on only two of the three skill attainments.

There is also a statistical reason for this difficulty as it is difficult to do very well in both intermediate and high level skills as very high levels of attainment in the latter necessarily makes it difficult to secure high attainment levels in the former. The ambition to be top quartile at all skill levels should be treated as such and not as a target.

We can unpick the UK's changing international position a little more by examining the progress 'across the generations' (see Charts 3.1 and 3.2). Looking at educational attainment by age group we see that **whereas older workers in the UK** (45–54 year olds) **are ranked 15th among OECD countries for attainment of at least upper secondary education, this compares with a ranking of 21st for younger workers**. Comparing these figures to the 2003 data published in the Leitch Interim Report, the UK position for intermediate level skills has worsened slightly for adults aged 45–54, and has not improved for adults aged 25–34.

Similarly, data shows that **for tertiary education UK 45–54 year olds rank 12th and younger workers 15th compared to OECD counterparts**.

In sum, the UK's relative position is worse for younger individuals than it is for older people. The progress we are making is often less than for other countries and we are at serious risk of being left behind.

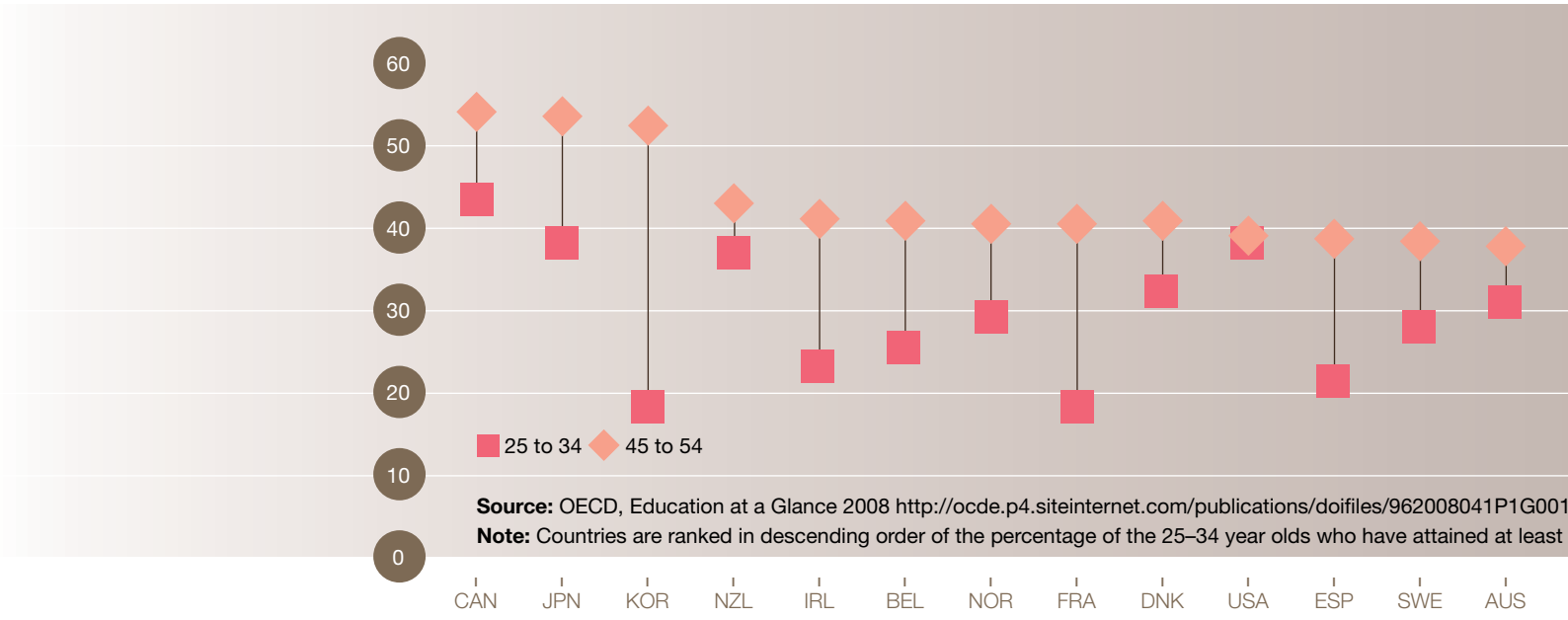
53 Leitch, S., Prosperity for All in the Global Economy – World Class Skills, 2006, p. 10.

Table 3.1: Current international skills position

Below upper secondary (low skills)			**Upper secondary** (intermediate skills)			**Tertiary** (high skills)		
Country	***% Qualified***	***Rank***	***Country***	***% Qualified***	***Rank***	***Country***	***% Qualified***	***Rank***
Czech Republic	9.6	1	Czech Republic	76.9	1	Canada	47.0	1
USA	12.2	2	Slovak Republic	72.5	2	Japan	40.5	2
Slovak Republic	13.5	3	Austria	62.7	3	USA	39.5	3
Canada	14.4	4	Hungary	60.7	4	Finland	35.3	4
Switzerland	15.0	5	Germany	59.3	5	Scotland	34.9	n/a
Japan	15.3	6	Switzerland	55.1	6	Denmark	34.7	5
Sweden	15.9	7	Sweden	53.6	7	Norway	33.0	6
Germany	16.8	8	New Zealand	50.8	8	Australia	33.0	6
Denmark	18.4	9	USA	48.3	9	Korea	32.9	8
Austria	19.7	10	Denmark	46.9	10	Belgium	31.8	9
New Zealand	20.2	11	Norway	46.1	11	England	30.7	n/a
Finland	20.5	12	Finland	44.3	12	Ireland	30.5	10
Norway	20.9	13	Japan	44.2	13	Sweden	30.5	10
Hungary	22.0	14	Korea	43.7	14	**UK**	**30.2**	**12**
Korea	23.3	15	Netherlands	42.2	15	Netherlands	30.2	12
Netherlands	27.6	16	Luxembourg	41.5	16	Switzerland	29.9	14
Scotland	29.5	n/a	France	41.2	17	Iceland	29.5	15
UK	**31.0**	**17**	**UK**	**38.8**	**18**	New Zealand	29.0	16
England	32.4	n/a	Wales	38.8	n/a	Spain	28.5	17
France	32.6	18	Canada	38.7	19	Northern Ireland	27.8	n/a
Belgium	33.1	19	Italy	38.5	20	Wales	26.3	n/a
Australia	33.3	20	England	37.0	n/a	France	26.2	18
Ireland	33.9	21	Greece	36.7	21	Luxembourg	24.0	19
Luxembourg	34.5	22	Northern Ireland	36.2	n/a	Germany	23.9	20
Wales	34.9	n/a	Scotland	35.6	n/a	Greece	21.9	21
Northern Ireland	36.0	n/a	Ireland	35.5	22	Poland	17.9	22
Iceland	36.7	23	Belgium	35.2	23	Austria	17.6	23
Greece	41.4	24	Poland	34.8	24	Hungary	17.2	24
Poland	47.3	25	Iceland	33.8	25	Mexico	15.4	25
Italy	48.8	26	Australia	33.7	26	Slovak Republic	14.0	26
Spain	50.3	27	Spain	21.2	27	Czech Republic	13.5	27
Turkey	71.7	28	Turkey	17.9	28	Portugal	13.5	27
Portugal	72.4	29	Portugal	14.1	29	Italy	12.8	29
Mexico	78.1	30	Mexico	6.5	30	Turkey	10.4	30

Source: OECD, Education at a Glance 2008, http://dx.doi.org/10.1787/401474646362, and Labour Force Survey, ONS. Data relates to 2006.
Note: Distribution of the 25–64 year old population by highest level of education attained.

Chart 3.1: Proportion of adults with at least tertiary education



Source: OECD, Education at a Glance 2008 http://ocde.p4.siteinternet.com/publications/doifiles/962008041P1G001

Note: Countries are ranked in descending order of the percentage of the 25–34 year olds who have attained at least

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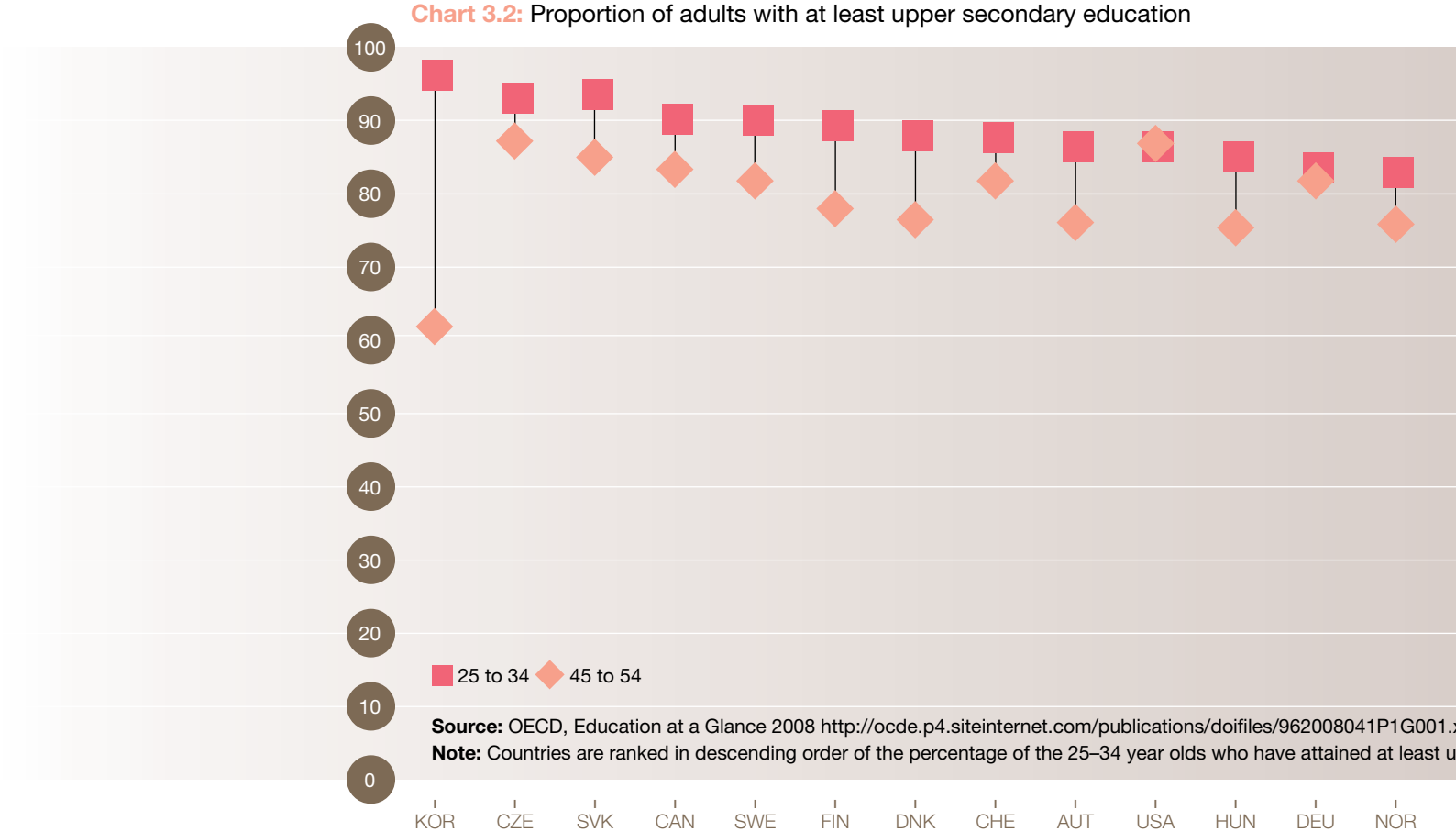
Chart 3.2: Proportion of adults with at least upper secondary education



Source: OECD, Education at a Glance 2008 http://ocde.p4.siteinternet.com/publications/doifiles/962008041P1G001.x

Note: Countries are ranked in descending order of the percentage of the 25–34 year olds who have attained at least u

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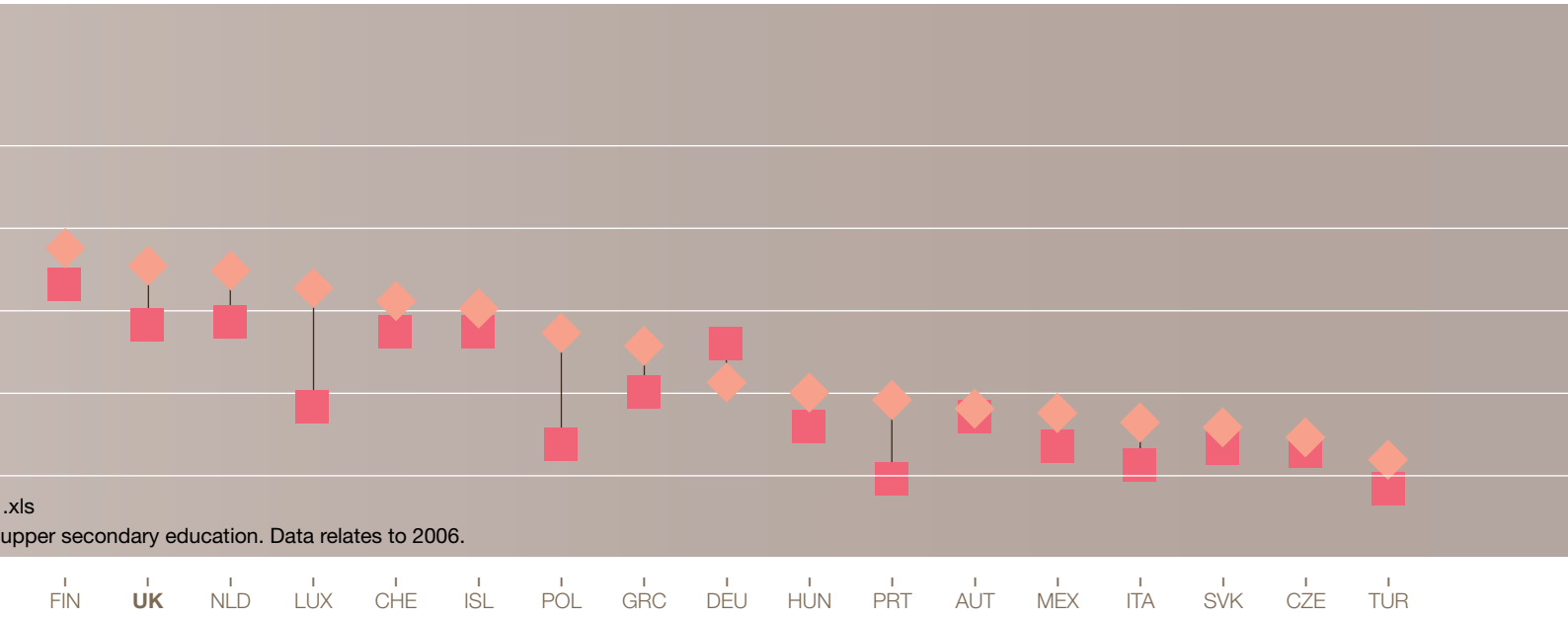

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upper secondary education. Data relates to 2006.

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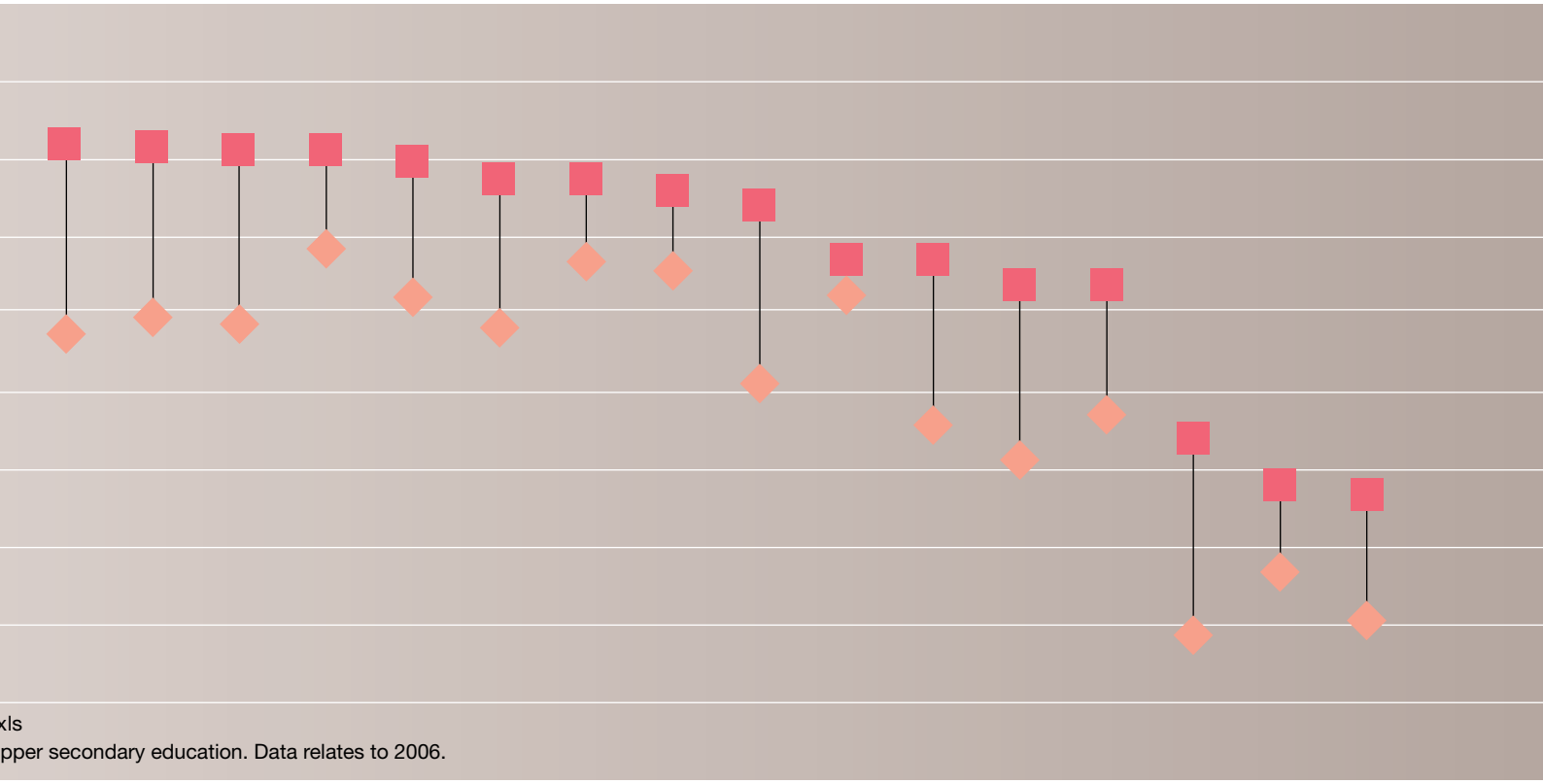

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pper secondary education. Data relates to 2006.

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3.3 THE PROFILE AND CHANGING LEVEL OF SKILLS AND EMPLOYMENT IN THE UK

Since the Leitch Review, we have seen progress across all levels of skill.

Regarding **basic skills**, the Leitch Review estimated that in 2005 just less than 85% of the working age population possessed functional literacy and 79% functional numeracy.[54]

Using data that is available on the qualification levels of flows of young people into the labour market and using a comparable methodology to that used by the Leitch Review team, it is estimated that the basic skills of the working age population are improving.

Since 2005, the proportions of the population with functional literacy skills has edged up to just above 86% in 2008 (ie just less than 14% had poor literacy skills) and the proportion with functional numeracy skills had increased to 81% (ie 19% had poor numeracy skills). This is a rate of improvement of 0.5 percentage points per annum in numeracy and just under 0.6 percentage points per annum for literacy over the years 2005 to 2008.

Regarding **qualification attainment** (see Table 3.2 below), there have been continued improvements in the overall skills profile in the UK and the direction of travel is clearly towards that required, with increases in the proportion qualified at higher levels (Level 4 and above) from 21% in 1997 to 31% in 2007.

Increases at intermediate levels have been less dramatic: the proportion qualified to Level 3 has increased only from 18 to 20% and Level 2 has actually decreased from 21% to 20%. The proportion with no or very low qualifications has decreased from 39% to 29%.

Regarding the **employment ambition**, after increasing from 74.1% in 2000 to 75% in 2005, the employment rate actually declined between 2005 and 2007 to 74.4%.

54 *Leitch, S., Prosperity for All in the Global Economy – World Class Skills, 2006, p. 10.*

Table 3.2: The changing distribution of qualifications in the UK %

	1997	2002	2005 (Leitch)	2007	Change 2005–07
Level 5	3	5	5	7	+2
Level 4	18	21	23	24	+1
Level 3	18	20	20	20	0
Level 2	21	21	21	20	-1
Below Level 2	21	19	18	17	-1
No qualifications	18	15	13	12	-1
Total	**100**	**100**	**100**	**100**	

Note: Working age people 19–59/64 **Source:** Labour Force Survey

3.4 DISTRIBUTION OF QUALIFICATION ATTAINMENT

Table 3.3 sets out the pattern of qualification attainment. It shows the impact of:

- **Age:** excepting the very young, the older the age group the less likely individuals are to have no qualifications and the more likely to have higher level qualifications. The youngest age group (those aged 16–24) are still in the process of qualification attainment, which explains why a lower proportion have Level 4 and above qualifications, but a higher proportion have intermediate levels.

- **Disability:** with those without a disability being more highly qualified.
- **Ethnicity:** with the qualifications levels of those from non-white ethnic groups being more polarised, with higher proportions with no qualifications and also with higher level qualifications.

There is little difference in qualification attainment with respect to **gender:**

For those that are in employment:

- Those in **full-time employment** are more likely to have high level qualifications than those in **part-time employment**, who are more likely to have qualifications at intermediate levels.
- Those who do not have **permanent employment** status are more likely to have higher level qualifications.
- There is the expected pattern with regard to **occupational status**, in that the higher the occupation, the higher the qualification level of individuals within that occupation.

3.5 CONCLUSIONS

In international terms, our current position is little changed from that reported in the Leitch Review. **We are now ranked 17th on 'low' level skills**, **18th on 'intermediate' level skills and 12th on 'high' level skills**. While the overall UK skills profile is improving over time, **too many people are still in danger of being left behind**: one in eight adults of working age still have no qualifications; more than a quarter are not qualified to Level 2; and just shy of a half are not qualified to above Level 2. Moreover, as other countries are improving their skills profile too, our relative position has changed little. Indeed, many countries are improving faster than we are.

With regard to our employment 'aspiration' of 80%, **the employment rate, which increased steadily throughout much of the 1990s, has barely increased since the turn of the century**. In international comparative terms, **our employment rate ranks 10th in the OECD**, though since 2003 only Portugal in the OECD has performed less well than the UK.

Table 3.3: Distribution of qualifications, 2008

	None %	Below Level 2 %	Level 2 %	Level 3 %	Level 4 and above %
Age					
16–24	11	19	28	28	13
25–49	9	19	20	17	34
50–59	18	17	19	17	29
60–64	22	13	19	21	25
Gender					
Male	12	18	20	22	28
Female	12	19	22	17	30
Disability					
With disability	23	20	20	16	20
No disability	10	18	22	20	31
Ethnicity					
White	12	18	22	20	29
Non-white	16	20	18	15	31
Employment status					
Full-time	7	17	20	20	36
Part-time	9	19	25	20	27
Contract status					
Permanent	7	18	22	20	34
Not permanent	6	15	19	21	40
Occupation					
Managers and senior officials	4	13	18	19	46
Professional occupations	0	4	6	8	82
Associate professional and technical	2	10	15	18	55
Administrative and secretarial	5	22	28	22	24
Skilled trades occupations	11	18	26	35	10
Personal service occupations	6	18	29	27	20
Sales and customer service occupations	11	23	29	23	13
Process plant and machine operatives	17	32	27	18	6
Elementary occupations	21	30	26	16	7

Source: Labour Force Survey 2008.

4 Prospects to 2020: Where Are We Going?

4.1 INTRODUCTION

This section assesses the prospects for the attainment of the 2020 Ambition to be World Class, to be in the top quartile of OECD countries.

4.2 THE BASIS OF OUR FORECASTS

We have commissioned detailed research which enables us to estimate our likely progress towards the 2020 Ambition. Specifically our models project:

- our 2020 international ranking vis-à-vis OECD countries for (i) below upper secondary ('low skills'), (ii) upper secondary ('intermediate skills') and (iii) tertiary ('high skills') levels of education;
- forecasts of the 2020 qualifications profile for the UK and for individual UK nations; and
- the UK 2020 basic skills position for literacy and numeracy.

In the forecasting model, changes in qualification/skill levels are driven by three forces:

- a qualifications effect, as people who are already in the workforce increase their qualifications level;
- a demographic effect, whereby older individuals leave the working age population and are replaced by younger people who leave the education system and enter the labour market. Generally, this is a positive effect, as young people flowing into the workforce are (on average) more highly qualified than the average (though not necessarily more so than comparable groups in other countries) and significantly more highly qualified than those older people retiring from the active workforce; and
- a migration effect, reflecting the skills of the people who migrate into the UK and the skills of the people who migrate out of the UK.

The international projections of qualifications profiles are based on trends in different countries' adult skill stock from 1998 to 2007. These are made on a relatively simple basis: they take the average annual rate of change at each of the qualification levels for 25–64 year olds over the period and project that forward to 2020 fitting a trend line to the data. As well as limitations on the sophistication of the model there are also some data issues, which mean that individual nations' rankings need to be treated with some caution.

Our UK qualifications model is constructed using the average annual rate of change in the qualifications held, by age, for the previous seven years and then rolls this forward to 2020. This approach explicitly allows for demographic changes such as an ageing population, changing retirement patterns and pension age changes and migration patterns. It should be noted that it is not designed to give a precise forecast of qualifications in 2020, but to give indicative projections of the UK's likely skill profile if recent/current trends continue. It is also capable of testing the impact of different scenarios.

The model used to derive the 2020 forecasts for individual UK nations is a simpler iteration of the UK qualifications model. The projections are based on a continuation of the long-term qualifications trend (1998–2007) within each UK nation. These shares by qualifications level for individuals aged 19–64 are then projected forward to 2020.

55 Department for Education and Skills, The Skills For Life Survey: A National Needs and Impact Survey of Literacy, Numeracy and ICT Skills, 2003

These three models are based on the qualification framework; therefore they cannot easily incorporate changes in attainment of basic skills. As a result, a separate basic skills model has been developed. Whilst subject to the same limitations as the qualifications model, this is a stock/flow model, building in the inflow of 16 year olds each year and removing those who will retire. The Skills for Life Survey is used as the starting point, providing a breakdown of numeracy and literacy by age for the UK population.[55] GCSE English and Mathematics trends are then used to model the achievements of 15 year olds. As demographic change can only offer some improvement to basic skills levels, the approach also allows for the basic skills achievements of the post-15 group via approved Skills for Life qualifications (England only). These are scaled up to UK population estimates, and constrained for remaining 'hard to reach' groups.

Some care should be taken with the basic skills model; there are issues regarding measuring the literacy and numeracy of both school leavers and the post-15 group, not least that the principal measures available (GCSE Maths and English acquisition and the Skills for Life survey) suggest different levels of basic skills amongst 16 year olds. The Skills for Life survey has also not been updated since 2003, which limits the extent to which the projections can be updated to those used in Leitch. To lessen the impact of these issues, two variants of the model have been run giving the worst- and best-case scenarios.[56]

We are publishing a separate detailed technical report on this assessment of the prospects for attaining the 2020 Ambition in the summer, which gives more detail and incorporates the assumptions underpinning the models along with our proposals for improving the modelling approach further in the future.

4.3 PROJECTED INTERNATIONAL POSITION

The World Class Skills Ambition is for the UK to be in the top eight OECD countries at all skill levels by 2020. The forecasting work suggests that as a result of the likely developments (on current trends), **the UK's relative international position is unlikely to improve in terms of our international ranking between now and 2020** (see Table 4.1 overleaf). We will be 'lower table' for lower skill levels, ie the proportion below upper secondary level (23rd out of the 30 OECD countries); 'mid-lower table' for intermediate skills, ie proportion below upper secondary (21st out of 30) and 'mid-high table' for higher skill levels, ie the proportion at/above tertiary (10th out of 30). **On current rates of progress, therefore, we are unlikely to be in the top quartile of OECD countries at any skill level. We will, therefore, not reach our 2020 Ambition.[57] Indeed, we will be in the bottom half of countries at lower and intermediate skills, though just outside the top quartile on higher level skills.[58]**

It is also worth noting that **the prospects for attaining the ambition of being in the top countries of the world at all three skill levels vary across the four constituent parts of the UK**. For example, Scotland's likely progress on lower level skills is the strongest of the four. With regard to intermediate level skills, progress is strongest in Wales and on higher level skills, it is strongest in Scotland.

It should also be noted that relatively small changes in the proportions of people attaining at these different levels of qualifications can make considerable differences to the ranking positions, particularly for countries which are (like the UK) in the 2nd and 3rd quartiles. For example, in the current projections, Switzerland with 42% of its workforce qualified at tertiary level is 14th in the rankings, while Australia with 46% is eighth.

56 The first assumes that the observed illiteracy and innumeracy rates amongst 16 year olds of 2003 (observed in the Skills for Life Survey) continue through to 2020; the second assumes that there is a improvement in literacy and numeracy amongst 16 year olds that reflects the rise in GCSE performance over the period 1994 to 2008.

57 Note that the UK's position here on high level skills is 43% – different from the 41% shown in the UK attainment. The numbers are consistent – the UK projections are taken directly from the qualifications model but adjusted to cover a comparable age range used by the OECD – hence the difference.

58 Our consideration of the UK's position set out here uses the Leitch definitions of Level 2 qualifications as 'upper secondary'. The international community (ie the OECD) classes the UK's Level 2 as below this. The projections here therefore over-estimate the UK's relative position. If we re-estimate them on the OECD view, then the proportions shift from 21% to 40% for below upper secondary and from 36% to 17% for upper secondary. The UK's international ranking, therefore, deteriorates to 26th (from 23rd) in regard to the proportion below upper secondary and to 29th (from 21st) in regard to the proportion of upper secondary. This is clearly an issue we have to examine further.

It is important to note that the relative positions of countries may in part reflect individual nations' skills choices – 'chasing' a higher ranking at all levels may not be desirable. The clearest example is perhaps Germany, which performs very well at intermediate (upper secondary) and yet is in the bottom third for higher level skills. This may be because, in part, Germany places a greater emphasis on the value of intermediate level skills, on which measure it is in the top quartile.

We also need to be clear that these projections assume that other countries will make similar progress to the progress they have made in recent years. It is likely that they will not. Some will be even better but some may well do less well than envisaged here. Indeed, the UK itself may do better or less well than envisaged here. It is feasible therefore that we could attain our domestic ambitions in section 4.4, but still not attain our 'World Class' Ambition, because other OECD countries 'up their game' at the same time.

This suggests a need to:

- make a systematic assessment of the future direction of skills attainments in other OECD countries. We need to understand more about what lies behind the skill formation strategies of other competing economies; and
- reassess over time the domestic qualification ambitions which currently support our international benchmarking position.

Of course, whilst the ambition focuses mainly on the proportions of people with different levels of skills, we are fully aware that it is not just the quantity of skills created but the type of skills created that matters – to individuals, to companies and to the economy. The skills which are held by people have to be those which are needed by the economy not just in level, but in nature. We discuss the nature of the future skill demands further in section 6.3 and their use in section 8.3.

Finally, we should note that policy changes take time to impact on skill levels. 'New' policies post-Leitch have only been in place across the UK over the last two years and it may be that progress will be more rapid in the future as those policy changes bite and impact on adult skills.

Table 4.1: International skills projections to 2020, 25–64 year old population

Below upper secondary			Upper secondary			Tertiary		
Country	*% Qualified*	*Rank*	*Country*	*% Qualified*	*Rank*	*Country*	*% Qualified*	*Rank*
Czech Republic	5.0	1	Czech Republic	77.2	1	Canada	60.2	1
Sweden	5.0	1	Slovak Republic	75.4	2	Japan	59.9	2
Hungary	5.0	1	Hungary	72.3	3	*Scotland*	*53.8*	*n/a*
Slovak Republic	5.0	1	Austria	63.3	4	Korea	51.8	3
Korea	5.0	1	New Zealand	61.9	5	Denmark	51.6	4
Norway	5.0	1	Sweden	58.8	6	USA	48.0	5
Canada	5.0	1	Germany	57.8	7	Iceland	46.7	6
Netherlands	5.0	1	Ireland	55.0	8	Norway	45.8	7
Finland	5.0	1	Finland	52.3	9	Australia	45.7	8
Austria	6.1	10	Netherlands	51.6	10	*Northern Ireland*	*44.9*	*n/a*
Japan	6.3	11	Italy	49.7	11	Spain	44.2	9
Ireland	7.7	12	Norway	49.2	12	**UK**	**43.5**	**10**
New Zealand	8.3	13	Luxembourg	48.3	13	Netherlands	43.4	11
USA	9.9	14	France	46.6	14	*England*	*42.8*	*n/a*
Switzerland	13.7	15	Greece	44.9	15	Finland	42.7	12
Denmark	13.9	16	Switzerland	44.4	16	Belgium	42.2	13
Belgium	14.3	17	Belgium	43.5	17	Switzerland	41.9	14
Germany	14.4	18	Korea	43.2	18	Ireland	37.3	15
Australia	14.6	19	USA	42.2	19	*Wales*	*37.3*	*n/a*
Luxembourg	15.8	20	*Wales*	*41.6*	*n/a*	Sweden	36.2	16
Scotland	*16.0*	*n/a*	Australia	39.7	20	Luxembourg	35.9	17
Northern Ireland	*19.8*	*n/a*	*England*	*35.9*	*n/a*	France	32.7	18
France	20.7	21	**UK**	**35.7**	**21**	Austria	30.5	19
Spain	20.8	22	*Northern Ireland*	*35.3*	*n/a*	Poland	30.3	20
UK	**20.9**	**23**	Spain	35.0	22	New Zealand	29.8	21
Wales	*21.1*	*n/a*	Canada	34.8	23	Greece	28.4	22
England	*21.3*	*n/a*	Denmark	34.4	24	Germany	27.7	23
Iceland	22.2	23	Japan	33.8	25	Hungary	22.7	24
Greece	26.7	25	Iceland	31.1	26	Portugal	21.2	25
Italy	31.4	26	*Scotland*	*30.2*	*n/a*	Mexico	20.4	26
Poland	50.5	27	Turkey	28.1	27	Slovak Republic	19.6	27
Turkey	55.9	28	Poland	19.2	28	Italy	19.0	28
Portugal	60.0	29	Portugal	18.8	29	Czech Republic	17.8	29
Mexico	74.6	30	Mexico	5.0	30	Turkey	16.0	30

Note: 25–64 year old population, by highest level of education attained, UK figures will differ slightly to qualification forecasts below; the forecasts are consistent: however the age range for these forecasts has been adjusted to be internationally comparable.
Source: UKCES (2009, in press), Ambition 2020 Technical Report.

