The 2010 Report

# Ambition 2020: World Class Skills and Jobs for the UK



The 2010 Report

# Ambition 2020: World Class Skills and Jobs for the UK

#### **ACKNOWLEDGEMENTS**

The authors of this report were Mark Spilsbury, Chief Economist, Lesley Giles, Deputy Director of Research and Policy and Mike Campbell, Director of Research and Policy.

A number of individuals made additional very important contributions to the work and we would especially like to acknowledge those of:

- Genna Kik, Senior Research Manager at the UKCES and Professor Derek Bosworth, in particular on the modelling to assess the prospects of meeting our 2020 Ambition;
- Abigail Gibson, Senior Policy Analyst at the UKCES, in particular on the section on inequality;
- Catherine Hodgkinson of the Research and Policy team who prepared the bibliography and footnotes;
- Members of the Sponsorship Team who have provided valuable comments on the methodology for forecasting and made valuable comments on a near final draft of the report;
- CDS who worked with us to design and publish the final report.



### Foreword

The UK Commission for Employment and Skills was established to advise Government on the policies, strategies, and measures 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. We believe that 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. It also requires us to achieve this in a way that puts us amongst the best in the world.

Last year we published the first Ambition 2020 report in what we called 'tough times'. The recession was biting deep into businesses, jobs and communities, and economic conditions were extremely testing and difficult. Now, although we are emerging out of the recession, as then, our focus must be on the economy and exploring the means to securing economic renewal and growth. We must actively seek to transform and rebalance the economy and to create the conditions needed to ensure sustainable recovery over the long term. The challenge is indeed great, but then so is the prize. To edge into the top 8 countries in the world, we need to increase our employment rate by close to 1% point and our productivity levels by 13% points. Every 1% point increase in each is worth around £10 billion a year: in perpetuity.

Our Commissioners, who are all leaders from a wide variety of global, national and small and medium businesses, leading trade unionists, and key figures from education, training and the public and voluntary sectors, are passionately committed to this agenda. As the full effects of recent economic developments and the associated financial crisis, are more fully understood, this year the scale of the challenge arguably appears if anything more arduous, especially in the context of substantial constraints on public and private expenditure. In framing our assessment this year, therefore, setting out World Class Ambitions for the UK in the future, and putting forward proposals for action, we have had to be, even more than ever, particularly mindful of the need to find more innovative approaches to achieving more and better for less. Crucially, Commissioners have discussed the need to think completely differently about how public policy is deployed in pursuit of World Class Ambitions and the continued critical role of employer leadership in pursuing these goals. We are very clear that an Ambition to be world class in skills and employment requires transformational change and is not just a responsibility for UK Governments but one for employers, individuals, communities and Government, all of whom have a vital role to play. Commissioners are unswerving in their dedication to work with the four UK Governments to help ensure that the UK becomes a world leader in jobs and skills to deliver strong economic recovery and growth.

und ver bale

Sir Mike Rake Chairman, UK Commission for Employment and Skills

### **Contents**

SUMMARY	
SOMMAN	

SUMI	MARY	4
1	INTRODUCTION	10
<b>2</b> 2.1 2.2 2.3 2.4 2.5 2.6 2.7 2.8	PROSPERITY, JOBS AND SKILLS Introduction The UK position Routes to prosperity: jobs and productivity The geography of productivity The geography of employment Inequality The value of skills Conclusions	<b>12</b> 12 12 14 17 21 24 28 31
<b>3</b> 3.1 3.2 3.3 3.4 3.5 3.6 3.7	PROGRESS TOWARDS AMBITION 2020 Introduction The Ambition Restated The International Skills Ambition Progress: how are we doing? Forecasts of Attainment in 2020 Employment aspiration Conclusions	<b>32</b> 32 34 35 43 50 51
<b>4</b> 4.1 4.2 4.3 4.4 4.5 4.6	INVESTMENT IN SKILL DEVELOPMENT Introduction Overall levels of investment in training Employer investment in training Individual participation in learning The UK benchmarked against EU countries Conclusions	<b>52</b> 52 53 61 65 67
<b>5</b> 5.1 5.2 5.3 5.4 5.5 5.6	MISMATCHES BETWEEN JOBS AND SKILLS Introduction Skills shortages and skills gaps Underemployment Unemployment Migration Conclusions	68 68 69 75 77 82 83
6.1 6.2 6.3 6.4 6.5 6.6	RAISING EMPLOYER AMBITION Introduction The changing nature of the UK labour market Low skills equilibrium Skills utilisation and high performance working Management and leadership Conclusions	<b>84</b> 84 85 90 95 98 99
<b>7</b> 7.1 7.2 7.3 7.4 7.5	SKILLS AND EMPLOYMENT POLICY Introduction The Policy Challenge in pursuit of Ambition 2020 What needs to be done? The implications for action Future Considerations	<b>100</b> 100 100 104 106 114
GLOS	SSARY OF TERMS	115
BIBLI	IOGRAPHY	117

### Summary

#### **INTRODUCTION**

This report is our **second** annual assessment of how well we are doing and what we need to do to achieve our ambition to be World Class by 2020. It aims to provide a sound evidence base and an agenda on which future success can be built.

Last year we published the first Ambition 2020 report. This assessed the UK's progress towards our world class ambition of being one of the top 8 countries in the world for skills, jobs and productivity. We found that we were just short of being world class in terms of employment (where we were ranked 10th); and productivity (where we were ranked 11th). Regarding skills, despite significant progress in recent years, we were ranked 12th, 18th and 17th on high level, intermediate and low level skills respectively. Based on this analysis we concluded that by 2020 our relative position would barely have improved and whilst we would be closer to being world class on higher level skills, our position on intermediate and low level skills would actually deteriorate.

We concluded by developing a framework in which to understand the skills and employment agenda and which could be used to develop a coherent and comprehensive skills and employment policy which would make progress towards our 2020 world class ambitions more achievable. We again follow this framework, which leads us to discuss (i) the 'prosperity' agenda (how we are faring on economic performance, employment and productivity); (ii) current skills levels and progress and prospects for the future; (iii) other measures of skill development, in particular measures of training activity and participation in both individuals and employers; (iv) the extent of skills mismatch between the skills available and the skills required; (v) employer demand for skills; and (vi) the role of public policy in enhancing employment and skills.

#### **PROSPERITY, JOBS AND SKILLS**

The UK remains the 6th largest economy in the world and the 4th largest in the OECD (behind the USA, Japan and Germany). It also remains regionally concentrated with London and the South East accounting for a third of GDP.

The World Economic Forum Global Competitiveness Report ranks the UK as the 13th most competitive in the world (down one place from 2008/09, itself down three places from 2007/08).

Prosperity ultimately depends on (i) the number of people in work (itself a function of the **'employment rate'** and the number of people in the potential workforce); and (ii) the value that they produce when in work – the **'productivity rate'**. The most recent data show that the UK remains 10th in terms of the former and 11th in terms of the latter – just outside the top quartile of OECD countries and **unchanged** from the previous year.

Employment and productivity rates also vary considerably across the UK nations and regions with a strong correlation between the two, except in London where productivity levels are high but employment levels relatively low. Trends in **productivity growth** tend to exacerbate existing productivity differences with London and the South East outperforming other **regions**, though Scotland has, over time, narrowed its 'productivity gap' and Wales, West Midlands and Yorkshire and the Humber positions have deteriorated.

Recent trends in the **employment rate** across the UK nations and regions during the recession, show above average declines in the South West and Scotland, with the least declines in the East Midlands and London.

In terms of **inequality**, the UK position (24th least equal in the OECD) has not changed since last year but we highlight in the report the key findings of the 'Hills' report on economic inequality within the UK which draws attention to its significance, including in terms of jobs and skills.

#### **PROGRESS TOWARDS AMBITION 2020**

#### **Recent trends in qualification attainment**

Last year, we drew attention to the significant progress that had been made in recent years in raising the **skill levels of the UK workforce**. The numbers achieving high level qualifications increased over the decade by more than 3 million or 44% whilst, at the other end of the spectrum, the numbers without any qualifications declined by more than 1.5 million or 26%.

Since then, **these trends have continued** and, over the last two years (2007/09), for example, the proportion without qualifications of at least Level 2, has declined from 30% to 28% and the proportion qualified to at least Level 4, has increased from 30% to 32%.

It is important to recognise that **skill levels vary considerably by socio economic group and/or characteristic** e.g. by age, disability, ethnicity, employment status and occupation. In particular, we also show that geographical variations are substantial with skill levels in the South East, Scotland and London being particularly high and being relatively low in, for example, Yorkshire, the West Midlands and Northern Ireland.

#### The UK's changing international position

When it comes to estimating our **likely future progress** towards the 2020 ambition, our models project the UK's international ranking for low, intermediate and high level skills based on trends in the OECD countries' adults stock of skills from 1998–2007. These show that the UK is unlikely to improve its relative international position between now and 2020 and that:

- we estimate we will not reach our world class skills ambition in respect of low and intermediate level skills: indeed, we will remain in the bottom half of OECD countries at these levels;
- with regard to high level skills, we expect to almost achieve our world class skills ambition, and we expect to be ranked 11th by 2020<sup>7</sup>.

Table 1 below summaries the results.

#### Table 1

#### The UK's current and forecast international position

	Current Rank		
Skill Level	2007	Ambition	Expected rank 2020
Low Skills	19	Top 8	20
Intermediate Skills	21	Top 8	21
High Skills	12	Top 8	11

<sup>1</sup> These forecasts use LFS data which have not been adjusted to take account of the revised methodology for estimating the level of adult educational attainment in England

#### **PROJECTED DOMESTIC POSITION**

An important element of the 2020 Ambition is striving for 95% of UK adults to have both functional numeracy and literacy skills and, accordingly, our models also project the UK's position for the basic skills of numeracy and literacy. These projections indicate that 93% of UK adults will by functionally literate by 2020 and 89% will be functionally numerate. We will not, therefore, achieve these basic skills ambitions.

Our projections for those aged 19–64 indicate that (see table 2):

- the Level 4+ ambition will be slightly exceeded at 42% compared to the aspiration of 40%;
- there will be significant under-achievement of the Level 3 Ambition, with 19% qualified at this level compared with the aspiration of 28%;
- there will be slight under-attainment of the Level 2 Ambition, at 20% compared to the desired 22%; and
- there will be insufficient improvement in the lower levels of qualifications, with a forecast of 19% still with no or low levels of qualifications, compared to the 10% aimed for.

#### Investment in skill development

It is clear that the attainment of our ambitions will only be met if **responsibility for their attainment is to be shared between employers, individuals and Government**. In the current climate of tight public sector finances this is, perhaps, ever more important.

Research by NIACE suggests that expenditure on adult skills development accounted for some £55 billion in 2007/08, of which the public sector accounted for 47%, private sector employers 30%, individuals 17% and the remaining 7% being contributed by the voluntary and community sectors.

Examining patterns in employer participation in learning and training and allows us to see that:

the proportion of employers providing training continues to increase over time. In England, for example, from 64% in 2004 to 67% in 2007 and, despite the recession, 68% in 2009. In Scotland 65% of employers provide some form of training to their staff, as do 78% in Northern Ireland. The data from Wales is not quite comparable, but here we see that 58% of employers provide off-the-job training;

#### Table 2

#### The qualifications of the UK workforce 2008-2020: estimated numbers, 000s

		2008	А	2020 mbition	Pr Attai	ojected nments	Last Year	Ga	ıp
	%	n	%	n	%	n	%	%	n
Level 4+	31	11,179	40	15,717	42	16,399	41	2% points above ambition	682,000 above ambition
Level 3	20	7,082	28	11,002	19	7,599	17	9% points below ambition	3,403,000 below ambition
Level 2	20	7,201	22	8,644	20	7,723	19	2% points below ambition	921,000 below ambition
Below Level 2	17	6,130	6	2,358	14	5,428	16	8% points below ambition	3,070,000 below ambition
No qualifications	12	4,083	4	1,572	5	2,144	7	1% point below ambition	572,000 below ambition

Source: Labour Force Survey and UK Commission forecasting work

in terms of the volume of training, we look at this in terms of the number of days and the amount spent. In England, for example, over a year every worker on average receives
 4.7 days training. However, the proportion of the workforce who obtain employer training has declined between 2007–09: 70% (of those who provided training) do so for more than half their staff and nearly two fifths (38%) trained 90% or more of their workforce over the last year. These figures compare to 74% and 44% respectively in 2007

total annual employer expenditure on training in England (around £39 billion) in real terms, declined between 2007–09 by about 5%. It nonetheless equates to £1,700 per employee in the workforce (though this figure does include the labour costs of those trained).

So the training picture amongst employers is mixed: whilst the proportion of employers offering some training has held up during the recession, the proportion of trainees it is being offered to and the amount being spent has decreased. The recession has clearly impacted, perhaps leading to a focusing on training effort. And throughout all this we continue to see major variations in the level of spend by organisation size (the larger the employer, the more likely they are to provide training); and by sector (training is most prevalent in the public sector and least in manufacturing and agriculture).

### With regard to individual participation in training, the level of participation may be

**declining:** indeed some research indicates that across the workforce as a whole there has been a decline in average levels of job-related training and levels have now returned to 1993 levels. But whatever the level of training, the wide variations in training based on personal characteristics and (more importantly) previous qualification attainment level and occupation level remain.

Comparisons with other EU countries can be made with reference to 16 core indicators and, in particular, the 5 EU 2010 'benchmarks'. Using the former wider basket, the UK is one of the top 3 countries in respect of 3 of them i.e Lifelong Learning Participation, Investment in Education and Training and Higher Educational Attainment. Moreover, the UK is in the top performing countries on the basis of the average of the 5 '2010' benchmarks (and in the top 7 countries on 2 of them, i.e Lifelong Learning Participation and Maths/Science and Technology Graduates). It is positioned less well on: the proportion of early school leavers; the proportion of those completing upper secondary education; and on reading/literacy. On the 2020 EU benchmarks the UK performs better that the EU average on the majority of these indicators.

Such a relatively strong performance (compared to the OECD comparisons) not only reflects the specific measures used but also (i) that there are included in the EU comparisons countries which are not OECD members and who are not generally considered highly advanced economies appropriate for 'world class' comparisons; and (ii) there are 10 OECD members who are not EU countries yet many are highly advanced economies that are appropriate for 'world class' comparisons.

However, we still have concerns that the training being delivered is unevenly and unequally distributed. Low skilled individuals, those in lower status occupations and managers receive less training, together with employees in small firms and those in a number of important sectors in the economy. There are also questions about the duration of training and whether this is of sufficient quality. In the context, therefore, of achieving the 2020 World Class Skills Ambition, this raises questions about the current adequacy of training and skills investment and what more can or should be done to ensure that individuals and business make a long term commitment to continually invest in skills.

# MIS-MATCHES BETWEEN JOBS AND SKILLS

The issue of mis-match – the extent to which the people and their skills are matched (or not) to the jobs that employers need – is vital to our understanding of the efficient operation of the labour market. Mis-matches can be at 'either end' of a scale – at the one end with employers not being able to recruit to jobs that they need filling (skill shortage vacancies) or that the workforce that they have is not completely skilled (skill gaps), to the other end, where people cannot find jobs or the jobs that they are doing leaves them under-employed.

Overall, skills shortages are relatively small, affecting only a minority of employers. Whilst this in part reflects the recessionary conditions, skill shortages were also relatively low at the peak of the boom. Current skill gaps are more common and impact on about one in five employers.

Increasing the number of higher skilled people only 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.

#### **RAISING EMPLOYER AMBITION**

We have reviewed the evidence concerning employer demand for skills. This suggest that over time the intensity of skills has been gradually growing and it is expected to continue to grow in the future.

It seems clear that there is a significant positive relationship between product market strategy and the skill levels of the workforce in the UK, with the higher the product market strategy the higher the average skill level required from the workforce. Product market strategies drive skill use, and it therefore follows that to increase skills used in the workplace, there is a need to drive companies up the product market value chain.

If the skills that are being embedded in the workforce are not to be wasted, it is important that they are effectively used in the workplace. High Performance Working (HPW) offers an important potential vehicle for inspiring organisations to act to enhance their competitiveness and performance. At the moment, take-up of high performance practices is low and there are questions about the level of skills demand compared to other countries.

Both development of high value-added product market strategies and skills utilisation will be affected crucially by the ability of our management and leaders. There remains a concern that management levels and deployment is relatively poor compared to our main competitors and this must therefore remain a key priority for action.

#### SKILLS AND EMPLOYMENT POLICY

After a significant period of economic growth, the UK is emerging from the financial crisis and the deepest international downturn for 80 years. In this context the imperative is to focus on the means to transform and re-balance the economy to secure economic recovery, renewal and growth, as well as managing increasingly scarce public resources more efficiently and effectively to secure greater benefits.

We believe that there are three underlying issues to be addressed:

- individual aspiration despite our progress in skills attainment, too few adults still possess the skills needed to succeed in tomorrow's labour market or the motivation, confidence and opportunity to gain them. We need to upskill our older workers who are already in the labour market, which raises issues about future modes of provision. Over 80% of our 2020 workforce is now already in work. We must fix the 'stock' of adult skills as well as the 'flow' of young people into the labour market.
- employer demand whilst our leading employers are amongst the best in the world, there are questions about the balance of our economy as a whole. Relative to other industrialised nations, we have too few businesses in high skill, high value added industries, too few high performance workplaces are creating too few high skilled jobs. Compared to our ambition, we simply don't have sufficient employer demand for skills. We need more and better jobs which can only come from more and better businesses.
- responsive provision We have important strengths in our skills and employment systems in the UK but, there are significant improvements needed too. In particular, providers need to be responsive to ongoing developments in the labour market so that provision and learners skill acquisition is well aligned to labour market needs and varying consumers' (employers and learners)

demands. This raises questions about the forces driving the system, whether it is too complex and sufficiently empowers customers, the pattern of future demand, its performance and scope for quality improvement.

The implications for action which stem from these issues are that we need to:

- support businesses to create more jobs and more high skilled jobs, combining higher levels of employment with higher levels of productivity. Achieving the World Class Ambitions depends on developing a competitive, high value added and high quality business environment and economy. To secure this, businesses must have the **ambition** to be a force to be reckoned with in the traditional industries of today and the emerging industries of tomorrow. This calls for world class **business leadership** to enable the UK to compete with the best in the world;
- invest in the right skills: there is a need to ensure that skills acquired bring real, sustainable benefits to the individuals concerned. This means focusing on those that are most in demand and generate the most value to the individual, employers, the economy and society;
- use information and incentives on the levers for raising investment in skills. Whilst we do not think that we can rely on detailed, centrally driven planning of skills investment, there is an important role for government to provide high quality information reinforced (if necessary) by targeted incentives to give market signals;
- achieve more and better for less by empowering customers, focusing on outcomes and placing greater trust in providers in the delivery of skills and job services.

The UK Commission will shortly provide evidence around policy incentives for individuals and employers through its 'More for Less' project. This will provide our advice about where scarce resources should be prioritised to add the greatest value and, in particular to leverage the greatest investment from individuals and employers.



This 'Ambition 2020' Report is the UK Commission for Employment and Skills' second annual assessment of the progress towards making the UK a world leader in employment and skills by 2020. We believe this means being one of the best eight countries in the world. This will be our benchmark. We need this goal because in this rapidly developing world, there are increasing competitive pressures internationally, due to the effects of globalisation, ongoing technological developments, and changes in consumer demand. This sets enormous challenges and opportunities to which we must respond if we are to secure future economic success. We monitor progress on our World Class Skills and Jobs Ambition against our international competitors in the context of the aims and priorities for the four nations of England, Scotland, Wales and Northern Ireland. This provides the sound evidence base for advice on strategies, policies and measures needed to increase skills, employment and productivity.

Whilst our focus is on the long-term challenge and opportunities, we have prepared this report against the background of continuing economic difficulties and, in particular, substantial and growing constraints on public and private expenditure. This has provided an important lens through which to focus our assessment this year and to consider the policy implications.

The near term prospects for many individuals and businesses remain troubled. But 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. We also need to create a shared responsibility for such investment from employers, individuals, and communities, as well as government.

Given the wider economic context, however, the challenge this presents for our skills and employment system are even more formidable. It calls, urgently, for a real step change in our thinking about how to deploy public policy most effectively in pursuit of these Ambitions. We must of course prioritise scarce public resources to areas where they add greatest value, but we must also work to eliminate waste, secure greater efficiencies and find more innovative approaches for achieving more with less. Most crucially, too we need innovative policies and strategies that will leverage greater investment from individuals and employers themselves.

Last year we published the first Ambition 2020 report. We found that among OECD countries we were:

- just short of being world class in terms of employment, where we were ranked 10th;
- just short of being world class in terms of productivity, where we were ranked 11th; and
- despite significant progress in recent years, we were ranked 12th, 18th and 17th on high level, intermediate and low level skills respectively.

We also found that, if recent trends in the UK and our overseas competitors continue, our relative skills position would barely improve by 2020 – the UK would rank 10th, 21st and 23rd respectively. We would be closer to being world class on higher level skills but, our position on intermediate and low level skills would actually deteriorate. We also forecast that, by 2020, we **would** achieve our basic literacy objective of 95% but that we would **not** achieve our basic numeracy objective of 95%<sup>2</sup>.

This report is our **second** annual assessment of how well we are doing and what we need to do to achieve this important Ambition by 2020. It should be noted that annual changes, relative to the scale of historical change and prospects for the next 10 years are likely to be relatively limited and not all data sets and analyses are capable of annual monitoring. Nonetheless, we do examine the changes to see if they are moving in the 'right' direction. We also delve in a little more detail into some important areas where our work over the last year has enabled us to do so and reflect further on relevant policy developments.

The content, structure and broad narrative of the report is that:

we first set out the 'prosperity' agenda: economic performance, the high level outcomes which we seek to influence primarily: productivity, jobs and income equality and how we compare on these measures of

**<sup>2</sup>** The basic skills ambition is for 95% of the working age population to be numerate and literate.



success against other leading countries, before considering both the effect of recessionary conditions and the contribution of skills to improving economic performance;

- next, we examine the level of skills that we believe are needed by the economy, as encapsulated in the Ambition for the UK to achieve World Class skills and jobs by 2020 and articulated in the measures of success being deployed by different nations across the UK. To do this we, therefore, examine the UK's progress towards attaining this Ambition;
- we then consider other measures of skills development, in particular measures of training activity and participation in training of both employers and individuals;
- it is not enough, however, only to seek to secure higher skill levels in the workforce. It is also important to ensure that they align with the skills the economy needs so we provide 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 depend ultimately on the 'shape' of the economy and business strategy; how they can actually be used in the workplace;

and the role of management and leadership in shaping the skills and economic performance agenda. This relationship between skills supply and the 'demand' side is essential so that the development of skills connects to the evolution of skill requirements; and

we conclude by examining the **role of public** policy in enhancing employment and skills. We build on the framework we developed last year, using a range of work conducted within the UK Commission, to present four new broad principles for action. These are used to set out our recommendations. Their intention is to secure the necessary step change in our thinking and approach to achieve economic growth through World Class skills and jobs. More specifically, this will involve: supporting businesses to create more jobs and more highly skilled people; investing in the right skills; using information and incentives as levers for change; and achieving more for less if we empower customers and place greater trust on providers.

This logic to the report reflects the framework we developed in and for the 2009 Ambition 2020 and is outlined in Chart 1.1. 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.

# 2

### Prosperity, jobs and skills

#### 2.1 INTRODUCTION

Productivity and jobs are vital to prosperity. This chapter outlines the UK's international economic position, before turning to an assessment of the co-determinants of our prosperity – employment and productivity – and outlining the contribution of skills to achieving these. As the aim of achieving the World Class Ambitions is not solely to improve economic prosperity but also to achieve greater social inclusion we also discuss evidence on measures of inequality.

#### 2.2 THE UK POSITION

Last year we reported that the UK is the 6th largest economy in the world and the 4th largest in the OECD. In recent years it has enjoyed robust growth, averaging around 3% per annum, a performance which overall had exceeded that of the OECD and Euro Area.

The UK's relative position has remained unaltered in either the OECD or world rankings: we remain the 6th largest economy in the world and the 4th largest in the OECD (see Table 2.1).

London and the South East together account for over a third of the UK's GDP. The impact of the recession has not altered the recent trends in growth across the UK. Unequal growth has served to further consolidate the position in Southern England, with a declining share in the North West, Scotland and West Midlands.

The Global Competitiveness Report, produced by the World Economic Forum<sup>3</sup> ranks the UK economy as the 13th most competitive in the world, a fall of one place from the previous year (which in turn was a fall of three places from the year previous). The countries that constitute the top 10 remain the same, with some change in rank between them.

#### Table 2.1:

Gross Domestic Product, 2007

OECD Countries	GDP (\$US)	OECD ranking	World ranking
Australia	794.6	11	16
Austria	308.7	17	23
Belaium	375.8	14	20
Canada	269.6	19	25
Czech Republic	248.0	21	27
Denmark	196.3	23	29
Finland	183.6	26	32
France	2,078.0	5	8
Germany	2,829.1	3	5
Greece	318.1	16	22
Hungary	188.6	25	31
Iceland	11.1	30	36
Ireland	196.2	24	30
Italy	1,802.2	6	10
Japan	4,295.9	2	3
Korea	1,201.8	9	13
Luxembourg	38.3	29	35
Mexico	1,479.9	7	11
Netherlands	642.4	12	17
New Zealand	114.8	27	33
Norway	251.7	20	26
Poland	609.4	13	18
Portugal	242.0	22	28
Slovak Republic	108.4	28	34
Spain	1,417.4	8	12
Sweden	334.8	15	21
Switzerland	308.6	18	24
Turkey	960.3	10	14
United Kingdom	2,168.1	4	6
United States	13,741.6	1	1
Selected others			
Drozil	1 000 6		0

Brazil	1,833.6	9
China	7,055.1	2
India	3,092.1	4
Indonesia	841.1	15
Russian Federation	2,088.2	7
South Africa	463.3	19

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

Note: GDP expressed in current prices and PPPs

**<sup>3</sup>** This ranks countries according to a range of measures and on the basis of a 'global competitiveness' index. 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.

Regarding the UK's performance the WEF notes that the UK country benefits from some clear strengths such as (i) the efficiency of its labour market; (ii) its ability to harness latest technologies for productivity improvements; and (iii) the possession of some sophisticated and innovative businesses, which are important for spurring productivity enhancements. The drop in rank is largely attributable to a weakening of the assessment of the financial market, based on rising concerns in the business sector about the soundness of banks on the back of several banking-sector bankruptcies and bailouts. In this context it is not surprising that a significant and growing weakness remains the United Kingdom's macroeconomic instability, with low national savings, an exploding public-sector deficit (related in large part to recent efforts to bail out the financial sector), and consequential public indebtedness. Regarding the specific education factors, the UK is ranked 15th overall.

Another ranking of international competitiveness, the IMD World Competitiveness Yearbook<sup>4</sup>, in 2010 ranks the UK 22nd in the world, which marks a fall from being 21st in 2009 and after being ranked 20th for the four years prior to that.

#### **Table 2.2:**

WEF global competitiveness index rankings

Country/ economy	Rank 2009–10	Rank 2008–09	Rank 2007–08
Switzerland	1	2	2
United States	2	1	1
Singapore	3	5	7
Sweden	4	4	4
Denmark	5	3	3
Finland	6	6	6
Germany	7	7	5
Japan	8	9	6
Canada	9	10	13
Netherlands	10	8	10
United Kingdom	13	12	9

Source: Schwab, K., The Global Competitiveness Report 2009–2010

<sup>4</sup> IMD World Competitiveness Yearbook, 2010, IMD.

# 2.3 ROUTES TO PROSPERITY: JOBS AND PRODUCTIVITY

As we reported last year, 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 is summarised here:

the UK ranks 10th out of the 30 OECD countries with an (internationally comparable) employment rate of 72.7%. The best performing countries tend to be the Nordic economies: Iceland (1st), Denmark (3rd), Norway (4th), and Sweden (6th). 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. This puts us outside the top quartile of OECD performance.

See Table 2.3.

There is an overall positive relationship between employment and productivity (see Chart 2.1). 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.



Source: OECD Employment Outlook 2009 (http://dx.doi.org/10.1787/708072701475), and OECD Productivity Database, version of December 2009 (www.oecd.org/statistics/productivity)

#### Chart 2.1:

Productivity and employment in OECD countries

# Table 2.3:Relative rankings of productivity and employment rates

	Productivity		Employment	
	GDP per hour worked at current prices in US dollars, 2008 (OECD = 100)	Ranking	Employment/ population ratio, all persons 15–64, 2008	Ranking
Australia	106.5	13	73.2	9
Austria	109.1	10	72.1	11
Belgium	129.2	6	62.0	25
Canada	103.3	16	73.7	8
Czech Republic	58.4	26	66.6	18
Denmark	104.3	15	78.4	3
Finland	105.7	14	71.9	12
France	127.3	7	64.6	20
Germany	120.8	8	70.2	15
Greece	76.8	21	62.2	24
Hungary	57.7	27	56.7	29
Iceland	88.0	20	84.2	1
Ireland	130.9	5	68.1	17
Italy	98.3	18	58.7	28
Japan	91.6	19	70.7	14
Korea	60.5	25	63.8	22
Luxembourg	185.6	1	64.4	21
Mexico	44.5	30	59.9	26
Netherlands	132.8	3	76.1	5
New Zealand	73.0	22	74.9	7
Norway	179.9	2	78.1	4
Poland	50.2	29	59.2	27
Portugal	65.8	24	68.2	16
Slovak Republic	72.2	23	62.3	23
Spain	101.7	17	65.3	19
Sweden	109.8	9	75.7	6
Switzerland	106.9	12	79.5	2
Turkey	56.9	28	44.9	30
United Kingdom	107.4	11	72.7	10
United States	132.3	4	70.9	13

Source: OECD Employment Outlook 2009 (http://dx.doi.org/10.1787/708072701475), and OECD Productivity Database, version of December 2009 (www.oecd.org/statistics/productivity)

#### **Table 2.4:**

#### Productivity and employment in the nations and regions of the UK

	GVA per hour worked (UK = 100)%	Ranking	Employment rate (Nov–Jan 2010)%	Ranking
London	132.7	1	68.6	10
South East	103.8	2	76.7	1
England	101.7	n/a	72.5	n/a
East of England	100.7	3	76.1	2
South West	94.0	5	75.3	3
East Midlands	92.5	6	74.1	4
Scotland	96.3	4	73.1	5
North East	90.1	7	68.5	11
West Midlands	89.6	8	70.3	7
North West	87.9	10	70.3	7
Yorkshire and the Humber	89.2	9	70.9	6
Wales	86.4	11	69.0	9
Northern Ireland	81.4	12	67.3	12

**Source:** Office for National Statistics, Productivity First Release, March 2010; Office for National Statistics, Labour Market Statistics First Release, April 2010. **Note:** Workplace basis

#### Chart 2.2:

Productivity and employment in the nations and regions of the UK



Source: Office for National Statistics, Productivity First Release, March 2010; Office for National Statistics, Labour Market Statistics First Release, April 2010

Employment and productivity levels also vary across the UK. 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, the close relation between productivity and employment 'performance' remains – i.e. high levels of productivity are associated with high levels of employment (see Table 2.4 and Chart 2.2).

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.

#### 2.4 THE GEOGRAPHY OF PRODUCTIVITY

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

Output growth has, however, been highly uneven across the UK. Compared to the UK average only London (particularly) and the South East perform better than the average. Looking at change over time, Scotland has narrowed the gap between itself and the UK average, Northern Ireland has remained broadly static whilst Wales' position has deteriorated. Within England, London has actually increased its position relative to the UK average (and therefore accentuated the gap with most other UK countries and regions) whilst the West Midlands and Yorkshire and the Humber have suffered from particularly weak performance. Such developments and variations need to be borne in mind in shaping future action (see Table 2.5).

#### **Table 2.5:**

GVA per head: indices

	2000	2002	2004	2006	2008
United Kingdom	100	100	100	100	100
North East	77.8	77.6	78.0	78.1	77.4
North West	88.0	87.5	86.4	85.5	85.6
Yorkshire and the Humber	87.2	86.9	86.0	84.1	83.3
East Midlands	89.7	89.7	89.7	88.7	87.9
West Midlands	90.5	89.1	87.3	85.8	85.1
East of England	93.8	93.7	95.0	95.5	94.9
London	160.4	161.0	163.6	166.6	169.5
South East	107.7	108.3	107.9	107.1	105.7
South West	91.9	92.2	92.4	91.9	91.5
England	102.6	102.7	102.7	102.6	102.4
Wales	77.1	76.7	75.5	74.8	74.3
Scotland	94.1	94.0	94.2	96.1	97.9
Northern Ireland	79.8	79.2	80.1	80.0	78.9

Source: ONS Statistical Bulletin, regional, sub-regional and local gross value-added, December 2009

Importantly though too, our analysis also reveals significant spatial variations. Indeed, within the 12 countries and regions of the UK, and sub-regionally as well this year, we highlight considerable differences in output levels. When examining this data it is important to note the distorting impact that Inner London has on the distribution. Thus, looking at NUTS 2 level<sup>5</sup>, Inner London has a GVA per head (relative to the UK average) of 286.6, compared to the second placed NUTS 2 area (Bedfordshire, Buckinghamshire and Oxfordshire) of 134.6. The gap between Inner London and Bedfordshire is greater than that between Bedfordshire and the lowest ranked NUTS 2 area of West Wales and the Valleys (63.2). As a result, only 8 NUTS 2 Areas are ranked above the UK average of 100, with 27 below the average.

High (and low) GVA are not located solely in specific regions. Of the top 10 NUTS 2 areas with the highest GVA, 3 are in the South East (Berkshire, Buckinghamshire and Oxfordshire, Hampshire and Isle of Wight, Surrey, East and West Sussex) 2 in Scotland (North Eastern Scotland and Eastern Scotland) and one each in London (Inner London), the South West (Gloucestershire, Wiltshire and North Somerset), the North West (Cheshire), the East of England (Bedfordshire and Hertfordshire) and the East Midlands (Leicestershire, Rutland and Northamptonshire). Of the 10 NUTS 2 areas with the lowest GVA 2 are in Yorkshire and the Humber (East Yorkshire and Northern Lincolnshire and South Yorkshire), 2 in the South West (Devon and Cornwall and Isles of Scilly), 2 in the North West (Merseyside and Cumbria) and one each in the West Midlands (Shropshire and Staffordshire), Scotland (Highlands and Islands), the North East (Tees Valley and Durham) and Wales (West Wales and The Valleys).