4.4 PROJECTED QUALIFICATION ATTAINMENT

So, on the basis of recent trends, what do our models suggest will happen in terms of our 'domestic' objectives?

BASIC SKILL OBJECTIVES

An important element of achieving our 2020 World Class Skills Ambition is striving for 95% of UK adults to have both functional literacy and numeracy skills. Whilst we are unable to undertake any international benchmarking of projected outcomes due to gaps in data availability, we are able to assess the extent to which we are likely to achieve the 95% objective (see Table 4.2).

Our projections indicate:

- **95% of the population will be literate by 2020**; indeed the best-case scenario indicates this target may be achieved by 2019.
- **We will not achieve our numeracy ambitions by 2020.** At best, current trajectories suggest we will reach a 90% rate of adult numeracy; at worst we will achieve 88%.

It is clear from the forecasts that there will be some improvements to basic skills levels through demographic changes, as fewer numerate and literate older individuals reach retirement age and newly qualified younger people flow in. However, it is also apparent that, if the overall targets of 95% numeracy and literacy are to be met by 2020, then a considerable amount of work needs to be done amongst older adults, not just those passing through formal education.

QUALIFICATION TARGETS

Our projections indicate that (see Table 4.3 opposite):

- **the Level 4+ target will be achieved** (and even slightly exceeded);
- **there will be significant under-achievement of the Level 3 target**, with only 17% qualified at this level compared with the target of 28%;
- **there will be slight under-attainment of the Level 2 target**, at 19% compared to the desired 22%; and
- **there will be insufficient improvement in the lower levels of qualifications**, with a forecast of 23% still with no or low levels of qualifications, compared to a target of 10%.

Table 4.2:
UK basic skills improvements (literacy and numeracy), 16–64 year olds

	Source of improvement (percentage point)			2020 Ambition	Projected attainment		
	Demographic effect	Achievement 15 year olds	Achievement 16–64 year olds		Outcome	Year attained	Gap
Literacy							
Worst case	2	0	9	95%	95%	2020	0 – meets ambition
Best case	2	1	8 (9)	95%	95%	2019	Above ambition
Numeracy							
Worst case	1	0	8	95%	88%	n/a	-7 below ambition
Best case	1	2	8	95%	90%	n/a	-5 below ambition

Source: UKCES, Ambition 2020, Technical Report, 2009 (forthcoming).
Note: Values in parentheses are uncapped values, the values next to the parentheses are capped at 5% lower limit.

Table 4.3:
Changing distribution of qualifications in the UK and four countries

	2007	2020 Ambition	Projected attainment	Gap
UK				
Level 4+	31	40	41	1 above ambition
Level 3	20	28	17	11 below ambition
Level 2	20	22	19	3 below ambition
Below Level 2	17	6	16	10 below ambition
No qualifications	12	4	7	3 below ambition
England				
Level 4+	31	40	40	Meets ambition
Level 3	20	28	17	11 below ambition
Level 2	20	22	19	3 below ambition
Below Level 2	18	6	17	11 below ambition
No qualifications	11	4	6	2 below ambition
Wales				
Level 4+	28	36	35	1 below ambition
Level 3	20	29	22	7 below ambition
Level 2	22	24	21	3 below ambition
Below Level 2	16	6	15	9 below ambition
No qualifications	15	5	8	3 below ambition
Scotland				
Level 4+	36	46	51	5 above ambition
Level 3	20	27	15	13 below ambition
Level 2	17	18	17	1 below ambition
Below Level 2	13	5	10	5 below ambition
No qualifications	13	4	7	3 below ambition
Northern Ireland				
Level 4+	27	36	40	4 above ambition
Level 3	20	29	18	11 below ambition
Level 2	21	23	20	3 below ambition
Below Level 2	11	4	9	5 below ambition
No qualifications	20	7	12	5 below ambition
Total	**100**	**100**		

Note: Working age people 19-64; this age range is different to the UK international projections whose figures were adjusted to cover the 25–64 age range to be internationally comparable.
Source: UKCES, Ambition 2020, Technical Report, 2009 (forthcoming).

59 For these illustrative purposes only we have constrained the total size of the workforce to be at its 2007 level.

We also report likely progress across the four nations. Within the individual UK nations the pattern of progress towards such a 2020 Ambition remains broadly the same as for the UK as a whole, although Northern Ireland and Scotland are projected to particularly perform well with regard to their 'adjusted' Level 4+ target (see Chapter 2 of this report), which they could exceed by 4% and 5% respectively.

To give some sense of the scale of change required we have made some calculations of the actual increased numbers of qualifications that would need to be obtained at the different levels of qualifications if the Ambition were to be achieved[59] (see Table 4.4).

These show that in 2020 **the number of people who will be qualified at Level 3 will be some 3.5 million below that required, whilst the number qualified at Level 2 is 1 million below. We will also have 4.4 million people more than we wish with below Level 2 qualifications**.

Table 4.4:
The qualifications of the UK workforce 1997–2020: estimated numbers, 000s

	2007		2020 Ambition		Projected attainments		Gap
	%	n	%	n	%	n	n
Level 4+	31	10,668	40	13,760	41	13,964	204,000 above ambition
Level 3	20	6,798	28	9,632	18	6,130	3,502,000 below ambition
Level 2	20	6,875	22	7,568	19	6,471	1,097,000 below ambition
Below Level 2	17	5,923	6	2,064	16	5,449	3,385,000 below ambition
No qualifications	12	4,135	4	1,376	7	2,384	1,008,000 below ambition

Source: Labour Force Survey and UK Commission analysis with IER/CE.
Note: Working age people 19–59/64.

EMPLOYMENT ASPIRATION

Our updated projections of employment and population suggest that an 80% employment rate aspiration is also highly unlikely to be achieved by 2020. The increase in employment during 2007–2020 is forecast to be slightly smaller than the projected increase in the working age population, and therefore the employment rate is actually expected to fall. It is important to note that:

- for men, the employment rate is expected to rise gradually after 2010 and may achieve the 80% target by 2020; but
- for women, the employment rate is expected to rise gradually only to 2010 because the female working age population will increase as the state pension age of women is increased from 60 in 2010 to 65 by 2020.

Rising the retirement age threshold will lead to a sharp increase in the female working age population over 2007–2020 and this could lead to a decrease in the employment rate if the increase in the working age population were to exceed the increase in employment.

4.5 CONCLUSIONS

Our projections suggest that the UK's relative international position on skills is unlikely to improve by 2020, let alone become World Class. Indeed, overall, our position may deteriorate slightly. **In 2020, we are likely to be ranked 23rd on low level skills (compared to 17th now); 21st on intermediate level skills (compared to 18th now); and 10th on high level skills (compared to 12th now). We will, therefore, not be in the top eight countries of the world at any skill level (see Table 4.5)**. Overall, the international skills gap between the UK and the top countries is widening rather than closing.

If we translate our international ambition to reach the top quartile of countries into what this means for UK skill levels, we have an equally troubling picture. Our projections suggest that, with the exception of high level skills, we will not achieve our objectives as can be seen in Table 4.6.

We will **not** achieve the desired improvement at 'low' skill levels (we may achieve 77% qualified to Level 2 as against a 90% plus ambition); we will **not** achieve the desired improvement at intermediate skill levels (we may achieve 58% as against a 68% ambition); but we **will** achieve the higher level skill ambition (41% as against a 40% ambition). Even here, because we expect other countries to improve faster than previously anticipated, this skills improvement is now not enough to move us into the top quartile of countries.

As far as basic skills are concerned, our projections indicate that 95% of UK adults will be functionally literate by 2020 and that we **will** therefore achieve the basic literacy skills ambition, but that the numeracy ambitions of 95% will **not** be attained, with an expected outcome of between 88% and 90% of UK adults achieving functional numeracy.

Table 4.5:
The UK and World Class skills – international ranking

	Today	2020	Ambition
Low level skills	17	23	Top 8
Intermediate level skills	18	21	Top 8
High level skills	12	10	Top 8

Table 4.6:
The qualifications of UK adults

	Today	2020	Our Ambition
Low level skills (% qualified to at least Level 2)	71	77	90
Intermediate level skills (% qualified to at least Level 3)	51	58	68
High level skills (% qualified to at least Level 4)	31	41	40

5 Other Measures of Skill Development

5.1 INTRODUCTION

We have seen above how the stock of UK skills (as defined by qualifications) is changing and how we expect it to change by 2020. We have also seen that on our estimates we are unlikely (on current trends) to fully attain our (stretching) World Class Skills Ambitions.

However, there are other measures of skill levels, most notably occupations, which we will examine in Chapter 6, when we examine 'demand', and in Chapter 7 when we examine skills and labour market mismatch. Here, we outline other available measures of skills development, notably training activity and participation in training. We then outline the barriers to participation in skills development which could lead to 'sub-optimal' levels of skills before benchmarking the UK against EU countries in respect of the current range of non qualification related measures of skills adopted by the EU in pursuit of the Lisbon Strategy for jobs and growth.

At the moment, there are limitations to the extent we can internationally benchmark against a wider set of measures. However, the Programme for the International Assessment for Adult Competencies (PIAAC) is developing a strategy to address the supply and demand of competencies by identifying and measuring differences between individuals and countries in competencies believed to underlie both personal and societal success, assessing the impact of these competencies on social and economic outcomes at individual and aggregate levels, gauging the performance of education and training systems in generating required competencies; and helping to clarify the policy levers that could contribute to enhancing competencies. We look forward to the first results from the OECD-wide PIAAC survey in 2012–2013, which will enable us to benchmark progress on a wider range of measures.

Gathering evidence on how much is invested in training by the various parties – government, individuals and employers – across the employment and skills system is problematic. A key piece of evidence required is an estimate of how much is spent on education and training and skills by all the partners. This requires gathering together, in a common framework, data from a variety of sources. This has been a major strand in NIACE's *Inquiry into the Future of Lifelong Learning*, and after a year's study they report that this is 'extraordinarily problematic'.[60] We hope to be able to report on the outcomes of their work next year.

5.2 TRAINING

Evidence from employees[61] shows that employers fund the vast bulk of training in terms of the actual costs involved. While only around one fifth of training activity involves 'payment', nearly 70% of this is provided by employers – most of the rest comes from individuals, with a small amount (c.4%) from public funds. However, this does vary by gender, employment status and occupation (see Table 5.1).

60 *Schuller, T., 'Money, Money, Money: Mapping Spending on Lifelong Learning', 2008, p.15.*

61 *Green, F. et al, Skills Survey, 2006.*

Table 5.1:
Training fees and associated costs, UK, 2006

		Who bears the cost of these fees		
	Training fees	Employer	Government	Self
All	22.0	68.5	4.4	33.7
Sex				
Male	20.7	74.9	2.7	25.7
Female	23.3	62.6	5.9	41.0
Working time				
Female full-time	24.7	65.8	5.9	38.2
Female part-time	20.7	55.5	6.0	47.1
Occupation				
Managers	28.2	86.9	3.2	17.2
Professionals	34.7	64.6	5.7	34.5
Associate professionals	25.7	70.1	2.2	31.9
Administrative and secretarial	17.9	64.5	11.2	39.9
Skilled trades	19.7	65.9	4.4	38.5
Personal service	22.0	47.2	3.4	56.2
Sales	6.6	32.0	2.6	66.8
Plant and machinery operatives	8.3	48.6	0.3	49.5
Elementary occupations	5.4	82.1	0.0	17.9

Source: Green, F. et al, Skills Survey 2006, 2008.

However, the bulk of evidence on training activity comes from **employer** surveys, which show that **the majority of employers do provide training to their staff:**

- In England two thirds (67%) of employers provided some training or development to at least some of their staff over the previous 12 months, representing 63% of the workforce as a whole.[62]
- In Scotland, 65% of employers provided some form of training to employees in the previous year. 10% provided off-the-job only, 17% on-the-job only and 38% a mix of both types.[63]
- In Wales 58% of employers provided off-the-job training to their staff.[64]
- In Northern Ireland, 78% of employers provided some training to their staff in the previous year with 60% having provided on-the-job training, and 34% off-the-job training.[65]

Roughly therefore, overall in the UK a third of employers say that they do not provide training to their staff.

The proportion of employers providing training has, however, been increasing. In England, for example, there has been a continuing increase in the proportion of employers providing training – from 64% in 2004, to 65% in 2005 and to the most recent 67% in 2007.[66]

Turning to **volumes** of training, there are commonly two measures used: (i) number of days and (ii) spend. We examine each in turn.

Overall, employers in England funded or arranged 218 million days of training over the course of 12 months. This is equivalent to **every worker in England receiving 9.8 days' training over the course of the year**. Looking just at those establishments who train, this equates to 11.2 days per employee in these establishments or 15.6 days per person trained. This has also been increasing: between 2005 and 2007 the number of days' training delivered increased from 162 million days to the 218 million in 2007 (an increase of 35%). This is an increase of per capita training days amongst the total workforce from 7.5 to 9.8 and a per 'trainee' increase from 12.3 to 15.6 (see Table 5.2).

Table 5.2:
Training days per annum

Total training days	**217.7 million**
Per capita training days:	
Total workforce	9.8
Training employers' workforce	11.2
Per trainee	15.6
Weighted base	1,451,507
Unweighted base	79,018

Source: LSC, National Employers Skills Survey (NESS) 2007: Main Report, 2008, p.141. **Note:** England only. Base: all employers.

62 *Learning and Skills Council, National Employers Skills Survey 2007: Main Report, 2008, p.17.*

63 *Futureskills Scotland, Skills in Scotland 2008.*

64 *Futureskills Wales, Sector Skills Survey Summary Report, 2005, p.12.*

65 *DELNI, The Northern Ireland Skills Monitoring Survey 2005 Main Report, 2007, p.70 and 82 .*

66 *National Employers Skills Survey 2007: Main Report. p.130.*

The NESS data shows that employers who train typically provide training for a large proportion of their workforce. Three quarters arrange it for more than half their workforce and over two fifths (45%) trained 90% of their current workforce, over the previous 12 months.

Total employer expenditure on training in England is estimated to be £38.6 billion (over the 12 months prior to the NESS 2007 survey). This splits almost equally between on-the-job (53%) and off-the-job (48%). Examining the items of expenditure which make up this figure show that almost half of it (£18.1 billion, or 47%) are, in fact, opportunity costs (the labour costs of the trainees) rather than actual spend (see Table 5.3).

Table 5.3:
Training expenditure and its components

Total expenditure	£ 38.6 bn	% 100
Off-the-job training	18.4 bn	48
On-the-job training	20.3 bn	53
Off-the-job: course related		
Trainee labour costs	4.6	12
Fees to external providers	1.9	5
On-site training centres	2.6	7
Off-site training centre (within same company)	0.4	1
Training management	5.8	15
Non-training centre equipment and materials	0.5	1
Travel and subsistence	0.4	1
Levies minus grants	- 0.2	*
Off-the-job other expenditure (seminars, workshops, etc)		
Trainee labour costs	1.6	4
Fees to external providers	0.7	2
On-the-job training		
Trainee labour costs	11.9	31
Trainers' labour costs	8.4	22
Weighted base	974,091	974,091
Unweighted base	7,190	7,190

Source: LSC, National Employers Skills Survey 2007: Main Report, 2008, p. 182-183.
Note: England only. Base: all employers.

This total expenditure, nonetheless, equates to £1,725 for every employee in the workforce. Looking only at those employers who train, it equates to £1,975 per employee and for each employee that received training it equates to £2,775. The real 'spend', however, is roughly half of this figure.

Training expenditure by employers is also rising over time. In England, NESS data shows that between 2005 and 2007 there has been an increase in total training spend of £5.3 billion (or 16%) from £33.3 billion to £38.6 billion – a 'real' increase of £3.5 billion or 10%.

These figures are impressive but there are some doubts about the 'quality' of this training:

- Comparing participation in non-formal job related training across OECD countries (Chart 5.1); on average the proportion of time spent undertaking job related training is below average in the UK. 19% of individuals' annual hours of work are spent in non-formal job related training, compared to the average of 25% across the OECD.
- The UK has a low ranking amongst OECD countries based on the number of hours spent in training compared to the average hours in work. The proportion of employees in work receiving some form of continuing vocational education is relatively low by European standards (Chart 5.2). This is despite the UK having the largest proportion of enterprises involved in training their staff for any European country.[67]

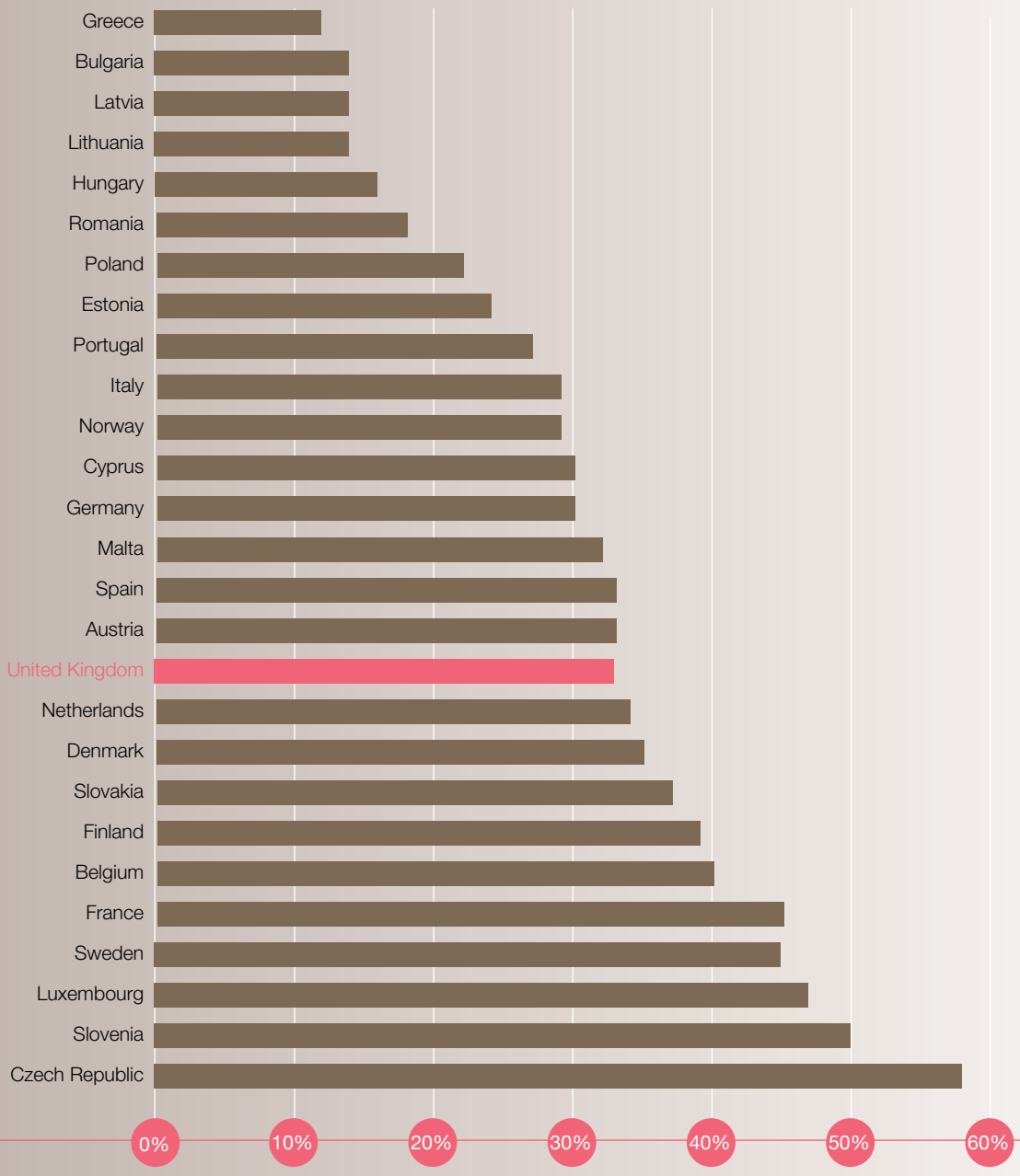
A common observation often made regarding training is that much of it may be delivered for health and safety or induction training or delivered simply to meet legislative requirements, and may only incidentally contribute to skills development that enhances the productivity of the employee or the organisation as a whole. This issue was explored in England by the National Employer Skills Survey which found this observation to be largely inaccurate: the majority of employers are providing training with skills development in mind, rather than simply inducting new staff or meeting health and safety requirements. Indeed for a third of employers providing off-the-job training and around a quarter providing on-the-job training, none of their training had covered induction or health and safety issues.

67 *Dent, R. and Wiseman, J., Continuing Vocational Training Survey 2005, 2008.*

Chart 5.1:
Ratio of hours in non-formal job related training to annual hours of work across OECD countries

Source: OECD, Education at a Glance 2008. http://dx.doi.org/10.1787/402178012235.
Note: Data relates to 2003.

Chart 5.2:
The proportion of employees receiving certified vocational training



Source: Dent, R. and Wiseman, J., CVTS 2005, 2008.

Finally, whilst this extent of training behaviour is considerable, the extent to which it will feed into increased qualification attainment is limited. NESS 2007 found that less than a fifth (18%) of the employees who had received training, had received training that led towards a nationally recognised qualification. In absolute terms, of the 14 million employees that had received training, 2.6 million had been trained towards a nationally recognised qualification. This has changed little since 2005.

It is hoped that the UK Vocational Qualification Reform Programme (VQRP) will help to address this issue. The VQRP is seeking to reform vocational qualifications, making the system more responsive, with more flexible approaches to assessment, allowing learners to achieve qualifications in small steps. One of the key features of this reform is to create a system that meets the demands of employers for smaller units of learning within a framework that offers progression to a quality assured qualification. If this is successful we would anticipate that increasing proportions of employer training will lead towards nationally recognised qualifications.

68 Whilst the data shown is for England only, data for Scotland, Northern Ireland and Wales for off-the-job training confirms the pattern that the larger the employer, the more likely that they are to train.

There are variations across organisations in the extent of training. Organisation size is perhaps the key determinant of the likelihood of an employer providing training:

- **The larger an employer, the more likely they are to provide training**. More than nine out of 10 employers with more than 25 employees provide training: below that size, the proportion providing training diminishes rapidly, to just above half in the smallest firms.
- However, amongst employers who do train, the proportion of staff who receive training remains static across size groups (except for the very smallest). The issue seems to be about the establishment being a training establishment or not: when the establishment does train, employees within that establishment are roughly equally likely to receive training regardless of workplace size (see Table 5.4).[68]

Table 5.4:
Proportion of employers providing training and workforce development activity

		Number of employees					
	All employers	2–4	5–24	25–99	100–199	200–499	500+
Provide training							
Yes	67	54	80	92	94	94	95
No	33	46	20	8	6	6	5
Proportion of staff receiving training	**63**	**46**	**61**	**65**	**64**	**67**	**68**
Weighted base	1,451,507	777,049	520,326	122,361	18,407	9,703	3,661
Unweighted base	79,018	24,084	36,778	13,830	2,424	1,407	495

Source: LSC, National Employers Skills Survey 2007: Main Report, 2008
Note: England only. Base: all employers.

There is also considerable sectoral variation. Looking on an SSC basis, we can see that the 'public sector' SSCs are much more likely to provide training (see Table 5.5): 92% of employers in the Government Skills sector provided training, as did 89% of employers in the Skills for Justice sector, 87% in the Lifelong Learning UK sector, 85% in the Skills for Health sector and 81% in the Skills for Care and Development sector.

Table 5.5:
Proportion of establishments providing training – by SSC

	% providing on or off-the-job training (or both)	% providing neither
All	**67**	**33**
Lantra	52	48
Cogent	69	31
Proskills	58	42
Improve	68	32
Skillsfast UK	47	53
SEMTA	64	36
Energy & Utility Skills	75	25
Construction Skills	60	40
Summit Skills	69	31
Automotive Skills	60	40
Skillsmart Retail	62	38
People 1st	66	34
Go Skills	55	45
Skills for Logistics	63	37
Financial Services SSC	82	18
Asset Skills	71	29
E-Skills UK	66	34
Government Skills	92	8
Skills for Justice	89	11
Lifelong Learning UK	87	13
Skills for Health	85	15
Skills for Care and Development	81	9
Skillset	62	38
Creative and Cultural SSC	61	39
SkillsActive	75	25
Non-SSC employers	70	30

Note: LSC, National Employers Skills Survey 2007: Main Report, 2008.

While (as would be expected) the average training expenditure by establishment is smaller for smaller firms than for larger firms, the results show that smaller employers spend a much higher share of total training expenditure than the proportion of staff that they train would account for. 7% of all staff trained across England work in establishments with fewer than five staff, yet these establishments account for 15% of total training expenditure. Training expenditure per trainee falls with size, from £6,125 per trainee in the smallest (those with less than five employees) to £925 per trainee in the largest.

Reasons for this include:

- larger firms will enjoy economies of scale and greater purchasing power;
- larger employers are likely to have access to internal training facilities and dedicated training staff and hence be less dependent on bought-in services; and
- smaller establishments spend more on off-the-job training than they do on on-the-job training (the reverse is true for larger employers) (see Table 5.6).

Table 5.6:
Expenditure on training and size of establishment

		Number of employees					
	All employers	2–4	5–24	25–99	100–199	200–499	500+
Total expenditure	**38,648m**	**5,655m**	**11,400m**	**9,885m**	**5,314m**	**4,199m**	**2,194m**
% of training expenditure	100	15	29	26	14	11	6
% of all trainees	100	7	22	26	12	16	17
Spend per trainee	2,775	6,125	3,650	2,725	3,200	1,850	925
Weighted base	974,091	418,285	413,398	112,458	17,850	9,440	2,659
Unweighted base	7,190	1,724	3,720	1,398	207	113	28

Source: LSC, Cost of Training Survey, National Employers Skills Survey 2007: Main Report, 2008.
Note: England only. Base: all employers.

Although the statistical evidence suggests that small organisations are less likely to provide training for their employees than larger organisations, some researchers question the meaning of these statistics. Indeed, they point to the wide variation in sub-groups of smaller employers and resist making broad generalisations about the heterogeneous SME community.[69]

SMEs (typically defined as businesses with fewer than 250 employees), particularly those at the smaller end of the spectrum, are not just scaled down larger employers. Of almost 4 million employers in the UK, 99.4% of them employ less than 250 people and account for about 40% of the people employed in the UK.

69 Johnson, S. and Devins, D., Training and Workforce Development in SMEs: Myth and Reality, 2008; Unwin, L. et al, Worlds Within Worlds: The Relationship Between Context and Pedagogy in the Workplace, 2005.

It appears that expenditure of SMEs on off-the-job training increases with firm size[70] and that larger SME workplaces have more formalised training practices.[71] Furthermore, some SMEs are franchised and this frequently predetermines training activity.[72] The approach of SMEs to training is undoubtedly also influenced by their business. For instance, larger customers may insist on or help to facilitate various types of training such as the procurement arrangements of public sector organisations.[73]

However, SMEs (especially the smallest) are notoriously informal and unstructured in terms of human resource management practices and approaches to workforce development. Skills acquisition largely occurs as a natural part of day to day work, often involving adapting and developing knowledge and skills in an informal, incidental and dynamic way in the workplace setting. It is frequently a by-product of a business process rather than the focus of the process itself and rarely is formal or structured. That said such approaches can still be a highly appropriate and rational business response to ensuring that employees have sufficient skills to meet current requirements and objectives.[74]

Mentoring, supervision and coaching of employees by an experienced manager or staff member are commonplace. Generally, however, informal training and assessment based on personal observation and task specific coaching suits the purposes of many small organisations and there is little perceived value to be realised by the business from accrediting such activity either internally or externally. There are exceptions to this to meet regulatory, health and safety or 'licence to practise' requirements.

These factors highlight the complexity of the policy challenges associated with raising skills in the SME context, requiring a more holistic view of workforce development. Whilst there is clearly a case for continually 'raising the game' of UK SMEs in relation to skills, policy approaches must recognise the reality of the situation facing most SMEs and help to facilitate solutions that build on appropriate practice. For small firms this may require a need to explicitly recognise the role of informal learning in the workplace, to help identify what is effective informal workplace learning and promote this more widely to SMEs.

5.3 REASONS FOR EMPLOYERS NOT PROVIDING TRAINING

The most common reason for not providing training is a belief that all staff are already proficient in their job – mentioned by 67% of non-trainers in England, 76% in Wales, 44% in Scotland, and 73% in Northern Ireland.[75] Employers do not particularly cite issues of training supply, or expense, as being barriers to training provision.

Outside England and, in relation to providing off-the-job training, employers in the devolved administrations do indicate additional barriers to providing training. Within Scotland employers not training felt off-the-job training was not necessary for their business. Welsh employers stated they had a lack of time for training (31%), and Northern Ireland employers suggested they preferred alternative training methods to off-the-job training (see Chart 5.3).

70 *Cosh, A. et al, Investment in Training and Small Firm Growth and Survival: An Empirical Analysis for the UK 1987-1995, 1998.*

71 *Curran, J. et al, 'Small Firms and Workforce Training: Some Results, Analysis and Policy Implications from a National Survey', 1997.*

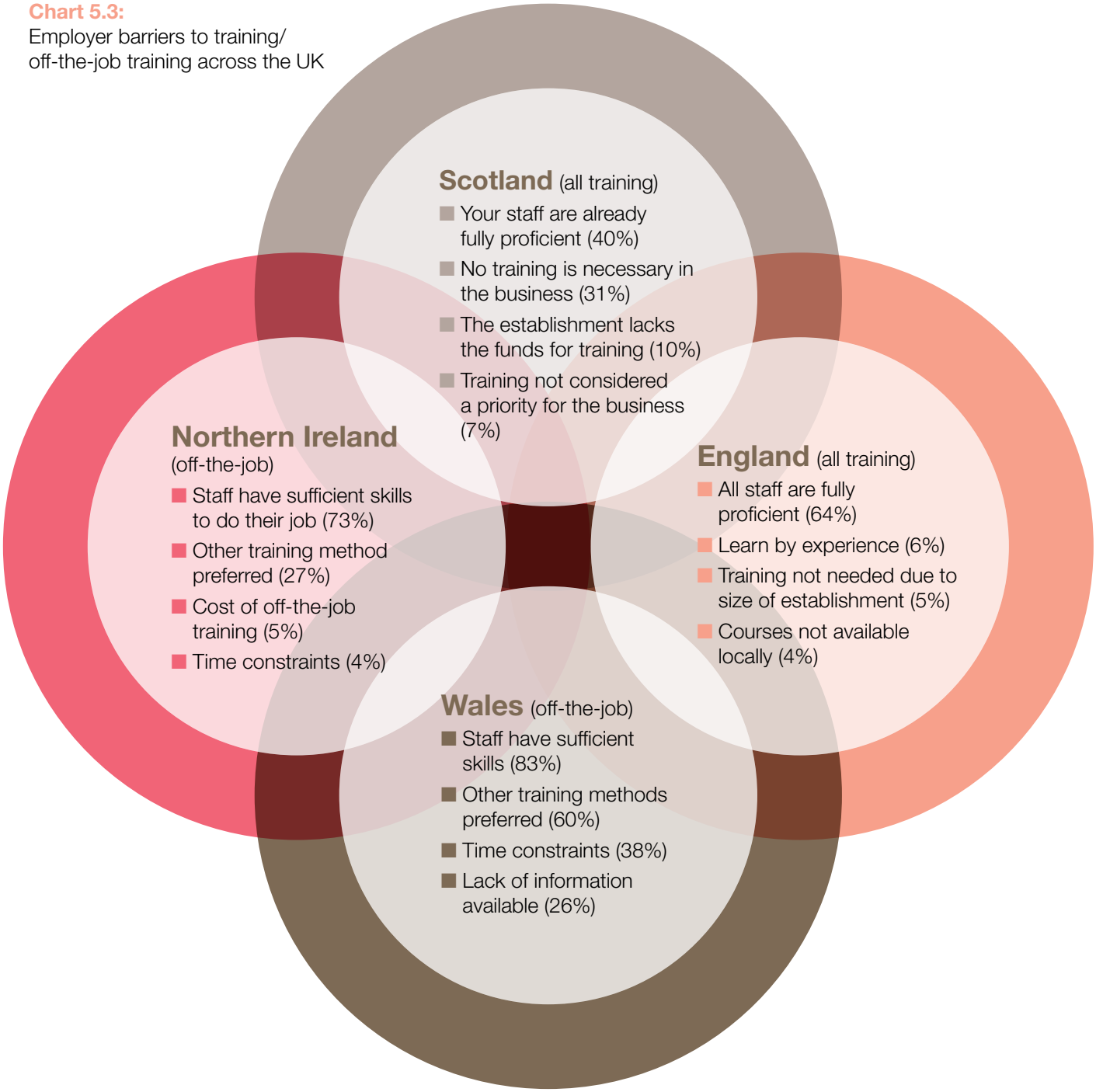
72 *Litz, R.A. and Stewart, A.C., 'Trade Name Franchise Membership as a Human Resource Management Strategy Does Buying Group Training Deliver 'True Value' for Small Retailers?', 2000.*

73 *Hendry, C. et al, Strategy Through People: Adaptation and Learning in the Small-Medium Enterprise, 1995; Goss, D. et al, 'Small firms and HRM: Exceptions that Prove the Rule', 1994.*

74 *Curran, J. et al 'Small Firms and Workforce Training: Some Results, Analysis and Policy Implications from a National Survey', 1997; Johnson, S, 'Lifelong Learning and SMEs: Issues for Research and Policy', 2002.*

75 *Some care needs to be taken with comparing the responses across countries because individual countries used slightly different response codes.*

Chart 5.3:
Employer barriers to training/
off-the-job training across the UK



Source: LSC, National Employer Skills Survey 2007, 2008; Futureskills Scotland Skills in Scotland 2006, 2007; DELNI, Northern Ireland Skills Monitoring Survey 2005, 2007; Future Skills Wales, Sector Skills Survey Summary Report, 2005. Base: England: all establishments reporting they did not train; Scotland and Wales: all establishments reporting they had not provided off-the-job training; Northern Ireland: all establishments reporting they had not provided off-the-job training.