Looking at a further disaggregation of area, to NUTS 3 level (see map 1 overleaf), we see a similar pattern, although with greater variations. Again, there is a considerable distortion effect created by Inner London – in this case Inner London West. The gap between Inner London West as the highest ranking GVA area (relative to the UK average of 100) and the 2nd ranked (City of Edinburgh) is 507.1 compared to 163.9. This is again greater than the gap between the City of Edinburgh and the lowest ranked NUTS 3 area (Isle of Anglesey at 55.1). Again, this has a distorting effect on the distribution – with 36 NUTS 3 areas ranked above the UK average of 100 and 96 below.

Again, we also see that the top 10 ranked GVA areas are not solely confined to one country or region of the UK: two are in London (Inner London - West and Inner London - East), 2 in Scotland (City of Edinburgh and Glasgow City), 2 in the South East (Berkshire and Milton Keynes) two in the South West (Swindon and City of Bristol) with one in Northern Ireland (Belfast) and one in the East of England (Peterborough). However, when we look at this disaggregated data for the bottom 10 we do see a clustering. Five of the 10 are in Wales (South West Wales, Conwy and Denbeighshire, Central Valleys, Gwent Valleys and the Isle of Anglesey) two in the North West (Sefton and the Wirral), with one each in Northern Ireland (North of Northern Ireland), Scotland (East and West Dunbartonshire, Helensburgh and Lomond) and the North East (Durham).

There are a number of other points to be made:

- in some cases the 'arbitrary' nature of some regional boundaries disguises parts of the economic reality. The London case is particularly instructive: for example, Bedfordshire and Hertfordshire, whilst lying outside London, clearly has strong economic ties with London. Similarly Swindon, which is officially in the South West.
- there is a clear 'big city' impact, with those areas with highest GVA being close to urban centres: London in England, Glasgow and Edinburgh in Scotland, Belfast in Northern Ireland. Conversely, many of the areas with lowest GVA are the most remote: Devon and Cornwall, Isle of Anglesey, the Highlands and Islands.
- it is sometimes difficult to disentangle the impacts of commuting into the big urban centres. GVA is a workplace-based measure and as such it is based on those geographies where the workplace is based. Where there is net commuting into a city, this will raise the GVA of the city and simultaneously lower that in the areas from which people commute. Perhaps this can be seen most clearly in the case of Northern Ireland, where Belfast has a GVA more than twice of its outlying areas.

<sup>5</sup> For a full definition of NUTS see Glossary on page 116

#### Map 1: GVA per head by region, area and local level



Source: ONS Statistical Bulletin, Regional, sub-regional and local gross value added, December 2009, Table 3.3

In addition to this analysis of productivity we also have the benefit of the UK Competitiveness Index<sup>6</sup> (UKCI) which aims to benchmark the relative economic competitiveness of the UK's regions and localities. This is an integrated measure of competitiveness focussing on both the development and sustainability of businesses and the economic welfare of individuals and as such is wider than measures of GDP or productivity. The key points to note from this on a regional basis are:

- for the first time since the inception of the UKCI, London is not ranked as the most competitive region as the South East has overtaken London;
- Wales is the least competitive area;
- there are only relatively minor changes in the rankings since 2008, with most regions moving (at best) only one place. However, the North West has shown most improvement moving from the 6th most competitive to the 4th;
- there has been a closing of the relative competitiveness gap between regions so that by 2010 London and the South East are no longer as far above the UK average as they were in 1997. Also, the bottom 4 regions have all seen their positions improve compared to the UK average over the period.

See Table 2.6.

#### Table 2.6:

Regional UK Competitiveness Index, 2010 (UK = 100)

	2010 rank	2008 rank	1997 rank
South East	1	2	2
London	2	1	1
East of England	3	3	3
North West	4	6	8
East Midlands	5	4	5
South West	6	5	7
West Midlands	7	7	6
Scotland	8	8	4
Northern Ireland Yorkshire and the	9	10	10
Humber	10	9	9
North East	11	12	12
Wales	12	11	11

Source: UK Competitiveness Index 2010, Centre for International Competitiveness, 2010

In addition to this regional analysis there is a 'cities competitiveness index', which is a ranking of large localities (populations of more than 100,000 people) designated as cities. The most striking element of this analysis is that the relative rankings of these cities remains remarkably constant. Whilst the top of the rankings is filled by smaller cities that represent the locations of fast growing knowledgeintensive and high-technology clusters in the UK, the performance of the larger cities in the UK remain of importance due to their prominent share of the UK economy (see Table 2.7).

<sup>6</sup> Huggins R and Thompson P, UK Competitiveness Index 2010, Centre for International Competitiveness, 2010.

#### Table 2.7:

Regional UK Competitiveness Index, 2010 (UK = 100)

	2010 rank	2008 rank
Тор 10		
Guildford	1	1
St Albans	2	2
Winchester	3	3
Aberdeen City	4	6
Cambridge	5	4
Edinburgh	6	5
Oxford	7	9
Bristol	8	7
Chichester	9	8
Brighton and Hove	10	10

#### Bottom 10

Carlisle	34	34
Liverpool	35	36
Plymouth	36	39
Bradford	37	38
Swansea	38	40
Wakefield	39	33
Wolverhampton	40	37
Sunderland	41	41
Stoke on Trent	42	42
Kingston upon Hull	43	43

**Source:** UK Competitiveness Index 2010, Centre for International Competitiveness, 2010

#### 2.5 THE GEOGRAPHY OF EMPLOYMENT

Raising the employment rate matters too. This is the case 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  $\pounds 8-11$  billion to GDP.

As indicated earlier, the latest figures show that the UK's employment rate (calculated on an internationally comparable basis) was 72.7% – 10th in the OECD rankings. This is some 6.2 percentage points above the OECD average. This 'OECD rank' has remained at the same level since we reported last year.

Looking within the UK, we can see that whilst all areas have experienced a decline in employment rates since 2008, the changes have varied. Indeed, the South West and Scotland have shown the biggest declines and the East Midlands and London the smallest (see Table 2.8).

This year we look in more depth and explore the sub-regional picture, to uncover the wide variation geographically in employment rates (initially at NUTS 2 level). For instance, employment rates vary from 65.6% in the West Midlands to a high of 81.6% in the Highlands and Islands. Looking at the NUTS 2 with the highest employment rates, we again see no particular geographical clustering to the areas with the highest rates: The South East has three in the top ten (Berkshire, Buckinghamshire and Oxfordshire; Surrey, East and West Sussex; and Hampshire and Isle of Wight), Scotland two (Highlands and Islands and North Eastern Scotland) the South West has two (Gloucestershire, Wiltshire and North Somerset and Dorset and Somerset), with one each from Yorkshire and Humberside (North Yorkshire) the West Midlands (Herefordshire, Worcestershire and Warwickshire) and the North West (Cumbria).

In terms of the lowest employment rates, there is some concentration: 3 of the 5 North West NUTS 2 areas are in the bottom ten (Greater Manchester, Lancashire and Merseyside) as are both of the North East's (Northumberland and Tyne and Wear and Tees Valley and Durham) and 2 of Yorkshire and the Humber's 4 areas (East Yorkshire and Northern Lincolnshire and South Yorkshire) with Wales (West Wales and The Valleys), London (Inner London) and the West Midlands. Looking at the more disaggregated NUTS 3 areas (see map 2 overleaf), the range is greater still from a high of 88% in the Shetland Islands to a low of 60.5% in Liverpool. Scotland has five NUTS 3 areas in the top ten with the highest employment rates (Shetland Islands, Orkney Islands, Inverness and Nairn and Moray, Badenoch and Strathspey and Aberdeen City, Aberdeenshire and North East Moray and the Scottish Borders), with the South East having two (Oxfordshire and West Sussex), and one each from the South West (North and North East Somerset, South Gloucestershire), the East of England (Suffolk) and the East Midlands (South and West Derbyshire). There is relatively little regional clustering in the bottom ten in terms of employment rates: with three from the North West (East Merseyside, Blackburn with Darwen and Liverpool); two from the East Midlands (Nottingham and Leicester) and one each from Scotland (Glasgow City), Wales (Gwent Valleys), the North East (South Teesside), Yorkshire and the Humber (City of Kingston upon Hull) and West Midlands (Birmingham).

#### **Table 2.8:**

#### Employment rate by region and nation, 2008 and change 2003–2009

	Nov–Jan 2008	Nov–Jan 2009	Nov–Jan 2010	Change 08–10
North East	71.1	69.9	68.5	-2.6
North West	72.9	71.8	70.3	-2.6
Yorkshire and the Humber	73.7	72.3	70.9	-2.8
East Midlands	75.6	76.0	74.1	-1.5
West Midlands	73.1	71.2	70.3	-2.8
East	78.5	78.1	76.1	-2.4
London	70.5	71.4	68.6	-1.9
South East	79.0	78.4	76.7	-2.3
South West	79.4	78.1	75.3	-4.1
England	75.0	74.3	72.5	-2.5
Wales	71.4	69.9	69.0	-2.4
Scotland	76.8	75.5	73.1	-3.7
Great Britain	75.0	74.2	72.3	-2.7
N Ireland	69.6	67.7	67.3	-2.3
United Kingdom	74.8	74.0	72.2	-2.6

Source: Labour Force Survey, Office for National Statistics, available from www.statistcs.gov.uk/elmr/04\_10/data\_page.asp

#### Map 2: Employment rate by region, area and local level



Source: ONS Statistical Bulletin, Regional, sub-regional and local gross value added, December 2009, Table 3.3

#### 2.6 INEQUALITY

It is important to reduce inequality, not only to ensure that increases in prosperity are distributed across different social groups, but there is also clear evidence that reduced inequality can, in itself, contribute to prosperity<sup>7</sup>.

There are a range of different measures of inequality which can be used. We start as we did last year, with one of the most common, the Gini coefficient<sup>8</sup>, and looking 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 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. 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<sup>9</sup>.

If we compare the incomes of different groups of individual earners, we gain an understanding of people's earnings from work and how these compare. For example, looking at 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 countries for which comparable data is available the UK is (in 2007) the 16th least equal in terms of the ratio of the top 10% of earners to the bottom 10% of earners out of the 22 OECD countries for which data is available.

The Scandinavian countries, Belgium, Switzerland, France and the Netherlands are amongst the most equal: the USA, Korea, Hungary and Poland the least equal. In addition,

- 7 Wilkinson R and Pickett K, The Spirit level: Why More Equal Societies Almost Always do Better, 2009.
- 8 This is a summary measure of inequality based on income distributions. The lower its value, the more equally income is distributed. For more detail see ONS, Measuring Inequality of Household Income: The Gini Coefficient, 2009.
- 9 New Policy Institute, www.poverty.org.uk/09

this earnings dispersion, in the UK, has been increasing over time and the UK is slipping further down the international rankings (see Table 2.9).

#### **Table 2.9:**

#### Earnings dispersion, in OECD countries

	9th to 1st earnings deciles			
	199	97	200	7
	Level	Rank	Level	Rank
Australia	2.95	7	3.31	13
Austria	_	_	3.37	14
Belgium	2.39	4	2.43	3
Canada	3.53	15	3.75	17
Czech Republic	2.77	9	3.11	11
Denmark	2.44	6	2.69	6
Finland	2.38	3	2.55	4
France	3.06	13	2.91	7
Germany	2.87	11	3.26	12
Hungary	4.17	19	4.56	20
Ireland	3.93	18	3.78	18
Japan	3.01	12	3.06	10
Korea	3.72	17	4.74	21
Netherlands	2.82	10	2.91	8
New Zealand	2.72	8	2.94	9
Norway	1.95	1	2.11	1
Poland	3.54	16	4.21	19
Spain	4.22	20	3.53	15
Sweden	2.21	2	2.31	2
Switzerland	2.41	5	2.65	5
United Kingdom	3.42	14	3.59	16
United States	4.62	21	4.85	22
OECD 22	3.08		3.30	

Source: OECD, Employment Outlook 2009, 2009, p.274 Data available: http://dx.doi.org/10.1787/708213058432 During 2009/10 two major reports – the National Equality Panel<sup>10</sup> and most recently the UK Government's State of the Nation report<sup>11</sup> – have delivered a comprehensive overview of income and wider inequality in the UK. They offer a broader, multi-dimensional approach to defining and measuring poverty and inequality, drawing on a range of indicators such as: income; indebtedness; wealth; education; health; community; and housing tenure. Both analyses explore how employment and skills not only contribute to inequality but also act as a solution.

The evidence highlights that, in addition to the UK's relatively poor performance internationally (and historically) in terms of the Gini coefficient the UK also exhibits higher levels of **wealth inequality** than many other nations and high levels of **persistent poverty** (poverty that has lasted for three or more of the last four years). The poorest members of society are particularly reliant on the welfare benefits system with the poorest 20% getting 58% of their income from benefits on average (compared with 2% of income for the wealthiest 20%). Levels of qualification are highly correlated with benefit claiming, with 46% of those on Incapacity Benefit having no formal qualifications.

Poverty and inequality is unevenly spread across and between social groups in the UK. Whilst some of the widest gaps between different social groups have narrowed over the past decade, including earnings between men and women and the qualifications of different ethnic groups, deep seated and systematic differences still remain. Indeed, significant variations in economic outcomes persist for all groups including by gender, ethnicity, social class, and between different regions and nations of the UK. The distribution of and interaction between these different dimensions of inequality are complex. 5.3 million people in the UK are multiply disadvantaged<sup>12</sup> and there are differences between the more and less advantaged within

social groups that are only a little narrower than across society as a whole and are greater than between different social groups.

Looking in more detail at the different experiences of social groups it is clear that **gender** remains a significant dimension of inequality. Despite the fact that women are, under many measures, performing better than men in terms of educational attainment<sup>13</sup>, they are still paid less than men, earning 21% less in median hourly pay for all employees (and 13% less than men when working full time). The gap is smaller for women in their 20s (6–7% in weekly full time earnings at the median) but even here within four years of graduation from university nearly twice as many men have earnings over £30,000 than women. Hourly wages for women are highest in their early 30s (when half earn £10.40) and lower in each subsequent age group. Hourly pay for men is highest for those aged 40-44 (when half earn £13.40 or more). This is partly because of the low levels of pay for part time work (half of those working part time earn less than £7.20 per hour) and is largely related to child rearing. There has however been some improvement in the relative pay position of women – in 1995–6 the median for women was 53% of that of men, in 2006-7 it was 64% – but progress is slow. It should be noted that there is almost as much inequality between well paid and low paid women as there is between the well paid and low paid overall.

When examining the impact of **ethnicity** it is clear that there are complex differences between ethnic groups in terms of their skills and labour market experience and this is further impacted by the interaction between gender and ethnicity. Ethnicity has an impact on whether people are in work at all and, if they are, which sector and which occupation they work in, and how much they are paid.

median education results at age 16 for Pakistani, Black African and Black Caribbean boys in England are below the national average, whereas a tenth of Chinese girls have results in the top 1%.

**<sup>10</sup>** Hills et al, An Anatomy of Economic Inequality in the UK – Report from the National Equality Panel, Government Equalities Office, 2010.

<sup>11</sup> Cabinet Office, State of the nation report: poverty, Worklessness and welfare dependency in the UK, 2010.

<sup>12</sup> Defined as individuals facing two or more aspects of disadvantage simultaneously.

**<sup>13</sup>** At age 16 girls now have better educational outcomes than boys. Women are more likely to go into tertiary education and to achieve a good (1 or 2.1) degree. More women have higher education qualifications in every age group up to 44 and fewer have no or low qualifications (source Hills, 2009).

- those from minority ethnic groups with GCSEs at or below the national median are more likely to go into Higher Education than White British peers with similar results **but** Black, Pakistani and Bangladeshi students are less likely to go to prestigious universities or get higher class degrees.
- nearly all minority ethnic groups are less likely to be in paid work than White British men and women. 44% of Pakistani and 49% of Bangladeshi women are economically inactive (compared with 20% or fewer of other groups). For some groups differences in unemployment rates are as great for the 'second generation' as for those born outside the UK.
- in work, nearly all groups have hourly pay rates less than White British men although several have higher pay than White British women. The differences are smaller for 'second generations' and some of the largest differences in pay by ethnicity are smaller than a decade ago.
- some minority ethnic groups still have Equivalent Net Incomes (ENI)<sup>14</sup> well below those of the rest of the population. Bangladeshi/Pakistani populations have a median ENI of £238 (compared with a national median of £393).

There are large differences between those reporting a 'work limiting **disability**' and others in terms of employment and wages (although differences for those classed as having a disability under the Disability Discrimination Act (DDA) definition are smaller). Nearly half of those reporting DDA **and** a work limiting disability have no or low qualifications. Paid employment rates are less than half of those of people who do not have a disability and in work, people with a disability have median hour earnings that are 20% less than male and 12% lower than female rates. The median Equivalent Net Income (ENI) of working age adults reporting a DDA disability is 30% lower than other working age adults. If 'Extra Cost Benefits'<sup>15</sup> are excluded the net income of people with a disability is reduced by a further 10%.

In terms of age the position of young people (those aged under 25) in the labour market has declined over the last decade, although for some this is because of longer periods in education. For those outside of employment, education or training however there is a risk of a long term scarring effect with a wage penalty of 10–15% for young people defined as NEET<sup>16</sup>. Median equivalent net incomes (ENIs) are the highest for those in their early 30s and early 50s when viewed at any one time. Many in their 30s and 40s have lower ENIs as family sizes are generally bigger although rising general living standards mean this tends to be experienced as a flattening rather than a dip in income. Wealth is highest for those in their late 50s and early 60s – including private pension rights median wealth is £66k for those aged 25–34 but £416k for those aged 55–64. There are however considerable differences in wealth within each age group for those aged 55–64 there is a range of £28k – £1.3m between the 10th and 90th percentiles.

**Occupational social class** is both an outcome of the labour market and part of the transmission mechanism that affects how people's lives develop. There are considerable differences in qualifications, employment rates, earnings and incomes between those from different occupational social classes. Median hourly wage rates for men from higher professional and managerial households are 2.5 times higher than for men in routine occupations and 2.9 times higher for women. The median ENI in higher professional and managerial households is 80% higher than for routine occupations. This puts half of them in the top 6th of the population overall.

These inequalities exist across the UK: inequality levels are slightly higher in England than in the devolved nations but recent trends are similar and the differences are relatively small. Scotland is the

**16** NEET = Not in Employment, Education or Training.

<sup>14</sup> Equivalent Net Income (ENI) looks at income at a household rather than an individual level. It measures income calculated from total household receipts; adjusted for the size and composition of household; and post benefits and direct taxes. It reflects the fact that different households require different levels of income in order to achieve the same standard of living. This is the main measure used in the Department for Work and Pension's Households Below Average Income (HBAI) publication.

**<sup>15</sup>** Extra cost benefits should arguably be excluded as they are put in place to compensate for the higher cost of living incurred because of a person's disability.

only nation where inequalities in all four aspects of earnings and income have declined a little. Within the English **regions** the situation is more complex than a simple 'north/south divide'. Inequality in all measures is wider in London than in any other region and inequality in income has grown faster in London over the last 10 years than anywhere else in the UK. Disaggregated further there are considerable differences at a **neighbourhood** level for between those areas with higher and lower levels of disadvantage. A third of workless households are in just 10% of local authority areas and only 55% of adults in the most deprived tenth of areas in England are in employment. Median hourly rates for people in the most deprived tenth of areas in England, Scotland and Wales are 40% lower than in the least deprived<sup>17</sup>.

Inequality begets inequality and cumulates across the life cycle. There are significant differences in 'school readiness' before and when children reach school by parental income and mother's education. Children entering primary school in 2005–2006 whose mothers had degrees were assessed as being six months ahead of those whose mothers had no qualifications above grade D at GCSE and every extra £100 per month in income when children were small was associated with a difference equivalent to a month's development. These differences widen throughout childhood - young children in higher social classes with a low assessment of relative cognitive ability will eventually overtake those from a lower social class background initially assessed as at a higher level. Children eligible for free school meals are half as likely to achieve five GCSEs at grade A\*–C at including maths & English and when looked at in conjunction with ethnicity White British, Black Caribbean and mixed White and Black Caribbean boys who receive free school meals have the lowest average assessment of any group identified by gender, ethnicity and free school meal status apart from Gypsy and Traveller children. Low income also acts as a barrier to post compulsory education. Young people who have been on free school meals with above median GCSE results are

**17** This is partly a circular issue – i.e. these areas are judged as deprived precisely because they have low levels of qualifications, employment and incomes.

less likely to go on to higher education than others with the same results. Those with manual worker parents who go to university are less likely than others to go to prestigious universities or get higher class degrees.

This social transmission of inequality has an impact on relative **social mobility** (i.e. the position of each generation in comparison to that of their parents). It matters more in Britain who your parents are than in many other countries. Rates of intergenerational mobility in terms of incomes are low in international terms and in terms of occupation are below the international average for men and at the bottom of the range for women.

This evidence reveals a number of significant **policy challenges**:

- economic disadvantage reinforces itself across the cycle – from educational outcomes to life expectancy. Policy responses are therefore needed across the life cycle, from early intervention approaches to accessible education and skills resources for working age adults.
- having low or no qualifications can exacerbate disadvantage for all social groups. "Many people are being held back in the UK because of a lack of skills, with qualifications being correlated with stronger employment outcomes, higher wages and better health" (State of Nation Report, p.40). This reinforces the need for lifelong learning and training opportunities, particularly targeted at those without prior (high level) qualifications.
- the complex interrelation and interaction between different social groupings requires concerted action across a number of policy areas and whilst employment and skills are potentially critical drivers they are insufficient in isolation to tackle the levels of inequality and disadvantage. The UK Government has recognised this through the creation of the new Cabinet Committee on Social Justice and further imaginative ways of connected working at the policy and delivery level need to be developed. Policies targeted at the neighbourhood level or at social housing for example could have a stronger focus on employment and skills.

- social mobility can be seen as a key driver of equality (or perhaps of 'justified' inequality). Achieving relative social mobility requires action to tackle inherited disadvantage, whereas tackling absolute social mobility<sup>18</sup> requires demand side policies that ensure not just that people are equally able to access opportunities, but that there are opportunities available to them.
- the relative labour market position of young people is a concern and is seen as potentially exacerbated by the recession which raises the challenge of avoiding longer term scarring effects.
- differences in pay by gender and ethnicity unrelated to qualifications or to occupation are partly the result of the pay and shape of part time work. This may require policies to encourage or enable the further opening up of part time and flexible opportunities beyond routine, low paid occupations, to open up career progression for part time workers, and to address parental needs around leave and childcare provision.
- the continuing 'disability penalty' suggests a need for stronger policies in relation to the employment of people with disability and in particular those with mental health conditions. This is particularly the case in the context of extensive welfare reform which requires open access to employment for people with ill health or disability to enable plans to reduce the proportion of the population on disability and health related benefits.

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<sup>19</sup>. 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. Reducing inequality may also be necessary in order to achieve the 2020 Ambition, *"the achievement of higher national standards of educational performance may actually depend on reducing the social gradient in educational achievement in each country"* (The Spirit Level, p.108).

As a further refinement to our work for the coming year, we want to more fully understand some of the wider consequences of achieving, or not, the 2020 World Class Ambitions. So, we are commissioning research with the Joseph Rowntree Foundation which seeks to explore the links between the balance and nature of skills and jobs in the labour market on the one hand and the level and nature inequality and poverty on the other. It will do this in part by investigating the inequality and poverty scenarios that might face the UK upon the achievement or not of our 2020 skills Ambitions.

#### 2.7 THE VALUE OF SKILLS

The policy interest in raising skill levels does not lie in the intrinsic value of skills themselves, but because 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.

## **2.7.1** 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.

**<sup>18</sup>** The State of Nation report defies relative social mobility as the ability of all groups to access opportunities regardless of parental position or personal characteristics. Absolute social mobility is defined as where there are a greater proportion of jobs in each successive generation that are high skills and high value added (creating 'room at the top').

<sup>19</sup> 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<sup>20</sup>. 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. 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 (i.e. whether they are academic and vocational) and (iii) different sectors and across different parts of the UK.

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. Whilst some evidence<sup>21</sup> 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. For the **firm**, higher levels of skills are associated with a range of positive benefits, including:

- increased job satisfaction and lower absenteeism and quit rates;
- improving chances of survival ('non training' firms are two and a half times more likely to go out of existence than 'training' firms<sup>22</sup>);
- providing returns (financial institutions with higher than average training expenditures per employee had better performance than competitor institutions on measures of return on assets, return on equity, net income per employee, total assets per employee and stock return);
- improving productivity and contributing to overall productivity (more productive companies in the UK had workforces with on average two years more schooling than less productive firms) and
- association 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.

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<sup>23</sup> indicates that increased wage costs are outweighed by the productivity and profit gains made by firms that provide job related training. There are substantial payoffs 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

<sup>20</sup> 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; The UKCES, The Value of Skills (forthcoming).

<sup>21</sup> 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.

<sup>22</sup> Collier, W. et al, Training and Establishment Survival, SSDA Research Report 20, 2007.

**<sup>23</sup>** 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.

workers' loyalty to that employer and thus reduce labour turnover. An estimate<sup>24</sup> 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.

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<sup>25</sup> has identified substantial wage returns associated with a range of generic/employability skills: e.g. 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<sup>26</sup> has indicated that basic and literacy skills are highly valued in the labour market: e.g. 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.

Clearly skills policy places a considerable value on the economic value of skills, but we should also recognise the skills acquisition may have important, wider, non-economic social outcomes, including on health, crime rates, life satisfaction and individual well-being. A number of studies<sup>27</sup> have identified the positive impacts that education and skills acquisition can have

- **24** Green, F. et al, The Impact of Training on Labour Mobility, 2000. British Journal of Industrial Relations Vol. 6, No. 2.
- 25 Felstead, A. et al, Work Skills in Britain 1986–2000, 2002.
- **26** 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.
- 27 Summarised in Garret R, Campbell M and Mason G, The Value of Skills: An Evidence Review' UKCES forthcoming.

on each of these. Whilst primarily non-economic in their direct impact, these benefits can lead to economic savings: reductions in illness as a result of education and skills attainment can lead to direct savings in treatment costs, reduction in the cost of crime, etc.

#### 2.7.2 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, skills are not the only enabler for accessing employment and that many people face multiple barriers.

It is clear is that of the 4.6 million people with no qualifications, 3.5 million fall into at least one of the other groups identified by DWP who experience low levels of employment (i.e. they are disabled, aged 50 or over, a lone parent, from an ethnic minority)28. 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%<sup>29</sup>. 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<sup>30</sup>. 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)<sup>31</sup>. It seems to be

- **29** 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.
- **30** Berthoud, R., Multiple Disadvantage in Employment: A Quantitative Analysis, 2003.
- **31** Skills Strategy Division, Explaining the Employment Gap Between High and Low Educational Attainers, 2007.

<sup>28</sup> This analysis doesn't take account of the other types of disadvantage that are not measured by the LFS e.g. 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.

the case that disadvantage may be additive, i.e. the more disadvantages faced by an individual, the greater the likelihood of being unemployed. Berthoud found that the nonemployment rate among the sample in his research ranged from just 3%, for those with none of the six disadvantages studied<sup>32</sup>, to 91% of those who faced all six.

#### **2.8 CONCLUSIONS**

In summary then, the UK's prosperity and our competitiveness, in the long run, depends on jobs and productivity: how many people are in work and how productive they are. 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. To do so involves raising employment and productivity in particular in those areas where it is particularly low, while sustaining and developing the higher levels apparent in more prosperous localities.

We are not yet World Class by these standards nor are we World Class in terms of competitiveness or in our ability to spread the benefits of prosperity widely amongst our people. These issues therefore remain important priorities for the future that we must find more effective ways to tackle. Skills can make an important contribution to raising employment and productivity as well as reducing inequality.

**<sup>32</sup>** 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.

### **Progress towards Ambition 2020**

#### **3.1 INTRODUCTION**

This section focuses on the level of skills. It discusses those which are thought to be needed for the UK to be internationally competitive (as determined by the 2020 Ambition), examines the current rate of progress in improving skill levels and gives our view of levels of attainment in 2020.

#### **3.2 THE AMBITION RESTATED**

The World Class Skills Ambition is for the UK to become a world leader in skills by 2020. More specifically, the ambition is 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, i.e. being in the top quartile of the OECD countries. When the Ambition was set it was estimated that for the UK to become World Class in skills we needed to commit to achieving:

- 95% of adults 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.

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.

We have adopted qualifications as a yardstick to measure our progress towards achieving World Class Skills. It is clear that qualifications do not fully capture all aspects of skills development. Moreover, we recognise that not all successful skill acquisition involves acquiring 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. But it remains true that 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. They are the most readily and widely used measure of skill – both in terms of their use in the labour market and in analytical terms. For this reason we continue to adopt them as an important yardstick and benchmark.

In the 2009 Ambition 2020 report<sup>33</sup> the UK Commission has, in addition to the literacy and numeracy objectives, expanded and developed these ambitions to give a fuller fivefold qualifications structure, shown below. The gap between the existing 2007 levels and the Ambition for 2020 for the UK shows that there needs to be progress at all levels (see Table 3.1).

#### Table 3.1:

Changing distribution of qualifications in the UK (%)

	2008	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	

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

Due to the devolved nature of skills policy, Governments across the UK have responded in a variety of ways following the establishment of the World Class Ambition. These differences reflect individual governments' concerns that differences in labour markets and economic conditions may require different skill strategies to achieve a World Class Skills Ambition.

**33** UKCES, Ambition 2020: World Class Skills and Jobs for the UK, 2009.

The **UK Government** embraced the World Class Ambition 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<sup>34</sup> that the 2020 Ambition is very stretching). The approach was to focus on (i) delivering significantly improved basic and intermediate skill levels; (ii) delivering improved higher skill levels and (iii) integrating the employment and skills systems with a greater emphasis placed on sustainable employment as a priority outcome. At the time of writing, given the recent election and change in Government, this has created a period of more uncertainty. The new administration whilst expressing a commitment to World Class Skills and Employment is reviewing its policy framework and in that context future measures of success. In this context, it has abolished the PSA framework. The results of the policy review are not due until the autumn 2010.

The Scottish Government published Skills for Scotland: A Lifelong Skills Strategy in September 2007. The strategy set out the Scottish Government's ambitions for skills throughout life within the context of its economic approach. The strategy articulates three main guiding principles: (i) individual development, (ii) economic pull and (iii) cohesive structures. It highlighted a direction of travel, but did not seek to develop the detail: the document sits at the strategic level, deliberately being the 'what' not the 'how'. In 2010 the Scottish Government will publish a refresh of Skills for Scotland which will recognise the progress made since 2007 and identify how they will reposition their skills policy to accelerate economic recovery and to realise their long-term economic aspirations. The Scottish Government have developed a performance measurement system 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 inequality. 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 not in positive and sustained destinations.

In Northern Ireland, the Government had already broadly adopted similar aims to those outlined in the Ambition and is developing a detailed strategy to be published in 2010. However, it is worth noting that existing Northern Ireland targets<sup>35</sup> do largely align with the World Class Ambition, setting out over a 10 year timeframe (i.e. to 2015) the intention to (i) support the essential skills learning for 100,000 adults; (ii) increase to 90% the proportion of adults in the workforce with a Level 2 gualification; (iii) increase to 60% the proportion of adults with at least a Level 3 qualification; and (iv) demonstrate significant progress on increasing the employment rate, especially among disadvantaged groups, taking account of the economic cycle.

The **Welsh Government**<sup>36</sup> also 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<sup>37</sup>;
- 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.

<sup>35</sup> DELNI, A Statement of Skills in Northern Ireland, 2008.

**<sup>36</sup>** DCELLS, Skills that Work for Wales: A Skills and Employment Strategy and Action Plan, 2008.

**<sup>37</sup>** WAG have adopted a different definition of functional basic skills, being attainment at Level 1 for both literacy and numeracy.

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 (i) bringing together interventions for skill, business development and employment; (ii) improving levels of basic literacy and numeracy; (iii) ensuring that people are equipped with a platform of skills that will help them to enter and remain in employment; (iv) increasing the supply of, and demand for, intermediate and higherlevel skills (including management and leadership skills); (v) addressing skills gaps and shortages in priority sectors of the Welsh economy; and (vi) 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 have importantly demonstrated commitment to the importance of achieving World Class skills and a high skill economy and all (except Scotland) have adopted, for now, a qualifications-based Ambition.

# **3.3 THE INTERNATIONAL SKILLS AMBITION**

The prosperity, employment, productivity and skills agenda is not unique to the UK: countries across the European Union are facing similar issues. As such they are realising too the importance of setting their sights high and articulating a stretching World Class Ambition. This is exemplified in Europe. 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'<sup>38</sup>.

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. Within this, the European Union has set five benchmarks in the education and training field in particular, which it aims to achieve by 2010 (i) reducing the proportion of young people not in education/training; (ii) increasing the proportion of young people completing an upper secondary education; (iii) increasing the proportion of adults participating in lifelong learning; (iv) an increase in Maths/Science/Technology Graduates; and (v) reducing the number of young people with poor reading skills.

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. It also established an expert group to develop the agenda and propose concrete actions and its recommendations *New Skills for New Jobs: Action Now* was published in February 2010. The overall objective of the policy initiative is to help ensure a better match between skills and labour market needs and to organise the assessment of the EU's future skills and jobs requirements on a permanent basis. The NSNJ agenda is organised in four strands:

- addressing mismatches;
- strengthening the EU's capacity for forecasting and anticipation;
- deepening international cooperation; and
- mobilising existing EU policy instruments.

In spring 2009, the European Commission published *New Skills for New Jobs*<sup>39</sup>, which contained a vision of Europe where citizens are higher skilled and where thinking around education, training and work has changed fundamentally and supported this with a set of recommendations in the area of (i) investment in skills (including incentives, services and skills use; (ii) a closer alignment of education, training and work; (iii) developing the right mix of skills; and (iv) better anticipation of future skills needs.

At the same time, the EU has been preparing a strategy to replace the Lisbon Agenda for Growth and Jobs which expires this year (2010). The European Commission has published a Communication that outlines the EU 2020 strategy to be formally adopted in June 2010.

**<sup>38</sup>** European Council, Lisbon Extraordinary European Council: Presidency Conclusions 23rd and 24th March 2000.

**<sup>39</sup>** European Commission, New Skills for New Jobs: Action Now, February 2010. http://ec.europa.eu/social/main.jsp?langld=en&c atId=89&newsId=697&furtherNews=yes

This Communication put forward three mutually reinforcing priorities:

- smart growth: developing an economy based on knowledge and innovation;
- sustainable growth: promoting a more resource efficient, greener and more competitive economy;
- inclusive growth: fostering a high-employment economy delivering social and territorial cohesion.
- It proposes headline targets to work towards:
- 75% of the population aged 20–64 should be employed;
- 3% of the EU's GDP should be invested in R&D;
- The "20/20/20" climate/energy targets should be met (including an increase to 30% of emissions reduction if the conditions are right);
- The share of early school leavers should be under 10% and at least 40% of the younger generation should have a tertiary degree;
- 20 million less people should be at risk of poverty.