Again, however, size is a factor here: small firms are much more likely to believe there is no need for training, larger employers less so. This may reflect the low levels of demand that some small employers have – reflecting the arguments discussed in the 'low skill equilibrium' debate below.

Simple exhortations to employers to train, or to train more may not, on their own, be sufficient to raise demand. The decision to train or not is embedded within the culture of businesses and the extent to which employers formally plan for the future growth and development of their businesses. NESS shows that 57% of businesses have business plans (which specify the objectives for the coming year), just under half (48%) have a formal training plan and just over a third (35%) have a budget for this training expenditure. Whilst this means, of course, that over 40% of businesses have no business plans, half have no training plan and two thirds have no training budget, it is of some comfort to note that the evidence suggests levels of planning and budgeting are increasing over time.

At either end of the scale, 25% of establishments (in England) have all three plans but 31% none. 92% of employers who do have all three plans in place provide training to their workforce whilst only 42% of those without any plans provide any training. There is a clear relationship between the size of the employer and the existence of these plans. NESS suggests that in England, over nine out of 10 of the largest establishments had these plans in place, compared to the 42% of the smallest establishments who have none. However, as we have discussed earlier, amongst SMEs, the absence of these plans amongst very small firms does not necessarily mean that training is not taking place, just that it has not been formalised.

For employers, there are also a number of real or perceived barriers to training, for example fear of poaching, lack of information about what is available, cost issues (particularly for SMEs) and issues associated with allowing time for training. Some of these issues could be overcome, for example there is some evidence that training can improve retention rather than lead to staff leaving and of course there is help available with the cost of training, particularly those with low or no skills.[76]

Non-provision, is not, however, the only possible reason for low levels of training. The NESS survey asked those who had provided training whether they would have liked to have provided more than they actually undertook: two fifths (41%) said they would, with the main barriers being a lack of funds (49%) and an inability to spare further staff time (42%).

It is further worth noting that satisfaction with external training providers (where used) appears to be high. The National Employer Skills Survey (2007) also asked employers (in England) who had funded or arranged training for their employees over the previous 12 months, whether they had used Further Education (FE) colleges to provide teaching or training or 'other training providers' (which includes external consultants or private training providers). These employers had most commonly used 'other' training providers (51%) with 26% having used FE Colleges.

76 *Ananiadou, K. et al, The Benefits to Employers of Raising Workforce Basic Skills Levels: A Review of the Literature, 2003.*

A large majority of employers were satisfied with the quality of service provided by their training providers: 84% of those who had used FE colleges were satisfied, 93% of those who had used 'other' training providers were so. It is the case, however, that there is a gap in satisfaction between FE and other providers (see Table 5.7).

The issue here appears not to be so much satisfaction with FE colleges and commercial providers once they are used, but why they are used by so few employers. Research[77] suggests that employers perceive that there is a lack of relevance of courses provided to companies' training needs, plus some wariness about costliness. Employers seem to believe that colleges and commercial providers were unlikely to be able to help them update their workers' skills.

77 Mason, G., et al, Raising Sector Skill Levels: How Responsive is Local Training Supply?, 2005

Table 5.7:
Level of satisfaction (%) with FE colleges and other external providers

	Training provided by:	
	FE college	Other external provider
Very satisfied	48	62
Quite satisfied	36	31
Neither satisfied nor dissatisfied	6	3
Not at all/ not very satisfied	6	1
Weighted base	253,235	502,278
Unweighted base	17,279	32,191

Source: LSC, National Employers Skills Survey 2007: Main Report, 2008, p. 182-183.

5.4 PARTICIPATION IN TRAINING

5.4.1 PATTERNS OF INDIVIDUALS' PARTICIPATION IN TRAINING

Table 5.8 sets out the pattern of individuals' participation in training. The main findings are that:

- **Younger people** (who are on average more highly qualified than older people) **are more likely to receive training**.
- **Women are more likely to receive training** than men.
- **Those in full-time work are more likely to be in receipt of training** than those working part-time.
- **The higher the qualification held the more likely it is that the individual receives training**.
- **The higher the occupational level** (with two exceptions – managers and personal service occupations), **the more likely it is that an individual will receive training**.

On the other hand, there is relatively little difference in the receipt of training between those who have a disability and those who do not; on the basis of ethnicity; or between permanent/temporary workers. These patterns, however, vary more across each of the four nations.

The proportion of the workforce in receipt of training is consistent across England (26%), Wales (27%) and Scotland (also 27%). Only in Northern Ireland are workers less likely to receive training.

Table 5.8:
The distribution of training across the UK

% receiving training in the last 13 weeks	England	Wales	Scotland	Northern Ireland	UK
All	**26**	**27**	**27**	**20**	**26**
Age					
16–24	30	30	33	24	30
25–49	27	28	27	21	27
50–59	23	23	25	15	23
60–64	15	18	10	9	15
Gender					
Male	23	22	25	17	23
Female	28	31	28	23	28
Disability					
With disability	24	23	26	13	24
No disability	25	27	26	20	25
Ethnicity					
White	25	26	26	19	25
Non-white	26	35	35	21	27
Employment status					
Full-time	27	28	28	20	27
Part-time	22	24	22	17	22
Contract status					
Permanent	27	28	28	21	27
Not permanent	28	36	29	31	29
Qualification level*					
No qualifications	8	13	10	6	8
NVQ Level 1	20	18	20	20	20
NVQ Level 2	22	22	22	19	22
NVQ Level 3	25	27	23	20	25
NVQ Level 4	34	38	35	27	34
NVQ Level 5	39	41	40	30	39
Occupation					
Managers and senior officials	24	22	23	23	24
Professional occupations	38	43	41	27	39
Associate professional and technical	35	36	37	29	35
Administrative and secretarial	21	23	22	19	22
Skilled trades occupations	16	17	20	13	17
Personal service occupations	37	39	34	26	37
Sales and customer service occupations	19	25	21	18	20
Process plant and machine operatives	14	17	13	10	14
Elementary occupations	15	16	14	12	15

Source: Labour Force Survey July-September 2008.
*NVQ Levels represent NVQ equivalents calculated from disaggregated qualifications data.

Data available from the NESS in England confirms this overall pattern of occupational/qualification skew, but allows additional insight. In all occupational groups, the proportion of the workforce receiving on-the-job training was higher than the proportion that had received off-the-job training – emphasising the importance of this route/mode of training.

However, the pattern differs by occupational group. The difference is less marked for those in higher occupations, managers and senior officials and professional occupations, but greater for those in lower level occupations – particularly sales and customer service occupations (see Table 5.9).

It is also important to note that **the extent of training, measured in terms of the proportion of employees receiving it, has increased over the last 10 years** from 25% of the workforce to 27%, though this is below the peak achieved in 2003. It is also worth noting that training has declined a little in terms of those with relatively high levels of qualifications and increased a little amongst those with lower levels of qualification (see Table 5.10).

Table 5.9:
Distribution of training by occupation

	Receipt of off-the-job training (%)	Receipt of on-the-job training (%)
Managers and senior officials	36	42
Professional occupations	52	59
Associate professional and technical occupations	44	57
Administrative and secretarial	32	47
Skilled trades occupations	36	45
Personal service occupations	52	67
Sales and customer service occupations	27	61
Process, plant and machine operatives	24	43
Elementary occupations	26	51
Weighted base	1,451,507	777,049
Unweighted base	79,018	24,084

Source: LSC, National Employers Skills Survey 2007: Main Report, 2008.
Note: England only. Base: all employers.

Table 5.10:
Job related training by highest level of qualification in the UK

	1998 %	2003 %	2008 %
Degree or equivalent	39.9	42.4	37.2
Higher education	38.7	40.9	35.4
GCE A level or equivalent	24.3	27.3	25.6
GCSE grade A–C or equivalent	25.6	27.9	24.4
Other qualifications	17.1	21.9	18.7
No qualification	7.9	10.2	8.4
All levels of qualification	25.0	29.0	26.6

Source: Labour Force Survey taken from Clancy, G., 'Labour Demand: The Need for Workers', 2009.
Note: Data is 12 months ending March, not seasonally adjusted.

5.4.2 BARRIERS TO INDIVIDUALS' PARTICIPATION

There are a range of reasons that individuals give for not participating. It is important if we are to make progress towards World Class skills that these barriers are overcome.

The obstacles to learning faced by individuals vary between those who have already participated in learning and non-learners; barriers also vary by age, qualification level, and sex (see Table 5.11). Overall the most common obstacle to learning is lack of time due to work (45%), closely followed by a lack of time due to family commitments (31%). Individuals also commonly cite they prefer to do other things than learning (28%), and the difficulty paying course fees (21%). Those with low/no skills are also the least likely to undertake training and there is some evidence that lack of motivation is one factor in this. The National Adult Learning Survey (2005) indicates that around a third of those with no qualifications say they are not interested in learning, compared with approximately 1 in 10 of those with Level 2, and a negligible proportion of those with Level 5.[78]

78 Snape, D. et al, National Adult Learning Survey 2005, 2006.

Table 5.11:
Obstacles to learning by sub-group

Learners vs non-learners

- Lack of time due to work mentioned more often by **Learners** (51% compared with 24% of non-learners).
- **Learners** were also more likely to suggest getting time off work for learning was hard.
- **Non-learners** expressed concerns over their personal attributes, and were more likely not to be interested in learning and did not recognise the potential benefits. They were less likely than learners to be able to find local opportunities to learn or know where to find out about courses.

Men vs women

- **Women** were more likely to find family responsibilities (39% compared to 23%) and childcare (21% compared to 9% of men) barriers to learning.
- **Men** however found work was their main obstacle, citing a lack of time due to work (51% compared to 39% of women) and struggling to get time off work (20%).

Age

- Key barriers for the youngest age group (age 16–19) included preferring to spend time doing things other than learning (37%), difficulty paying fees (29%) and not having qualifications to get on a course (35%).
- Respondents aged 20–39 most commonly cited a lack of time due to work or family, as well as difficulty paying the course fees.
- Those aged 40–59 were also most likely to cite lack of time due to work and family; in addition this age group also indicated a strong preference for spending time doing things other than learning.
- The oldest respondents (aged 60–69 and 70+) indicated a preference for spending time doing things other than learning (36%, 37%). They also commonly mentioned a lack of interest in learning, and had a perception they were too old to learn.

Qualification level

- Among those who had no qualifications, the most common obstacles were lack of time due to work and family (25%, and 33%). In addition there was a lack of knowledge about local learning opportunities (25%).
- Respondents who had a Level 1 qualification demonstrated concern about their personal aptitudes (eg concerns about keeping up with the course) and returning to learning in general.

Note: Snape, D. et al, National Adult Learning Survey 2005, 2006.

In addition to the obstacles to learning that are experienced by individuals, there are also notable differences in the attitudes to learning by learners and non-learners. These perceptions may also serve as barriers to individuals' motivations and investment in learning. Whilst both learners and non-learners recognised the importance of continuing to improve their knowledge and skills, non-learners were less likely to see education as an investment in their future, and were more likely to agree with the statement that 'Learning is only worthwhile if there is a qualification at the end'.

Looking at individuals' orientation towards learning, non-learners were also much more likely to feel that learning 'wasn't for people like me' compared to learners (19% compared to 3%), and not be interested in any learning (29% compared to 5% of learners). Learners on the other hand were more likely to see learning as something that is undertaken over an individual's life compared to non-learners, and disagree with the statement that they didn't get anything useful out of school.

5.5 THE UK BENCHMARKED AGAINST EU COUNTRIES

The European Commision annually publishes progress towards the Lisbon Strategy objectives in respect of education and training.

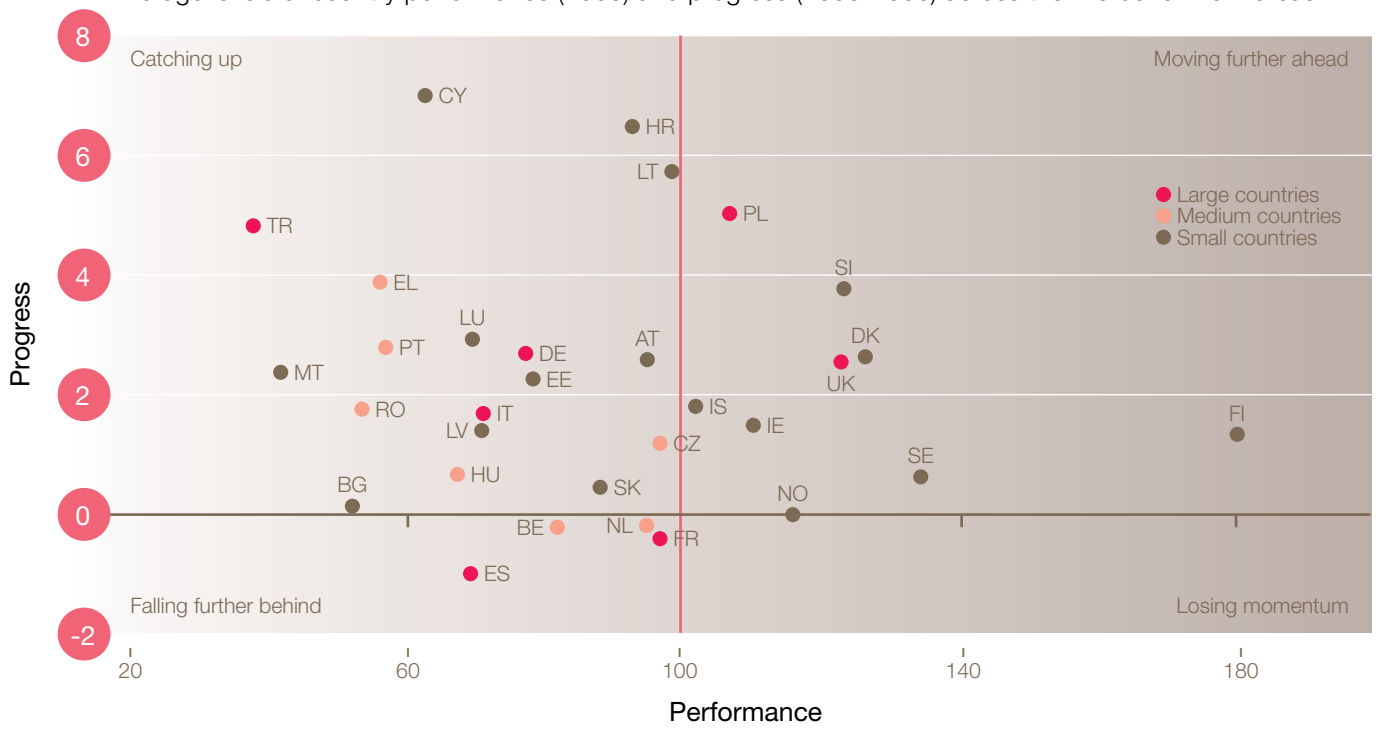
The UK is in the top performing six countries on the basis of the average of the five benchmarks for 2010 (Chart 5.4). The UK is in the top seven countries on Lifelong Learning Participation and Maths, Science and Technology Graduates. It is positioned less well on the proportion of early school leavers (13th); proportion of those completing upper secondary education (18th); and on reading literacy (9th).

Table 5.12 on page 83 summarises the UK's and other countries' positions and progress.

More broadly, the European Commission uses 16 core indicators to measure progress towards the Lisbon objectives. On these indicators, the UK is one of the three best performing countries with respect to three of the 16 indicators:

- Lifelong Learning Participation levels;
- Investment in Education and Training; and
- Higher Educational Attainment

Chart 5.4:
Average levels of country performance (2006) and progress (2000-2006) across the five benchmark areas



Source: European Commission, Progress Towards the Lisbon Objectives in Education and Training, Indicators and Benchmarks, 2008, Chart A2.

This better performance when benchmarked against EU countries as opposed to the OECD countries reflects:

- The OECD countries include 10 who are not members of the EU but are highly advanced economies.
- The EU countries include eight who are not OECD countries, several of whom are not highly advanced economies.
- The OECD benchmarking focuses on qualifications, whereas the EU benchmarking includes a range of other measures, generally only available for EU countries.

The overlap between membership of the G8/G20, the OECD and the EU is shown at Annex 2.

5.6 AN OPTIMAL LEVEL?

The discussion above does not discuss whether this amount is in any sense the 'optimal' amount of skills development through training.

There are four broad sets of reasons why the market for training may be subject to failure:

- **Imperfect or asymmetric information:** employers or individuals lack reliable information on the quality and content of learning opportunities and the benefits that may accrue from investment in them and each, indeed, may have different or even conflicting information.
- **Time preference, 'short-termism' and risk aversion:** individuals and organisations may focus on the short term and ignore or devalue longer-term benefits. In addition, both firms and individuals may be risk averse, and the returns on investment in skills may be uncertain, fluctuating with economic conditions and personal circumstances.
- **Capital market imperfections:** problems may be encountered in obtaining funding to invest in skills; due to moral hazard and adverse selection.
- **Externalities:** skill formation has wider benefits or spill-overs that those financing

it cannot fully capture for themselves and which those investing therefore will have no incentive to take account of in their decision. These externalities can take a number of forms: the most obvious is 'poaching', whereby having upskilled their staff these can be 'poached' by another employer. The first employer's investment return is diminished and another 'free-rides' on their investment.

If markets are failing, then two forms of outcome may be expected: training that is an immediate need for employers or individuals does not take place; and the sum total of skills development that takes place falls short of the long-term needs of the economy or society.

5.7 CONCLUSIONS

Measures of skill development, other than qualifications, most notably training, show that around two thirds of UK employers provide training to their staff and the overall volume of training seems high. However, this training is unevenly and unequally distributed. Low skilled employees, those in lower status occupations and managers receive less training, together with employees in small firms and those in a number of important sectors of the economy.

European comparisons based on the European Union's five Lisbon education and training benchmarks for 2010 rank the UK in the top six performing countries. Using a wider basket of 16 indicators, the UK is one of the top three in respect of Lifelong Learning Participation, Investment in Education and Training and Higher Educational Attainment.

These more favourable results for the UK, when benchmarking against the 27 EU countries rather than the 30 OECD countries, largely reflect the differing performance of the eight EU countries that are not OECD members, and who are largely not highly advanced economies, and the 10 OECD members who are not EU countries, yet are largely highly advanced economies.

Source: European Commission, Progress Towards the Lisbon Objectives in Education and Training, Indicators and Benchmarks, 2008, Chart A3.

Table 5.12:
Country performance progress in each benchmark area, period 2000–2006

	Low performers in reading	Early school leavers	Upper secondary education	MST Graduates	Lifelong learning
EU					
Belgium					
Bulgaria					
Czech Republic					
Denmark					
Germany					
Estonia	••				
Ireland					
Greece					
Spain					
France					
Italy					
Cyprus					
Latvia					
Lithuania	—				
Luxembourg					
Hungry					
Malta					
Netherlands					
Austria					
Poland					
Portugal					
Romania					
Slovenia	••				
Slovakia					
Finland					
Sweden					
UK	•				
Croatia	•				
Turkey					
Iceland					
Norway					

For low achievers in reading where only 2006 results were available: •• performance above benchmark, • performance above EU average, — performance below EU average.

Changes in 2007: Early school leavers: LU improving to catching up, LT to moving further ahead, AT to falling further behind, Upper secondary attainment: Cyprus changing to moving further ahead, Austria and Finland changing to losing momentum, Lifelong learning participation: Portugal and Poland changing to catching up.

	Above EU benchmark	Below EU benchmark
Increasing performance	Moving further ahead	Catching up
Decreasing performance	Losing momentum	Falling further behind

6 Jobs: Today and Tomorrow

6.1 INTRODUCTION

So far, we have assessed the availability of skills and our prospects of attaining the 2020 Ambition in the context of the employment and productivity agenda. But **increasing our skill levels only makes sense if jobs are available to make use of those skills**. In other words, the demand for labour, employers' requirements in terms of jobs and skills needed. Unless we have a better understanding of these issues we will fail to effectively respond to the changes that are taking place in the economy and fail in the aim of building a stronger and fairer economy. This chapter, therefore, examines the changing nature of jobs in the labour market, the skills they require and the likely changes and prospects for the future, before concluding with a focus on the unemployed and inactive, and current labour market conditions in the recession.

6.2 RECENT CHANGES IN EMPLOYER DEMAND

Over the last 10 years (1997–2007), total employment in the UK has increased by just over 3 million or 10.7%. This substantial growth has been allied to significant structural changes in the economy, most notably a declining demand for labour in the primary, utilities and manufacturing sectors overall, with significant growth in construction, business and personal services, public services, retail and hospitality. The **growth has also been disproportionately strong in London, Northern Ireland, Wales, the East and the South**.

It is also interesting to note that public sector employment has grown considerably over this period. From 5.2 million in 1998, it reached a peak of 5.9 million in 2005, from which time it has declined. The growth has been most marked in education and healthcare. It now comprises 19.5% of total employment.[79]

A sense of the extent to which the 'skill intensity' of this jobs growth has been increasing can be seen in the occupational distribution of this growth (see also Charts 6.4 to 6.6 later in this chapter). **In short, the vast bulk of jobs growth has been in managerial** (+1.1 million); **professional** (+1.05 million) **and associate professional/technical** (+900,000) **jobs as well as in personal service occupations** (+700,000). Indeed, the first three of these groups now account for more than 4 in 10 jobs in the economy (43%) compared to 36% 10 years ago. Relatively low skill occupations such as operatives (-350,000) have been declining, despite the large overall growth in jobs.

We also saw, in Chapter 4, how the qualifications of people in work had grown significantly in recent years with, for example, a considerable growth at 'Level 4' and above and rapid decline of those without any qualifications (though this could potentially reflect skills supply trends, of course, as much as skills demand).

Further evidence of the growth in the labour market's skill requirements comes from the 'Skills at Work' research, which has been conducted over the period from 1986 to date. This indicates that **there has been a continuing demand for upskilling in the labour market. The need for the qualifications, training time, and the time required to become proficient in a new job have all been steadily increasing**. As a result, improving the skills base of the UK economy is crucial to boosting productivity and competitiveness and exploiting new opportunities in high value-added activities but to also ensure the growth is equitable.

79 *Kent, K., 'Employment Changes Over 30 Years', 2008, p.35.*

80 *UKCES, Working Futures 2007–2017.*

- **The proportion of jobs requiring a degree level qualification has risen from 20% to 30% between 1986 and 2006**, alongside a fall in the proportion of jobs requiring no qualifications by around 11 percentage points over the same period (see Chart 6.1).
- Alongside this growth in qualification requirements, the level of training needed to become competent at a job has also increased (see Chart 6.2). **The proportion of jobs requiring only one month's learning to be able to do well has fallen from 27% to 19% in 2006**.

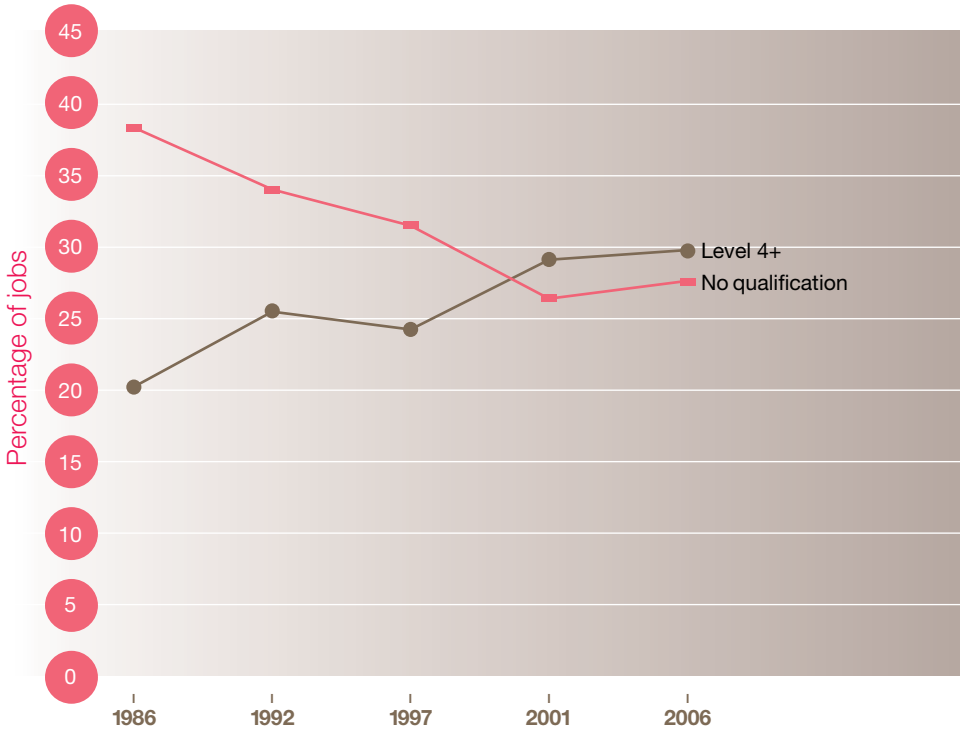
6.3 FUTURE EMPLOYER DEMAND

There is a strong need for anticipation of future skills needs given the time lag between education and training and producing suitably skilled recruits. If there is effective anticipation and matching of labour market needs, there will be better labour market utilisation, higher labour productivity and more jobs, together with reductions in frictional and structural unemployment. Working Futures 2007–2017 provides the most comprehensive projections of future skill demand in the UK.[80]

The current uncertainties facing the UK economy and labour market are considerable. In such circumstances, producing meaningful and robust economic and labour market projections is difficult. However, whilst we are currently witnessing a significant slowdown in economic activity, in the long term renewed growth will return. Moreover, changing patterns of employment are largely dominated by long-term trends and as such, the forecasts in *Working Futures* can be regarded as the best currently available guide to likely long-term future developments in employment.

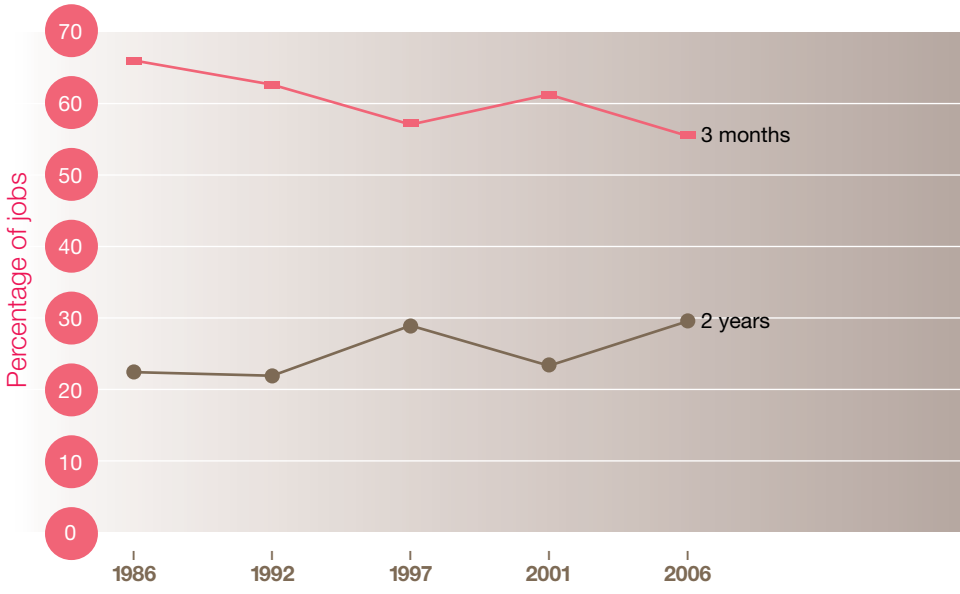
Total employment in the UK (as at 2007) is around 28.5 million. Women account for just less than half of all employment, though their increasing share over time has recently slowed. Self employment accounts for around one job in eight and part-time employment for more than one job in four (28%). The **labour force** stands at approximately 30.1 million and consequently (ILO) unemployment is around 1.6 million.

Chart 6.1:
Trends in broad skills: required highest qualification, 1986–2006



Source: Felstead et al (2007)

Chart 6.2:
Trends in broad skills: training time, 1986–2006



Source: Felstead et al (2007)

Total **employment** is expected to rise by around 1.9 million over the next 10 years. The majority of these jobs are expected to be taken by men and there is, especially, expected to be a relatively large increase in part-time employment amongst men. Whilst self employment is expected to increase, at just less than 200,000, this is a relatively small proportion of total jobs growth compared to full and part-time employment growth. The **labour force** is expected to grow by over 1.9 million, just a little more than employment, hence giving rise to a possible small increase in unemployment and small decline in the activity rate and employment rate.

Employment has grown rapidly in recent years, by 10.7% between 1997 and 2007, but **our forecasts suggest a growth of just 6.2% over the next 10 years, only two thirds as fast as in the previous decade**.

The geographical pattern of these expected changes is significant (see Table 6.1). Over the last 10 years, **jobs growth** has been fastest in Northern Ireland, London, Wales and the East whereas it **is expected to be fastest over the next 10 years in London, the South East, the East and the South West**. However, the 'gap' in growth rates across the regions is narrower than in the previous decade. In terms of absolute numbers, job growth is likely to be greatest in London and the South East.

Of course, there are substantial economic uncertainties pertaining to our forecasts of jobs over the next 10 years, given current economic conditions: the impact of uncertainty in the financial markets, the housing market, global uncertainties, and the timing/planning of the consequent recession and subsequent recovery mean that our assessment of future labour market prospects should be treated with care.

Table 6.1:
Regional labour market changes 2007–2017

	Employment change[1] 1997–2007 (%)	Employment change[1] 2007–2017 (%)	Employment change[2] 2007–2017 ('000)
London	15.2	9.1	+421
South East	11.3	7.5	+322
East	13.6	6.8	+192
South West	11.5	6.9	+182
West Midlands	5.0	4.7	+125
East Midlands	6.3	5.9	+126
Yorkshire and Humber	10.3	5.7	+147
North West	6.7	5.0	+171
North East	9.7	3.0	+36
England	**10.3**	**6.5**	**+1,723**
Wales	**14.4**	**5.2**	**+73**
Scotland	**9.2**	**3.8**	**+102**
Northern Ireland	**19.8**	**6.2**	**+52**
UK	10.7	6.2	+1,949

Source: UKCES, Working Futures 2007-2017, 2008.
1 Table 5.5, p306
2 Table 5.4, p304 (workplace based)

Chart 6.3 shows the expected **sectoral changes in the pattern of jobs**. In percentage terms, **the most significant growth is anticipated to be in IT services and 'other' business services, followed by hotels/catering, health/ social work and miscellaneous services** with significant growth also in construction and retail. In terms of the absolute number of jobs, the dominant growth sectors are also expected to be in other business services (over 1.3 million) and health, education and social work (over 570,000) followed by retail, hotels/catering and miscellaneous services (all over 300,000 jobs).[81]

On the other hand, **manufacturing employment is expected to continue its long-term decline** in terms of jobs, with a net loss of around 400,000 jobs by 2020. It is expected to account for only just over 8% of all jobs in the economy – 1 in 12 compared to 1 in 10 in 2007 and 1 in 5 in 1987.

81 Source: UKCES, Working Futures 2007-2017, 2008, Figure 3.1, p. 50.

Chart 6.3: Projected sectoral employment change 2007–2017

Source: UKCES, Working Futures 2007–2017, 2008, Table 2.6, p. 38.

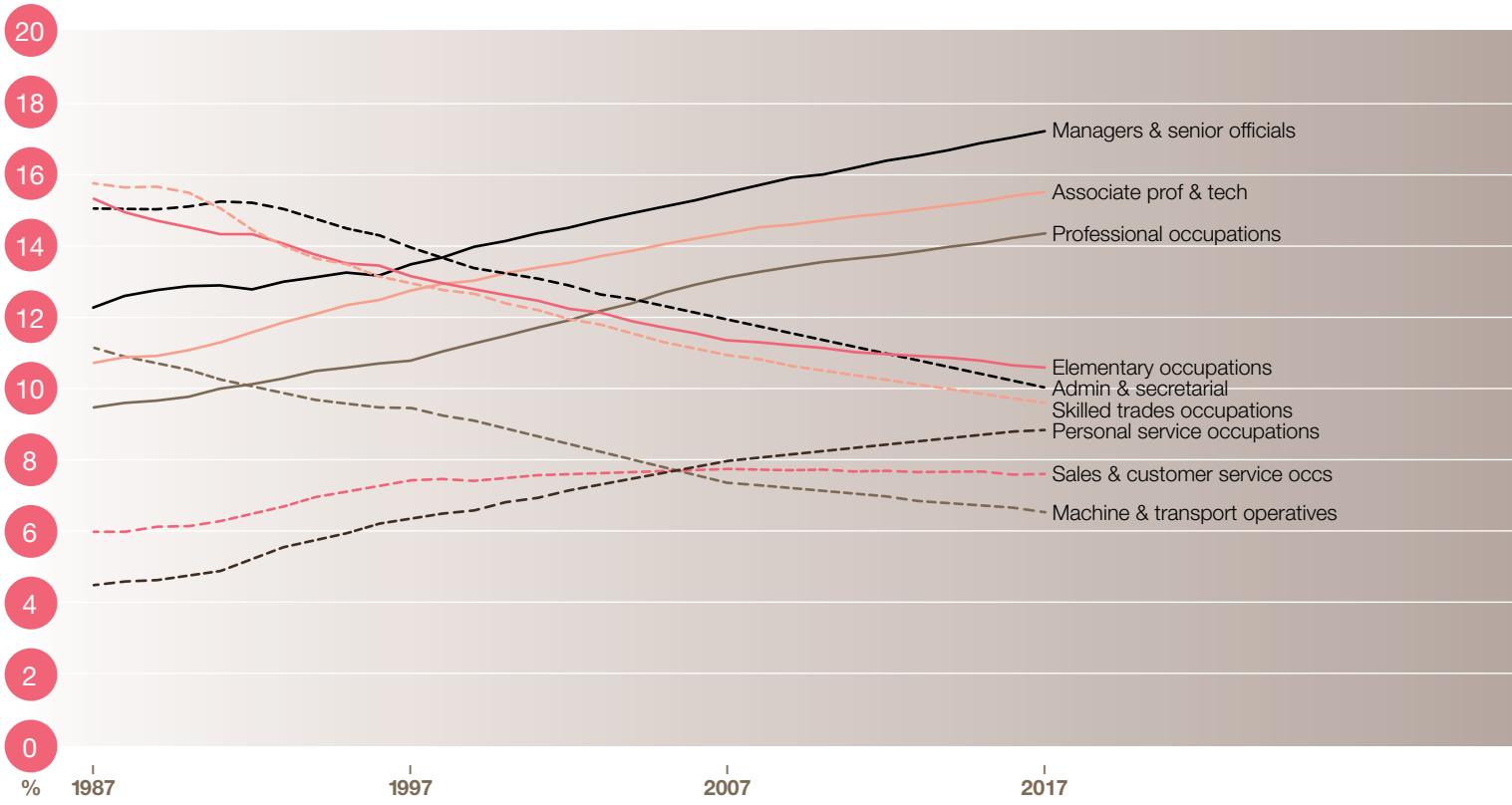
Chart 6.4 shows recent, and expected, **occupational changes in the pattern of jobs**. A rather slower pace of change is expected over the next 10 years than was the case in the previous two decades. **The groups expected to show the most significant increases in employment are managers, professional occupations, associate professional/technical occupations and personal service occupations**. Compared to earlier projections, faster growth is expected for managers, some professional and many associate professional occupations, protective service and culture, media and sport occupations, and caring personal service and customer service occupations.

More rapid declines than previously expected occur in: administrative, clerical and secretarial occupations; skilled manual and electrical trades; 'other' skilled trades and sales occupations. **For elementary occupations, there is evidence, however, of a reversal of trend in several sectors with new jobs being generated following a previous period of steady job losses**.

Chart 6.4:
Changes in occupational employment structure, 1987–2017

Source: UKCES, Working Futures 2007–2017, 2008, Figure 3.2, p. 50.

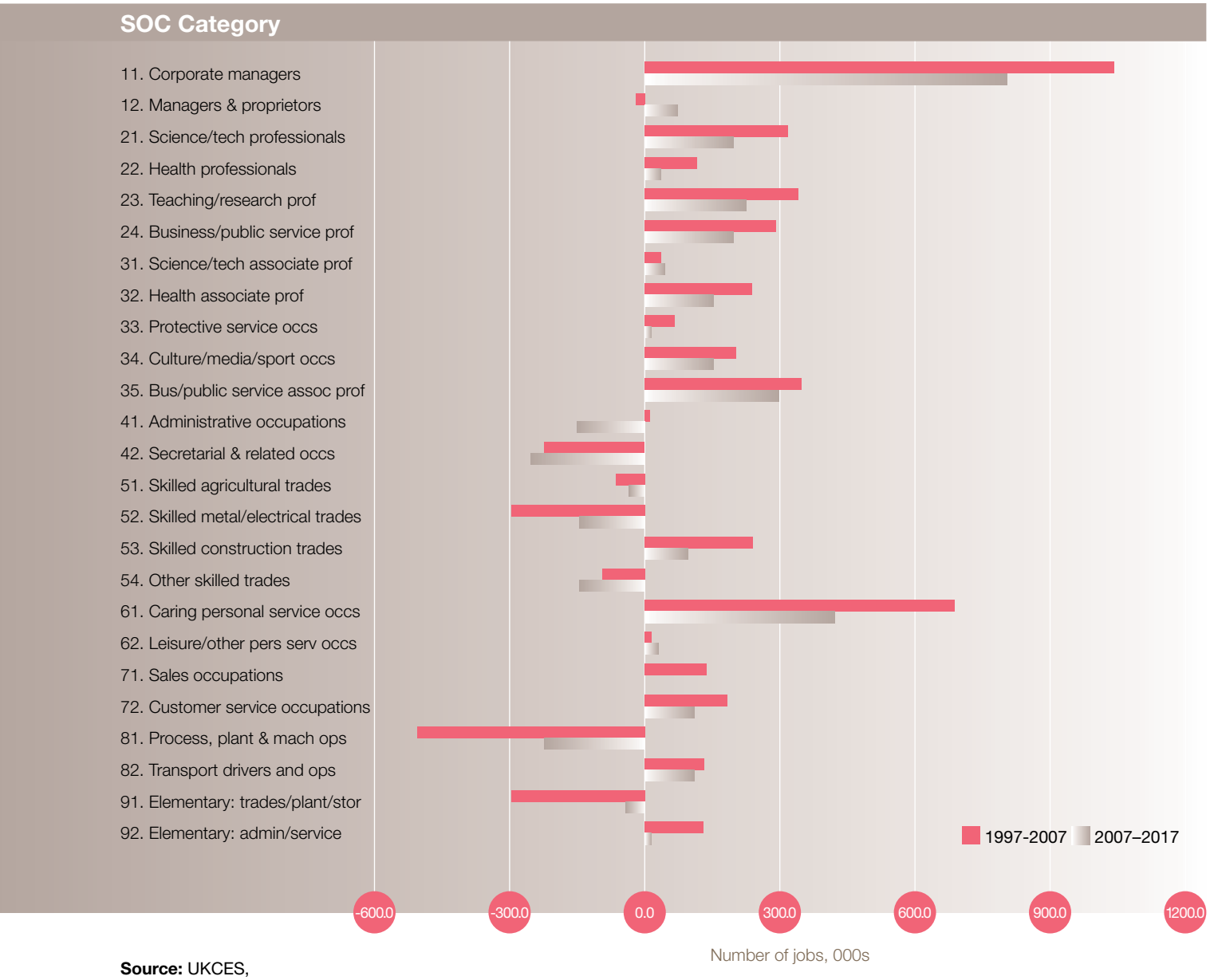
Chart 6.5:
Occupational profiles (shares), 1987–2017



Source: UKCES, Working Futures 2007–2017, 2008, Figure 3.2, p. 50.

More detail of these occupational changes can be found in Chart 6.5 and 6.6. Essentially, we expect to see the continuing growth of white collar, non manual, high skill jobs as well as growth in personal service and leisure related occupations.

Chart 6.6:
Changes in occupational employment structure by sub-major groups, 1997–2017



Source: UKCES, Working Futures 2007–2017, 2009.

Combining expected sectoral and occupational changes enables us to provide a detailed picture of the main anticipated changes in the labour market over the next 10 years, identifying where levels of employment are particularly high, where the growth of jobs is particularly strong (and weak), using a 'matrix' of sectoral/occupational change (see Table 6.2).

Table 6.2:
Occupational change by sector

	Sub-major groups																								
	11	12	21	22	23	24	31	32	33	34	35	41	42	51	52	53	54	61	62	71	72	81	82	91	92
Agriculture etc							–		–			–	–	–	–	–	–		–	–		–		–	
Mining and quarrying				–			–		–	+			–		–		–	+				–			
Food, drink & tobacco		+										–	–	+			–		–	–		–			
Textiles & clothing					–			–	–		–	–	–		–		–	–	–	–	–	–		–	–
Wood & paper products			–				–		–			–	–		–		–		–	–		–	–	–	–
Publishing & printing				+	+					+		–	–			+	–			–		–			–
Chemicals & non-metal minerals									–			–	–		–		–		–			–			–
Metal & metal goods									–	+				–	–		–					–			–
Engineering							–	–	–			–	–	–	–		–					–			–
Transport equipment									–					–	–		–	+			+	–			–
Manufacturing nes* & recycling		+		+						+			–				–	+				–	+		–
Electricity, gas & water				–					–				–	–	–	–	–	+	–			–		–	
Construction	+	+			+					+	+		–				–	+			+				+
Distribution relating to motors													–					+			+				
Wholesale distribution nes*					+								–					+			+				
Retailing distribution nes*	+		+	+	+	+			+	+	+		–				–	+					+		
Hotels and catering			+		+	+		+		+	+			+				+			+		+	+	
Transport and storage								+		+							–	+			+				
Post & telecommunications															–		–	+		+	+	–			
Banking & insurance	+		+	+	+	+	+	+		+			–			+	–	+	+		+		+		
Professional services													–				–	+			+				
Computing & related services	+		+		+	+	+			+	+		–	+				+			+		+		+
Other business services	+		+	+	+	+	+	+		+	+		–			+	–	+	+		+		+	+	
Public admin & defence													–		–		–	+				–			
Education												–	–		–		–					–			–
Health & social work	+		+		+								–				–		–			–			–
Miscellaneous services	+				+	+				+	+						–				+				

	Level of employment in 2007 and/or 2017 is 100,000 or greater.
+	Growth in employment between 2007 and 2017 is forecast to be 20% or greater.
–	Growth in employment between 2007 and 2017 is forecast to be -20% or less.
	Growth in employment in the sector or occupation between 2007 and 2017 is forecast to be 10% or greater.
	Growth in employment in the sector or occupation between 2007 and 2017 is forecast to be -10% or less.

Source: UKCES Working Futures, Figure 3.8, page 62.

*Not elsewhere specified

82 *An estimate of the numbers that will be needed to replace those workers who will leave an occupation (or industry) due to retirement, career moves, mortality or related reasons.*

83 *For more details, see UKCES, Working Futures 2007-2017, 2008, p. 63-68 and Annex A4.*

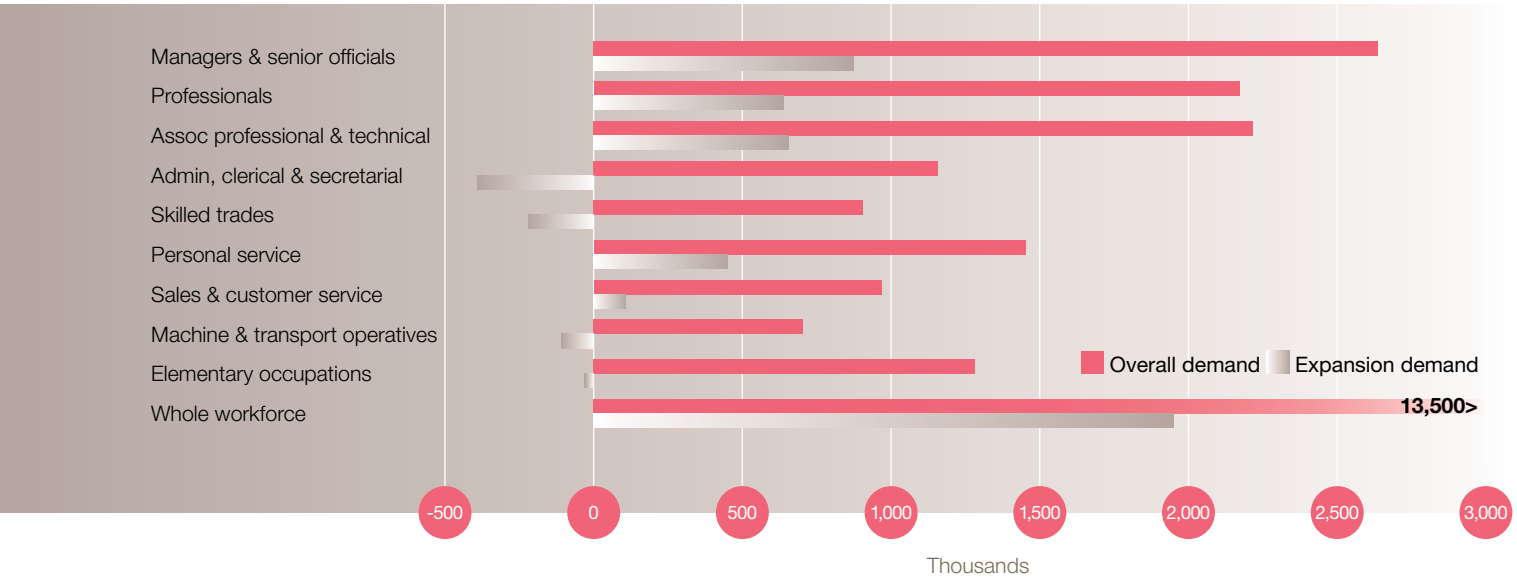
84 *Lawton, K., Nice Work If You Can Get It, 2009.*

It is also important, however, to take account of expected **'replacement' demand.**[82] Our assessment of labour market change above has concentrated on gains/losses in jobs, but **these are 'net' figures and do not take account of the need for employers to replace workers who leave their jobs due to retirement, occupational mobility or even mortality. Thus, job openings are created and opportunities made available even in sectors and occupations where, in aggregate, the total number of jobs is actually falling. Overall, such replacement demand is expected to be around 11.5 million over the next 10 years, nearly six times greater than the net 'expansion' demand of around 1.95 million**.

Chart 6.7 shows the broad occupational distribution of this replacement demand when added to expansion demand: the overall demand for jobs. By and large, this reinforces the pattern of net/expansion demand, but also shows that additional job openings arise, even in 'declining' occupations.[83]

Based on similar occupational forecasts, it has been suggested[84] that without significant changes in policy there will be a similar number of low paying jobs in 2020 as in 2004. This will be driven by expansion of jobs in sectors and occupations where incidence of low pay is currently high. However, at the same time there will considerable job growth in sectors with a low incidence of low pay

Chart 6.7:
UK employment change 2007–2017: expansion demand and total demand



Source: UKCES, Working Futures 2007–2017, January 2009.

(such as management and professional occupations). Job losses are projected in intermediate occupations where the incidence of low pay is just below the national average. This 'hollowing out' or 'polarisation' of the labour market is clearly a developing feature which warrants further examination.

These broad patterns are not unique to the UK and are, in many ways, replicated in broad terms across the European Union. Forecasts suggest that across the EU, over 20 million new jobs are expected to be created between 2006 and 2020 at a time when the working age population will fall by 6 million.[85] In addition to this higher level of expected demand, a further 85 million jobs are likely to be available to replace people who retire or leave the labour market for other reasons.

The broad drift of shift away from employment in the primary and utilities sector and traditional manufacturing industries towards business and personal services and the knowledge-intensive economy is likely to continue as a key feature across the European economy.

Assessing the future skill needs of the economy (and of the wider European economies) is central to the work of the UK Commission. The Government has stated that[86] it, and the Devolved Administrations, will look to the UK Commission to help assess medium to longer-term strategic skill needs and inform the appropriate policy response to meet future challenges. The UK Commission is also working with the European Commission on their 'New Skills for New Jobs' initiative which involves understanding Europe's future labour market and skill needs.

6.4 UNEMPLOYMENT AND THE ECONOMICALLY INACTIVE

What of those who are not in work, whose labour and skills are not required by the labour market or those who do not wish to work?

In this section, we compare the characteristics of the employed, the unemployed and the economically inactive. The 'unemployed' are defined as being available and actively seeking work – the issue for this group is to find employment. The 'economically inactive' are more heterogeneous because they comprise a range of people in different circumstances (which includes students, those looking after family or the home, the temporarily or long-term sick, 'discouraged' workers and the retired), some of whom may want work under certain circumstances and others who do not want, or are not able, to work (see Table 6.3).

Nearly 3 in 4 people of working age are in work and just less than 5% are 'ILO' unemployed (out of work and have recently actively sought work). The remainder, just over 1 in 5, are inactive. Of these, around 2 million want work, although they are not currently actively seeking it. However, there are over 5.5 million (15% of adults of working age) who are inactive and 'not wanting work now'. This group mainly consists of: students; the long-term sick and disabled; those looking after family (including carers); and the early retired.

People frequently move between the broad groups and the different states of inactivity: for example most students will flow out of 'inactivity and not wanting work' into unemployment and, hopefully, employment. These labour market flows are important to understand if we wish to maximise

85 Cedefop, Future Skill Needs in Europe: Focus on 2020, 2008. Summarised in Cedefop, Mind the Gap, 2008.

86 HM Treasury and BERR, The UK Economy: Addressing Long-Term Strategic Challenges, 2008.

employment and minimise the 'labour market detachment' of people who remain outside of employment for a long time. It is, for example, sometimes more difficult to move from some states of inactivity to employment than it is to move from unemployment to employment and it is important for policies to recognise this.

However, in a modern economy there are always likely to be substantial numbers who will not want paid employment at any given point in their working lives – this is why an 80% employment rate is generally recognised to be 'full employment'. **Progress towards this 80% employment rate will thus be partly dependent on moving people from economic inactivity into employment as well as from unemployment into employment**.

Table 6.3:
The UK labour market

(000s)	n	%
In employment	28,209	74.7
Unemployed	1,702	4.5
Inactive, of whom:	7,863	20.8
want a job	2,187	5.8
do not want a job	5,676	15.0
Total	**37,774**	**100**

Source: ONS, LFS May–July 2008.
Note: Base is all aged 16–59/64.

The characteristics of the unemployed and economically inactive differ both from each other and from the characteristics of those in employment. The likelihood of individuals being in any one of these labour market states varies considerably according to their own personal circumstances (see Table 6.4):

- **Age:** people at either end of the age spectrum are more likely to be inactive, although for very different reasons. Young people are more likely to be students, older people to be retired.
- **Young people** are the age group who are most likely to be unemployed – almost twice the rate for the overall population. Consequently, young people make up 42% of the unemployed, despite being only 15% of the working population.
- **Gender:** men are more likely to be in work, women more likely to be inactive. ILO unemployment rates for men and women are broadly similar.
- **Ethnicity:** those from white ethnic groups are more likely to be in work; those from non-white ethnic groups are more likely to be inactive or unemployed. This means that people from non-white ethnic groups make up nearly a fifth of the unemployed (18%) even though they only account for a tenth (11%) of the population.
- **Disability:** people with a disability are much more likely than average to be economically inactive and much less likely to be in employment.
- **Qualifications:** the higher people's qualification level, the more likely they are to be in work and the less likely they are to be inactive. This is seen most starkly amongst those with no qualifications, where less than half (48%) are employed (compared to 74% overall) and 46% are inactive (compared to 21% overall).

Table 6.4:
Economic activity and personal characteristics

	Employed %	Economically inactive %	Unemployed %
All	**74**	**21**	**5**
Age			
16–24	57	34	9
25–49	82	15	3
50–59	71	26	2
60+	11	88	0
Gender			
Male	79	17	5
Female	70	26	4
Ethnicity			
White	76	20	4
Non-white	61	32	7
Disability			
With disability	51	44	5
Not disabled	80	15	5
Qualification level			
No qualifications	48	46	6
Level 1	71	23	6
Level 2	73	22	5
Level 3	77	20	3
Level 4+	87	11	2

Source: ONS, LFS May–July 2008.
Note: Base is all aged 16–59/64.

The overall inactivity rate has remained broadly constant over the last 10 years – declining only slightly throughout the long period of growth since 1998 from 21.4% to 20.8%. However, this overall figure masks the impact of the drive to increase the proportion of young people in education.

Economic inactivity, excluding students as a proportion of the working age population has, indeed, steadily declined over the period, from 17.3% to 15.4% (see Table 6.5), though this does only represent a fall of little more than 300,000.

Table 6.5:
Economic inactivity rates, 1998–2008

	All economically inactive		All economically inactive excluding students	
	n (000s)	%	n (000s)	%
1998	7,599	21.4	6,154	17.3
1999	7,545	21.1	6,147	17.2
2000	7,707	21.5	6,213	17.3
2001	7,768	21.5	6,270	17.3
2002	7,707	21.2	6,151	16.9
2003	7,873	21.2	6,151	16.9
2004	7,874	21.4	6,135	16.6
2005	7,977	21.4	6,092	16.4
2006	7,885	21.1	6,037	16.1
2007	7,906	21.0	5,948	15.8
2008	7,856	20.8	5,838	15.4

Source: ONS, LFS.
Note: Denominator is total working age population.

6.5 PROGRESS IN A COLD CLIMATE: JOBS

Economic conditions within the UK deteriorated substantially during 2008 and have continued to do so into 2009 creating an economic environment significantly different to any period in recent history. A succession of dramatic events within the financial markets has led to an environment of heightened uncertainty. A consequence of this has been a dramatic reduction in both the willingness and ability of many institutions to lend, signalling an end to the recent extended period of easily accessible credit. This has served to restrict the capacity for growth in the wider economy and as a result there has been a general downward shift in levels of output within the UK economy across sectors, with an actual contraction in economic activity in 2008 Q3 for the first time since the early 1990s. Looking forward, the Bank of England's Inflation Report[87] projects that the economy will contract throughout 2009, returning to positive growth in the early stages of 2010 generally in line with HMT (in PBR) who also expect that taking into account the PBR stimulus package alongside an expansionary monetary policy, the economy will return to growth during 2010.[88]

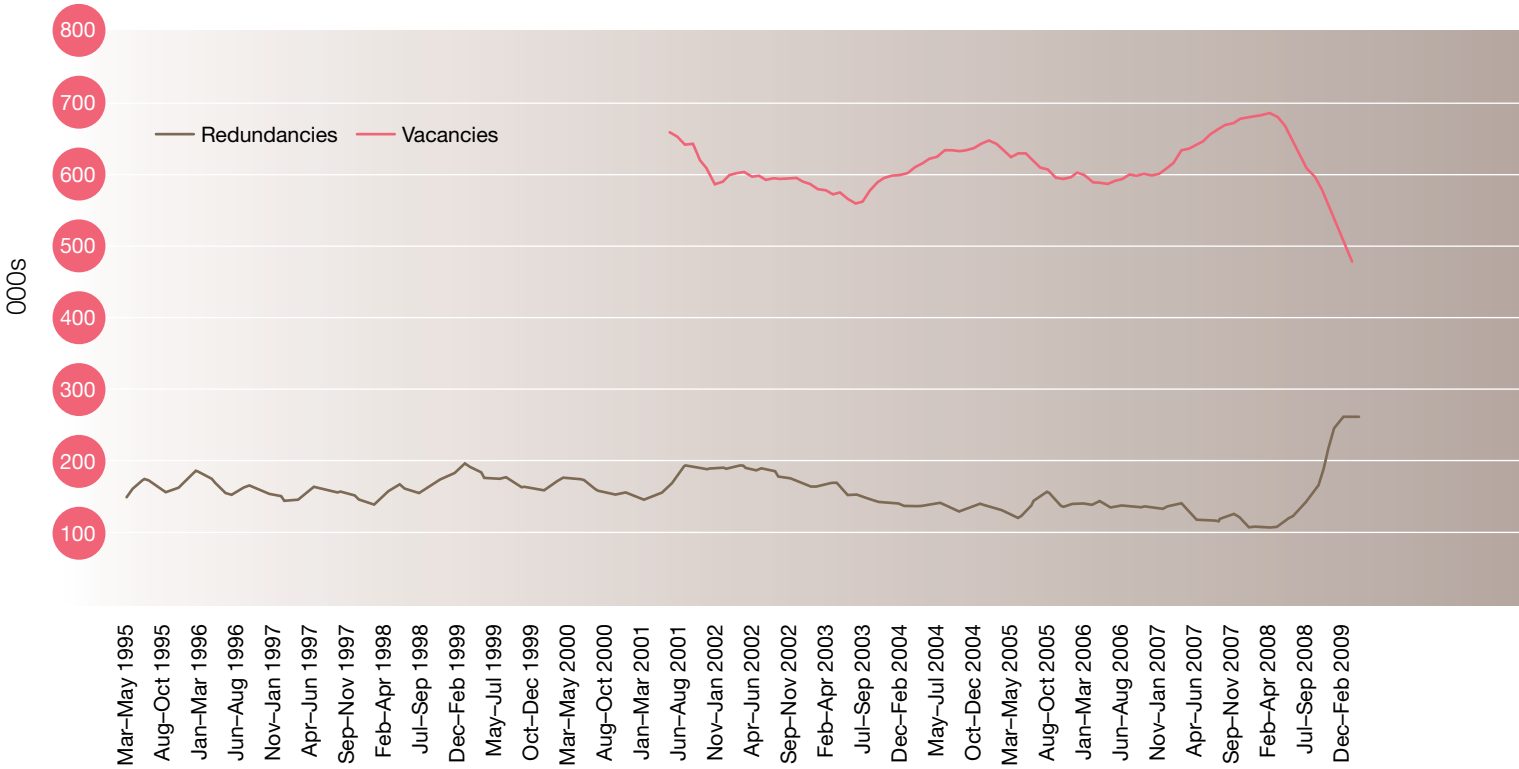
This contraction in output in 2008 has already caused declines in the demand for labour, with evidence of increasing levels of redundancies and falling vacancies (Chart 6.8):

- The number of redundancies in the UK rose significantly toward the end of 2008 and into 2009. The proportion of redundancies to jobs is now at the highest level since the start of the data series.
- The number of vacancies has fallen sharply, tightly correlated with the increase in redundancies.

87 Inflation Report, Bank of England, November 2008.

88 HM Treasury, Pre-Budget Report 2008, 2008

Chart 6.8:
Redundancies and vacancies



Source: ONS, LFS and ONS Vacancy Survey.

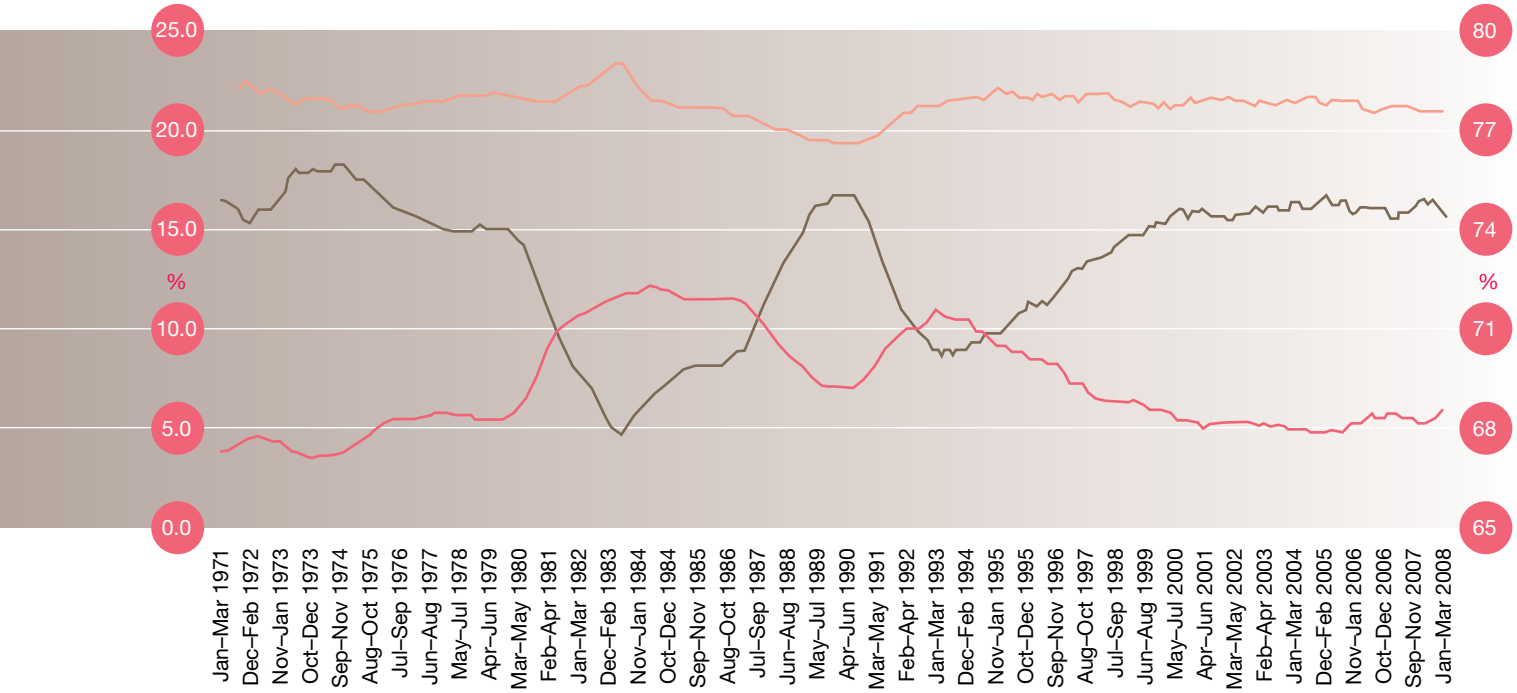
Further evidence from employers' surveys indicate falling recruitment intention across the UK and employers, with increasingly redundancies plans to come on stream.[89] In combination, the indicators outline a reduction in the level of demand for labour.

Recent labour market statistics also show a sharp deterioration. There has been a fall in both the number of people in employment and the employment rate. The number of unemployed people, the unemployment rate and the claimant count have all increased. As of March 2009, the employment rate for people of working age was 74.1% for the three months to January 2009, down 0.1 percentage points from the previous quarter and down 0.7 percentage points over the year. The last time there were similar quarterly falls in the employment rate, and level, was in the early 1990s.

- The unemployment rate was 6.5% for the three months to January 2009, up 0.5 percentage points over the previous quarter. The number of unemployed people increased by 165,000 over the quarter (and by 421,000 over the year, to reach 2.03 million. The last time the number of unemployed was higher was in the three months to July 1997 (when it was 2.08 million).

89 See, for example, CIPD/KPMG, Labour market outlook, RBS PMI Survey, September 2008.

Chart 6.9:
Employment rate, Unemployment rate, Inactivity rate 1971–2009



Source: ONS, LFS historical supplement.

- The claimant count of unemployment was 1.39 million in February 2009, up 138,400 over the previous month and up 595,600 over the year. The last time the claimant count was higher was in July 1997 (when it was 1.4 million).

And it should be noted that this is a snapshot in time, using the most recent data as at the time of writing. Not all job losses will have yet fed through into this data.

It is worth noting that the rising unemployment level is the result of the changing balance between inflows and outflows. Even in current circumstances around a quarter of a million people are leaving the count every month.

Significant though these increases are, they do need to be seen in an historical context. As Chart 6.9 above shows, whilst it is increasing, unemployment remains at an historically low level, lower than levels which existed for much of the 1980s and 1990s. Employment rates remain historically high and again are higher than existed for much of the same period.

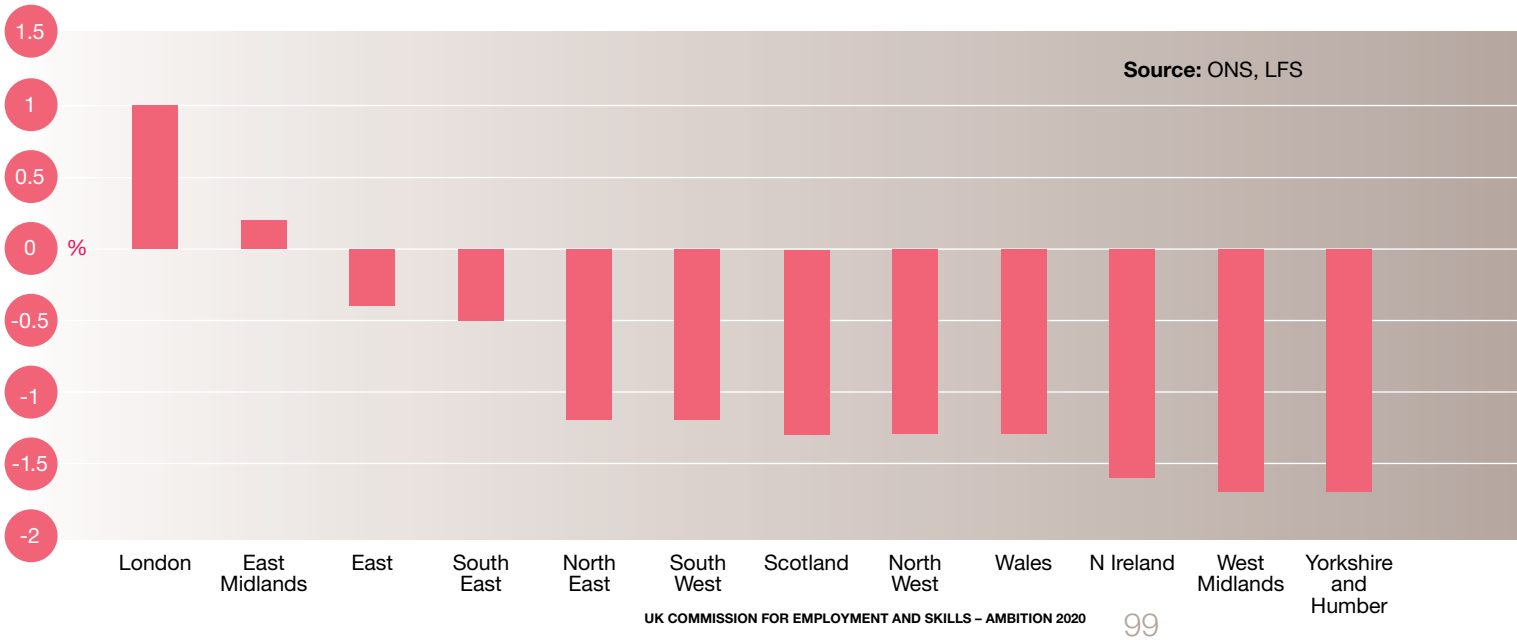
In some ways, it will be difficult to predict what will happen to jobs in the current recession: the labour market has changed significantly since the previous recessions. Three issues, however, are relevant:

- A significant proportion of employment growth in the last five years has been taken up by migrants. As the economy slows we might expect fewer migrants joining the labour market and many of those that have been working in the UK may return home. Less of the decline in labour demand will therefore show up in 'domestic' unemployment than would otherwise be the case.
- Over the last five years, there has been a substantial increase in the number of people over 'normal' retirement age (ie 60 for women, 65 for men) taking jobs. It is difficult to predict the likely incentive effects of recession on this group. Older workers who might otherwise have stayed on in work, or re-entered employment, may decide to retire. If so, this will again reduce the impact of falling labour demand on unemployment levels.
- In previous recessions, a major feature was the movement out of work into 'non-work' benefits, such as incapacity benefits. The combination of recent benefit reforms, such as Pathways to Work, has been successful in reducing this route into 'disguised unemployment'. This will magnify the effect on measured unemployment of falling labour demand.

Job numbers have fallen furthest amongst the Banking, Financial and Business Services sectors, those at the centre of the financial crisis that has precipitated the economic downturn, and other parts of the services industry, most notably hotels, catering and distribution. The largest declines in output in the fourth quarter of 2008 were in the Hotels, Catering and Distribution sectors and Manufacturing, with falls of 4.3% and 7% respectively between Q4 2007 and Q4 2008. Current expectations are for data to show significant falls in employment in the construction sector, but these have not (as yet) worked their way through into the actual data.

Geographically, the largest falls in employment vary from month to month (Chart 6.10), with the most resilient regions proving to be those around London and the East Midlands. Again, this may change as the data 'unravels': the concentration of Financial and Business Services alongside the large number of retail, wholesale and distribution jobs in London leaves employment in the region highly exposed to contractions in these sectors.

Chart 6.10:
Annual change in the employment rate 2008 Q4



A powerful recent prescription on the UK's rising unemployment can be found in Bell and Blanchflower[90] who prepared 10 proposals to tackle unemployment:

- A fiscal stimulus focussed on job creation. A package comparable to that in the USA would be around £4 billion and could generate around 750,000 jobs. A key part of this would focus on raising education levels, especially of the young.
- Cuts in income tax and National Insurance contributions aimed at the low paid and young.
- Increase the education 'leaving age' to 18 as soon as is possible, as UK unemployment and skill levels are particularly poor for young people relative to other countries.
- Provide more encouragement for 18–24 year olds to undertake further/higher education by increasing the number of places available.
- Provide financial inducements for them to do so.
- Expand the number of teacher training places, in particular in further education.
- Direct job creation through 'green' infrastructure investment.
- Allow public sector and not for profit organisations to fill vacancies by increasing their funding for two years.
- Temporary, limited, targeted expansion of active labour market programmes.
- Incentives to encourage making use of short time working and job sharing.