In order to achieve these targets, the European Commission put forward seven flagship policy initiatives, including two on skills and jobs and one on industrial policy: firstly **'an industrial policy for the globalisation era'** designed to improve business environment, notably for SMEs, and to support the development of a strong and sustainable industrial base, secondly, an **'agenda for new skills and jobs'** to modernise labour markets and empower people by developing their skills throughout the lifecycle with a view to increase labour participation and better match labour supply and demand, including through labour mobility<sup>40</sup>.

The OECD has developed a skills strategy which will focus on increasing skill levels but also on getting the right mix of skills, increase skills utilisations and recognise the importance of localisation. The G20 countries have also developed a training strategy which seeks to equip the workforce with the skills required for economic growth and sets out three main objectives: improved matching of the supply of and demand for skills, assistance in adjustment and adaptation to change by individuals and enterprises and building competencies to meet future skill needs.

#### 3.4 PROGRESS: HOW ARE WE DOING?

#### 3.4.1 Domestic qualification attainment

#### **Current levels of qualifications**

Last year we highlighted the progress that has been made in domestic skills and qualification attainment.

Before reporting on the detail of attainment, it should be noted that as a result of statistical research and investigation between the Office for National Statistics and the Department for Business, Innovation and Skills, in March 2010 it was decided to adopt a revised methodology for producing estimates of the level of adult educational attainment within the working age population in England. This has resulted in a revised series and a comparison of the estimates produced from the old and revised methodology is set out below (see Table 3.2).

If the revised method were to have a similar impact on estimates across the UK (and at this stage there is not any evidence to demonstrate impact outside of England) then we would need to adjust the stated position for both the current international position and the forecast international position.

At this stage in the process, we have not concluded enough work to base our modelling on the revised attainment estimates and in our 'formal' statement of our view of the outcome in 2020. This is because, currently, no assessment has been made of whether the revised estimation method adopted in England should be used to provide estimates for the Devolved Administrations. We suggest that discussions take place over the forthcoming year on how the method can be adapted, if thought necessary and appropriate, to produce UK estimates and, from this, the forecasts on a more systematic basis.

**<sup>40</sup>** European Commission, Europe 2020: A European strategy for smart, sustainable and inclusive growth, March 2010.
#### **Table 3.2:**

#### Estimated revisions to LFS qualifications attainment in England

	Old methodology	Revised methodology	Impact of change (percentage points)
Below Level 2	28.8	26.4	-2.4
Level 2	20.3	19.5	-0.8
Level 3	19.7	20.8	1.1
Level 4	31.2	33.6	2.4

Source: Summary of methodology used to calculate estimates of adult educational attainment within the population using LFS data, The Data Service, ONS, 2010

Turning to the results, regarding basic skills, it is estimated that the **basic skills** of the working age population are improving. Based on our extrapolation of 2003 data, we estimate that in 2009 the proportion of the population with functional literacy skills was 86% (i.e. 14% had poor literacy skills) and the proportion with functional numeracy skills had increased to 81% (i.e. 19% had poor numeracy skills). This is an improvement of 2 percentage points since 2005 for both numeracy and literacy.

Regarding qualifications, as we reported last year, the decade to 1997–2007 saw unprecedented improvements in the numbers (and proportions) of people in the UK who have qualifications. The numbers who have high level qualifications (Level 4 plus) increased over 10 years by over 3 million, an increase of 44%, whilst at the other end of the spectrum, the

#### **Table 3.3:**

#### UK Qualification Achievements, 2007–2009

	100.0	100.0
Total	100.0	100.0
Below Level 2	30.2	27.9
Level 2	20.2	20.5
Level 3	19.5	19.8
Level 4 +	30.1	31.8
	<b>2007</b> %	2009 %

Source: Labour Force Survey, 2007-09 (Q2 data)

**Note:** Working age population 19–59/64. This data taken from a Statistical release in which the derivation of qualifications is done on a slightly different basis for that for the A2020 modelling – there will be slight discrepancies between the two sets of figures.

numbers who have below level 2 qualifications decreased by over  $2\frac{1}{2}$  million, or 20%.

Since then, these trends have continued (see Table 3.3) with further decreases in the proportion with no qualifications and increases in the proportions holding higher qualifications. The proportion with no, or very low levels of qualification (i.e. those below Level 2) has continued to decline, those with higher levels of qualifications (Level 4 plus) have continued to increase.

Increases at intermediate levels are less clear because the proportions holding these are a balance of the inflow from lower qualification levels and the outflow into higher qualification levels. The proportions qualified to Level 2 and 3 combined have increased only slightly (and well within the margin of error).

#### The profile of skills across the UK

As we reported last year, the pattern of qualifications varies according to a range of individual characteristics. These have not changed and are summarized below:

- Age: The older the age group the more likely individuals are to have no qualifications and the less likely to have higher level qualifications (excepting the very young);
- Disability: those without a disability are more highly qualified;
- Ethnicity: 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;

- 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; and
- Occupation: The higher the occupation, the higher the qualification level of individuals within that occupation.

#### The geography of skills

In addition to these individually-based variations, there are clear and distinct variations in qualification attainment on the basis of geography and sector. Clearly (since qualifications are held by individuals) these geographic and sectoral variations in qualifications are due to the clustering of individuals with differing qualifications and sectors.

It is important to note that existing skill levels, as measured by qualifications, vary widely across the UK. 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 (e.g. the North West) and others at the lower skills end (e.g. the South West). Others are relatively weak on both counts (e.g. West Midlands).

This year we explore in more detail sub-regional patterns. Looking at a more disaggregated level (NUTS 2), we can see the proportion with low gualifications, ranging from 7.7% (Berkshire, Buckinghamshire and Oxfordshire) to 19% (West Midlands). Those areas in the 'top 10', with the lowest proportions of low qualifications, include a number from the South East (Berkshire, Buckinghamshire and Oxfordshire, Hampshire and Isle of Wight and Surrey, East and West Sussex), the South West (Gloucestershire, Wiltshire and North Somerset; Dorset and Somerset; and Devon), Scotland (North Eastern Scotland and the Highlands and Islands) and with one each from Yorkshire and the Humber (North Yorkshire) and the East of England (Bedfordshire and Hertfordshire). Conversely, those with higher proportions of low qualifications include: a grouping in the North West (Lancashire, Greater Manchester and Merseyside), the West Midlands, Scotland (South Western Scotland), Wales (West Wales and The Valleys), Yorkshire and the Humber (South Yorkshire), the North East (Tees Valley

and Durham), The East of England (Essex), and the East Midlands (Leicestershire, Rutland and Northamptonshire).

Regarding high level qualifications (Level 4 and above) the range is again substantial from the highest performing of Inner London (45.2%) through to the lowest in East Yorkshire and North Lincolnshire (20.8%). Again, there is a clustering of high performing areas within certain regions: Scotland having four of the top ten with the highest proportions (North Eastern Scotland, Eastern Scotland, Highlands and Islands and South Western Scotland), with two from the South East (Surrey, East and West Sussex; and Berkshire, Buckinghamshire and Oxfordshire) and both of London's areas (Inner and Outer London). The last two highest performing areas are from Yorkshire and the Humber (North Yorkshire) and the North West (Cheshire). The areas with the lowest proportions of high qualifications are again spread: looking again at the 'top 10', there are two in Yorkshire and Humberside (West Yorkshire and East Yorkshire and Northern Lincolnshire), two in the North West (Cumbria and Merseyside) and two in the West Midlands (Shropshire and Staffordshire and West Midlands). Furthermore there is one each in Wales (West Wales and The Valleys), the North East (Tees Vallev and Durham) the East of England (Essex) and the East Midlands (Lincolnshire). See Maps 3 and 4 overleaf.

# Map 3: High Skill levels and local area



Source: Annual Population Survey, derived from NOMIS, 2010

# Map 4: Low Skill levels and local area



Source: Annual Population Survey, derived from NOMIS, 2010

This matters because it is clear that these skill levels are associated, as we have discussed above, with variations in the employment rate and productivity levels.

From a policy perspective, it needs to be considered whether it is appropriate for each geographic area in the UK to adopt the same scale of ambition, starting as they do from rather different positions. 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. Furthermore, 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 areas with already relatively high levels of skills want or need to improve faster than the average implied here.

Of course, the qualifications held by individuals in an area do not simply reflect the characteristics of just the people who live there but also the nature and economic structure of the local labour market and the qualifications, in turn, demanded by those sectors. Even at the broadest levels, we can see that

**Table 3.4:** 

Qualifications by broad sector, 2008

**Below level 2** Level 2 Level 3 Level 4+ % % % % Agriculture and fishing 36 23 19 22 Mining and Quarry; Energy and water 24 26 15 36 21 22 26 Manufacturing 31 Construction 30 24 30 17 24 21 17 Distribution, hotels and restaurants 38 Transport and communications 40 24 18 18 Banking, finance and insurance etc 18 19 15 48 Public admin, education and health 17 15 52 16 22 21 21 37 Other services

**Source:** Labour Force Survey, 2008, taken from UKCES Almanac (https://almanac09.ukces.org.uk/Skills/D2/D2.1\_UK\_Workers\_by\_Qualification\_Level.xls)

Note: % working age workers (19-59/64), workplace

qualification requirements vary widely across sectors, which usefully illustrates this point; for instance: 40% of those working in Transport and communications have no qualifications as opposed to less than a fifth in Public administration, Education and health (16%) and Banking and finance (18%). Conversely, around half of people working in these two sectors are qualified to Level 4 and above (52% in Public administration, education and health, 48% in Banking and finance) and less than a fifth are so qualified in Construction (17%), Distribution, hotels and restaurants (17%) and Transport and communications (18%) (see Table 3.4).

# **3.4.2** The UK's changing international position

As noted above, the skills agenda is not unique to the UK. Whilst we are making considerable absolute progress (i.e. in the proportion of people who hold qualifications), the question is whether this is World Class and hence that we are making progress when compared to our international competitors.

We estimate that the UK's 'current'<sup>41</sup> international position is that the UK is 19th out of the 30 OECD countries on 'low' skills, 21st on 'intermediate' skills and 12th on 'higher' level skills. This puts us well outside the top quartile (i.e. top 8) for lower level (indeed this places the UK in the third quartile on lower level – below upper secondary) and intermediate level skills (upper secondary) and just outside the top quartile on higher level (tertiary) skills (see Table 3.5).

If we compare our view of the UK's current ranking to that which we presented in 2009, we can see that it has changed slightly since last year's report, in that the ranking of:

- Iow skills has declined from 17th to a current 19th;
- intermediate skills has also declined from 18th to 21st; and
- high level skills has stayed at the same position, 12th.

If we were to consider the possible adjustments suggested by the revised LFS methodology (and assuming these apply equally across the UK) this suggests that the UK's current proportions qualified at intermediate and high level skills would be higher, the proportion qualified to low skills is lower. This would boost the ranking for low skills from 19th to 18th and take the position for high level skills into the top 8.

So whilst UK skills levels have been progressing, so too have the skills within other countries, and some are doing so at a faster rate. When it comes to estimating the UK's future progress towards the 2020 Ambition, it is unlikely to improve its relative position. Notwithstanding the UK's performance, a number of issues are worthy of comment:

- it is notable how stable the rankings are: there are relatively few movements in the table's rankings overall and where these do take place they alter by only a few relative positions. Moreover, the top five at each skill level have mostly stayed in the same place, as have the bottom four. Most changes occur in the middle ranking positions;
- it should also be noted just how difficult it is to achieve the Ambition to be in the top quartile at all skill levels. Whilst it is arithmetically possible, no country is in that position. Even the USA and Japan fall just short of that ambition. Most high performing countries do well on only two of the three skill attainments. There is an arithmetical 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;
- the international comparisons are made on the basis of the most recent data available – in this case that for 2007. Any changes which have been made to the UK's skill and qualification attainment progress in the last two years relative to that of our international competitors will not therefore be reflected in these forecasts. And policy changes take time to impact on skill levels. 'New' policies post-Leitch have only been in place across the UK over the last three years and it may be that progress will be more rapid in the future as those policy changes bite and impact on adult skills;
- 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; and
- 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

**<sup>41</sup>** It should be noted that internationally comparative data is always more dated than individual country data. Thus, the data in the table relates to 2007, not 2009 as for the UK data.

# Table 3.5:

## Current international skills position

#### Below upper secondary (low skills)

	(1011 0	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
Country % Qualifi	ed	Rank
Czech Republic	9.5	1
Japan	11.3	2
USA	12.1	3
Slovak Republic	13.0	4
Canada	13.4	5
Poland	13.7	6
Switzerland	14.6	7
Sweden	15.4	8
Germany	15.6	9
Finland	19.5	10
Austria	19.9	11
Hungary	20.8	12
Norway	21.1	13
Korea	22.1	14
Denmark	24.5	15
Netherlands	26.8	16
New Zealand	28.4	17
Scotland	28.4	n/a
England	31.1	n/a
France	31.3	18
UK	31.7	19
Australia	31.8	20
Wales	31.9	n/a
Belgium	32.0	21
Ireland	32.4	22
Luxembourg	34.3	23
Iceland	35.5	24
Northern Ireland	36.8	n/a
Greece	40.4	25
Italy	47.7	26
Spain	49.3	27
Mexico	66.7	28
Turkey	71.3	29
Portugal	72.5	30

Upp (intern	er secon	dary kills)	
Country % Qual	ified I	Rank	
Czech Republic	76.8	1	
Slovak Republic	72.9	2	
Poland	67.6	3	
Austria	62.6	4	
Hungary	61.2	5	
Germany	60.1	6	
Switzerland	55.5	7	
Sweden	53.3	8	
Japan	47.6	9	
USA	47.6	9	
Norway	44.7	11	
Finland	44.2	12	
Denmark	43.3	13	
Korea	43.3	14	
Netherlands	42.4	15	
France	41.9	16	
Luxembourg	39.2	17	
Italy	38.7	18	
Canada	38.3	19	
Wales	38.0	n/a	
Greece	36.9	20	
England	36.8	n/a	
UK	36.5	21	
Belgium	35.9	22	
Ireland	35.4	23	
Scotland	35.4	n/a	
Northern Ireland	34.9	n/a	
Iceland	34.7	24	
Australia	34.4	25	
New Zealand	30.6	26	
Spain	21.7	27	
Mexico	18.4	28	
Turkey	17.9	29	
Portugal	13.8	30	

#### Tertiary (high skills)

		/
Country % Qualifi	ed	Rank
Canada	48.3	1
Japan	41.0	2
New Zealand	41.0	3
USA	40.3	4
Finland	36.4	5
Scotland	36.2	n/a
Korea	34.6	6
Norway	34.2	7
Australia	33.7	8
Ireland	32.2	9
Denmark	32.2	9
Belgium	32.1	11
England	32.1	n/a
UK	31.8	12
Sweden	31.3	13
Wales	30.1	n/a
Netherlands	30.8	14
Switzerland	29.9	15
Iceland	29.8	16
Spain	29.0	17
Northern Ireland	28.3	n/a
France	26.8	18
Luxembourg	26.5	18
Germany	24.3	20
Greece	22.7	21
Poland	18.7	22
Hungary	18.0	23
Austria	17.6	24
Mexico	14.9	25
Slovak Republic	14.1	26
Czech Republic	13.7	27
Portugal	13.7	27
Italy	13.6	29
Turkey	10.8	30

**Source:** OECD Education at a Glance 2009, http://statlinks.oecdcode.org/962009061P1G001.xls and LFS, ONS. Data relates to 2007 **Note:** Distribution of the 25–64 year old population by highest level of education attained. Japan is adjusted compared to the published 2009 data based on the historical proportions published by OECD as data on low skills is no longer collected perhaps Germany, which performs very well at intermediate level skills (upper secondary) and yet is in the bottom third for higher level skills. This may be, in part, Germany places a greater emphasis on the value of intermediate level skills, on which measure it is in the top quartile.

## 3.5 FORECASTS OF ATTAINMENT IN 2020

#### 3.5.1 The basis of our forecasts

We have continued the programme of work on developing the models to enable us to estimate our likely future progress towards the 2020 Ambition<sup>42</sup>. This helps us establish whether we are on the right trajectory to improve on relative skills position. 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 regions; and
- the UK 2020 basic skills position for literacy and numeracy.

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 to 64-year-olds over the period and project that forward to 2020 fitting a trend line to the data. This means that there are some limitations, particularly that the methodology employed will not immediately respond to an accelerating level of attainment occurring in the later part of a data series, as the higher rate of growth will be 'weighed down' by the slower growth earlier in the series.

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.

In the qualifications 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.

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 UK qualification model is based on the qualification framework; therefore it 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

**<sup>42</sup>** Last year we published a separate detailed technical report (Bosworth and Kik, 2009) on our assessment of the prospects for attaining the 2020 Ambition. This report gave more detail on last year's approach and incorporated the assumptions underpinning the models along with our proposals for improving the modelling approach further this year. We plan to update this report later in 2010.

population<sup>43</sup>. 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-yearolds. *The Skills for Life Survey* has also not been updated since 2003, which limits the extent to which the projections can be updated. However, this major survey is being repeated in 2010, with results being available in 2011 and we will incorporate these results into the forecasts when they become available.