And the rise in unemployment matters. The impacts of unemployment have been summarised[91] and cover:

- The loss of output, leading to a generally poorer society.
- The degradation of the individual's skills.
- The wider impact on the individual, including impacts on health (with increased susceptibility to illness, malnutrition, mental stress, loss of self-esteem, leading to depression), including poor physical outcomes (such as heart attacks) later in life; increased likelihood of suicide; a lower life expectancy.
- Wider impacts beyond the individual to other individuals, with unemployment lowering the well-being of everyone, not just the unemployed. The fear of unemployment lowers everyone's job satisfaction. Also, as unemployment rates increase, so do crime rates.

A particular concern is long-term unemployment. The effects of unemployment depend greatly on how long the unemployment spell lasts and the longer the spell of unemployment (i) the greater the negative effects and (ii) the less the chance of re-entering work.

6.6 PROGRESS IN A COLD CLIMATE: SKILLS AND THE RECESSION

We need to further consider the impact of the deterioration in economic conditions on investment in and development of skills.

First principles would suggest that employers cut back on training during periods of recession both to reduce 'discretionary' spending and because they are less likely to be recruiting new staff and apprentices who have initial training needs. Economic pressure means that they have to resort to short-term solutions. And this is, no doubt, true for many companies. On the other hand, falling demand during recession can also lead companies into new markets or to change business strategies in ways that result in new training needs. Lower demand can also give employers the 'slack' to release staff for training and can reduce the opportunity cost of that training. Individuals may also be 'encouraged' to learn new skills more appropriate to changing labour market needs.

90 Bell, D. N. F. and Blanchflower, D. G., What Should be Done About Rising Unemployment in the UK?, 2009.

91 Bell, D. N. F. and Blanchflower (op cit).

Evidence on this issue is limited and we need to look to the last recession in the early 1990s for any real evidence.[92] Whilst levels of training fell, they did so by a lesser amount than might have been expected. Indeed the research indicated that more employers claimed to have increased their training as a result of that recession than had decreased it. There was considerable diversity in approaches to training taken by different employers. Some employers increased training investment as part of a competitive strategy based on raising quality; some invested in customer care training to hold on to existing customers or trained to cut waste. Employers operating in declining product markets were still found to be maintaining a commitment to training due to training being considered vital to compete. They had to train to keep in line with industry-specific or economy-wide regulations and identified their own 'training floors' below which it was simply unsafe or unwise to go. Companies' competitive or survival strategies during times of recession will vary considerably, as do the training needs that fall out of them.

What of the current recession? Evidence suggests that, to date, training activity is holding up (see Table 6.6). There is a seasonal pattern to training activity, with incidence of training being highest in October–December quarter and then falling gradually over the year, so it is important to compare the same periods in different years. It can be seen that the proportion of people in receipt of training does not appear to have fallen over the last three years. The proportion of those in employment receiving training was 27% in October–December 2006 and has stayed at that level for the same period in 2007 and 2008.

Of course, it may be too early for the impacts of the recession to have fed through into this data as yet, and this is a feature we will continue to review as the year progresses. But it is possible that the experiences from the last recession are being replicated in this and that training levels will hold up.

This is not to say, however, that the nature of that training will have stayed the same. We might expect, for example, that as recruitment levels fall there will be less effort on induction and health and safety training, and more emphasis on the needs for reskilling, developing the necessary skills to survive through the current recession and to thrive when the economy picks up.

92 Felstead, A. and Green, F., 'Training During the Recession', 1994.

Table 6.6:
Proportion of adults training in the last 13 weeks

	All %	In employment %	Unemployed %	Inactive %
October–December 2006	22	27	16	9
January–March 2007	22	27	15	10
April–June 2007	21	26	16	9
July–September 2007	20	25	15	8
October–December 2007	22	27	15	10
January–March 2008	22	27	14	10
April–June 2008	21	26	16	9
July–September 2008	20	26	17	7
October–December 2008	22	27	15	10

Source: LFS Autumn 2006–Autumn 2008. **Note:** All aged 16–69 in the UK.

6.7 CONCLUSIONS

Increasing the number of higher skilled people makes sense if the jobs are available for them to fill and employers are able to make use of these skills. Following almost 15 years of jobs growth and relatively low unemployment, economic conditions, and jobs prospects in particular, have deteriorated sharply in recent months.

When these conditions are placed in a longer run context, however, we see that not only has there been a sustained growth in jobs, over 3 million in the last 10 years, but that these jobs have, on the whole, been more highly skilled than in the past. **The proportion of jobs requiring higher levels of qualifications has been rising whilst the proportion requiring low or no qualifications has been declining**, a trend reflected in the substantial growth of 'white collar' professional, associate professional, technical and managerial jobs and the decline of 'blue collar' jobs in both manufacturing and services.

This trend has serious implications for those with low or no qualifications and those who are unemployed or inactive. Those not in work are likely to be at both ends of the age spectrum, particularly the young; they are likely to be low skilled; they are more likely to have a disability; and they are more likely to be from an ethnic minority group.

Making headway on the skills and jobs agenda during the recession will be difficult. Some of the jobs lost will not return; some skills will become obsolete and many industries and occupations will experience restructuring. There will be future growth; it will be slower than in the past but growth will come with an expected 2 million new jobs between now and 2020 and most of these will demand higher skills than in the past. And, because of retirements and other labour market changes, a further 11 million job opportunities are likely to become available.

So **we must prepare for the jobs of the future** and ensure that people have the skills necessary to access the opportunities that will become available post-recession so that employers will be able to recruit workers with the skills necessary for success.

7 Mismatches Between Jobs and Skills

7.1 INTRODUCTION

In a dynamic economy and labour market, there are continuous changes in the demand for skills. At the same time, there are ongoing changes in the supply of skills in the workforce. **The issue is how far the changes in supply meet changing demands and how far the market effectively matches supply and demand**. It is not enough to ensure an adequate level of skills in the workforce. **It is essential that the balance, or mix, of skills is appropriate and aligned with employer and labour market needs**. This chapter examines the extent and nature of the imbalance between skills supply and demand.

7.2 SKILLS SHORTAGES AND SKILL GAPS

Skills shortages occur when organisations cannot recruit sufficient people who are appropriately qualified, skilled or experienced to fill the vacancies they have. They are, effectively, a sub-set of – and should be distinguished from – hard-to-fill vacancies (HTFVs) in general, which may also be due to other issues, such as poor pay, conditions or remoteness.

Skills gaps exist when members of the existing workforce in an organisation are seen to have lower skills than are necessary to meet current business needs.

The filling of vacancies through the recruitment of workers to meet business needs is an everyday part of economic life. But the shortages and gaps can have significant implications for individual companies, for the sector as a whole and even for the economy. They can create: difficulties in meeting quality standards, loss of orders, difficulties in introducing new working practices, new products and services and may constrain business growth. At an industry and economy-wide level, they can affect competitiveness, inflation, and decisions on whether to remain in or move into the UK.

Data on skills shortages and gaps are available separately for each of the four nations, but cannot be combined for the UK as a whole, as the national surveys use slightly different methodologies, in different timescales. Comparisons between the surveys can be made, but care needs to be taken in comparing the results. Here, we summarise the main findings from the latest employer skills surveys[93] (see Table 7.1).

93 Learning and Skills Council, National Employers Skills Survey 2007: Main Report, 2008; Futureskills Scotland, Skills in Scotland 2006, 2007; Futureskills Wales, Sector Skills Survey Summary Report, 2005; DELNI, The Northern Ireland Skills Monitoring Survey 2005 Main Report, 2007.

Table 7.1:
Employer skills surveys in the UK

Country	Survey	Last carried out (published)	Sample size
England	National Employer Skills Survey (NESS)	2007 (2008)	79,000
Scotland	Skills in Scotland	2008 (2009)	6,274
Wales	Sector Skills Survey	2005 (2006)	6,719
Northern Ireland	Skills Monitoring Survey	2005 (2006)	4,126

7.2.1 SKILL SHORTAGES

Despite 14 years of continuous economic expansion from 1993 to 2007, difficulties in filling vacancies are experienced only by a small minority of employers. The NESS estimated that 18% of all establishments in England had vacancies at the time of the survey, equating to some 620,000 vacant jobs. 7% reported hard-to-fill vacancies (183,000 vacancies) and 5% a skill shortage vacancy (130,000 vacancies). Nonetheless, of those establishments that had vacancies, over a quarter experienced at least one skill shortage. These figures have changed little since the last survey in 2005 (see Table 7.2).

Employers in Scotland and Wales reported a similar proportion of vacancies as England (18% and 21% respectively). However, a higher proportion of vacancies were hard to fill in Scotland and Wales (10%). In Northern Ireland only 11% of establishments had vacancies and 6% reported their vacancies were hard to fill, lower than reported elsewhere in the UK.

In terms of skills shortages, these are comparable across all four countries; 5% in England and Scotland, 4% in Northern Ireland and Wales.

However, to get a real sense of how pervasive skill shortages are, we need to see them in relation to the labour market as a whole (see Table 7.3). **In England**, total vacancies are equivalent to around 1 in 40 of all jobs (2.8% of all employment). **Hard-to-fill and skill shortage vacancies form 0.8% and 0.6% of total employment respectively**, ie well less than 1 in 100 of all jobs. These figures have changed little since 2005. Skill shortages are a little lower, measured in this way, in Northern Ireland and Wales but higher in Scotland. It is worth noting too that, if we take the proportion of hard-to-fill vacancies that are due to skill shortages, then the former account for 71% of the latter in England but less than half in Scotland, Northern Ireland and Wales.

Whilst overall skill shortages are not pervasive, they are, however, significant in some types of organisation, sectors and occupations.

Table 7.2:
Level of current vacancies, hard-to-fill vacancies and skill shortage vacancies

	England		Scotland		Northern Ireland		Wales	
	2005	2007	2006	2008	2002	2005	2003	2005
All vacancies								
% of establishments reporting	17	18	19	18	16	11	25	21
Number of vacancies (000s)	574	620	77	70	16	12	51	38
Hard-to-fill vacancies								
% of establishments reporting	7	7	12	10	10	6	15	10
Number of vacancies (000s)	204	183	37	35	10	6	20	13
Skill shortage vacancies								
% of establishments reporting	5	5	7	5	*	4	9	4
Number of vacancies (000s)	143	130	23	16	1	3	11	5

Source: England: National Employer Skills Survey, 2005 and 2007; Scotland: Skills in Scotland, 2006 and 2008; Northern Ireland: Northern Ireland Skills Monitoring Survey, 2002 and 2005; Wales: Future Skills Wales, 2003 and 2005. Base: England, Scotland, and Wales: all establishments; Northern Ireland: all establishments excluding the agricultural sector. Base: all establishments.

Take size. The larger the employer, the more likely it is that they have skill shortages (see Table 7.4). More than 1 in 8 large organisations, those employing more than 500 people, report skill shortages, compared to 1 in 20 small organisations, employing fewer than 25 people. However, in terms of the absolute number of skill shortages, the greatest volumes are experienced by smaller companies. Data from NESS (which covers just England) shows that **60% of skill shortages are in establishments employing less than 25 people**, even though such establishments account for little more than 30% of total employment.

In occupational terms, it is Associate professional, Skilled trades and Professional occupations where the largest volumes of skill shortage vacancies are reported. As a proportion of employment, the 'density' of skill shortage vacancies (SSVs) is far higher for Associate professionals and Skill trade occupations (14 per 1,000 staff) than is the average for all vacancies. It is here where skill shortages are concentrated.

Geographically, the largest volumes of skill shortage vacancies are in London and the South East. Whilst this is partly driven by the size of these economies, the density of skill shortage vacancies is also highest in London.

Table 7.3:
Level of current vacancies, hard-to-fill vacancies and skills shortage vacancies as a proportion of employment

	England		Scotland		Northern Ireland		Wales	
	2005	2007	2006	2008	2002	2005	2003	2005
Total vacancies as a % of employment	2.7	2.8	4.0	3.1	2.6	2.1	4.9	3.5
Hard-to-fill vacancies as a % of employment	0.9	0.8	2.0	1.6	1.6	1.1	2.0	1.2
Skill shortage vacancies as a % of employment	**0.7**	**0.6**	**1.0**	**0.7**	**0.5**	**0.4**	**1.1**	**0.5**

Source: England: National Employer Skills Survey, 2005 and 2007; Scotland: Skills in Scotland, 2003 and 2006; Northern Ireland: Northern Ireland Skills Monitoring Survey, 2002 and 2005; Wales: Future Skills Wales, 2003 and 2005. Base: England, Scotland, and Wales: all establishments; Northern Ireland: all establishments excluding the agricultural sector.

Table 7.4:
Level of current vacancies, hard-to-fill vacancies and skills shortage vacancies and size of establishment

Establishments by number of employees	All	2–4	5–24	25–99	100–199	200–499	500+
% reporting vacancies	18	11	21	39	58	61	65
Total number of vacancies (000s)	**620**	**119**	**188**	**148**	**61**	**59**	**45**
% reporting HTFVs	7	4	8	12	17	18	15
Number of HTFVs (000s)	**183**	**45**	**68**	**40**	**12**	**10**	**7**
% reporting SSVs	5	3	6	9	14	14	13
Number of SSVs (000s)	**130**	**32**	**47**	**28**	**10**	**8**	**6**

Source: England: National Employer Skills Survey, 2007.

Table 7.5:
Level of current vacancies, hard-to-fill vacancies and skills shortage vacancies and SSC sector

	% reporting vacancies	Total number of vacs	Vacancy density (%)	% reporting HTFVs	Number of HTFVs	HTFV density (%)	% reporting SSVs	Number of SSVs	SSV density (%)
All	18	620,000	2.8	7	183,000	0.8	5	130,000	0.6
Lantra	9	8,000	2.7	4	4,000	1.3	3	2,000	0.8
Cogent	18	7,000	1.7	6	2,000	0.5	4	1,000	0.4
Proskills	13	4,000	1.5	5	1,000	0.5	4	1,000	0.3
Improve	19	5,000	1.5	6	1,000	0.3	4	1,000	0.2
Skillfast-UK	13	4,000	1.9	5	1,000	0.7	4	1,000	0.5
SEMTA	19	23,000	2.0	9	9,000	0.7	8	7,000	0.6
Energy & Utility Skills	15	6,000	2.5	3	1,000	0.3	3	1,000	0.2
Construction Skills	16	37,000	3.6	8	19,000	1.8	7	15,000	1.4
Summit Skills	13	8,000	3.5	6	2,000	1.0	5	2,000	0.9
Automotive Skills	15	11,000	2.4	6	4,000	0.9	4	3,000	0.6
Skillsmart Retail	15	53,000	2.3	4	13,000	0.5	2	7,000	0.3
People 1st	20	68,000	4.3	8	21,000	1.3	4	13,000	0.8
Go Skills	22	11,000	2.7	11	4,000	0.9	8	2,000	0.6
Skills for Logistics	14	11,000	1.7	5	3,000	0.5	3	2,000	0.3
Financial Services SSC	22	30,000	3.4	7	6,000	0.6	6	5,000	0.5
Asset Skills	16	25,000	3.1	5	7,000	0.9	4	5,000	0.6
E-Skills UK	18	23,000	3.5	6	7,000	1.1	5	6,000	1.0
Government Skills	32	10,000	2.7	6	2,000	0.5	5	1,000	0.4
Skills for Justice	30	4,000	1.3	6	500	0.2	4	*	0.1
Lifelong learning UK	25	19,000	2.4	8	4,000	0.5	6	3,000	0.3
Skills for Health	24	31,000	1.9	7	8,000	0.5	4	4,000	0.2
Skills for Care and Development	28	30,000	3.4	7	8,000	0.9	4	5,000	0.5
Skillset	13	7,000	5.6	5	3,000	2.6	5	3,000	2.3
Creative and Cultural SSC	16	7,000	3.3	6	2,000	1.0	5	2,000	0.8
SkillsActive	19	7,000	2.5	7	2,000	0.7	4	1,000	0.5
Non-SSC employers	20	171,000	3.0	7	49,000	0.9	6	36,877	0.6

Source: England: National Employer Skills Survey, 2007.

In terms of sectors, those with the largest number of skills shortage vacancies are hospitality, retail, IT and social care. The greatest 'density', however, is in the construction and audio-visual industries (see Table 7.5).

7.2.2 SKILLS GAPS

Skills gaps exist where employers consider that their employees are not fully proficient at their jobs. In all UK nations, it is a minority of employers affected by skills gaps, though the extent of these skills gaps differs across nations and they are much more prevalent than skill shortages (see Table 7.6). The most recent results show that **15% of employers in England report that at least some of their employees exhibit skills gaps. The proportion is significantly higher in Scotland, somewhat higher in Wales and much lower in Northern Ireland**.

If we translate this, however, into the proportion of the employed workforce (as opposed to the proportion of establishments) that are considered not be fully proficient in their jobs, then only 6% in England and Wales are considered by their employers to be less than fully proficient. The figures for Scotland and Northern Ireland are 8 and 9% respectively. Nonetheless, this does amount to some **1.8 million employed people in the UK who are not considered to have the skills necessary to do their job effectively**. It is worth noting that many of these skills gaps are apparent in the relatively low level occupations of sales, customer services and 'elementary' staff.

It is evident that the extent of skills gaps far exceeds that of skills shortages. This suggests (i) a need to emphasise workforce development to address skill gaps within the employed workforce as well as looking at skill supply, the quality of entrants into the labour market and job applicants, and (ii) employers do not necessarily recognise skill deficiencies on recruitment, but these become apparent when workers' skills are actually deployed in the workplace post-recruitment.

The proportion of employers who report skill gaps is again highest in SSC sectors which are mainly public sector – Government Skills and Skills for Justice.

Table 7.6:
Level of skills gaps across the UK

	England		Scotland		Northern Ireland		Wales	
	2005	2007	2006	2008	2002	2005	2003	2005
Proportion of establishments reporting internal skills gaps (%)	16	15	22	20	13	9	19	18
Skills gaps as a proportion of employment %	6	6	8	8	3	9	5	6

Source: England: National Employer Skills Survey, 2005 and 2007; Scotland: Skills in Scotland, 2003 and 2006; Northern Ireland: Northern Ireland Skills Monitoring Survey, 2002 and 2005; Wales: Future Skills Wales, 2003 and 2005. Base: England, Scotland, and Wales: all establishments; Northern Ireland: all establishments excluding the agricultural sector.

Table 7.7:
Level of skill gaps and SSC sector

	% reporting skill gaps	Total number of employees with skill gaps	Skill gap density (%)
All	15	1,361,000	6
Lantra	11	17,000	5
Cogent	18	31,000	8
Proskills	15	16,000	6
Improve	19	24,000	7
Skillfast-UK	14	14,000	7
SEMTA	17	75,000	6
Energy & Utility Skills	16	12,000	5
Construction Skills	14	58,000	6
Summit Skills	19	14,000	6
Automotive Skills	17	25,000	5
Skillsmart Retail	18	163,000	7
People 1st	19	140,000	9
Go Skills	15	25,000	6
Skills for Logistics	13	33,000	5
Financial Services SSC	19	56,000	6
Asset Skills	11	41,000	5
E-Skills UK	13	50,000	8
Government Skills	29	36,000	10
Skills for Justice	26	15,000	5
Lifelong learning UK	17	55,000	7
Skills for Health	16	96,000	6
Skills for Care and Development	18	44,000	5
Skillset	11	9,000	7
Creative and Cultural SSC	11	11,000	5
SkillsActive	16	16,000	6
Non-SSC employers	14	287,000	5

Source: England: National Employer Skills Survey, 2007.

7.2.3 THE CAUSES OF SKILL SHORTAGES AND SKILLS GAPS

The most common skills lacking in skills shortage vacancies overall are technical and practical skills, oral communications skills, and customer handling skills (see Table 7.8). Skills lacking are closely related to the nature of the job to be done, eg employers struggling to recruit staff to Sales occupations reported difficulty finding appropriate customer handling skills (49% in England, 67% in Wales), and communication skills (47% in England, 66% in Wales). Similarly, those employers having difficulties recruiting to skilled trade occupations reported one of the main skills lacking being technical and practical skills (70% in Wales, and 65% in England).

Table 7.8:
Key skills lacking in skills shortage vacancies across the UK

		% of establishments reporting a skill shortage vacancy
England		
	Technical and practical skills	52
	Oral communication skills	33
	Customer-handling skills	32
	Problem-solving skills	29
Scotland		
	Technical and practical skills	54
	Customer-handling skills	51
	Planning and organising	48
	Problem-solving skills	48
Wales		
	Other technical and practical skills	52
	Customer-handling skills	44
	Communication skills	43
	Problem solving skills	41
Northern Ireland		
	Other technical and practical skills	35
	Communication skills	30
	Customer-handling skills	22
	Management skills	15

Source: National Employer Skills Survey 2007; Skills in Scotland 2008; Northern Ireland Skills Monitoring Survey 2005; Future Skills Wales 2005. Base: England, Scotland, and Wales: all establishments reporting skills shortage vacancies; Northern Ireland: all establishments reporting skills shortage vacancies excluding the agricultural sector.

The main cause of skills gaps is that employees have been only recently recruited; or they lack experience. As such, we should expect that these are often transitory and that over time these gaps will close as employees gain more experience or complete their training/development with their employer. A proportion of employers in England also note staff lacking motivation and their own failure to train and develop staff as a cause of skills gaps (28 and 20% respectively). In some instances there may also be skills gaps that have arisen out of the changing needs of the organisation, often related to positive developments.[94] Such gaps arise out of the introduction of new working practices, the development of new products and services and the introduction of new technology, developments that can be viewed as leading to higher productivity and/or higher output.

If one important cause of skills gaps is the 'recent' nature of recruitment, then an important means of limiting these is to secure staff retention as far as possible. **Where there is a high turnover of staff, an establishment is more likely to have skills gaps and to face high recruitment and vacancy costs**. The CIPD Annual Survey Report *Recruitment, Retention and Turnover (2008)* shows that 70% of establishments highlight the loss of staff as having a negative impact on business performance and suggests an average cost of filling a single vacancy of £4,667 and as much as £5,800 when associated labour turnover costs are included) (CIPD, 2008). A nationally representative survey of 13,500 businesses in the UK undertaken by the UK Commission for Employment and Skills (UKCES, 2008) asked employers the extent to which they agreed or disagreed that holding on to valued staff presented them with a significant problem. The results showed that:

- while the majority of establishments (63%) do not report difficulties in holding on to valued staff, three in 10 **do** report that the retention of valued staff poses a problem;
- unlike employers' experience with skills shortages, there was no clear relationship between the problems retaining valued staff and size of establishment;
- within the UK, establishments in Wales (36%) and Northern Ireland (35%) were more likely to have difficulty in retaining valued staff than those in England (27%) or Scotland (25%); and
- the more problems an employer experiences in terms of recruitment difficulties and problems with the education system, the more likely they are to report difficulties retaining valued staff.

7.2.4 IMPACT OF SKILL SHORTAGES AND SKILLS GAPS

Although these difficulties affect only a minority of employers, where they do, they have considerable effects. Around 90% of all employers with hard-to-fill vacancies report some kind of negative impact on their organisation, including having a detrimental impact on 'business as usual' within an organisation and in preventing establishments from innovating. Within England, by far the most common impact of skills gaps is an increase in workload levels for other staff (55%). Employers in Wales and Northern Ireland report the chief impact as being a difficulty meeting required customer service objectives (59 and 36% respectively). Other notable impacts include difficulties meeting required quality standards and increased operating or running costs.

94 Questions relating to the cause of skills gaps were not asked in the Wales employer skills survey.

95 *Migration Advisory Committee, Skilled, Shortage, Sensible: The Recommended Shortage Occupation Lists for the UK and Scotland, 2008.*

7.2.5 THE TOP SKILL SHORTAGE OCCUPATIONS: THE WORK OF THE MIGRATION ADVISORY COMMITTEE

Asking employers themselves about skill shortages and gaps is a vital means of indentifying skill deficiencies. However, measuring skill shortages, in particular, is not straightforward and there are other important indicators of 'shortage'. Most recently the Migration Advisory Committee, in its work on defining its recommended occupation list,[95] has used four sets of indicators (12 in all) of shortage: (i) employer-based indicators (eg reports of shortages), (ii) price-based indicators (eg earnings growth), (iii) volume-based indicators (eg changes in employment or unemployment) and (iv) other indicators of imbalance based on administrative data (eg vacancy data). These were combined together to establish the existence of skill shortage occupations. This enabled the MAC to identify 12 occupations at 4 digit SOC level (covering 478,000 people in employment) which 'pass' on six or more indicators and around 20 occupations (covering around 650,000 people) which pass on half or more of the indicators for which reliable data is available for that specific occupation. These latter 20 occupations are set out in Table 7.9 below.

Table 7.9:
MAC skill shortage occupations in the UK

Occupation	SOC code	Employment (000s)
Officers in Armed Forces	1171	28
Moulders, core makers, die casters	5212	4
Photographers and audio-visual equipment operators	3434	61
Musicians	3415	32
Welding trades	5215	87
Ship and hovercraft officers	3513	17
Dispensing opticians	3216	5
NCOs and other ranks	3311	53
Senior officials in national government	1111	12
Directors and chief executives of major organisations	1112	48
Hairdressing and beauty salon managers and proprietors	1233	22
Veterinarians	2216	15
Engineering technicians	3113	70
Midwives	3212	37
Pharmaceutical dispensers	3217	31
Dancers and choreographers	3414	6
Pipe fitters	5216	11
Metal machining setters and setter-operators	5221	66
Computer engineers, installation and maintenance	5245	39
Steel erectors	5311	14

Source: Migration Advisory Committee, Skilled, Shortage, Sensible: The Recommended Occupation Lists for the UK and Scotland, 2008, p. 123, table 123.
Note: The occupations listed above are those for which the MAC considers there is good 'top-down' evidence for potential shortage.

It would appear that, at least with regard to 'higher skill' occupations (some 192 of the 353 '4 digit' occupations, covering 49% of total employment or 13.2 million people), the overall volume of skill shortages is relatively limited, but they are significant in a range of key occupations.

7.2.6 A WIDER CONTEXT?

The existence of these skill shortages and gaps needs to be placed in a wider context. First, the extent of skill gaps in particular may be under-estimated. There may be 'latent' skill gaps, the difference being between that which is actually practised and the best practice (and that which is necessary to prepare for future competition).[96] Some employers may not actually recognise the deficiencies that exist because they do not systematically identify and manage the skill needs of their staff or their relation to business priorities. Where they exist, an understanding is needed as to why companies that operate at a less than optimal level do so. The evidence[97] indicates that such companies have failed to keep pace with other 'good' business practices as well.

Second, there is also some concern that employers, who experience a deficiency for some time that they cannot fill, may be 'making do' with sub-optimal levels of skill in key areas and may not recognise that they are doing so, which suggests skills gaps may be bigger that those reported and measured above.[98] These types of skill gaps are known as 'latent' skills gaps and tend not to appear until an organisation seeks to 'raise its game' and enhance its competitive and market position in terms of its product or service specification, relative to the leading performers and/or its competitors.

Such gaps can have a significant and wide ranging effect. Critically, as the employer skills surveys have already shown above, a substantial proportion of employers with such skills deficiencies are inhibited from moving 'upmarket' as well as being constrained in improving firm performance. In practice, such latent skills gaps are very difficult to measure but estimates suggest that, if firms who do not set explicit business goals changed their approach to reflect those of the 'average' establishment, the incidence of skills gaps could rise by approximately 2.5 percentage points, or 10%, and the incidence of skills shortages by 4.2 percentage points – an increase of almost a third. If long-term competitiveness and performance are to be enhanced, then this is an issue that needs to be explored and tackled.[99]

Evidence[100] also suggested that there is a 'U-shaped' relationship between overall levels of skill gaps and company performance, ie companies in decline tended to lose their staff and (assuming that their best staff left first) skill gaps would appear. At the other end of the scale, businesses that were growing also tended to report high levels of skill deficiency because they were in a growth period, often with challenging product strategies, which often meant that skill gaps began to emerge. If employers are expected to develop forward-looking business strategies and improve their productivity, additional skill gaps may appear. As workplaces 'raise their game' there will be (at least in a transitional phase) a gap between the skills existing in the current workforce that has existed to serve the old strategy and those required to serve the new strategy. In short, some skills gaps may be an indication that things are going well in the economy, rather than there being an immediate deficiency in the economy.

There is also evidence that skills demands, and the incidence of skills gaps, are affected by a firm's growth ambition. When companies are going through change, and especially when they move upmarket, they

96 Discussed in Bosworth D. et al, Employers Skill Survey: Statistical Analysis, 2001.

97 Hogarth T. and Wilson, R., Skills in England 2007, Volume 2: Research Report, 2007.

98 Hogarth, T. et al, Employers Skill Survey: Skills Matter: A Synthesis of Research on the Extent, Causes, and Implications of Skill Deficiencies, 2001; IER and IFF Research, National Employers Skill Survey 2003: Key Findings, 2004.

99 Hogarth T et al, Skills in England 2007, Volume 2: Research Report, 2007.

100 Bosworth, D.L. et al, Skills and Performance: An Econometric Analysis of Employers Skill Survey 1999, 2001.

are more likely to upgrade their skills, identify skills gaps and training needs, and conduct training. In particular, the introduction of new products and services, major changes in equipment and major changes in working methods or workforce organisation stimulated the demand for training.[101] For example, Green et al report that where employers are undergoing technical change, ie those establishments reporting changes in technology, work organisation, new techniques and procedures, 42% of them report that skills needs have risen 'a lot' compared with 25% in other establishments.[102]

International measures of skills mismatches allow benchmarking and give a sense of whether this constitutes a problem. For instance, data collected by the latest European Working Conditions Survey shows that over half of UK workers think their skills do not match their job well. Whilst this is more subjective, it raises questions about skills use in the UK and points towards less effective skills utilisation in the workplace. This data is especially compelling when compared to other EU countries, where workers seemed to have a much better fit in terms of skills–job match.[103]

7.3 SKILLS NEEDED VERSUS SKILLS AVAILABLE: OVER-SKILLED OR UNDER-EMPLOYED?

Another means of seeing the relationship between the skills we need and the skills we have available is to compare the overall supply of skills (as measured by qualifications) and the demand for skills, as measured by the jobs that require them. We can do this in two ways: (i) by drawing on international comparative evidence and (ii) by examining the 'Skills at Work' research. We cover each in turn.

International evidence on the nature and extent of skills mismatches is provided for the first time by the OECD (OECD 2008). This evidence examines the relationship between the high level skills available (in terms of the proportion of the workforce with high level skills) with the demand for them (in terms of the proportion of the workforce in high skilled jobs). This provides an indication of the balance between the skills available and the skills required by the labour market.

Overall, the UK does have more high skill jobs than high skill people. In the UK, some 30% of 25–64 year olds have acquired a tertiary level education, compared to the 27% OECD average). We can compare this to the proportion of the same age range in high skilled jobs. In the UK, some 44% of jobs can be thought of as high skill. So, we can say that, in the UK, there are roughly a third more (44% compared to 30%) skilled jobs than skilled workers, indicating an 'excess demand' for high skill workers rather than an excess supply.

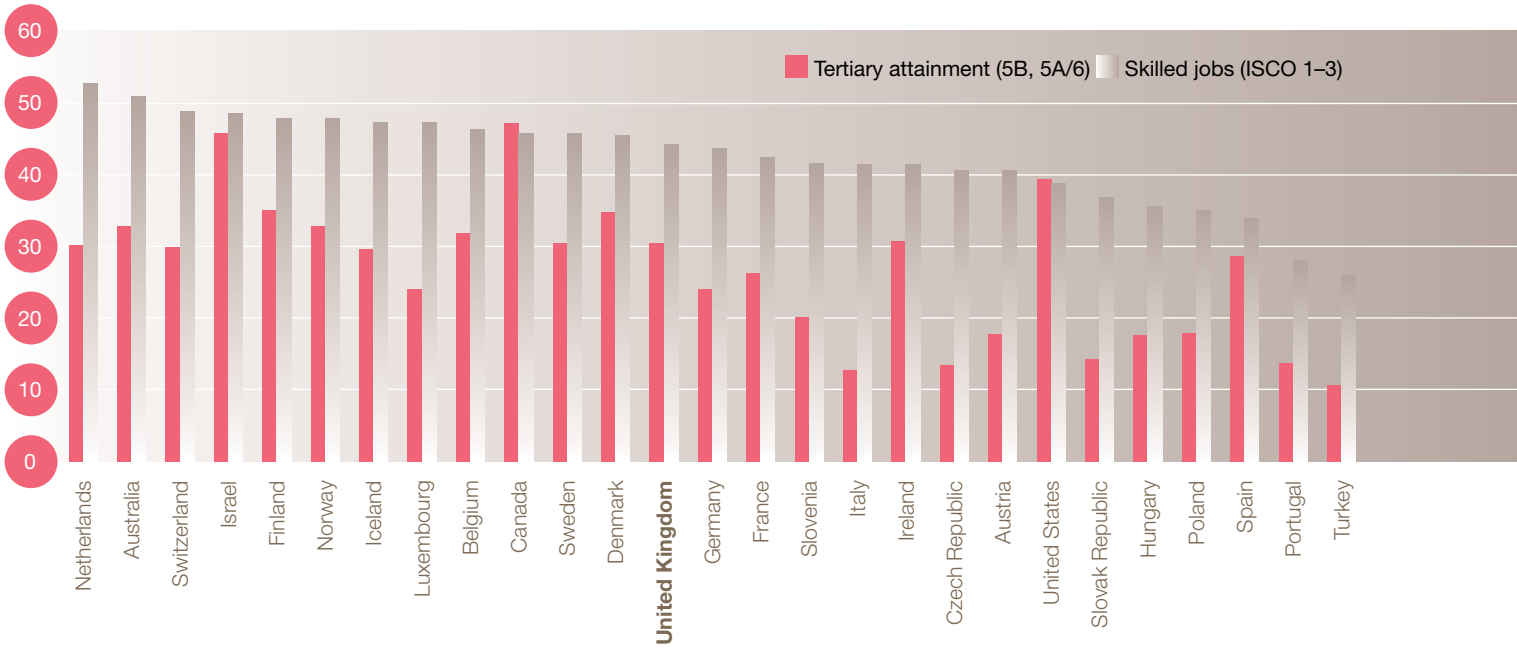
However, Chart 7.1 also shows that several countries have an even greater gap **and** several countries also have a higher proportion of skilled jobs than in the UK (indeed, the UK ranks 13th on the latter indicator).