#### **3.5.2** Projected international position

The World Class Skills Ambition, as stated earlier, 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 between now and 2020. We estimate that we will be 'mid-lower table' for lower skill levels (i.e. the proportion below upper secondary level - 20th out of the 30 OECD countries); 'mid-lower table' for intermediate skills, (i.e. proportion of upper secondary - 21st out of 30), but 'mid-high table' for higher skill levels, (i.e. the proportion at/above tertiary - 11th 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 and will therefore not reach our 2020 Ambition. 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.

Comparing these forecast outcomes to those produced last year is made slightly problematic by slight changes to the underpinning international data series<sup>44</sup>. But the general picture remains much the same, albeit with a higher forecast outcome for low level skills (20th rather than 23rd) and a lower forecast outcome for higher level skills (11th rather than 10th). The forecast position for intermediate skills remains unchanged.

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 (see Table 3.6).

Again, if we were to add in the revisions needed to take account of the revised LFS methodology, the proportions which would be qualified at intermediate and high skills are higher, those at low skills lower. However, this would have no impact on the ranking position for low and intermediate skill positions, but would boost that for high skills (from 11th to 8th). This does mean that we would attain the Ambition for high level skills of being top quartile in the OECD 30.

The caveats that we made earlier about international qualifications comparisons tables also hold for these projections, perhaps even more so as the forecast error for 2020 is likely to be greater than that for 2007. In addition, there are two further points to consider:

these projections do not take into account changes in Government spending on programmes that affect future qualification attainment. That said, in future it is likely that these spending assumptions will need to change given the current constraints on public finances;

**<sup>43</sup>** Department for Education and Skills, The Skills For Life Survey: A National Needs and Impact Survey of Literacy, Numeracy and ICT Skills, 2003.

**<sup>44</sup>** Some OECD countries have updated their back data series submitted to the OECD. Further details will be given in the forthcoming Ambition 2020 technical report.

these projections also have to assume that other countries will make similar progress to that which they have made in recent years. This is unlikely in all cases. Some will undoubtedly make more progress than others but this is of course hard to predict, especially for the purposes of modelling. Indeed, the UK itself may do better or less well than envisaged here. It is feasible therefore that we could attain our 'domestic' Ambitions, but still not attain our 'World Class' Ambition, because other OECD countries 'up their game' at the same time and improve their relative position to the UK.

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 qualificationbased Ambitions and whether they need to be refined, given the rate of developments in other countries and hence relative 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 that is important but the type of skills that are created too. It is therefore also crucial that we do not monitor skills too rigidly within this annual assessment but also track wider variations in types of skills as well. We explore this issue more fully later on to assess broader trends and developments here.

### Table 3.6:

International skills projection 2020

#### Below upper secondary (low skills)

Country % Qualified		Rank	Со
Japan	5.0	1	Cze
Czech Republic	5.0	1	Slo
Poland	5.0	1	Hu
Canada	5.0	1	Pol
Hungary	5.0	1	Aus
Sweden	5.0	1	Sw
Finland	5.0	1	Ge
Ireland	5.0	1	Fin
Korea	5.0	1	Ne
Slovak Republic	5.0	1	Ital
Netherlands	5.3	11	Gre
Austria	9.0	12	Sw
USA	10.2	13	Lux
Switzerland	11.8	14	Irel
Luxembourg	12.3	15	Fra
Germany	13.7	16	Bel
Belgium	14.5	17	Wa
Australia	14.5	17	Ko
New Zealand	15.3	19	US
Scotland	15.9	n/a	Jap
Wales	16.6	n/a	Au
UK	18.7	20	En
Northern Ireland	18.9	n/a	UK
England	19.1	n/a	No
Greece	19.4	21	Sp
Denmark	20.2	22	Са
France	21.0	23	Ice
Iceland	21.3	24	De
Spain	22.3	25	Sc
Norway	29.4	26	No
Italy	29.5	27	Tur
Portugal	56.2	28	Ne
Mexico	59.0	29	Me
Turkey	60.8	30	Po

)							
Upper secondary (intermediate skills)							
Country % Qualified Rank							
Czech Repub	olic 77.0	1					
Slovak Repub	olic 74.2	2					
Hungary	70.9	3					
Poland	65.9	4					
Austria	65.4	5					
Sweden	60.0	6					
Germany	59.4	7					
Finland	52.0	8					
Netherlands	50.2	9					
Italy	50.2	9					
Greece	48.8	11					
Switzerland	47.6	12					
Luxembourg	46.5	13					
Ireland	44.2	14					
France	44.0	15					
Belgium	43.3	16					
Wales	43.2	n/a					
Korea	42.2	17					
USA	42.0	18					
Japan	41.1	19					
Australia	40.0	20					
England	37.3	n/a					
UK	37.0	21					
Northern Ire	land 36.4	n/a					
Spain	34.5	22					
Canada	34.4	23					
Iceland	33.3	24					
Denmark	31.6	25					
Scotland	31.2	n/a					
Norway	26.5	26					
Turkey	24.3	27					
New Zealand	24.0	28					
Mexico	22.3	29					
Portugal	21.0	30					

#### Tertiary (high skills)

Country % Qualifi	ed	Rank
New Zealand	60.7	1
Canada	60.7	1
Japan	53.9	3
Korea	52.8	4
Scotland	52.8	n/a
Ireland	50.8	5
Denmark	48.3	6
USA	47.7	7
Australia	45.5	8
Iceland	45.4	9
Northern Ireland	44.7	n/a
Netherlands	44.4	10
UK	44.3	11
Norway	44.0	12
England	43.6	n/a
Spain	43.2	13
Finland	43.1	14
Belgium	42.3	15
Luxembourg	41.3	16
Switzerland	40.6	17
Wales	40.2	n/a
Sweden	35.0	18
France	35.0	18
Greece	31.8	20
Poland	29.1	21
Germany	27.0	22
Austria	25.6	23
Hungary	24.2	24
Portugal	22.8	25
Slovak Republic	20.8	26
Italy	20.3	27
Mexico	18.7	28
Czech Republic	18.0	29
Turkey	15.0	30

Source: UKCES (2010, in press), Ambition 2020 Technical Report

**Note:** 25–64 year old population, by highest level of education attained, UK figures will differ slightly to UK qualification forecasts; the forecasts are consistent: however the age range for these forecasts has been adjusted to be internationally comparable

#### 3.5.3 Projected domestic position

On the basis of recent trends, we can estimate using our models what will happen to our 'domestic' position in terms of Ambitions around basic skills, qualifications and employment rates.

#### **Basic Skills Ambitions**

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 believe we are likely to achieve the 95% objective. Our projections indicate:

- 93% of the population aged 16–64 will be literate by 2020, the UK is now projected to miss the ambition for 2020 by 2 percentage points;
- we will not achieve our numeracy ambitions by 2020. Current trajectories suggest we will achieve 89%.

It is clear from the forecasts that there will be some improvements to basic skills levels through demographic changes, as less numerate and literate older individuals reach retirement age and newly qualified younger people flow in. However based on **demographic trends alone** our work suggests by 2020 just 87% of adults aged 16–64 would be literate and 82% numerate. It is apparent that, if the overall targets of 95% numeracy and literacy are to be met by 2020, then a considerable amount still needs to be done to encourage improvements in basic skills amongst older adults, not just those passing through formal education.

The current forecasts assume that basic skills upskilling of older adults will continue and increase over time at the same pace as in the recent past. If however the participation in basic skills programmes amongst adults were to slow or even hold steady, then these forecasts would need to be revisited as they would be too optimistic. A watching eye also needs to be kept on those progressing through formal education. The likely basic skills results presented for 2020 assumes the same rate of GCSE English and Maths attainment amongst school leavers in the future. This is based on the best performance that has been achieved to date. However, our most recent work indicates that this may be changing. Indeed, since 2007 there has been a slight increase in the proportions achieving below Level 1 GCSE English and Mathematics (i.e. not functionally literate or numerate). It is not yet clear whether this is a new trend or irregularity in the data and this will need to be closely monitored in future.

Further recent research conducted in this area by Bosworth and Kik (2010) has raised a range of critical issues which are likely to accentuate policy challenges in this area over the coming years and which need to be borne in mind in relation to meeting the 2020 basic skills ambitions, including<sup>45</sup>:

- first, they highlight difficulties around the increasing marginal costs associated with upskilling certain groups of individuals who tend to lack basic skills. They point to what they call the 'hard to reach' and 'hard to teach';
- second, the research draws attention to the problems associated with the effects of 'forgetting' and 'skills attrition', which need to be tackled for basic skills training to have benefit; and
- finally, they emphasise the critical role of employers in ensuring the success of different basic skills initiatives such as Skills for Life but the difficulties in effectively doing so.

**<sup>45</sup>** Bosworth, D. and Kik, G. Adult Training Policy with Respect to Basic Skills. Spring 2010, Paper for the XIX Meeting of the Economics of Education Association.

#### **Qualification Ambitions**

Our projections for those aged 19-64 indicate that:

- the Level 4+ Ambition will be slightly exceeded at 42% compared to the milestone of 40%;
- there will be significant underachievement of the Level 3 Ambition, with 19% qualified at this level compared with the target of 28%;
- there will be slight under-attainment of the Level 2 Ambition, at 20% compared to the desired 22%; and
- there will be insufficient improvement in the lower levels of qualifications, with a forecast of 19% still with no or low levels of qualifications, compared to the 10% aimed for<sup>46</sup>.

# Changing distribution of qualifications within the UK

We report below the likely progress across the four nations towards their 2020 ambitions for qualifications. As with last year, progress towards the 2020 Ambition remains broadly the same as the UK picture. The main exceptions to this are Scotland and Northern Ireland who look set to achieve beyond their 'adjusted' Level 4+ target, which they may exceed by up to 5%.

Although all four nations look like they will miss their targets for qualifications levels below Level four, the gap between their projected attainment in 2020 and their 2020 ambition has narrowed marginally since last years' 2020 projections in most cases (see Table 3.8).

See Table 3.7.

#### **Table 3.7:**

#### The qualifications of the UK workforce 2008-2020: estimated numbers

		2008	А	2020 mbition	Pr Attai	ojected nments	Last Year	Ga	ıp
	0/	n (000c)	0/-	n (000c)	0/-	n (000c)	0/_	0/	
	70	(0005)	70	(0005)	70	(0005)	70	70	
Level 4+	31	11,179	40	15,717	42	16,399	41	2% points above ambition	682,000 above ambition
Level 3	20	7,082	28	11,002	19	7,599	17	9% points below ambition	3,403,000 below ambition
Level 2	20	7,201	22	8,644	20	7,723	19	2% points below ambition	921,000 below ambition
Below Level 2	17	6,130	6	2,358	14	5,428	16	8% points below ambition	3,070,000 below ambition
No qualifications	12	4,083	4	1,572	5	2,144	7	1% point below ambition	572,000 below ambition

Source: Labour Force Survey and UK Commission forecasting work

**Note:** Projections relate to those aged 19–64, current estimates based on those aged 19–64/59. The international results for the UK have been adjusted for the 25–64 population so they are internationally comparable and therefore differ from the result presented here

**46** There are, of course, in reality two Ambitions: a relative Ambition (where we compare ourselves against our international competitors) and an absolute Ambition which expresses the international position in the context of a domestic attainment. The international relative Ambition can remain the same i.e. to be in the top 8 of the OECD at each level of skills, but depending on the relative movements of the other OECD countries this may translate into different levels of absolute domestic targets than those originally envisaged. Our current forecasts suggest that these may 45% at level 4+ and for 5% for Below Level 2. And it should be noted that these relative international changes may mean that by 2020 it may not be arithmetically possible to actually be Top 8 at all 3 skills levels.

#### **Table 3.8:**

Changing distribution of qualifications in the UK and four home countries

	2008	2020 Ambition	Projected attainments		Improvement in 2020 forecast
	%	%	%	Gap	since last year?
UK					
Level 4+	31	40	42	2 above ambition	$\checkmark$
Level 3	20	28	19	9 below ambition	$\checkmark$
Level 2	20	22	20	2 below ambition	√
Level 1	17	6	14	8 below ambition	√
No qualifications	12	4	5	1 below ambition	$\checkmark$
England					
Level 4+	31	40	41	1 above ambition	$\checkmark$
Level 3	20	28	19	9 below ambition	√
Level 2	20	22	20	2 below ambition	√
Level 1	18	6	15	9 below ambition	√
No qualifications	11	4	5	1 below ambition	$\checkmark$
Wales					
Level 4+	29	36	34	2 below ambition	х
Level 3	22	29	26	3 below ambition	$\checkmark$
Level 2	22	24	22	2 below ambition	$\checkmark$
Level 1	15	6	11	5 below ambition	$\checkmark$
No qualifications	13	5	7	2 below ambition	$\checkmark$
Scotland					
Level 4+	36	46	50	4 above ambition	Х
Level 3	21	27	18	9 below ambition	√
Level 2	18	18	16	2 below ambition	х
Level 1	13	5	10	5 below ambition	√
No qualifications	12	4	5	1 below ambition	$\checkmark$
Northern Ireland					
Level 4+	28	36	41	5 above ambition	√
Level 3	20	29	21	8 below ambition	√
Level 2	20	23	19	4 below ambition	х
Level 1	11	4	8	4 below ambition	✓
No qualifications	21	7	11	4 below ambition	$\checkmark$

Source: UK Commission forecasting, Ambition 2020, Technical Report, 2010 (forthcoming)

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

This year we also report how the English regions' qualifications profiles may compare in 2020. The intention is to reveal any variations in the scale and nature of the challenge sub-nationally. Chart 3.1 demonstrates the regional variations we might expect to see in qualifications. In particular, London stands out as having a particularly high concentration of its workforce qualified to Level 4+ (i.e. at 54% compared to 41% for England and 42% for the UK). In contrast, the North East has the lowest proportions and will not reach the 2020 Ambition at L4+.

## **3.6 EMPLOYMENT ASPIRATION**

Our analysis suggests that an 80% employment rate aspiration is highly unlikely to be achieved by 2020.

A key component of the employment rate is the activity rate. There is a clear relationship between economic activity rates and qualification levels, with (other things being equal) those that are more highly qualified more likely to be economically active. Thus, with the increasing qualification rate amongst the working age population we should therefore also expect to see an increase in the economic activity rate.



#### Chart 3.1: Projected 2020 qualifications profile of the workforce in English regions

Source: UK Commission forecasting model, based on ONS Labour Force Survey

Our forecasts confirm that this is the case, with economic activity rates forecast to increase from 79.5% for 25 to 64-year-olds in 2008 to 83.1% in 2020. However, this overall level does conceal a more complex picture, with individual activity rates at different qualification levels changing (those for the lowly qualified going down, those at higher levels increasing) combined with the overall substitution effect of higher for lower skilled groups in the overall population (see Table 3.9).

#### Table 3.9:

Economic activity rates and qualification level

Economic activity rate				
2008	2020			
average	average			
89.9	90.7			
87.1	89.0			
85.7	87.6			
81.0	83.3			
77.4	77.6			
51.7	45.3			
79.5	83.1			
15.5	00.			
	2008 average 89.9 87.1 85.7 81.0 77.4 51.7 79.5			

**Source:** Based on UK Commission forecasting, UKCES (2010, in press), Ambition 2020 Technical Report

**Note:** to take account of the older age at which level 4 and level 5 qualifications are completed figures cover population aged 25–64.

## **3.7 CONCLUSIONS**

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 national prosperity.

In 2009 we reported that on current rate of progress the UK's relative international position on skills is unlikely to improve by 2020, let alone become World Class and, indeed, overall, our relative position may deteriorate slightly. This 2010 report repeats these warnings: by 2020, we are likely to be ranked:

- 20th on low level skills (compared to 19th now);
- 21st on intermediate level skills (compared to 21st now); and
- 11th on high level skills (compared to 12th now).

We will, therefore, still not be in the top eight countries of the world at any skill level. As last year, therefore, we conclude that overall, the international skills gap between the UK and the top countries is, if anything, 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. We will not achieve the desired improvement at 'low' skill levels (we may achieve 80% gualified to Level 2 as against a 90% plus ambition); we will not achieve the desired improvement at intermediate skill levels (we may achieve 61% as against a 68% ambition): although we will achieve the higher level skill ambition (42% as against a 40% ambition). But 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 93% of UK adults will be functionally literate by 2020 and 89% of UK adults will be functionally numerate. We will therefore not achieve the basic skills ambition.

Economic activity rate



# Investment in skill development

# 4.1 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, given that qualification based measures do not fully capture all aspects of skills it is important to explore other skills measures as we did last year. In the following section we thus review wider updated measures of skills development. This includes in particular measures of training activity and participation in training. Given the value of investing in skills to individuals and employers, it is important that we explore skills development from both perspectives. To this end, we examine available information on investment in training using the recently published NIACE analysis, and then follow this with a more detailed look at employer and individual behaviour.

At the moment, there are still limitations to the extent we can internationally benchmark against a wider set of measures in this area. We noted last year that this will be improved by the OECD Programme for the International Assessment for Adult Competencies (PIAAC). This is developing a strategy to address the supply and demand of a range of competencies – the results however will not be available until 2012/2013.