101 *Kitching, J and Blackburn, R., The Nature of Training and Motivation to Train in Small Firms, 2001, p. 20-21.*

102 *Green F. et al, Employer Perspectives Survey, 2003, p. 47.*

103 *Rüdiger, K., and McVerry, A, Exploiting Europe's Knowledge Potential: 'Good Work' or 'Could do Better', 2007.*

Chart 7.1:
Proportion of OECD countries, population in skilled jobs and proportion of population with tertiary education (2006)

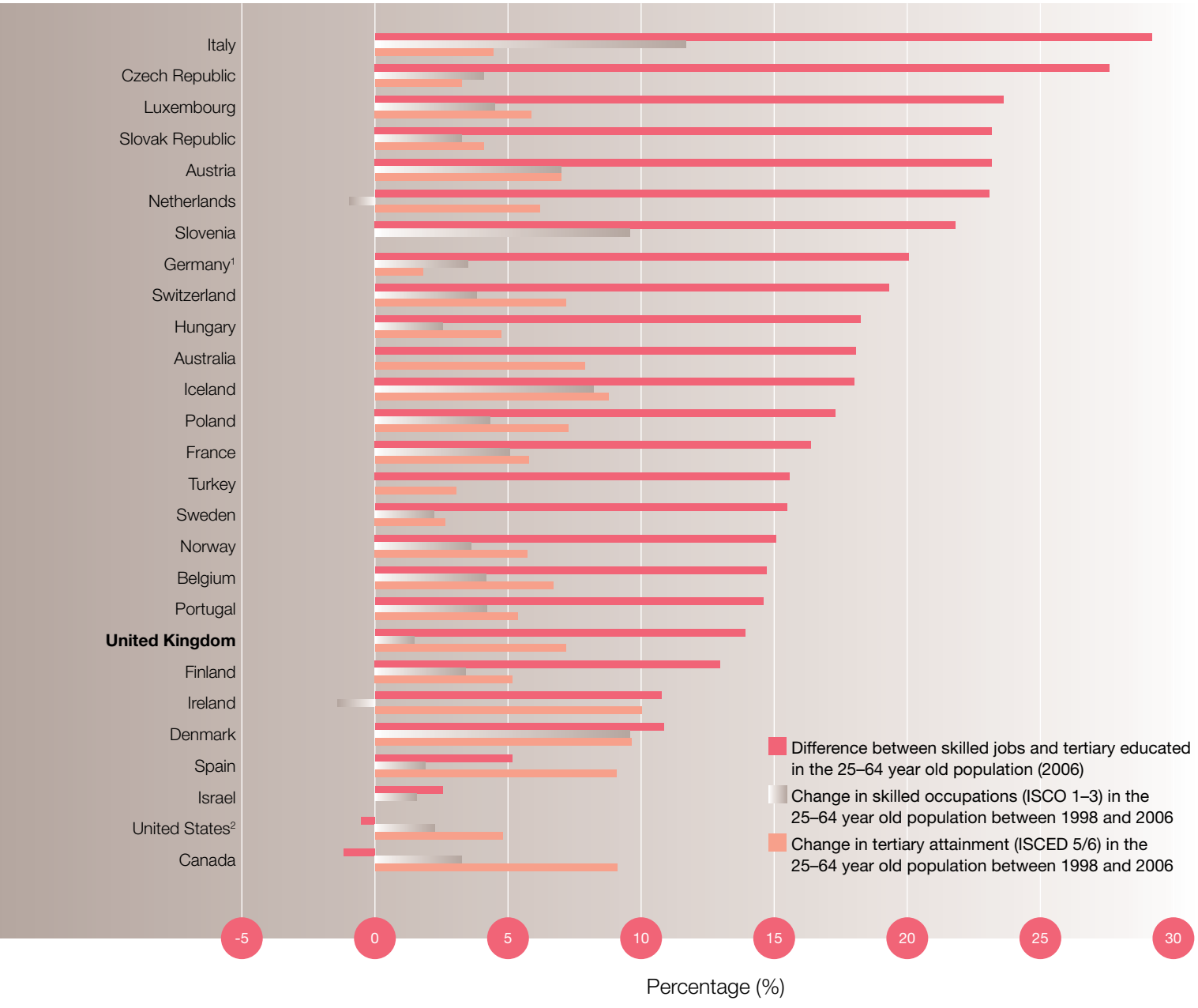


Notes: Countries are ranked in descending order by the proportion of the population with skilled jobs. For the United States, ISCO groupings 3 and 9 are not separated and thus distributed among remaining ISCO categories.
Source: OECD, Education at a Glance 2008, Table A1.3a and Table A1.6 http://dx.doi.org/10.1787/401474646362

The difference between the proportion of skilled jobs and the proportion of skilled workers can be seen more clearly in Chart 7.2. It shows that the UK ranks 20th out of 27 countries, thus exhibiting **a relatively small gap compared to other countries, between the skills needed and skills available, ie relatively low levels of excess demand. However, when we examine recent changes in skills demand and skills supply, we can see that the UK growth in supply very much exceeds the growth in demand. Indeed, it does so by a factor of around 4 to 1**, more than in any other country, with the exception of Netherlands, Ireland and Spain.

Furthermore, **the chart also shows that the relative growth in demand in the UK is particularly low** – indeed, it is the slowest of any OECD country, with the exception of Netherlands and Ireland. **These combinations of a relatively small initial 'gap' between demand and supply, a slow growth in demand/skilled jobs and a large gap between skills supply growth and skills demand growth are a possible set of 'lead indicators' of potential future imbalances between high level skills availability and skills demand, ie potential 'over-supply' or 'deficient demand' for high level skills. This would represent 'over-skilling' or 'under-employment', depending on whether this is viewed as a challenge generated by too many people with too high a level of skills, or too few employers with too low a level of skill requirements.**

Chart 7.2:
Difference between skilled jobs (ISCO 1–3) and proportion of tertiary educated in 2006 and changes in skilled jobs and tertiary attainment between 1998 and 2006



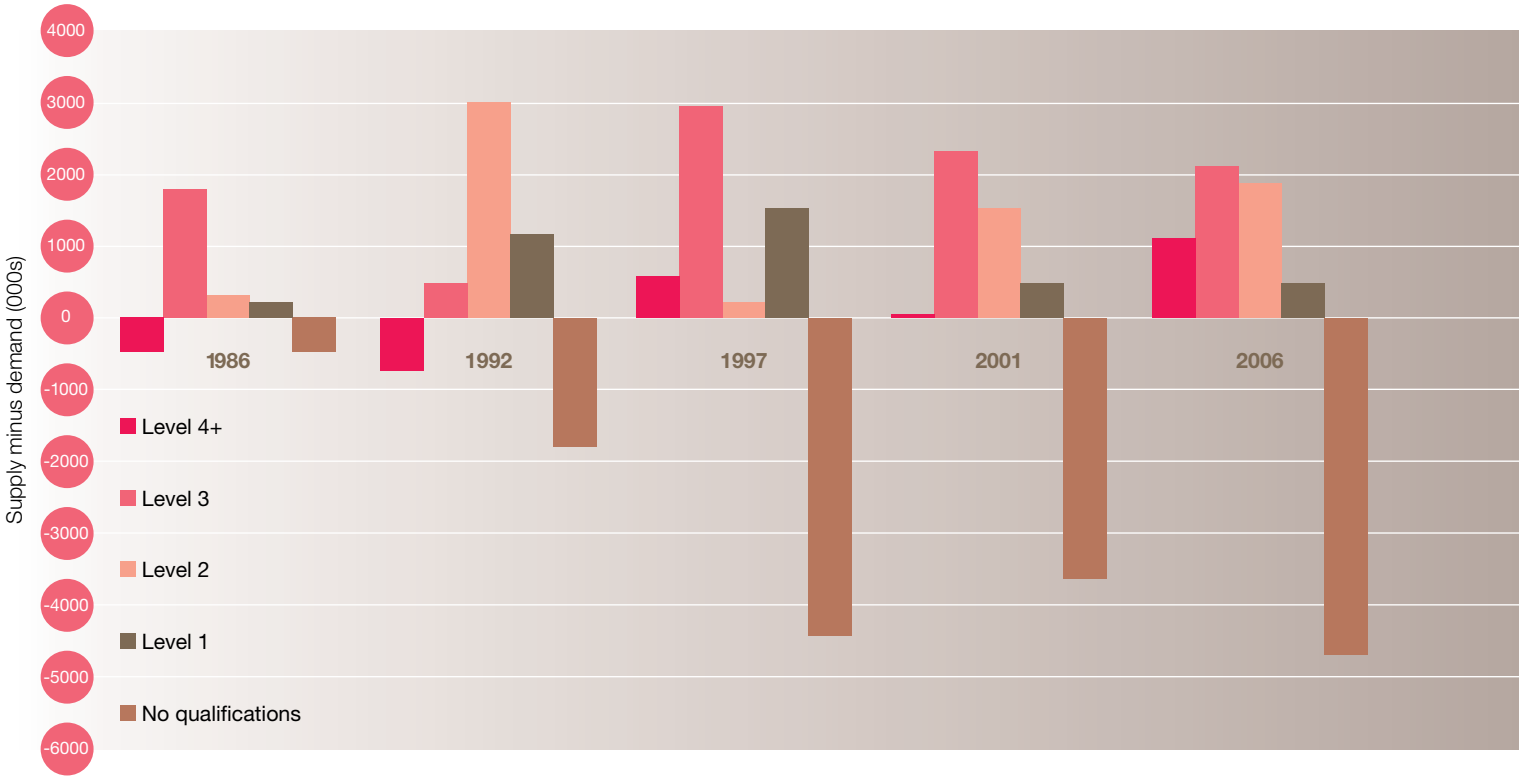
Notes: Countries are ranked in descending order by the difference between skilled jobs and tertiary attainment in 2006. [1] The year of reference is 1999, not 1998 for Germany. [2] ISCO groupings 3 and 9 are not separated and thus distributed among remaining ISCO categories for the United States.
Source: OECD, Education at a Glance 2008, Table A1.3a and Table A1.6 http://dx.doi.org/10.1787/401474646362

The second set of evidence draws on the 'Skills at Work' research.[104] We know from earlier chapters that **skills supply has been growing, as has skills demand. The question is: how has the balance between the two been changing?**

Chart 7.3 and Table 7.10 show the overall balance of the supply and demand for qualifications and how it has changed over time.

104 Felstead, A. et al, Skills at Work, 1986-2006, 2007.

Chart 7.3:
Trends in the balance of supply and demand for qualifications, 1986–2006



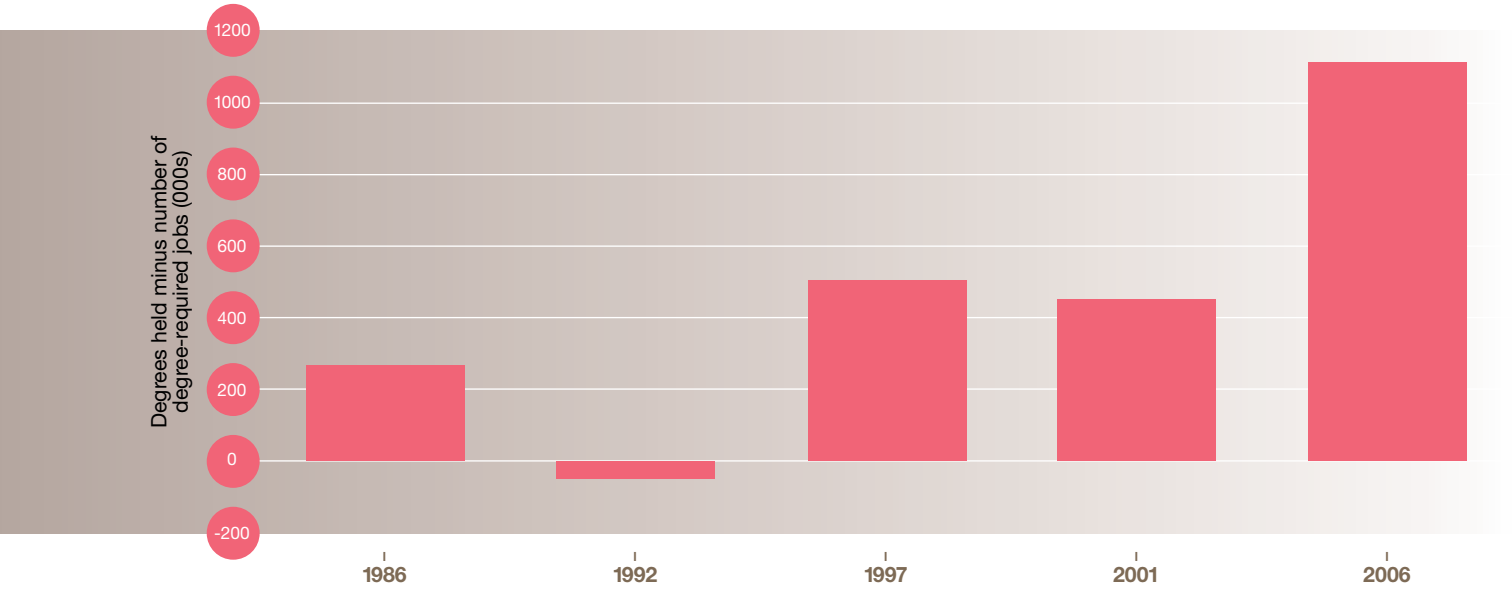
Source: Felstead, A. et al, Skills at Work, 1986-2006, 2007.

Table 7.10:
Qualification demand and supply, 1986–2006

	1986		1992		1997		2001		2006	
	Demand (000s)	Supply (000s)	Demand (000s)	Supply (000s)	Demand (000s)	Supply (000s)	Demand (000s)	Supply (000s)	Demand (000s)	Supply (000s)
Level 4 or above	4,260	3,820	5,793	4.988	5,805	6,324	7,292	7,359	7,445	8,495
Degree	*2,048*	*2,319*	*3,002*	*2,979*	*3,376*	*3,877*	*4,321*	*4,774*	*4,805*	*5,928*
Professional qualifications	*2,214*	*1,501*	*2,791*	*2,009*	*2,430*	*2,447*	*2,973*	*2,585*	*2,641*	*2,567*
Level 3	3,215	4,905	3,759	4,124	3,292	6,209	4,074	6,379	4,081	6,126
Level 2	3,920	4,080	4,309	7,276	5,081	5,255	3,985	5,302	3,788	5,617
Level 1	1,631	2,198	1,125	2,269	2,213	3,754	3,031	3,549	2,808	3,248
No qualifications	8,201	7,748	7,702	5,831	7,588	3,274	6,651	2,881	6,990	2,232

Source: Felstead, Gallie, Green and Zhu (2007), Skills at Work 1986–2006.

Chart 7.4:
Trends in the balance of supply and demand for degrees, 1986–2006



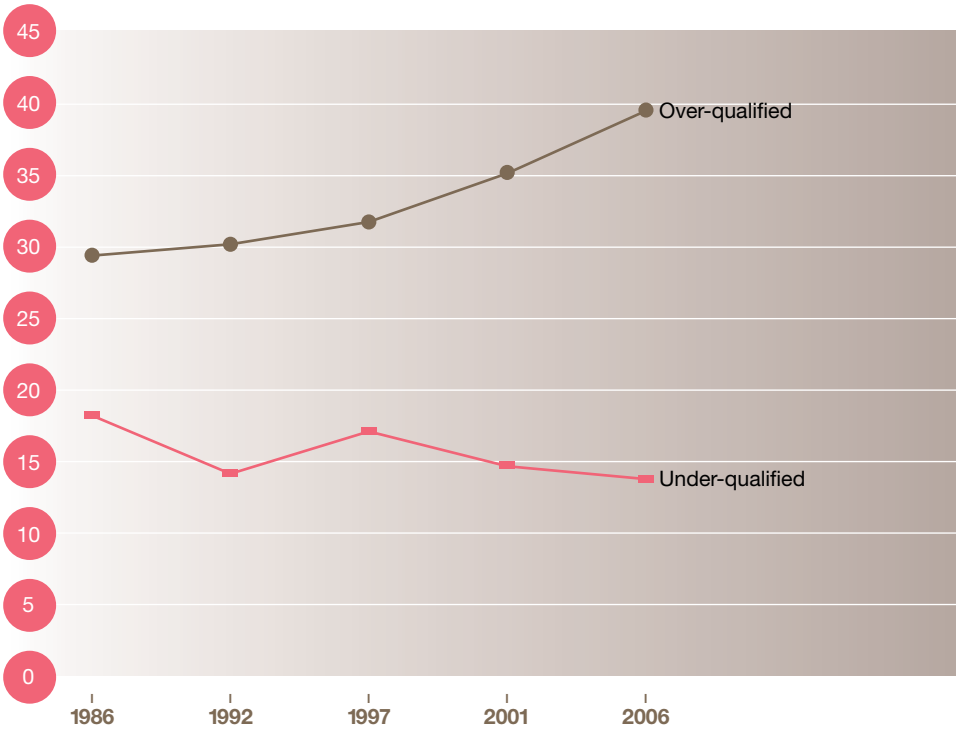
Source: Felstead, A. et al, Skills at Work, 1986-2006, 2007.

Overall, we can see that the supply of skills, at all levels, exceeds demand, except at the 'no qualifications' level, ie there is a considerable excess of jobs for people with no qualifications. The latter phenomenon has grown consistently over the last 20 years because, **although the number of jobs not requiring qualifications has fallen considerably, the number of people without qualifications fell even faster**. With regard to other levels of qualifications, the balance between demand and supply has fluctuated over the years, but perhaps **the most significant feature of recent years and the current situation is the fall in excess supply of Level 3 and the increase in excess supply at Level 4 and above**. The difference between the supply and demand for degrees is now well over 1 million, ie **the supply of graduates is outpacing the growth of jobs that require them** (see Chart 7.4).

Chart 7.5 compares people's qualification levels with the qualifications someone would need to get the job they are doing, so we can see if people have a higher or lower level of qualification than is required to get their job, ie whether they are 'over-qualified', 'under-deployed' and 'under-utilising' their skills. Low and/or declining levels would indicated both strong 'matching' of skills to jobs and limited over-qualification/under-employment/under-use of skills – high or rising levels – would indicate weak matching and more extensive over-qualification/under-employment and under-use of skills.

Between 1986–1997, **'over-qualification'** was relatively stable at around 30% but, since then, it **has risen markedly – by five percentage points since 2001**, for example. This means that **two in every five workers are in jobs for which they are 'over-qualified'**. This trend has the greatest impact on those holding Level 4+ qualifications – **the proportion of graduates over-qualified has increased by 50% over the last 20 years**, but three quarters of this average has occurred within the last five years.

Chart 7.5:
Percentage of workers 'over-qualified' and 'under-qualified' for their jobs, 1986–2006



Source: Felstead, A. et al (2007) Skills at Work, 1986-2006, 2007.

Chart 7.5 also shows trends in 'under-qualification' – where people's qualifications fall short of the level required to get the job they currently occupy. This rate has declined in recent years and by four percentage points since 2001.

Two caveats should, however, be attached to this assessment: (i) the results reflect people's **perception/judgement** by job holders of the qualifications required to get the job; (ii) qualifications may be necessary for a job the person will do in the future.

It is also important to note, in passing, that generic/employability skills are becoming more important in jobs over time. Influencing skills, computing skills, literacy skills and planning and communication skills, in particular, have shown the greatest increase over the last 10 years, and the biggest increase in generic skills required has been in

relatively lower status jobs and in the health/ social care, personal service and education sectors of the economy. Only in construction and hospitality has there been no increase in generic skill requirements.

Overall then, the growth in supply of skills, as measured in this extensive longitudinal study, **has outpaced the growth in demand for them or, put another way, the demand for skills has lagged the increase in supply, at a number of skill levels**. However, this qualification mismatch is not paralleled in respect of generic skills, where the value/ importance attached to them continues to rise.

Table 7.11 below provides a summary of these issues, broken down by nation, within the UK. The differences, overall, are relatively small and, certainly, all parts of the UK provide broadly comparable evidence on 'over-qualification' issues. But there are some interesting differences: over-qualification is lower in Northern Ireland; over-skilling higher in Wales; and qualification matching higher in Northern Ireland.

Table 7.11:
Qualification and skill matching across the nations of the UK, 2006

	England %	N. Ireland %	Scotland %	Wales %	UK %
Over-qualified	39.0	32.4	39.9	39.9	39.0
Comprising:					
real over-qualification	16.7	12.5	17.3	19.4	16.8
formal over-qualification	22.3	19.8	22.6	20.4	22.2
Over-skilled	32.7	33.6	30.4	37.6	32.7
Under-qualified	14.0	11.8	12.8	13.4	13.8
Qualification-matched	47.0	55.8	47.3	46.8	47.2
Among which:					
matched but over-skilled	12.3	16.2	10.2	14.8	12.3

Data Source: Felstead, A. et al, Skills at Work, 1986-2006, 2007.
Definitions:
Over-qualified: an 'over-qualified' individual has a qualification at a higher level than that currently required to get the job he/she now holds.
Real over-qualification: over-qualified and over-skilled.
Formal over-qualification: over-qualified but not over-skilled.
Over-skilled: perceived underutilisation of skills.
Under-qualified: an 'under-qualified' individual has a qualification at a lower level than that currently required to get the job he/she now holds.
Qualification-matched: neither over-qualified nor under-qualified.
Note: Qualification-matched, over-qualified and under-qualified add to 100%, but subject to rounding.

Whilst the full, long-term impact of such developments needs to be closely monitored, currently, apparent over-supply appears to have had little effect, as yet, in dampening wage growth for those jobs that require higher level skills, with the wage premium in these jobs continuing to be large. (See Table 7.12.)

However, at degree level, recent years have seen a growth in dispersion in the returns to degrees (by subject and institution) with rising over-qualification.[105] Each successive cohort of graduates was found to be more over-qualified than the previous ones.

Chevalier and Lindley (2001)[106] also show that the wage penalty from being over-educated 'almost eradicates the financial benefits' for this group who amount to around 15% of graduates. Their data relates to the five-year experience of 1995 graduates and, since that time, the volumes of graduates have grown further. On the other hand, Grayer, O'Leary and Sloane (2008)[107] find no evidence of the over-production of graduates and no decline in the wage premium.

Such comparisons of the 'skills of jobs' with the 'skills of people' clearly raise the issue of whether it is 'deficient demand' for skills, rather than excessive availability of skills, that is the problem. The demand for, and supply of, skills can be misaligned because either is too low or too high. Indeed, they may even be in equilibrium, but at 'too low' a level to secure long-term prosperity.

Clearly, skills mismatches are important issues, which need to be regularly monitored and reviewed. Whilst on the one hand they are a natural phenomenon in the labour market, when persisting at significant or even increasing levels, they are more problematic, risking alienation and disillusionment for individual workers and, ultimately, deleterious consequences for firm performance and productivity.

The relatively low levels of skills in the UK, when combined with the existence of only limited skill shortages/gaps and a potentially excessive supply of skills relative to demand, strongly imply a potential weakness in the demand for skills in the UK. There may be more skilled people than skilled jobs today, but these will be needed if **tomorrow's** labour market exhibits a higher demand for skills.

105 Green, F. and Zhu, Y, Overqualification, Job Dissatisfaction and Increasing Dispersion in the Returns to Graduate Education, 2007; Conlon, G. and Chevalier, A. (2002) Financial Returns to Undergraduates: A Summary of Recent Evidence; Purcell, K. et al, The Class of '99: A Study of the Early Labour Market Experiences of Recent Graduates, 2005.

106 Chevalier, A. and Lindley, J., Over-Education and the Skills of UK Graduates, 2007.

107 Grazier, et al, Graduate Employment in the UK: An Application of the Gottschalk-Hansen Model, 2008.

Table 7.12:
Percentage wage premium over otherwise identical job requiring no qualifications

Qualifications required to do the job	Females			Males		
	1997	2001	2006	1997	2001	2006
Level 3	18.7%	12.4%	12.9%	9.1%	13.2%	11.8%
Professional/vocational	28.1%	38.6%	30.5%	15.2%	22.3%	22.4%
Degree	39.0%	43.8%	44.4%	33.1%	35.3%	39.5%

Source: Felstead, A. et al, Skills at Work, 1986-2006, 2007.

7.4 CONCLUSIONS

There are imbalances between the available skills of the workforce and the employers' requirements. Two types of mismatches occur. Skill shortages arise when employers find it difficult to fill their vacancies with appropriately skilled applicants. Overall, skill shortages are low (around 170,000 across the UK) though they are more significant in small establishments, in some key occupations (eg skilled trades, associate professional and technical occupations), and in a number of sectors (eg construction and audio/visual) and localities (eg London). Skill gaps arise where members of the existing workforce lack the skills necessary to meet business needs. These are more significant in the UK – perhaps 10 times greater, amounting to some 1.8 million people.

The mismatch between the skills we need and the skills we have available can also be seen on an international comparative basis, by comparing the proportion of the workforce with high level skills and the proportion of the workforce who are in high skill jobs. The extent to which the latter exceed the former indicates how much current demand exceeds supply. The UK has more high skills jobs than high skill people, implying we have insufficient people with high level skills, but the gap is small relative to most countries. Moreover, the UK's growth in the numbers of high skilled people significantly exceeds the growth of numbers in high skill jobs. The growth in high skilled jobs is also occurring at a slower rate than in other countries. This growing mismatch is also observable in research which shows a growing gap between the supply of, and demand for, graduates as well as an increase in the proportion of workers who are 'over-qualified' for their current jobs.

Taken together, these findings are lead indicators of potential imbalances between the numbers of skilled jobs and skilled people. So far, this has had little impact on the relative earnings of those with higher skill levels whose wage premium overall remains high by international standards.

This potential misalignment may arise either because demand for skills is too low or because supply is too great. Our view is that this problem lies largely on the demand side. The relatively low level of skills in the UK, the limited extent of skill shortages and the potentially relatively low demand for skills relative to their supply, taken together, imply a demand-side weakness. The UK has too few employers producing high quality goods and services, too few businesses in high value added sectors. **This implies a need to raise employer ambition, to stimulate demand, as much as to enhance skills supply. In doing so, we can create a 'virtuous circle' of skills development**, increasing both demand and supply. In the current recession, however, the biggest 'mismatch' in the labour market is between a weak overall demand for labour and the available supply of labour, creating a combination of both unemployment and unused skills. These valuable resources will need to be preserved and nurtured in preparation for the recovery.

8 Raising Employer Ambition

8.1 INTRODUCTION

It is necessary, but not enough, to raise skill levels. It is necessary, but not enough, to align skills availability more closely with skills demand. It is also necessary to ensure that the available, appropriate skills are effectively used in the workplace, so as to ensure the 'potential' of a skilled workforce is turned into real 'performance', improved organisational productivity and economic performance. Indeed, management capability more generally is essential to success.

An underpinning assumption behind setting a World Class Skills Ambition in terms of the stocks of skills (in both absolute and relative terms compared to our international competitors) as we have done above, is that more skills will lead to higher levels of productivity, employment and prosperity. However, whilst important, **the existence of skills on their own will not necessarily lead to improved economic performance. It is not enough that these skills exist but, also, that:**

- **employer demand is sufficient** to use these skills;
- **they are used effectively in the workplace** to turn the 'potential' into actual 'performance'; and
- **they are the 'right' skills**, in terms of labour market requirements and employer needs, and are thus 'economically valuable' skills which reduce skill mismatches and provide benefits to individuals, employers and the economy (see Chapter 7).

Thus the role of skills utilisation in the workplace is critical. Moreover, how organisations are managed and led has a major bearing on whether and how skills are used in the workplace.

8.2 LOW SKILL EQUILIBRIUM

Although, as we have seen, the general trend is for an increase in skill levels, the question is whether this is sufficient. Questions are consistently raised as to whether a perceived qualification-dominated approach is sufficient, or whether there is a need for measures to stimulate demand.

The argument is that the UK, or particular sectors or geographical areas, may be 'trapped' in a low skills equilibrium or following a low skills trajectory, which presents a problem of relatively low demand for skills by some UK employers.

A low skill equilibrium exists where a substantial part of the economy uses low skills to produce relatively low specification goods and services, which are sold on the basis of low price, and which then support large numbers of relatively low-paid jobs. In firms in these parts of the economy, 'path dependency' (ie managerial reliance on historic ways of production and of dealing with competition) and low domestic demand for higher quality goods and services mean that they are unwilling (or unable) to break free from this equilibrium. Demand for higher level skills is therefore limited.

If true, this represents a significant challenge to public policy of attempting to shift some employers from a position they have chosen to be in: one in which low specification market strategies, cost-based competition and routinised work design lead to limited demand for skills. Policy therefore needs to encourage employers to break out of this equilibrium position, 'raise their game' in terms of their product market strategies and by this, increase their demand for skills. Here the demand for skills is seen very much as 'derived' demand. The challenge is to raise the demand for skills by moving up the value chain and encouraging more businesses to adopt high value added skill intensive patterns of behaviour. The focus becomes raising the demand for skills.

8.3 SKILLS UTILISATION

8.3.1 THE BENEFITS OF SKILLS UTILISATION

The UK Commission is currently conducting a major study of skills use, an initial stage of which involved reviewing the available literature. This initial work has been led by the Scottish Government on behalf of the UK Commission and its UK partners. This offers an encompassing definition from the literature of skills utilisation as being: **"Skills utilisation is about ensuring the most effective application of skills in the workplace to maximise performance, through the interplay of a number of key agents** (eg employers, employees, learning providers and the state) **and the use of a range of HR, management and working practices. Effective skills utilisation seeks to match the use of skills to business demands/needs."**

The working and management practices that are deployed to develop and use skills in the workplace more effectively, and which encourage attempts to work smarter and not harder, are commonly referred to as High Performance Working practices (HPW). There is no definitive list of practices that constitute HPW, but it is possible to identify a number of overlapping areas such as: HR policy and practice; employment relations; management and leadership (including the importance of line management in implementation as well as a clear strategic direction and vision); and organisational development, including organisational values, behaviours and employee engagement.

The adoption of HPW is important, as it has been shown to lead to significant benefits, including improved labour turnover and workers' well-being.[108]

Overall, **organisations that adopt an integrated range of HPW practices are likely to perform better:**

- Patterson et al (1998) found that almost a fifth of the variance between productivity and profitability between firms could be attributed to HR practices.
- Tamkin (2008)[109] found that a 10% increase in business investment in HR, training and management practices equated on average to (i) an increase in operating profits per employee of between £1,139 and £1,284; (ii) an increase in profit margins per employee of between 1.19% and 3.66% (ie the ratio of profit over sales), (iii) a 0.09% increase in sales growth per employee, and (iv) a 3.1% increase in the probability of achieving sales from new technology.[110]
- Guest (2006) found that those companies that deploy a greater range of HR practices can double the profit per employee compared to those implementing relatively few. Furthermore, they can reduce their labour turnover rates by half.
- Bevan et al (2004) report that only three HR practices had a major impact on productivity: flexible working practices (17% of all organisations), high training commitment (15%) and improving communication channels between staff and management (8%).[111]

108 Tamkin P. et al, Skills Pay: The Contribution of Skills to Business Success, SSDA, 2004.

109 Tamkin, P. et al, People and the Bottom Line, 2008.

110 Guest, D. Smarter Ways of Working: The Benefits of and Barriers to Adoption of High Performance Working, 2006, p. 6-7.

111 Bevan, S. et al, Workplace Trends Survey 2004 Summary Report, 2004, p. 20.

- Becker et al (2001) found strong support for positive links between the existence and operation of HPW within firms and financial performance, in particular shareholder value but more generally employee productivity. They calculated that a 35% improvement in the quality of strategy implementation resulted in a similar percentage increase in shareholder value.[112]

The research evidence has also demonstrated that employers of all types and sizes could benefit. There is a widespread view that it is not the individual practices per se that are most important, but the way they are implemented and come together to create meaningful 'bundles'.[113] Furthermore, a range of evidence suggests that the total management effects are greater than the sum of the individual parts.[114]

There is also evidence of positive benefits of involvement in the Investors in People initiative: Tamkin (2008) notes a relationship between IIP accreditation and business performance due to a relationship between IIP and intensity of HR practice. Bourne (2008)[115] found a relationship between adopting IIP (and the associated practices embedded within the Standard) and better firm performance. IIP encourages changes in the business and HR approach which foster a more positive organisational social climate, creating higher levels of trust, cooperation and people engagement, encourage the skills and behaviours needed for the organisation to change and, ultimately, lead to better non-financial and financial performance, delivered through higher returns on assets as shown in firms' published annual reports.

Whilst evidence highlights the positive improvements HPW has on business performance, the literature also suggests that HPW can deliver broader outcomes that can be both negative and positive. Positive outcomes are higher job satisfaction and employee motivation which result in lower labour turnover. For instance, CIPD research has identified links between HPW and staff retention which has cut overall recruitment costs.[116] However, care needs to be taken to ensure that performance gains are not achieved to the detriment of employee well-being through increased workload, limited discretion and enhanced stress at work.[117]

It is also possible that HPW, and the subsequent more effective skills utilisation, will have wider benefits to the economy. Policy debates across many European countries (as well as more widely) have become increasingly concerned with not only promoting higher skills and more employment, but better employment, with a growing emphasis on quality in work, creating 'better' jobs and a good working environment.[118] This priority has arguably grown out of the desire not only to raise economic performance and prosperity across Europe, but also to tackle social exclusion, raise social mobility and to develop a fairer and more inclusive society. In particular, this has generated an interest in attracting the unemployed, economically inactive and those employed in low skilled jobs, into quality work that offers mutual advantages to the individual as well as the employer. It follows that quality jobs aim to offer rewards to the individual, both financially and in terms of personal well-being and satisfaction.
At the same time, quality employment seeks to deploy highly skilled people, in the most effective way, to add more value in the workplace.

112 *Becker, S. et al, The HR Scorecard: Linking People, Strategy and Performance, 2001, p. 213.*

113 *Tamkin, P et al, Skills Pay, 2004; Huselid, M. et al, 'Technical and Strategic Human Resource Management', 1997.*

114 *Tamkin, P. et al, 'People and the Bottom Line', 2008; Tamkin, P. et al, Skills Pay, 2004; Huselid, M. et al, 'Technical and Strategic Human Resource Management', 1997; Becker, B.E. et al, The HR Scorecard: Linking People, Strategy and Performance, 2001.*

115 *Bourne, M. et al, The Impact of Investors in People on People Management Practices and Firm Performance, 2008*

116 *EEF and CIPD, Maximising Employee Potential and Business Performance: the Role of High Performance Working, 2003, p.13.*

117 *CFE, Skills Utilisation Literature Review, 2008.*

118 *European Council, Lisbon Extraordinary European Council: Presidency Conclusions 23rd and 24th March 2000.*

8.3.2 HPW PRACTICES

Given the evidence of the potential benefits of adopting HPW, there has been considerable interest in identifying and understanding what practices are important. Increasingly, the focus has shifted towards understanding how HPW operates as a system rather than a concern, simply, with individual and/or bundles of practices. This recognises that HPW is complex and it is the combination of practices and how they inter-relate that is the key to performance.

Ashton and Sung in their model have developed three broad categories: (i) High Involvement, (ii) Human Resource Practices and (iii) Reward and Commitment.[119] A description of these categories and practical examples is shown in Table 8.1.

Alternatively, Guest (2006) identifies four core areas, each associated with a range of practices: employee competence, employee motivation, opportunity to participate and employee commitment.[120] He then considers how these come together within a broad system, alongside HR and business strategy, to influence business performance.

119 *Sung, J. and Ashton, D., High Performance Work Practices: Linking Strategy and Skills to Performance Outcomes, 2005, p. 6–7.*

120 *Guest D, Smarter Ways of Working: The Benefits of and Barriers to Adoption of High Performance Working, 2006*

Table 8.1:
Different components of a HPW system

Category	Description	Examples
High Involvement	High employee involvement practices encourage a much greater level of trust and communication between employers and employees through involving them more in the organisation	Circulating information on organisational performance and strategy Providing all employees with a copy of the business plan and target Internal staff surveys Staff suggestion schemes Total Quality Management Self-managed or self-directed teams Cross-function teams
Human Resource Practices	Specifically targeted to create a greater depth of human capital investment and skill formation within the organisation	Annual appraisal Formal feedback on job performance from superiors/employers Reviewing vacancies in relation to business strategy Formal assessment tools for recruitment Annual review of employees' training needs Training to perform multiple jobs Continuous skill development Business Excellence Model
Reward and Commitment	Practices to facilitate a greater sense of belonging and commitment to the organisation	Performance pay for some employees Performance pay for all employees Profit sharing for some employees Profit sharing for all employees Share options Flexible job descriptions Flexible working Job rotation Family friendly policies

Source: Ashton and Sung (2005).

121 *Tamkin P., The Contribution of Skills to Business Performance, 2005, p. 34–36.*

Finally, Tamkin has developed a comprehensive model, based on a review of various existing HPW systems, to capture the key components of existing models in one. This is called the 4As model. There are two key dimensions: the development and deployment of capability and the individual and the organisation. Putting these two dimensions together creates four quadrants of activity:[121] (see Chart 8.1).

- **Access** — the effective resourcing of roles in the organisation
- **Ability** — the skills of the workforce
- **Attitude** — the engagement, motivation and morale of the workforce
- **Application** — the opportunities available to ensure skills and motivation are effectively applied.

Skills utilisation falls within the two right quadrants of 'Attitude' and 'Application' of the 4A model. Attitude includes policies such as improvement of engagement, the way people are treated at work, the role of the line manager, the level of reward people receive and communication. Application includes measures such as flexible working, quality schemes, autonomy and team work.

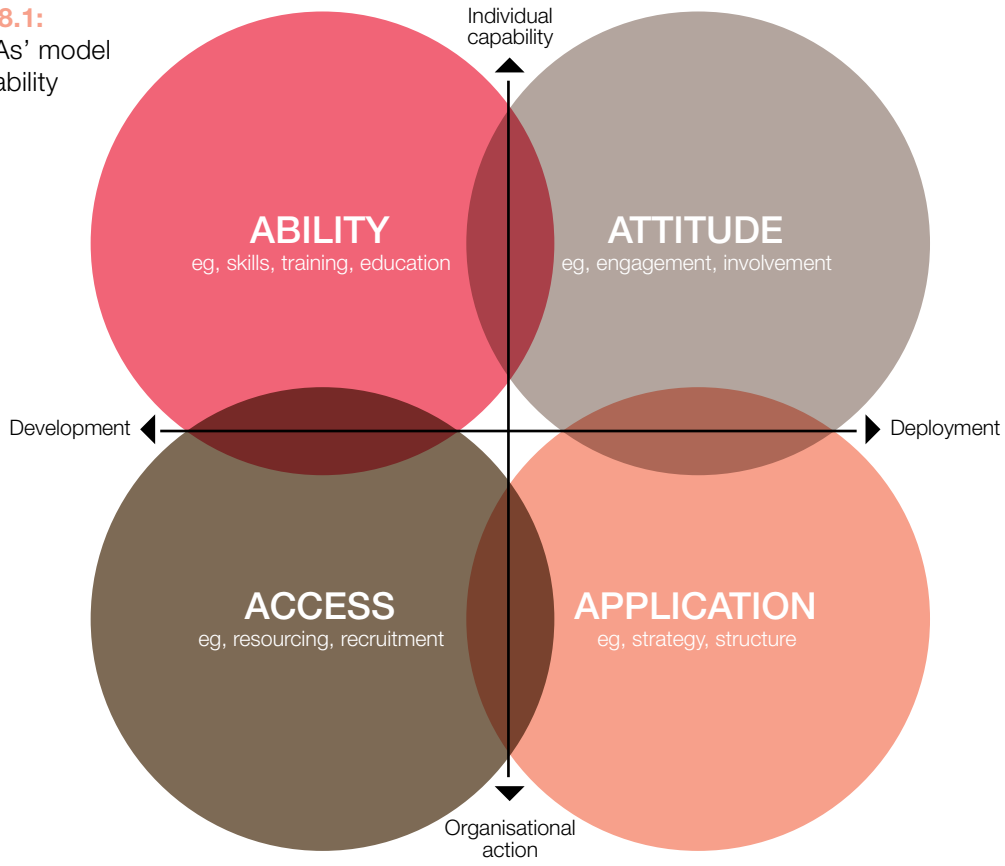
In developing this model Tamkin has sought to identify those practices which have the greatest impact on performance and identified 12 which had a particularly important effect (see Table 8.2).

Table 8.2:
The '4As' model of High Performance Working

Area	Measures
Access	1. Proportion of new appointees tested on recruitment
	2. Proportion of new appointments for which there was a person specification
	3. Proportion of employees covered by a succession plan
Ability	4. Proportion of workforce that have a current personal development plan
	5. Proportion of the workforce that have a career development plan
	6. Proportion of employees qualified to degree level
Attitude	7. Proportion of managers that left voluntarily over the last twelve months
	8. Proportion of staff that receive profit related pay
	9. Proportion of staff that have a regular appraisal
	10. The frequency with which staff have one-to-ones
Application	11. Who decides on the pace of work (1 = exclusively managers; 5 = exclusively workers)
	12. Who decides on task allocation (1 = exclusively managers; 5 = exclusively workers)

Source: IES, 2008.

Chart 8.1:
The '4As' model of capability



Source: Tamkin P et al (2004) Skills Pay, Research Report No 5, SSDA.

8.3.3 TAKE-UP OF HPW PRACTICES

Despite the evidence of the benefits of adopting HPW, it appears that only a small proportion of all firms have implemented them across the UK and rates of take-up have not changed dramatically over time. Estimates vary from just under a third of all firms in the UK from the UK Commission's own employer survey of 2008 to as low as 2% (see for example analysis using the WERS).[122] Similarly, a survey of 10 European countries in the 1990s found that only around 1% could be classified as HPW organisations.[123] Furthermore, those establishments adopting HPW are more likely to be larger, and/or within the public sector.

Many managers in the UK have not heard of HPW, which is one of the barriers to a more widespread uptake of practices.[124] In particular, SMEs often perceive these practices as bureaucratic and unsuitable. Others find them too complicated, or are just not interested. Hyde et al suggest take-up is limited by management 'incompetence', different management perspectives on what constitutes the most appropriate approach, financial pressures favouring short-term responses and conflicts of interest between managers and employees. CIPD and EFF also point to a lack of employee trust which can make implementation difficult.[125] Many might not share the view on the importance of human capital or are unwilling to take the risk of giving workers greater autonomy and control over their tasks performed.[126]

122 UKCES, Skills for the Workplace: Employer Perspectives, 2008, p. ii.

123 EPOC (1997) New Forms of Work Organisation: Can Europe Realise its Potential?, 2007.

124 Ashton, D. and Sung, J., Workplace Learning for High Performance Working, 2002. p. 11.

125 EEF and CIPD, Maximising Employee Potential and Business Performance: the Role of High Performance Working, 2003, p. 20.

126 Guest D, Smarter Ways of Working: The Benefits of and Barriers to Adoption of High Performance Working, 2006, p. 10.

Philpott[127] believes take up has been low in the UK because there is an 'implementation gap' – he identifies three issues:

- **Ignorance:** there may be an information failure where some employers are unaware of the need to change or the benefits to their businesses of adapting their business approach, adopting new and/or different HPW management practices, knowing which practices to deploy and how to implement them, investing more effectively in their staff and/or utilising their skills in different ways.
- **Doubts and/or inertia:** Given that the benefits to changing management processes, adopting HPW and investing in skills may not be immediate and/or uncertain compared to tried and tested approaches or the status quo, some employers may excuse inactivity because change is thought to be too complex, 'risky' and/or costly. The emphasis too of UK business on short-term returns may also be a particular deterrent to change.
- **Inability or impediments:** Finally, given the difficulty of managing change programmes, some employers may be reluctant to act because they lack sufficient know-how and ability, they fear failure or because there are impediments or barriers in their way. There may be a lack of management and leadership ability, resistance from employees or regulations that make it difficult to introduce the necessary changes.

In particular, this points to the fundamental role that managers and leaders need to play in implementing HPW.

8.4 MANAGEMENT AND LEADERSHIP

Since the 1980s, there has been a concern that, in general, management capability and the deployment of managers in the UK is poor in various respects relative to competitor countries and that this has contributed to reduced productivity and inhibited economic performance across the UK.[128] Concerns about the quality of UK managers have grown through the 1990s and beyond, alongside the growth in evidence that the demands for, and on, managers have been dramatically increasing. Such changes have been driven by a range of factors, including innovations in business and technological developments, globalisation, market liberalisation and organisational and industrial restructuring. Management, in different, rapidly evolving contexts, requires a wide range of skills and competences. In addition, management responsibilities are broadening and a growing number of other employees are undertaking management tasks. A key question is whether the UK has sufficient managers and leaders of high quality and whether it is sufficiently developing and deploying them to fully optimise its management potential and firm performance.

There is considerable evidence that management capability brings advantages to organisations in terms of better performance and business gains. Whilst the basis on which these studies are conducted varies, and they deploy different measures of management capability, **the overall weight of evidence, emphasising the importance of management, is compelling**.

127 Philpott, J., 'Raising Productivity: From Skills to High Performance Working', 2006, p. 168–169.

128 Bosworth, D, Empirical Evidence of Management Skills in the UK, 1999; PIU. In Demand: Adult Skills in the 21st Century, 2001; CEML, Managers and Leaders: Raising Our Game, 2002.; Burgoyne, J. et al, Leadership and Management Literature Review on the Development of Management and Leadership Capability and its Contribution to Performance, 2003.

The decisions and actions managers and leaders take are essential to shaping organisational strategies, organisational structure, working practices, investment patterns, the nature and extent of innovation and technological developments, the organisation of work and management of employees, and, not least, the design and operation of any HPW system.

The recent work of LSE/McKinsey[129] develops/applies an approach to measuring company management practices, and enabling comparisons of these practices with actual business performance, both within and between countries. It is clear from this work that **companies that apply accepted management practices perform significantly better than those that don't**. Improving management practices, in particular their take-up across a wider range of companies, is thus likely to improve both business and national economic performance. Broadly, the same strong relationships between management practices and performance hold true across countries. Chart 8.2 shows the average management practice score by country, with the UK being in the 'second division' of countries studied. One way to interpret how much these differences in scores matter is to note that a one percentage point increase in management score is equivalent in impact on company performance to a 25% increase in the workforce or a 65% increase in capital investment. Management practice scores are highly correlated with productivity.

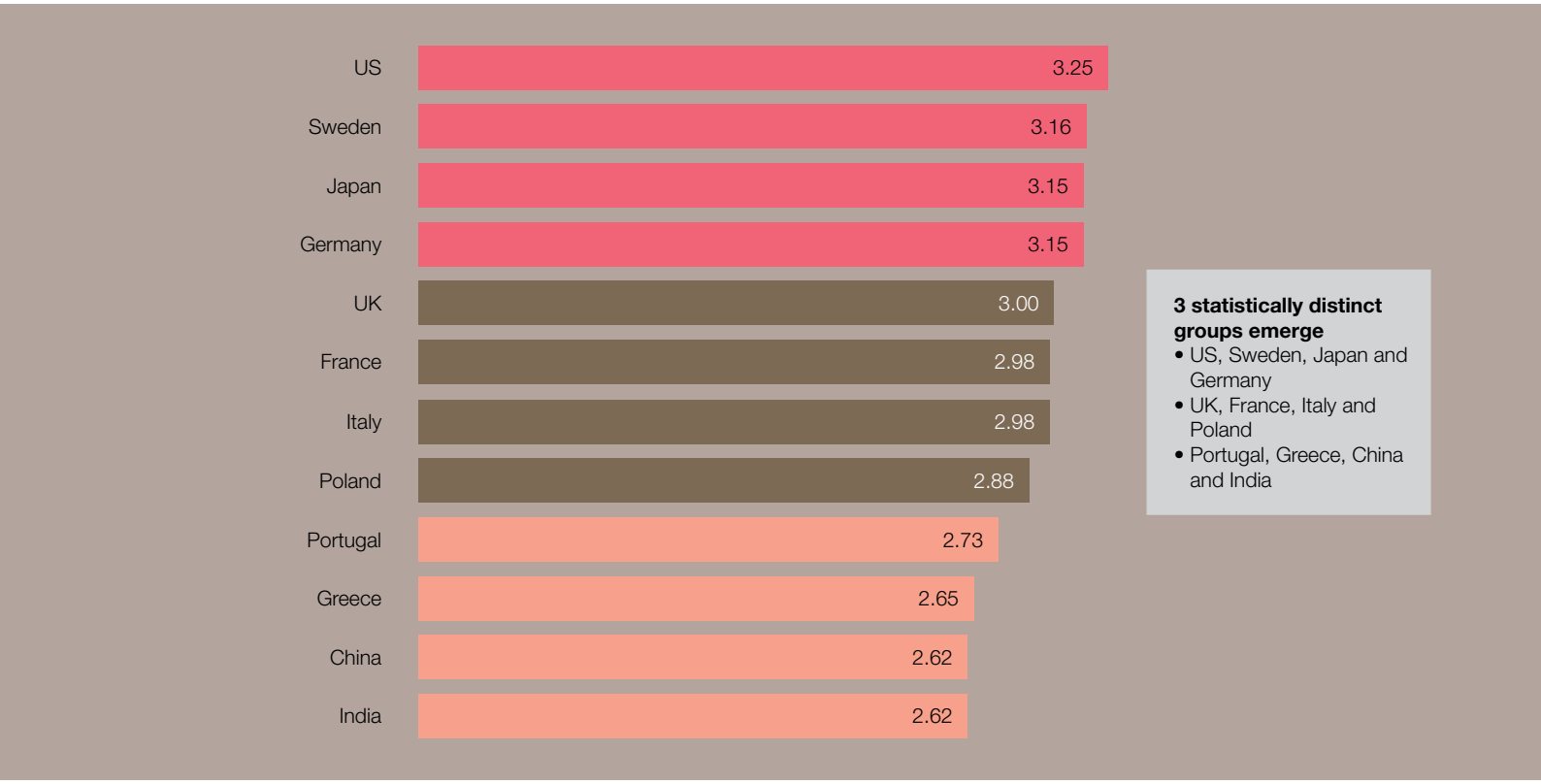
However, it is important to recognise that management practices vary much more **within** countries than across countries – **the overall performance of most countries (including the UK) is determined** not by the performance of its leading companies but **by the size of the tail of poor performers** (see Chart 8.4). There is also a considerable spread within sectors and a significantly smaller one across regions.

One key driver of the UK average management score is its relatively low skill levels (see Chart 8.3). Better managed firms have a more highly educated workforce amongst both managers and non managers alike. Internationally, 84% of managers (and a quarter of non managers) in the highest scoring firms are educated to degree level, compared to 54% of managers (5% of non managers) in the lowest scoring firms. **In the UK, it should be noted we have the lowest share of managers with a degree of any country** (43%) compared, for example, to 70% in Japan and 60% in the USA. We also have the third lowest share of non managers with a degree.

Management practice scores also vary considerably by ownership type – multi-nationals appear to be 'well-run' in all countries, including the UK where their score is well above the average. Weaker scores predominate in family owned, founder owned and government owned companies, with the highest scores where there are dispersed shareholders and private equity/venture ownership. As the UK has, by international standards, a relatively high proportion of family owned firms, this may well impact on the uptake of management practices.

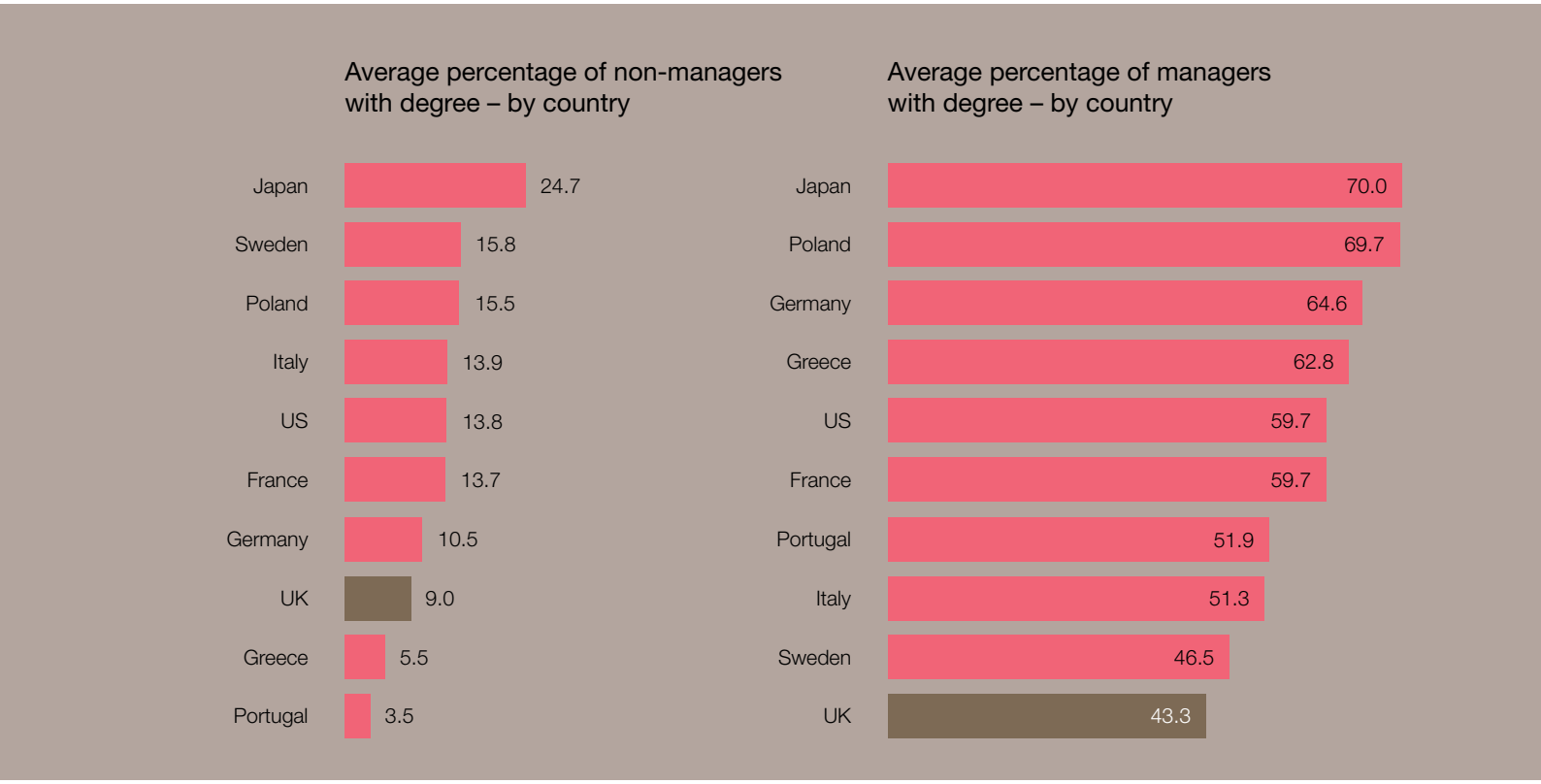
129 Bloom, N. et al, Management Practice and Productivity: Why They Matter, 2007.

Chart 8.2:
Average management practice score by country



Source: Bloom, N. et al, Management Practice and Productivity: Why They Matter, 2007.
Note: China score not robust due to small sample size.

Chart 8.3:
Management and workforce skills



Source: Bloom, N. et al, Management Practice and Productivity: Why They Matter, 2007.

Bosworth et al have shown that in firms where there were higher levels of qualification and a higher proportion of managers holding them, this increased the probability of 'introducing new, higher quality products'.[130]

The sectoral spread of managers holding high level qualifications may indicate a potential issue. The proportion of managers who hold Level 4 qualifications varies from 14% in the vehicle maintenance sector to 63% in transport equipment. The public sector tends to have higher proportions of managers who have Level 4 qualifications, eg health and social work, public administration and education (see Table 8.3).

130 *Bosworth et al, The Extent, Causes and Implications of Skill Deficiencies: Managerial Qualifications and Organisational Performance: An Analysis of ESS 1999, 2002, p. 19.*

Chart 8.4:
Distribution of firm level management practice scores by country

Source: Bloom, N. et al, Management Practice and Productivity: Why They Matter, 2007.

Table 8.3:
Proportion of managers qualified to Level 4+

Transport equipment	63%
Electricity, gas and water	63%
Computer and related activities	63%
Health and social work	63%
Public admin etc	62%
Education	56%
Professional & business services	55%
Machinery & equipment	54%
Chemicals etc	54%
Mining and quarrying	53%
Food, drink and tobacco	47%
Real estate etc	46%
Financial services	44%
Metals & metal products	44%
Publishing etc	42%
Post and telecoms	41%
Textiles and textile products	41%
Other services	36%
Construction	36%
Wood, pulp etc	32%
Transport	32%
Wholesale trade	30%
Agriculture etc	28%
Other manufacturing	24%
Hotels and restaurants	23%
Retail trade	23%
Vehicle maintenance etc	14%

Source: The Sector Skills Almanac, SSDA, June 2007

In the cross national study of management development by Mabey and Ramirez in six European countries mentioned earlier, they found that around a quarter of the variation in organisational performance was explained by three factors: a strategic approach to HRM, a long-term, proactive and strategic approach to management development and, on the part of line managers, a belief that their employer takes management development seriously.[131] These results hold true, irrespective of country, size, sector and growth.

But what is the wider evidence assessing the adequacy of UK management? Although levels of education and qualifications are only indicative of skills deficiencies, they have frequently been deployed in assessments of management quality and hence as a proxy for management capability. Qualification levels of managers have been increasing in recent years, which could at face value signify growing management capability. For instance, Johnson has shown that the vast majority of SME owner-managers have no formal management qualifications and have undergone no formal management training prior to starting their businesses.[132] This is supported by Bosworth who identified disproportionately high proportions of managers in small firms with low or no qualifications, and relatively few with high qualifications.

131 Mabey, C. and Ramirez, M., Developing Managers: A European Perspective, 2004.

132 Johnson, S., Skills Issues in Small and Medium Sized Enterprises, 1999.

A range of studies point to shortfalls in management capability based on 'softer' assessments of management quality. For instance, Horne and Stedman Jones and Charlesworth et al[133] have based their assessments on staff perceptions. In a survey of 15,000 managers, Horne and Stedman Jones found that over a third of managers and almost half of junior managers rated the quality of leadership in their organisations as poor. Also, interestingly, the study identified differences in perspective amongst managers. For instance: senior managers and executives were far more likely than junior managers to rate the quality of leadership as high. Similarly, Charlesworth et al, surveying the perspectives of 1,800 public sector managers, found only a third of managers gave a high rating to senior management teams, but these proportions were higher (just over two fifths) when involving their immediate manager. Finally, Porter and Ketels in their wider review of UK competitiveness used a range of international indicators including managers' skills, the take-up of modern management techniques and wider business returns.[134] Whilst management capability was not seen as the core of the UK competitiveness challenge, they did observe issues around the skills of lower and middle ranking managers in the UK, compared to its international competitors, and the slower take-up and use of new management techniques.

Further international research also raises questions around management capability and differences in approaches to management development. Whilst there may be issues about the true nature of comparability across international indicators of qualifications, they highlight important differences which arguably warrant further research and analysis. For instance, Keep and Westwood based their assessments of the adequacy of[135] UK management on broad reviews of wider business approaches and again a range of international indicators such as education and training levels of managers in different countries. In particular, they considered changes in such approaches and indicators over time, and the evidence of business benefits that have resulted. These point to relatively poor levels of education and training by UK managers (see Table 8.4). Furthermore, they used this, and the low evidence of business gains from a range of business approaches, such as business process re-engineering and mergers, for example, to argue that there is a lack of managerial skills in the UK.

Table 8.4:
Training of managers in selected countries

	UK	USA	Japan	Germany	France
Average terminal educational age	19.5	22	21	21	22
Graduate (%)	49	74	78	72	61
Off-the-job training (days/year)	4	7	5.5	5.5	6
On-the-job training (days/year)	4.5	8	6.5	6.5	6

Data Source: Keep, E. and Westwood, A, Can the UK Learn to Manage?, 2003, p. 7.

133 *Horne, M. and Stedman Jones, D., Leadership: The Challenge for All?, 2001; Charlesworth, K. et al, Leading the Change in the Public Sector: Making A Difference, 2003.*

134 *Porter, M.E. and Ketels, C.M. UK Competitiveness: Moving to the Next Stage, 2003.*

135 *Keep, E. and Westwood, A. Can the UK Learn to Manage?, 2003.*

Mabey and Ramirez surveyed 700 domestically owned organisations with more than 20 employees in Germany, Denmark, France, Spain, UK, Norway and Romania. They found that UK organisations generally spent less per year on management development than all the other countries (see Table 8.5). Where management development was happening in the UK, it was found to be highly dependent on externally accredited training and qualifications. Finally, UK and French organisations were significantly less likely to adopt a strategic approach to HR management and the link between HR and business strategies was less evident than in the other countries.

Table 8.5:
Spend on management development

Country	Euros per manager (average per year)
Germany	4,438
Denmark	3,387
Norway	2,734
France	2,674
Spain	1,803
UK	1,625
Romania	424

Data Source: Mabey, C and Ramirez, M., Developing Managers: A European Perspective, 2004.

The SSDA funded the IES[136] to study important aspects of management capability in 484 domestic and multinational businesses across four countries in 2006 – this included measures of: innate ability, vocational qualifications, generic qualifications, internal training, experience, management education when in post. It was found that innate ability and job experience carried the most weight in enhancing management capability, and formal qualifications were regarded as less influential. In the UK, experience was regarded as most important for managers, with less regard for qualifications and in-company training. HR was found to play the least strategic role in the development of managers in the UK (and the most strategic role in Norway). UK firms preferred a less formal approach and this was felt to be a significant contributory factor limiting competitive success in the UK.

In conclusion, therefore, **management and leadership matter. Action, targeted at improving management capability and development in the UK, and, therefore, in enhancing the skills levels of UK managers, could have a significant effect on fostering organisational ambition, future business practices, the take-up of HPW, improve skills utilisation** and, ultimately, bring substantial benefits to business and economic performance. We need to make sure that future investment develops the high quality leadership and management skills we need to compete effectively in the global economy.

8.5 EMPLOYER AMBITION

Taken together, the evidence in this chapter – when combined with a range of evidence in earlier chapters – points to the need to stimulate employer demand for skills as one key mechanism to up-skill the UK.

Strengthening the demand for skills through greater skill utilisation and more widespread use of sound management practices can help create a more 'virtuous circle' of skills demand and supply which is mutually reinforcing. Furthermore, making the 'business case' for skills upgrading and spreading the message from successful businesses to others would help stimulate demand. But, more widely, in the end, an economy 'gets the skills it deserves': the economic structure; the position of companies in the international division of labour and value chain; the business strategies of companies – it is these economic drivers which structure skills demand, supply and their use. **Skills are, ultimately, a 'derived demand'**. Economic development policy has, therefore, a crucial role to play in assisting more companies to move up the value chain, to choose to produce higher specification goods and services, to innovate, to be creative, to

136 Tamkin, P. et al, The Comparative Capability of UK Managers, 2006.

adopt a 'high road' strategy in order to tackle 'path dependency' (reliance on historic means of production and completion) and relatively low domestic demand for higher quality goods and services. **In short, we should aim to encourage and support more businesses to 'raise their game', not only to aid their survival in the tough times of a recession, but to help them prepare for, and thrive in, the recovery and beyond**. Such policies should place skills development, skill matching, skill use and management/leadership development at their heart.

8.6 CONCLUSIONS

It is essential, but not enough, just to raise skill levels. It is essential, but not enough, to also align the skills available with skill requirements. It is also necessary to build an economy that is internationally competitive and fit for the future. A highly skilled workforce is of little benefit on its own, without the high skill jobs for them to fill.

Higher skill levels are not the only driver of employment and economic development. Innovation, research, quality, distinctive products and services, high productivity and high value added goods and services are all ingredients of sustained competitive advantage. They will stimulate employer demand for skills. So raising skill levels is both a contributor to, and a consequence of, a 'high road' economic development path. The more that a post-recession recovery strategy is built around higher skills, the more likely it is to raise employer demand. In the end, the demand for skills is a 'derived' demand; dependent on the shape of the economy and level of economic activity.

This is why economic and industrial policy are as crucial as skills and employment policy to achieving our 2020 Ambitions, and why achieving those skills and employment ambitions are, in turn, a key route to a stronger economy.

But action is needed at the level of the organisation too. **Leaders and managers are the key to successful business strategy and competitive positioning**. Organisational success depends on their vision, capability and effectiveness. Yet the UK has, compared to other countries, a relatively long tail of managers who are not well qualified and do not apply accepted management practices. Without improving UK leadership and management, we will struggle to improve economic performance.

There is also little value to an organisation in having a skilled workforce if those skills are not used well. Effective managers turn the potential of a skilled workforce into improved organisational performance. 'High performance workplaces' are an important contributor to increased productivity.

In the final analysis, allowing for the downward pressure on supply and demand, of both market and public failures, an economy broadly gets the skills it 'deserves'. The demand for skills is ultimately a derived demand. The more companies move up the value chain, the more they produce innovative, high specification goods and services; the more organisations raise their game, the greater the demand for higher skills. Strong management and leadership and a powerful focus on skills use in the workplace, will both require a more highly skilled workforce and will help ensure that one is provided.

9 Skills and Employment Policy

9.1 INTRODUCTION

What does all this mean for policy? This chapter briefly summarises some aspects of the current policy landscape before proposing a new strategic framework for policy development, distilled from the analysis in this report and which is intended to guide thinking, action and the measurement of progress towards our 2020 Ambition of being one of the top countries of the world in employment and skills. This has a number of implications for future policy development which are discussed. We conclude by outlining the priorities of the UK Commission over the coming years, as one contribution to the development of World Class skills and jobs for the UK.

9.2 THE CURRENT LANDSCAPE

Employment and skills policy in the UK operates through separate frameworks and there are variations in the degree to which governance, policy development and practice is devolved to Scotland, Wales and Northern Ireland. The objectives, targets and success measures vary across the UK and, as such, to date the UK has lacked consensus on a vision for the achievement of a World Class skills and employment ambition. Whilst policy differences across the UK rightly reflect devolved responsibilities and variations in requirements, there is a risk that, for the UK as a whole, such variations in different parts of the system create complexity and a lack of common purpose, though the 80% employment aspiration arguably provides a clarity lacking in the skills domain.

There has also been considerable reform in recent years in the policy frameworks used to seek to secure the various ambitions as well as in the policy instruments and structures that have been introduced to those ends. These have resulted in **a system that is often complex and difficult to understand**, as well as being hard to navigate from a user (individual or employer) perspective.

Indeed, the UK Commission has already made a series of proposals to simplify the system in England[137] in order to address a series of complexities:

- **Difficulties of access for employers** – limited understanding of the system; competence to engage and find the right service/organisation to meet their needs; and service responsiveness.
- **Complexity of programmes and initiatives** – the sheer range of programmes and initiatives; their potential to meet employer requirements; and the difficulty in choosing what is most appropriate.
- **Restricted constraints in initiatives and programmes** – eligibility rules restricting participation and engagement.
- **Excessive bureaucracy** – demanding administrative rules and reporting requirements, disproportionate to accountability requirements.
- **Complexity of structure and organisation** – the sheer number and range of organisations and their dealings with employers, risks confusion.
- **Rapidity of change** – the continual change in programmes, initiatives, language, procedures and organisations causes confusion and reduces awareness, understanding and interest.

To help simplify the system, the UK Commission has set out proposals with 10 linked components to 'hide the wiring' of the system and make it easier to access and use, including the development of a Talent Map; an integrated brokerage service; and unification of branding, amongst others. It is planned to implement the proposals over the next year. A further report on 'rewiring' the system is planned for 2009/10.

It is no easy task to keep abreast of the range of policies and initiatives that exist throughout the UK partly because of the variations across the four countries, but also because of the extensive and frequent

137 Simplification of Skills in England: UKCES (2008).

changes to policies and programmes. To that end, the UK Commission has completed a major review of the policies and programmes that operate across the UK and will publish, in the summer, a digest of this work to help enable a systematic overview of current policy to be available to interested parties.

The publication will provide a 'strategic policy overview' which provides an outline of the employment and skills policy environment; the principles behind policy developments; key initiatives used to deliver these policies; an outline of what works in these fields; and will highlight the similarities and differences across the four nations. It will also provide an 'initiatives' timeline showing the implementation timeframes for current and future policy initiatives and an 'Infrastructure Map' of the main organisations involved in the design, funding and delivery of skills and employment policy.

9.3 A FRAMEWORK FOR POLICY DEVELOPMENT

In addition to the 'implementation' gap referred to above, where delivery on the ground does not always fulfil the ambition of the policy promise, **there are two further gaps which can be identified** from the analysis in this report that need to be filled if we are to succeed in our World Class Ambitions.