# 4.2 OVERALL LEVELS OF INVESTMENT IN TRAINING

It is clear that the attainment of our Ambitions will only be met if responsibility for their attainment was to be shared between employers, individuals and Government. In the current climate of tight public sector finances, this is perhaps ever more important. Because of this (as we noted last year), a key piece of evidence concerns the detailed estimates, conducted by NIACE, of how much is spent on education and training and skills by all the partners - government, individuals and employers - across the employment and skills system, but at that time was only able to note that whilst vital, gathering this evidence was 'problematic'. Since last year's report we have benefited from the publication of NIACE's Inquiry into the Future of Lifelong Learning in the UK<sup>47</sup>.

This analysis (see Table 4.1) suggests that in 2007/08, the total expenditure on all postcompulsory and adult learning provision was £55 billion, just less than 4% of GDP. Of this total, nearly half (47%, £25.5 billion) was public expenditure, 37% (£20 billion) was the training of employees and volunteers by private 'forprofit' and 'not-for-profit' organisations and 17% (£9.4 billion) was by individuals (including selfemployed people).

#### **Table 4.1:**

Expenditure on adult learning costs of provisions and time, 2007/08

	Expenditur learning prov	re on ision	T opportunity	ïme/ cost	Total	
Investment source	£bn	%	£bn	%	£bn	%
Public expenditure	25.5	47	4.5	12	30.0	32
Private employer expenditure	16.2	30	4.6	12	20.8	22
Voluntary and Community sector expenditure	3.8	7	0.9	2	4.7	5
Individual expenditure	9.4	17	28.3	74	37.7	40
Total	54.9	100	38.4	100	93.3	100

Source: NIACE, Expenditure on Lifelong Learning: Context paper part 1, 2010

47 Schuller, T. and Watson, D., Learning Through Life: Inquiry into the Future of Lifelong Learning (IFLL), 2009.

In addition to this, NIACE calculate a cost of time (or opportunity cost) of learning. This is estimated to be £38 billion, but the distribution of these costs varies considerably to the costs described above, in that individuals commit the most – nearly three-quarters of the total cost of time is met by them, along with 12% by employers.

Of course, the construction of such estimates comes with a number of caveats – as highlighted and discussed by NIACE. The data on which they are based is often imperfect, commonly being used for a purpose for which they were not designed. However, NIACE are confident that they represent 'reasonable orders of magnitude' estimates of the patterns of investment and the relationships between the major parts.

There are two issues to note in particular:

- there is a clear discrepancy of the estimates of the amount spent by public sector employers on training between the NESS 2007 estimate of £3.4 billion and the NIACE estimate of £11.1–£11.6 billion. NIACE believe this to be caused by (i) the exclusion from the NESS estimates of the expenditure by the NHS on initial training of professional staff (around £4 billion) and (ii) apparent underestimates in NESS of the expenditure in central government departments.
- the estimate of investment of time by individuals. This has not been calculated previously. To do so, NIACE estimated the time spent by individuals in learning, adjusted by the total amount of time spent which was paid for by employers or by public funds, and assigned to this a monetary value of £12.26 per hour for economically active people and £5.52 for economically inactive people. Whilst individual elements of this logic chain can be questioned, there is perhaps a bigger question to ask: why should a value be assigned to individuals undertaking an activity which they have chosen to do? NIACE believe it to be important for two reasons: as an important dimension in learning in its own right but also because it facilitates comparisons with other parts of the expenditure study (e.g. the wage cost of employees undertaking training included in the NESS survey and public expenditure of student support for full-time students).

This analysis identifies the extent to which employers and individuals are key players in training investment – a key remaining question is whether this investment, although at face value considerable, is enough to ensure the 2020 Ambitions will be met? The earlier analysis raises doubts about this. Equally too, it is important to consider whether this investment is in the "right" areas. The remainder of this section examines patterns in participation in learning and training amongst employers and individuals to allow a fuller assessment to be made.

# 4.3 EMPLOYER INVESTMENT IN TRAINING

The evidence suggests that the majority of employers provide training to their staff:

- In England two thirds (68%) of employers provided some training or development to at least some of their staff over the previous 12 months, representing 56% of the workforce as a whole<sup>48</sup>;
- In Scotland, 65% of employers provided some form of training to employees in the previous year. 10% provided off-the-job only, 17% onthe-job only and 38% a mix of both types<sup>49</sup>;
- in Wales 58% of employers provided off-thejob training to their staff<sup>50</sup>; and
- In Northern Ireland, 78% of employers provided some training to their staff in the previous year with 60% having provided onthe-job training, and 34% off-the-job training<sup>51</sup>.

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 and seems to be increasing despite the recession. In England, for example, there has been a continuing increase in the proportion of employers providing training –

- **48** UKCES, National Employers Skills Survey for England 2009: Key Findings Report, 2010, p.39.
- 49 Future Skills Scotland, Skills in Scotland, 2009.
- 50 Future Skills Wales 2005, Sector Skills Survey Summary Report, 2005, p.12.
- **51** DELNI, The Northern Ireland Skills Monitoring Survey 2005 Main Report, 2007, p.70 and 82.

from 59% in 2003, to 65% in 2005, 67% in 2007 and has stayed effectively at this level in the most recent survey in 2009 (68%) despite the impact of the recession<sup>52</sup>.

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

#### 4.3.1 Number of training days

Overall, employers in England funded or arranged 109 million days of training over the course of 12 months. This is equivalent to every worker in England receiving 4.7 days' training over the course of the year. Looking just at those establishments who train, this equates to 5.3 days per employee in these establishments or 8.5 days per person trained.

#### **Table 4.2:**

#### Employer funded training days per annum

	Days
Total training days	109 million

#### Per capita training days

Total workforce	4.7
Training employers' workforce	5.3
Per trainee	8.5
Weighted base	1,492,367
Unweighted base	79,152

**Source:** UKCES, National Employers Skills Survey for England, 2009: Key Findings Report, 2010, p.44

Note: England only. Base: all employers

The NESS data shows that employers who train typically provide training for a large proportion of their workforce. 70% (of those that provide training) arrange it for more than half their workforce and nearly two fifths (38%) trained 90% of their current workforce, over the previous 12 months. However, this has decreased since the 2007 survey, when 74% of training employers trained more than half of their workforce and 44% trained more than 90%.

#### 4.3.2 Expenditure on training

Total employer expenditure on training in England is estimated to be £39.2 billion (over the 12 months prior to the NESS 2009 survey). Whilst this appears to be an increase over the 2007 figure, when inflation is factored in, this is equivalent to a decrease in real terms of around 5%. This expenditure splits almost equally between on-the-job (51%) and off-the-job (49%). Examining the items of expenditure which makes 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 4.3.

The figure of £39.2 billion is considerably lower than that used above and quoted in the NICE study. There are two reasons for this. The first is simply that this data is from the 2009 NESS survey, whilst NIACE use the 2007. The more fundamental reason, however, is the inclusion of which spending items in the overall figure. NIACE exclude from their calculations the 'opportunity cost' elements, which is the spend on wages of the staff being trained. On this basis, the real 'spend', however, is roughly half of the total figure.

This total expenditure, nonetheless, equates to  $\pounds1,700$  for every employee in the workforce. Looking only at those employers who train, it equates to  $\pounds1,925$  per employee and for each employee that received training it equates to  $\pounds3,050$ .

<sup>52</sup> UKCES, National Employers Skills Survey for England 2009: Key Findings Report. p.39.

## **Table 4.3:**

# Training expenditure and its components

	£bn	%
Total expenditure	39.2	100
Off-the-job training	19.1	49
On-the-job training	20.0	51
Off-the-job: course related	16.4	42
Trainee labour costs	4.8	12
Fees to external providers	2.1	5
On-site training centres	2.6	7
Off-site training centre (within same company)	0.3	1
Training management	6.3	16
Non-training centre equipment and materials	0.5	1
Travel and subsistence	0.4	1
Levies minus grants	-0.4	-1
Off-the-job: other expenditure (seminars, workshops, etc)	2.7	7
Trainee labour costs	2.0	5
Fees to external providers	0.7	2
On-the-job training	20.0	51
Trainee labour costs	12.4	32
Trainers' labour costs	7.6	20
Weighted base	1,011,308	1,011,308
Unweighted base	7,317	7,317

**Source:** UKCES, National Employers Skills Survey for England 2009: Key Findings Report, 2010, p.46 **Note:** England only. **Base:** all employers

Looking at changes over time, whilst fewer staff are receiving training than in 2007, more is being spent on each person trained. The average annual investment in training per trainee is  $\pounds3,050$  compared with  $\pounds2,775$  in 2007. This means that per trainee, employers in 2009 spend an average of 3% more on training in real terms (allowing for inflation) than was the case in 2007. The average annual expenditure on training per member of staff is down slightly (by 1%) from the 2007 figure of £1,725 to £1,700. In real terms this represents a larger decrease (7%). Looking only at employers that train, training expenditure in 2009 was £1,925 per member of staff – a decrease of 3% over the 2007 figure of £1,975 and a 'real terms' decrease of over 8%. See Table 4.4.

#### **Table 4.4:**

Comparative data on training activity

	2005 £m	2007 £m	2009 £m
Total training expenditure	33,331	38,648	39,157
Per capita training expenditure (total workforce)	1,550	1,725	1,700
Per capita training expenditure (training employers workforce)	1,800	1,975	1,925
Per trainee training expenditure	2,550	2,775	3,050
Weighted base	896,639	974,091	1,011,308
Unweighted base	7,059	7,190	7,317

Source: National Employer Skills Survey for England, 2009: Key Findings, p.47

# **4.3.3** Impact of the recession on training activity

It is difficult to disentangle the long term trends and the impact of the recession. Most indicators of training activity, as revealed by NESS, have been rising over time (from 2003). As we would expect, the recession has impacted on this, but the picture is complex to interpret in that:

- the proportion of employers providing training has remained static;
- real training expenditure by employers has fallen following a period when it has been rising. NESS data shows that between 2007 and 2009 there has been a 'real' decrease of 5%;
- the proportion of the workforce receiving training has fallen – NESS 09 estimates that 56% of the workforce received training, compared to 63% in 2007.

These findings from NESS closely chime with the findings from different sources reported by Mason and Bishop<sup>53</sup>. They suggest that the majority of establishments reported that spending on training was unchanged, with the volumes reporting cuts in training being much the same as those reporting an increase. However, there is some evidence in their research of reductions in the proportions of employees receiving training in a majority of firms and (in particular) a decline in off-thejob training. Whilst the scale of establishments offering on-the-job training seemed to be impacted relatively little, the coverage of that training did decline, being offered to fewer **employees**. At the same time the proportion of establishments offering off-the-job training declined. Mason and Bishop suggest that 'in essence...many establishments' training plans were blown off course by the recession'.

#### 4.3.4 Variations in training

Whilst the overall levels have changed, most probably due to the recession, the patterns in variation have not and still show that:

- organisation size is perhaps the key determinant of the likelihood of an employer providing training, in that 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;
- there is considerable sectoral variation. Training is most common amongst Education (92% of establishments providing training), health and Social Work (88%), Public Administration and Defence (87%) and Financial intermediation (80%). Low proportions of establishments provided training in the Agriculture and Manufacturing sectors.

However, as discussed in last year's Report, although the statistical evidence suggests that small organisations are less likely to provide training for their employees than larger organisations, there is a need to note the wide variation in sub-groups of smaller employers and resist making broad generalisations about the heterogeneous SME community<sup>54</sup>. 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

**<sup>53</sup>** Mason G and Bishop K, Adult training, skills updating and recession in the UK: the implications for competitiveness and social inclusion, LLAKES Research Paper 10, 2010.

<sup>54</sup> 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; Edwards P, Skills and the Small Firm: A Research and Policy briefing, UKCES Briefing paper Series, June 2010.

objectives<sup>55</sup>. 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.

#### **4.3.5** Employer Investment in Training: An Optimal Level?

But how do we deduce whether levels of training are adequate and at an optimal level to sufficiently support business development and enhance business performance? The UK Commission published in 2009 a series of research reports<sup>56</sup> which examined why a sub-optimal level of investment in education and training may exist and reviewed the range of policy levers available to remedy this. The potential barriers are shown in Table 4.5.

#### Table 4.5:

Potential barriers to training

Barrier	Definition and issue
Capital market imperfections	Organisations may find financial institutions are reluctant to lend money for investment in learning.
	This may particularly be true for firms which operate on low margins in markets which are price sensitive, and for those businesses which do not have assets or profits against which loans can be secured.
Short-termism	It typically takes a long time to recoup the benefits of investment in training. Firms which choose, or are required by institutional investors to make profits which are calculated over a short period of time may find it more difficult to justify investment in training. Individual managers who are short-termist will be more risk averse to investments such as training which have a long payback period.
Bounded rationality	Faced with a large number of pieces of (often partial) information, managers may find it simply too difficult to judge the costs and benefits of training investment accurately. Beliefs and assumptions may help guide their decision making.

55 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.

56 See, for example, Stanfield et al, Review of Employer Collective Measures: Final Report, UKCES Evidence Report 10, November 2009.

# Table 4.5: (continued)

Potential barriers to training

Barrier	Definition and issue
Management education	The level of education managers have, and their level of knowledge about training, may influence investment decisions. Management education is especially important in influencing organisational strategy, where limited aspirations may reduce ambition to compete in higher-value-added markets which would lead to needs for higher level skilled staff and consequently investment in staff development.
Imperfect information	Evaluating the benefits of training is difficult so training tends to be viewed as a cost which can discourage investment. In addition, imperfect information can also contribute to short-termism, capital market imperfections and bounded rationality.
	Employers may find the vocational education, training and qualifications system difficult to access and understand.
Poaching	The possibility of firms not training their own staff because they can simply recruit workers trained by other organisations. This can discourage organisations from investing in training if they fear they will lose trained workers to other firms.
Transaction costs	The cost to firms of sourcing and organising training on management time. The availability of management resources, how managers prioritise their time and the degree of attention they give to planning staff development are significant in supporting investment in training.
Staff willingness to train	Staff may need to perceive a personal benefit of training to be willing to participate.
Access to suitable training provision	Firms which have specific training needs, operate in sectors which have few training suppliers or are based in remote geographical locations may find it difficult to find suitable external training providers. There is also a long standing trend for employers and learners to seek specific learning provision which is more customised to individual and firm needs and delivered in smaller units of time and content.
Releasing staff to train	Enabling staff to leave the workplace to undertake formal training may cause difficulties – particularly for small firms.
Economies of scale	The greater the number of staff to be trained, the lower the costs of investment in training per head. For small firms, investment in equipment needed for training may be prohibitively expensive if very few staff need it.
Spillover effects of training between firms	Firms may indirectly benefit from training done by others, e.g. through the creation of a pool of skilled workers for the labour market, or through shared knowledge about the supply, costs and benefits of training.

Source: Review of Employer Collective Measures: Final Report, 2009

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. We have examined some of the evidence around the barriers to training to seek to understand current patterns of investment and whether they are sufficient.

#### 4.3.6 Employers who do not provide training

We examine from available evidence the reasons behind not training. About a third of employers across the UK do not provide any training for their staff. It is clearly important to understand the motivations of these employers and the barriers they face in providing skill development opportunities for their staff.

The most common reason for not providing training is a belief that all staff are already proficient in their job – mentioned by 66% of non-trainers in England, 76% in Wales, 44% in Scotland, and 73% in Northern Ireland<sup>57</sup>. 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-thejob 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. Because of this, 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 58% of businesses have business plans (which specify the objectives for the coming year), just under half (43%) have a formal training plan and just over a third (36%) have a budget for this training expenditure. Whilst this means, of course, that over 42% 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, 32% of establishments (in England) have all three plans but 43% none. 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 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<sup>58</sup>.

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

<sup>57</sup> Some care needs to be taken with comparing the responses across countries because individual countries used slightly different response codes.

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: 47% said they would, with the main barriers being a lack of funds (60%) and an inability to spare further staff time (54%). There is an important distinction to make here. Employers who do not train at all cite as reasons for this that their employees have all the skills that they need; employers who do undertake training but would like to do more tend to cite constraints of money and time.

# **4.3.7** Policy options to stimulate employer investment in skills

The UK Commission project mentioned earlier<sup>59</sup>, published in 2009, exploring employer investment in training explored a number of policy options available to tackle sub-optimal levels of investment. These are summarised in Table 4.6.

The policy review emphasised that there was no 'magic bullet' which would address all the issues simultaneously but that different levers would offer different benefits depending on the circumstances in which they were applied and how precisely they were developed and implemented. The UK Commission concluded that there was a need for policy responses in both the short and medium term and it put forward recommendations for further consideration in autumn 2009. This included proposals around: employer networks; human capital reporting; occupational licensing; and options around deploying the Investors in People Standard. However since the time of the review, given the wider economic climate, and constraints over public expenditure, the Commission has been asked to undertake further work in this area and to revisit the breadth and depth of evidence reviewed in the earlier work. In particular it is been asked to provide further advice about where public resources should be prioritised, and how, to add greater value to leveraging optimal levels of investment from employers. This work will report in the autumn of 2010.