First, there is a 'policy' gap. Too much emphasis has been placed on raising the skills, and in particular, qualification, levels of the workforce relative to other dimensions of the agendas and too little emphasis has been given to integrating the skills and employment agenda and their relation to economic performance.

Second, there is a 'measurement' gap, which reflects the above policy gap. **Progress is measured primarily in terms of the qualifications of adults, rather than a wider range of relevant success measures**. Developing such a suite of measures would help better align policy with the 2020 Ambition, and policy with delivery.

We propose a new strategic framework (see Chart 9.1) to inform thinking, action and our assessment of progress on the skills and employment agenda for achieving our 2020 Ambition. It crystallises the structure and narrative of this report into a framework which connects the various dimensions of the agenda and policy into a system to better connect skills, employment and economic development policy. The framework would provide the opportunity for greater alignment, coherence, balance and integration across the system and could generate enhanced synergy, effectiveness and impact.

The framework also provides a conceptual 'map' of the key dimensions of the agenda and a basic 'story' of Ambition 2020. **There are four inter-locking components of the framework**. First, the ultimate goals we seek to achieve (indicated in white on the chart). Economic performance is driven by high levels of productivity and employment and the ensuing prosperity needs to be widely shared.

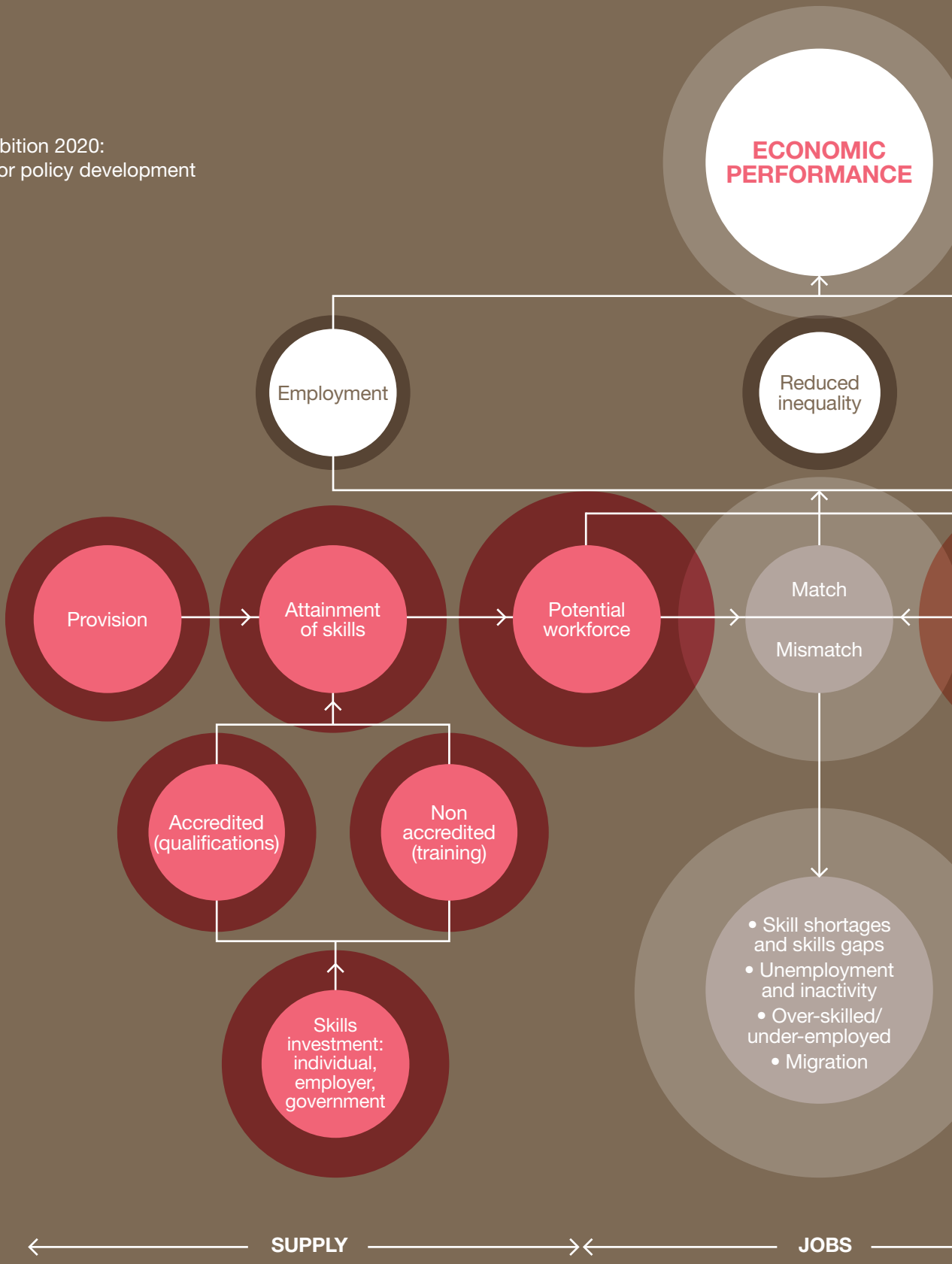
Second (indicated in orange), the demand side. To reach these goals, we need an economy, and more employers in more sectors and in more places, with business strategies that seek to thrive on quality, on value added, on innovation and on the skills of their people. The jobs needed in such an economy will be more highly skilled.

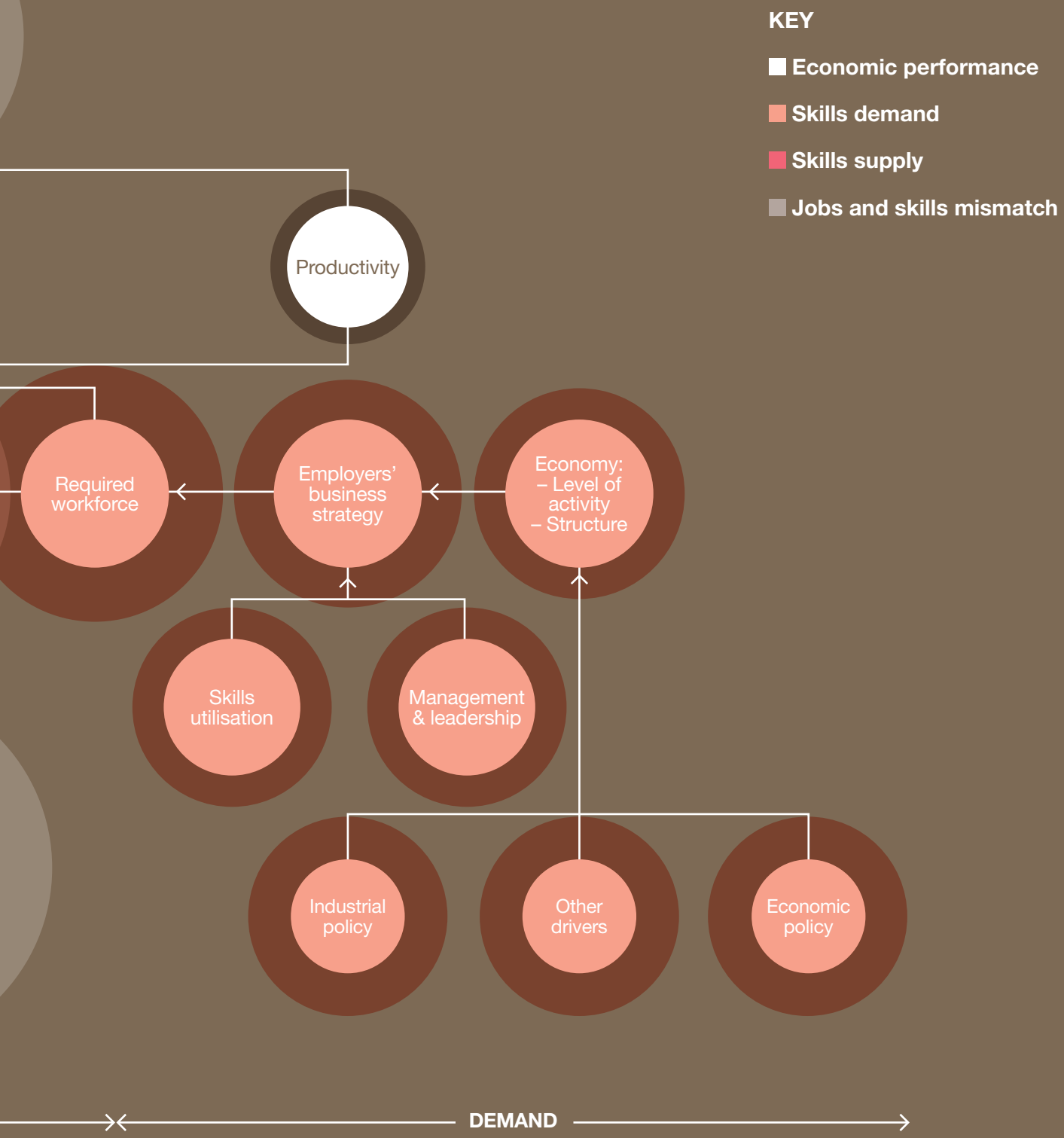
Third, the supply side (indicated in red). It is necessary to raise the skill levels of the workforce in order to ensure that the economy and labour market get the skills they need to sustain economic progress and that workers get the jobs they want.

Fourth (indicated in grey), jobs mismatches between demand and supply, between the workforce required and the potential workforce, between the skills we need and the skills we've got, must be reduced to a minimum to enable businesses to get the workforce they require to be successful and that workers are neither unemployed or under-employed. Alignment and synergy between each of these components of policy is crucial so as to maximise effectiveness and impact.[138]

138 At an early stage in the use of this framework, the UK Commission has established a series of goals and milestones, to assess the progress of our own Strategic Plan and we are also working with the Department of Innovation, Universities and Skills and other partners in England, to develop a new set of PSA targets, at least for skills.

Chart 9.1: Ambition 2020:
A framework for policy development

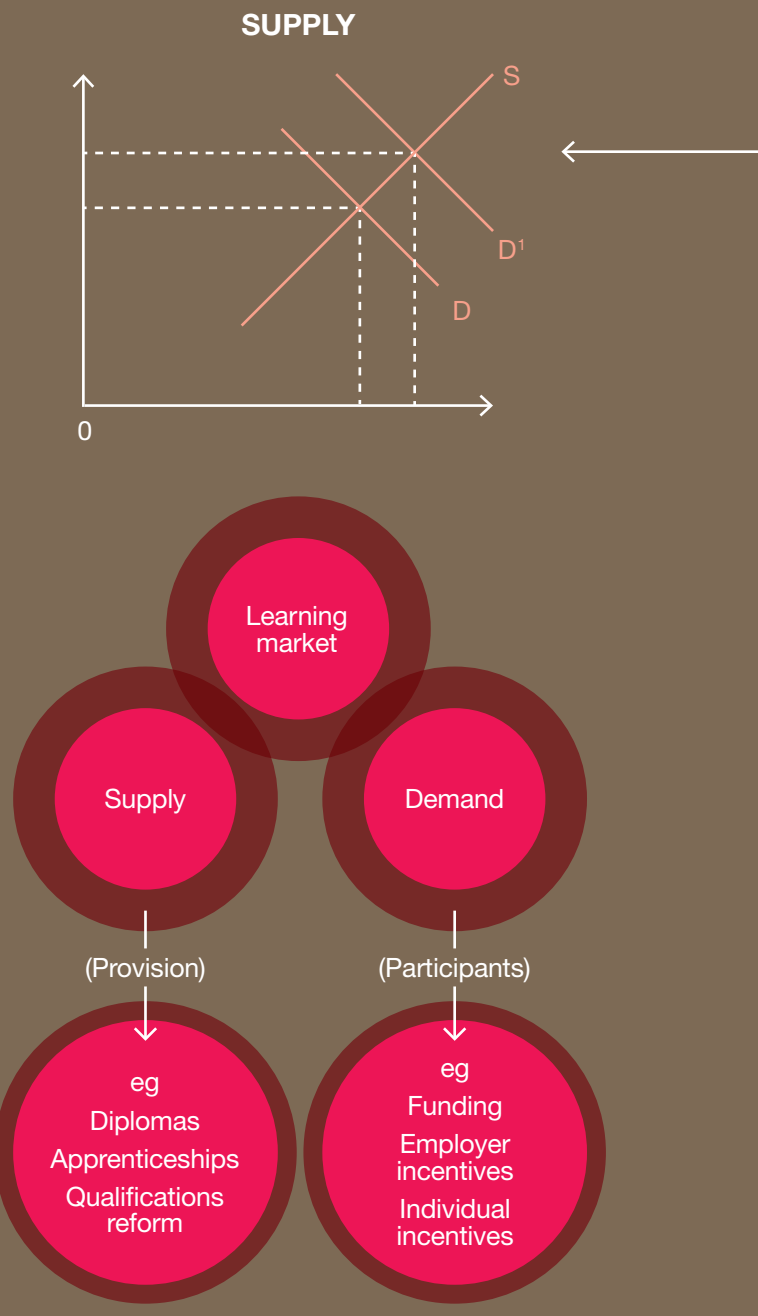


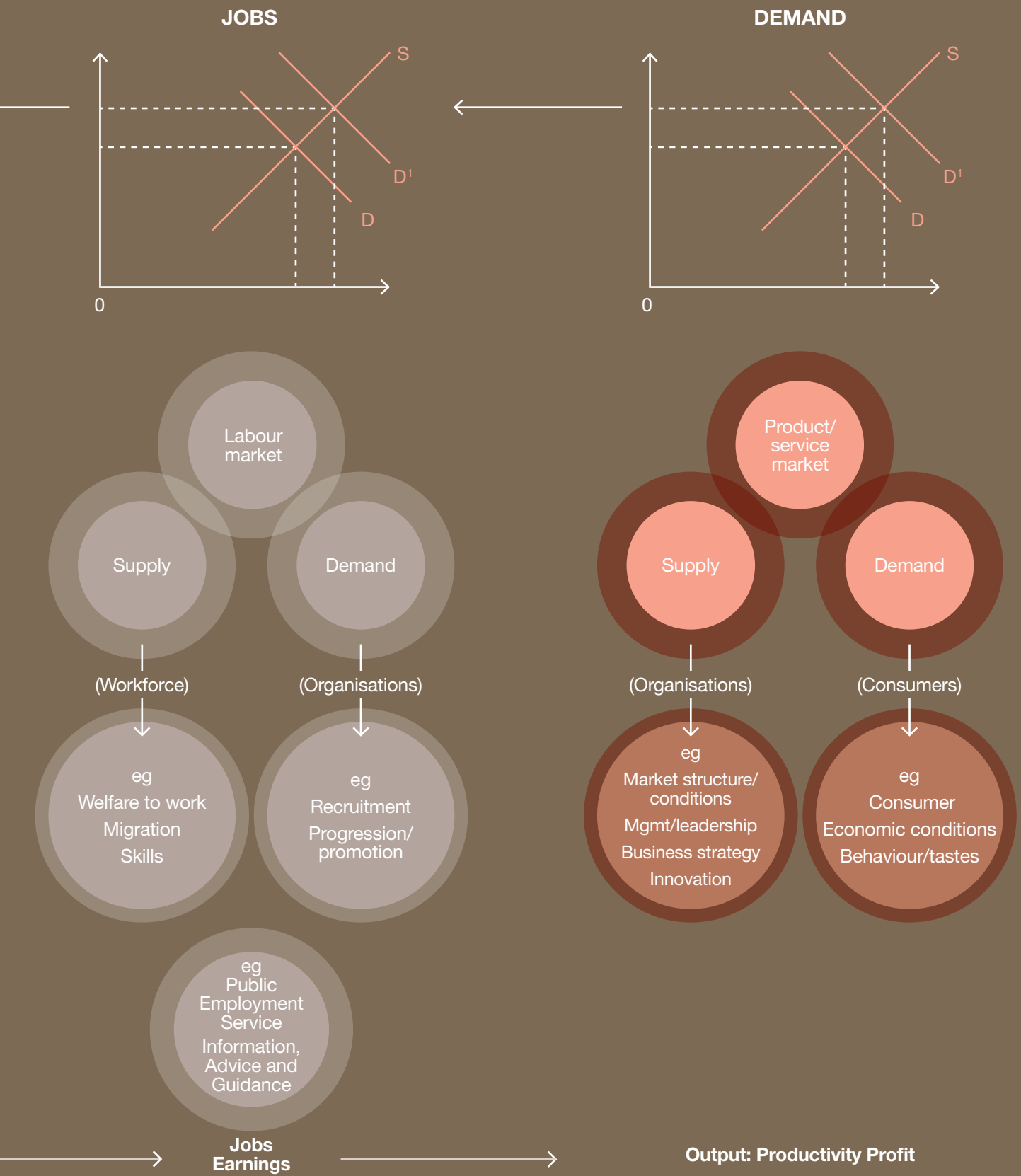

KEY
Economic performance
Skills demand
Skills supply
Jobs and skills mismatch
Productivity
Required workforce
Employers' business strategy
Economy: – Level of activity – Structure
Skills utilisation
Management & leadership
Industrial policy
Other drivers
Economic policy
DEMAND

We can view each of the last three components as connecting, interdependent markets, where people acquire skills in the 'learning' market; offer to work, are hired and earn their living in the 'labour' market, and work for organisations making goods/providing services in the 'product/service' market (Chart 9.2). Ultimately, it is conditions in the product market that drives the labour market and it's conditions in the labour market that drive the learning market. Whilst there can be 'induced' effects of developments in the learning and labour markets (and indeed of supply side adjustment takes place to effectively meet the changes in demand that are required.

There may also be 'market' failures **within** any one of these markets (on the supply or demand sides) or **between** any of the markets. Policies to correct such failures could therefore operate in, or between, the relevant market(s) and on either the supply or demand sides. Clearly, the correct diagnosis and specification of the problem is crucial to effective policy action.

Chart 9.2: The markets for skills and jobs




JOBS
S
D1
D
0
DEMAND
S
D1
D
0
Labour market
Supply
Demand
(Workforce)
(Organisations)
eg
Welfare to work
Migration
Skills
eg
Recruitment
Progression/ promotion
eg
Public Employment Service
Information, Advice and Guidance
Product/ service market
Supply
Demand
(Organisations)
(Consumers)
eg
Market structure/ conditions
Mgmt/leadership
Business strategy
Innovation
eg
Consumer
Economic conditions
Behaviour/tastes
Jobs
Earnings
Output: Productivity Profit

This policy development framework has a number of implications for closing the 'policy' and 'measurement' gaps:

- It points to the need to ensure that employment and skills policy is informed by, and connects to, the full range of **component parts** of the system.
- It points to the need for a **balanced approach** to employment and skills policies, ranging across all component(s) of the framework which exhibit, through **empirical evidence**, problems/ deficiencies.
- It points to the need to connect **supply side and demand side policies** within and, perhaps especially, between the components of the framework, ensuring that information, signals and incentives are effectively transmitted between them so as to minimise 'mismatches' and maximise the benefits that accrue to individuals and employers of skills acquisition and work.
- It points to the need to clearly distinguish between **different interpretations of 'demand' and a 'demand-led' approach:** the demand for skills, meaning the demand from **individuals** to acquire skills; the demand for skills meaning the demand by **employers** to recruit people with those skills; and the demand for skills, meaning how employer demand for skills is shaped by **the final demand for goods/ services** and the business strategies adopted by employers in meeting them.
- It points to the **dynamic** nature of skills and employment, their dependence on, and contribution to, productivity and economic performance; the crucial **interdependencies** between the different components and the need to ensure **integration** across the system.
- It provides a **mirror** to reflect on the range, balance, and relationship between different policies, so as to encourage more effective **alignment** between them.

Overall, based on the assessment in this report, **we believe that the balance of future policy development could usefully be redirected towards the demand side, both overall and within each component**.
In particular, we should seek to raise employer ambition and stimulate the demand for a more highly skilled workforce: through making the business case for skills; through building effective skill utilisation; through action in the field of management and leadership; and through seeking to build a post recovery economy which moves further up the value chain and which values, above all, the importance of a highly skilled workforce.

Moreover, **it would be valuable to position skills provision and development more proactively in relation to the needs of the economy**, in both recession and recovery, **by seeking to identify the 'jobs of the future' and the 'strategic skill needs' associated with them**, to better inform people, agencies and providers of the potential opportunities that may lie ahead. This would also position skills providers as central to the economic development agenda.

The World Class skills and employment ambition to 2020 is very stretching indeed. It cannot be delivered solely, or even primarily, through public intervention. **Success will depend fundamentally on employers and individuals 'raising their game'** and demanding and requiring higher skill levels, but public interventions have a key role to play, not least by acting as enablers in the system; influencing the attitudes and behaviour of the key players (employers, individuals and providers); enhancing understanding and aspirations; overcoming barriers; challenging inequalities and improving the functioning of the labour market.

9.4 THE IMPLICATIONS FOR ACTION

In this context, what are the key considerations that need to inform the shape and direction of future policy deliberations? The UK Commission is already undertaking extensive work on a range of priority issues: Simplification; the Integration of Employment and Skills; Skills Utilisation; Collective

Measures and Employee Demand, which we believe will aid the development of both policy and delivery. The UK Commission is also publishing its Five Year Strategic Plan 2009–14 in parallel with, and informed by, this report as well as by stakeholder consultation and the views of Commissioners. **The foundations for success, we believe, lie in five key priorities** which will underpin our work and which, we believe, should be the focus of joined up Government policy and between the four nations of the UK (see Chart 9.3).

- **To create a clear and integrated strategy for economic transformation and renewal,** capable of sustaining the UK through periods of recession, recovery and growth, and that aligns policies and practices in industrial strategy, employment and skills in order to achieve that transformation.

  The UK faces the complex challenges of raising productivity, employment and skills to unprecedented levels, whilst simultaneously narrowing the gaps between individuals and between the nations and regions of the UK. This requires much stronger alignment of national industrial skills and economic development policies, clear ownership and responsibility for the development of jobs and employment, and more effective integration of national policy with regional/local strategies and action.

- **To support effective economic development in cities and local communities,** built upon industrial and labour market strengths and opportunities, and maximising the skills of the local working age population.

  The need to close the gaps in economic performance and employment between the nations, regions and sub-regions of the UK, to customise employment and skills services to employer business need, to personalise service to individuals or groups of people, is increasing the demand to decentralise decisions and action, particularly through effective partnerships.

- **To develop more agile and responsive skills and employment provision,** capable of anticipating and meeting employers' evolving skills and job requirements.

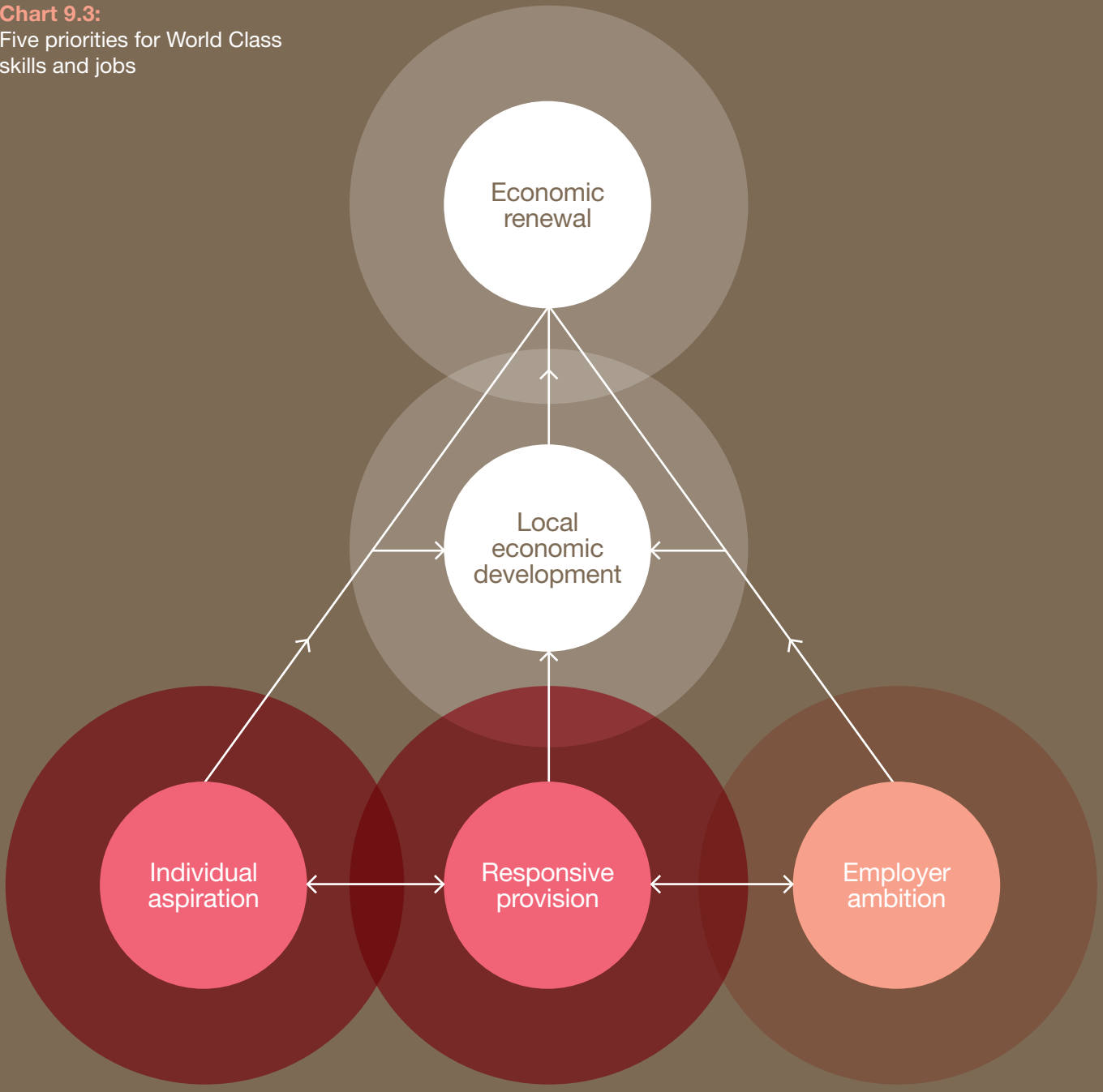
  Our colleges, universities and training providers need to be of excellent quality. They are essential to ensuring that employers get the skills they need for enhanced productivity and competitiveness, and that individuals get the opportunity to exploit fully their talent and potential. This requires building a high performing, agile, relevant and responsive employment and skills system – a system that meets today's needs and anticipates, and adapts quickly and effectively to, the challenges and opportunities of tomorrow.

- **To transform individual aspiration and skills into a World Class workforce,** maximising the motivation and opportunity for all people to develop and exploit their talents and skills for personal and professional success.

  Too many of today's working age population are ill-equipped with the knowledge and skills critical for success in tomorrow's jobs. The twin demographic challenges of a declining youth cohort and an ageing workforce require the UK to tap the talent of all adults in order to maximise both economic competitiveness and people's quality of life.

- **To build employer ambition and capacity to be World Class,** capable of competing globally in the high skills, knowledge driven economy, and optimising the talent and skills of their people. To recover from recession and thrive in the new global economy, employers must become more productive and effective in their field. Businesses will need to build their future on innovation, quality, high value added and efficiency. Public and voluntary employers will have to do far more with far less in the next decade when public expenditure will be under unprecedented pressure. The commitment, creativity, productivity and skills of their people will be crucial to success.

Chart 9.3:
Five priorities for World Class skills and jobs



The UK Commission's own contribution to these priorities, which focuses on the last three of these, can be found in our 2009–14 Strategic Plan, published alongside this document. Details of the projects and activities in our workplan for 2009–10 are provided in our 2009–10 Business Plan available from www.ukces.org.uk.

9.5 CONCLUSION

This chapter has set out an agenda for change.

The skills and employment landscape needs simplifying but it also needs a framework within which to operate; it needs a greater focus on skills development more generally not only through qualifications, important though they are; it needs more emphasis on the 'demand' side of policy; it requires a greater emphasis on jobs and skill mismatches; it would benefit from greater integration/connection between policies; and more appropriate measures of success would be valuable.

We also believe there should be five key priorities for action in the years ahead, in both recession and recovery:

- **A clear, integrated strategy for economic transformation and renewal.**
- **Support for effective local economic development.**
- **Develop a more responsive skills and employment provision.**
- **Build employer ambition and the capacity to be World Class.**
- **Transform individual aspiration and opportunity into a World Class workforce.**

We believe this agenda, if pursued with vigour and in a sustained manner, will provide an effective route to World Class skills and jobs for the UK in the years ahead.

Annex 1: Qualification Equivalents

Summary level	OECD equivalents	UK equivalents	Typical qualifications
Low	Below upper secondary	**No qualifications**	
		Level 1	GCSEs, O-Levels or equivalent at grades D-G; National Vocational Qualification (NVQ) Level 1; Business Training and Education Council (BTEC) first or general certificate; General National Vocational Qualification (GNVQ) foundation level; Royal Society of Arts (RSA); and SCOTVEC modules
Medium	Upper secondary	Level 2	Five or more GCSEs, O-Levels or equivalent at grades A-C; NVQ Level 2; BTEC first or general diploma; GNVQ intermediate level; City and Guilds Craft; RSA diploma; and BTEC, SCOTVEC first or general diploma
		Level 3	Two or more A-Levels or equivalent; NVQ Level 3; BTEC National; Ordinary National Diploma (OND); Ordinary National Certificate (ONC); City and Guilds Advanced Craft; and 3 or more Scottish highers
High	Tertiary	Level 4	First or other degree; NVQ Level 4; Higher National Diploma (HND); Higher National Certificate (HNC); and higher education diploma; nursing; teaching (including further education, secondary, primary and others)
		Level 5	Higher degree; Doctor of Philosophy (Ph.D.); and NVQ Level 5

Annex 2: Membership of International Fora and Organisations

Membership of G8, OECD and EU

Three organisations		Two organisations		One organisation only		
OECD, G8 and EU	**OECD and G8 only**	**OECD and EU only**	**G8 and EU only**	**OECD only**	**EU only**	**G8 only**
France	Canada	Austria		Iceland	Bulgaria	Russia
Germany	Japan	Belgium		Mexico	Cyprus	
Italy	USA	Czech Republic		New Zealand	Estonia	
United Kingdom		Denmark		Norway	Latvia	
		Finland		South Korea	Lithuania	
		Greece		Switzerland	Malta	
		Hungary		Turkey	Romania	
		Ireland			Slovenia	
		Luxembourg				
		Netherlands				
		Poland				
		Portugal				
		Slovak Republic				
		Spain				
		Sweden				

Membership of G20, OECD and EU

Three organisations		Two organisations		One organisation only		
OECD, G20 and EU	**OECD and G20 only**	**OECD and EU only**	**G20 and EU only**	**OECD only**	**EU only**	**G20 only**
France	Australia	Austria	European Union	Iceland	Bulgaria	Argentina
Germany	Canada	Belgium		New Zealand	Cyprus	Brazil
Italy	Japan	Czech Republic		Norway	Estonia	China
United Kingdom	Mexico	Denmark		Switzerland	Latvia	India
	Russia	Finland			Lithuania	Indonesia
	South Korea	Greece			Malta	Saudi Arabia
	Turkey	Hungary			Romania	South Africa
	USA	Ireland			Slovenia	
		Luxembourg				
		Netherlands				
		Poland				
		Portugal				
		Slovak Republic				
		Spain				
		Sweden				

Glossary of Terms

BERR	**Department for Business, Enterprise and Regulatory Reform**
DIUS	**Department for Innovation, Universities and Skills**
DWP	**Department for Work and Pensions**
Economic inactivity	The state of not actively seeking work.
Employment rate	The number of people in employment expressed as a percentage of the relevant population. For example, the working age employment rate is the number of people in employment aged 16–59/64 as a percentage of the population aged 16–59/64).[139]
EU	**European Union** The EU currently has 27 member states.
GDP	**Gross Domestic Product** A measure of the value of total economic activity. Gross Domestic Product can be measured in three ways: • as the sum of all the Value Added by all activities that produce goods and services (output); • as the total of incomes earned from the production of goods and services (income); or • as the total of all expenditures made either in consuming finished goods and services or adding to wealth, less the cost of imports (expenditure).[139]
Gini coefficient	A summary measure of inequality in the distribution of income. The lower its value, the more equally income is distributed. The Gini coefficient is a measure of the way in which different groups of individuals/households receive differing shares of total income.[140]
GVA	**Gross Value Added** Gross Value Added is the difference between the value of the output produced by a sector or region and its intermediate consumption. Intermediate consumption is the cost of raw materials and other inputs that are used up in the production process.[139]

139 *ONS, Glossary of Terms, 2008*

140 *ONS, Measuring Inequality of Household Income: The Gini Coefficient, 2009.*

HMT	**Her Majesty's Treasury**
MAC	**Migration Advisory Committee**
OECD	**Organisation for Economic Co-operation and Development** The OECD currently has 30 members.
PSA targets	**Public Service Agreement targets** A Public Service Agreement sets out what a department will deliver in the form of measurable targets over the public expenditure review period, in return for its agreed spending.[141]
SSC	**Sector Skills Council**
SMEs	**Small and Medium Sized Enterprises** Typically defined as those employing less than 250 people.
Quartile	The separation into four equal parts ie a quarter.
Unemployment	The state of actively seeking work, but being unable to find it. There are two commonly used measures: • the claimant count, which is an administrative count of those who are unemployed and eligible to claim benefits. Data for this measure is not internationally comparable; and • the ILO definition, which uses as a definition any individual who is actively seeking work, regardless of the benefit status. This is the commonly used international definition used by the International Labour Office. The ILO count is nearly always higher than the claimant count.
WAG	**Welsh Assembly Government**
WAP	**Working Age Population/Population of Working Age** The part of a country's population that is eligible to work. In the UK, this refers to females aged 16–59 or males aged 16–64.[139]

141 *DWP, Departmental Report: Glossary of Terms, 2005.*

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Notes

The UK Commission aims to raise UK prosperity and opportunity by improving employment and skills. Our ambition is to benefit employers, individuals and government by advising how improved employment and skills systems can help the UK become a world-class leader in productivity, in employment and in having a fair and inclusive society: all this in the context of a fast-changing global economy.

Because employers, whether in private business or the public sector, have prime responsibility for the achievement of greater productivity, the UK Commission will strengthen the employer voice and provide greater employer influence over the employment and skills systems.

Having developed a view of what's needed, the UK Commission will provide independent advice to the highest levels in government to help achieve those improvements through strategic policy development, evidence-based analysis and the exchange of good practice.

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