## 4.4 INDIVIDUAL PARTICIPATION IN LEARNING

Having considered the evidence concerning employers, it is important to reflect on individual training activity. This year we draw heavily on research conducted within the UK Commission which provided a thorough synthesis of the evidence in this area. This found that the propensity of individuals to engage in learning activities has been studied in some detail in recent years<sup>60</sup> and the messages being revealed are reasonably consistent. The main points are that:

- the proportion of people who are reported to have been in learning varies by (i) the definition of learning used and (ii) the time frame over which that learning is allowed to have taken place. So, if the definition is job-related training in the last 4 weeks, the proportion who have participated is around 15%, if the same definition is extended to 13 weeks it increases to around 30%. If the definition is expanded to 'learning' (as in the NIACE survey) the proportion participating over the last 3 years increases to 41% and if the definition is extended further (as in the National Adult Learning Survey<sup>61</sup>) then this suggests that 80% of individuals had participated in the last 3 years;
- there are some indications that on a common measure the UK participation in education and training is above the EU average with 49% of respondents in the UK participated in education or training compared to an average of 36%<sup>62</sup>;
- the level of participation may be declining: Mason and Bishop (2010)<sup>63</sup> show that across the workforce as a whole there has been a decline in average levels of job-related training through much of the 2000s, and levels have now returned to 1993 levels;

**60** Much of this is reviewed in UK Commission for Employment and Skills, Employee Demand for Skills: A Review of Evidence and Policy, Evidence Report 3, June 2009.

- **61** Snape, D. et al, National Adult Learning Survey (NALS) 2005, 2006.
- 62 The European Commission, Adult Education Survey: (http://epp. eurostat.ec.europa.eu/portal/page/portal/education/data/ database).
- **63** Mason G and Bishop K., Adult Training, Skills Updating and Recession in the UK: the Implications for Competitiveness and Social Inclusion, LLAKES Research Paper 10, 2010.

**<sup>59</sup>** See, for example, Stanfield, C. et al, Review of Employer Collective Measures: Final Report, UKCES Evidence Report 10, November 2009.

# Table 4.6:Policy options

Policy response	
Levies	Levy systems appear, in practice, to be relatively unsuccessful due to a number of operational barriers. They do not often succeed in reallocating funding to targeted employer groups (such as SMEs) and incur significant administration costs and manipulation/compliance problems. Pre-existing tri-partite relationships (at sectoral level) are a feature of successful levy systems, but are not (overall) a feature of the UK economy. Levies can be deeply unpopular with employers.
	There are a limited number of circumstances in which levies can have a useful role in stimulating employer investment in training, including where industries are geographically dispersed, consist of many small organisations and where there is a general employer consensus that levies are essential.
Individual training time rights	Rights to individuals to request time off for training should overcome employer reluctance to train, evidence from overseas suggests that take-up of such rights is very low relative to the proportions of eligible employees. Employees seeking to change careers (or employers) are most likely to make use of the right, meaning that the current employer may receive little benefit. There is little evidence that employees from vulnerable groups make use of their rights, meaning that significant investment in a resource intensive Information, advice and guidance service would also be required.
Occupational licensing	Occupational licensing would require employer support and may be regarded as an unnecessary, and undesirable, regulatory burden. The selection of occupations for licensing is critical. Effective enforcement mechanisms would be required and some agency to administer sanctions for non-compliance.
Modifying accountancy standards	This is a complicated task which would require collaboration amongst a number of stakeholders. Any changes here would need to be seen within the broader debate on human capital reporting.
Public procurement policies	Using public procurement policies may enable policy to target groups who are least likely to receive training from their employer. There is currently limited evidence on the impact of public procurement policy on training
Loan guarantees for training	Currently, loan guarantee schemes are rarely used explicitly for training. Their impact is limited by the fact that the decision to lend lies with the financial institutions rather than the Government, and more understanding is needed on how, given this constraint, their use could be optimised.

# **Policy response**

Improving dialogue on training between employer and employees	Dialogue between employers and employees can have a potentially powerful role on stimulating investment in and take-up of training, particularly when facilitated by employee representatives. This is especially notable when training is incorporated as a part of institutionalised collective bargaining. However, in the UK, the impact may be limited by the erosion of trade union representativeness and a decline in collective bargaining. Union Learn has advanced the learning agenda and evidence suggests that it has increased interest in and take-up of training, particularly amongst those with low skills or no previous qualifications. However, union coverage is higher in parts of the economy (public sector, manufacturing, larger companies) where companies are already likely to train staff. The ability of unions to champion learning is clearly dependent on them representing a wider proportion of the workforce than is currently the case.
Layered Investors in People accreditation	Investors in People is a well recognised and clearly understood scheme and changing the accreditation model creates the risk of diluting its clarity and purpose.
Inter-employer networks	There is a large number of positive evidence about the benefits of inter- employer networks, but they are demanding in the support they require and need considerable support from employers. Competitor organisations may not wish to collaborate with each other and it can take time to build up trust to enable the networks to operate efficiently. There may also be difficulties in generating sufficient interest from a diverse employer base.
Standalone government subsidies for training	Government subsidies are a widespread tool. Levels of deadweight may be high – some evidence suggests that they may increase the volume of training but not the amount of employer investment.
	would genuinely unable to train without them, such as small organisations. Designing and administering subsidies therefore require targeting.
Tax breaks	There is little evaluative evidence on the impact of tax breaks on employer investment in training, although studies of the impact of tax breaks on R&D suggest that in order for tax breaks to be effective they have to be (i) relatively generous to stimulate employer action, (ii) differential tax rates would be needed to target specific groups effectively, (iii) the tax break would need to be targeted at additional or specific types of training and (iv) employers are often able to manipulate the system to maximise the financial benefit. Moreover, this evidence suggests that tax breaks are taken up by companies with a pre-existing commitment to R&D.

Source: Review of Employer Collective Measures: Final Report, 2009

- whatever the level of participation there are wide variations in participation in education and training on the basis of:
  - geography: for example with participation in job-related training in the last four weeks ranging from 9% of employees of working age in Northern Ireland to 18% in Wales;
  - personal characteristics: women are more likely to receive training than men (although this may not be the case for all women – especially those with caring responsibilities); younger people are more likely to receive training than older people (19% of 20 to 24-year-olds compared to 11% of 50 to 64-year-olds); and
  - qualification attainment: those with qualifications are far more likely to receive training than those without, ranging from 20% of those with degrees to 4% of those with no qualifications at all. Thus, those already with skills and qualifications are more likely to get more training rather than those who might need more training and skills development. Research shows that negative attitudes toward learning can be traced back to experiences at school, and the fear of 'failing exams' acting as a major disincentive for some individuals. The evidence shows that amongst some disadvantaged areas, low skilled jobs are actively sought given the promise of 'no learning' (see, for example, Sabates, 2007; Park, 1994 and; Fitzgerald et al, 2002);
  - socio-economic status: those in work are more likely to receive learning opportunities than those unemployed or economically inactive. Amongst those in work, higher level occupations are more likely to receive training opportunities than those in lower level occupations: almost a quarter of all people employed in Professional occupations (22%) received training in the last four weeks compared to 8% in Elementary occupations. The motivation for learning will also vary by socio-economic group: for those in employment the main reason for undertaking a course leading to a qualification was to 'develop skills relevant to

work', followed closely by the desire to 'gain a qualifications valued by employers'. These reasons were also cited by unemployed people on training, although the additional reason of being able to apply for better paid jobs also featured highly;

- sector: with 22% of people employed in Public administration, education and defence receiving training compared to 8.5% in Transport and communications;
- other workplace factors, such as Trade union membership or recognition and employment in larger organisations.

In addition to these factors, individuals across all these situations will also experience other 'life pressures': the Adult Education Survey reported the top three barriers to learning as: a lack of time due to work commitments; a lack of time due to family responsibilities and expense. Research conducted by CEDEFOP shows that amongst the individuals surveyed the best way of increasing levels of demand would be to better tailor the offer of training available and to allow more flexibility in their current working hours to allow this to take place.

The UK Commission Review highlighted that:

there is a need to understand the social and economic context which sets the framework for intervention in raising demand for skills amongst individuals and which influences the culture, attitudes and behaviours of individuals across society. There are crucial factors, which are very difficult to tackle in the short term. Together with the institutional framework and the effectiveness of communicating the benefits of engagement to individuals, these are key underpinning issues to the effectiveness of policy interventions. As a whole, the policy review suggests the importance of policy interventions which have embedded within them measures to impact on these broader issues, such as tackling the attitudes and behaviours of individuals alongside their employers, providers and/or families;

- financial support is key, but not enough. The evidence shows that financial incentives prove beneficial for encouraging those in work, or with skills at Level 3 or above to take up training. Loans can also act as an important incentive for beneficiaries to complete their training. However, for lower skilled people, financial support may be insufficient in stimulating demand without supplementary support through the provision of information advice and guidance and sufficient support and encouragement;
- bespoke support may often be necessary: the evidence suggests that for low skilled people in work, a 'champion', e.g. union learning representative, and/or a line manager can provide important support and encouragement to undertake skills development, whilst for low skilled people out of work, anonymous support (such as learndirect) or one-to-one support schemes can be effective;
- significant work will need to be done to persuade both employers and employees of the value of a 'time to learn' offer without complementary steps taken to actually achieve a longer term culture change.

#### 4.5 THE UK BENCHMARKED AGAINST EU COUNTRIES

As part of the overall Lisbon strategy for jobs and growth, the European Council set out broad education and training common objectives for the systems of the EU. This is based on a framework of 16 core indicators for monitoring progress towards the Lisbon objectives, namely:

- Participation in pre-school education
- Language skills
- Upper secondary completion rates of young people
- Participation of adults in lifelong learning
- Special needs education
- ICT skills
- Professional development of teachers and trainers
- Adult skills
- Early school leavers
- Civic skills
- Higher education graduates
- Educational attainment of the population
- Literacy in reading, mathematics and science
- Learning to learn skills
- Cross-national mobility of students in higher education
- Investment in education and training

These indicators enable the European Commission and the Member States to (i) underpin key policy messages; (ii) analyse progress both at the EU and national levels; (iii) identify good performance for peer review and exchange; and (iv) compare performance with third countries.

The core indicators cover the whole learning continuum from pre-school to adult education, teachers' professional development and investment in education and training. Not all the data for these indicators are fully available yet. In almost all these areas, new surveys are being prepared or presently carried out. In order to guide progress on achieving the objectives set for education and training systems of the EU, the European Council adopted in May 2003 five benchmarks to be achieved by 2010 and in May 2009, five benchmarks for 2020 (see Table 4.7). Measuring progress<sup>64</sup> against these measures shows that education and training systems in the EU are generally improving.

The UK is in the top performing six countries on the basis of the average of the five 2010 benchmarks: it is in the top seven performing 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). 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.

Of the EU benchmarks for 2020, the UK performs better than the EU average on the majority of these indicators, having a lower proportion of low educational achievers (between 16.7–19.8% compared to 20.2–24.1% for the EU), a higher proportion with higher education attainment (39.7% compared to 31.1% and a higher proportion of adults participating in lifelong learning (19.9% compared to 9.5%). It lags the EU average on only one of these indicators – having a higher proportion of early leavers from education (17.0% compared to 14.9% across the EU).

The UK's better performance when benchmarked against EU countries reflects their different 'memberships', such that (i) the OECD includes 10 countries who are not members of the EU but are highly advanced economies and (ii) the EU contains eight countries who are not OECD countries, several of whom are not highly advanced economies. In addition, our 'OECD benchmark' focuses qualifications, whereas the EU benchmarking includes a range of other measures, generally only available for EU countries.

#### **Table 4.7:**

EU benchmarks for 2010 and 2020

Five EU benchmarks for 2010	Five EU benchmarks for 2020			
No more than 10% early school leavers.	At least 95% of children between 4 years old and the age for starting compulsory primary education should participate in early childhood education.			
Decrease of at least 20% in the percentage of low-achieving pupils in reading literacy.	The share of early leavers from education and training should be less than 10%.			
At least 85% of young people should have completed upper secondary education.	The share of low-achieving 15-year-olds in reading, mathematics and science should be less than 15%.			
Increase of at least 15% in the number of tertiary graduates in Mathematics, Science and Technology (MST), with a simultaneous decrease in the gender imbalance.	The share of 30 to 34-year-olds with tertiary educational attainment should be at least 40%.			
12.5% of the adult population should participate in lifelong learning.	An average of at least 15% of adults should participate in lifelong learning.			

64 European Commission, Progress towards the Lisbon objectives in education and training: Indicators and benchmarks, 2009, Commission Staff Working Document.

#### **Table 4.8:**

#### Performance against the 2020 EU benchmarks

		Benchmark	UK	EU average
Indicator		2020	2008	2008
Participation in early childhood education (1)		95%	90.7%	90.7%
Low achievers (2)	Reading	15%	19.0%	24.1%
	Mathematics	15%	19.8%	24.0%
	Science	15%	16.7%	20.2%
Early leavers from education and training (3)		10%	17.0%	14.9%
Higher education attainment		40%	39.7%	31.1%
Adult participation in lifelong learning (4)		15%	19.9%	9.5%

Source: Commission of the European Communities, Progress towards the Lisbon objectives in education and training: Indicators and benchmarks, 2009, Brussels

**Notes:** (1) 4-years-olds or year before start of compulsory primary education; (2) 15-year-olds, PISA study results; (3) aged those 18–24; and (4) those aged 25–64 in last 4 weeks

## **4.6 CONCLUSIONS**

Measures of skill development, other than qualifications, most notably training, overall appear to 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. There are also questions about the duration of training and whether this is therefore of sufficient quality.

Furthermore, in the last year developments in patterns of training may be raising issues for further concern. For instance, the number of training days has reduced slightly as has private expenditure by employers (albeit more has been spent on each person). Training behaviour has also been affected by economic developments due to the recession. A key question for the future is how far reaching and deep these developments are? In the context therefore of achieving the 2020 World Class Skills Ambition, this raises questions about the current adequacy of training and skills investment and what more can or should be done to ensure that individuals and businesses make a long term commitment to continually invest in skills.

# 5

# Mismatches between jobs and skills

# **5.1 INTRODUCTION**

The previous section focussed on the extent to which the levels of qualifications and skills in the UK are, and will be, at the right level. This section examines whether the qualifications and skills that the UK workforce hold are of the **right type**.

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. In doing so we use the framework developed for the National Strategic Skills Audit<sup>65</sup> which allows us to examine the degree of match/mismatch in the labour market and thus signals potential problem areas in the labour market which warrant further action. This covers:

- those areas where there are perceived shortages in skills supply and which may manifest themselves as skills shortages and gaps;
- those areas where labour supply may exceed labour demand and which may result in significant unemployment and underemployment (where the skills that the workforce possess are not fully utilised);
- economic migration, which can be seen as a response to existing mismatches within the UK.

This is discussed in considerable detail for England in the National Strategic Skills Audit: here we simply produce a summary of the core analysis, pertinent to this assessment, and update and extend it (where possible) to the UK.

## Chart 5.1: Framework of labour market mismatch



65 UKCES, 2010.

# 5.2 SKILLS SHORTAGES AND SKILLS 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 both an industry and an 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. This is particularly the case with the most recent Skills Surveys (those conducted in England and Northern Ireland) in which the results have been affected by the recession and makes comparison with 'pre-recession' data from Wales and Scotland problematic. The dates of the latest employer skills surveys across each of the 4 Nations are shown in Table 5.1.

#### 5.2.1 Skills 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 latest version of NESS (2009) estimated that 12% of all establishments in England had vacancies at the time of the survey, equating to some 386,000 vacant jobs. 3% reported hard-to-fill vacancies (85,000 vacancies) and 3% a skill shortage vacancy (63,000 vacancies). These figures have decreased considerably since the previous survey in 2007, reflecting the impact of the recession.

The 'recession impact' makes comparisons across the 4 countries difficult: England and Northern Ireland, who both have conducted more recent research, have a similar levels of vacancies. Employers in Scotland and Wales report a similar proportion of vacancies to each other.

#### Table 5.1:

Employer skills surveys in the UK

Country	Survey	Last carried out (published)	Sample size 79,152	
England	National Employer Skills Survey (NESS)	2009 (2010)		
Scotland	Skills in Scotland	2008 (2009)	6,274	
Wales	Sector Skills Survey	2005 (2006)	6,719	
Northern Ireland	Skills Monitoring Survey	2008 (2009)	4,000	

In terms of skills shortages, these are comparable across all four countries; 3% in England and Northern Ireland, 5% in Scotland, and 4% in Wales (see Table 5.2).

However, to get a real sense of how pervasive skills shortages are, we need to see them in relation to the labour market as a whole. In England, total vacancies are equivalent to around 1 in 60 of all jobs (1.7% of all employment). Hard-to-fill and skill shortage vacancies form 0.4% and 0.3% of total employment respectively, i.e. well less than 1 in 100 of all jobs. These figures have all declined since 2007, again most probably as a result of the recession. Skills shortages, when measured in this way, are a little higher in Northern Ireland and Wales and considerably higher in Scotland (see Table 5.3).

Overall skills shortages are not pervasive, they are, however, significant in some types of organisation, sectors and occupations.

Take size. The larger the employer, the more likely it is that they have skills shortages. Whilst 8% of large establishments, those employing more than 500 people, report skills shortages, only 2% of small establishments (those employing fewer than 25 people) report them. However, in terms of the absolute number of skills shortages, the greatest volumes are experienced by smaller companies. Data from NESS 2009 (which covers just England) shows that 63% of skills shortages are in establishments employing less than 25 people, even though such establishments account for only about a third of total employment.

In occupational terms, it is Associate professional, Skilled trades, Personal service occupations 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, Skilled trade and Personal service occupations than is the average for all vacancies. It is here where skills shortages are concentrated.

In sectoral terms, the largest volumes of skills shortages are in Business services and Health and social work, with over a third of skill shortage vacancies occurring in these two sectors. However, the highest proportions of SSVs are found in the Agriculture, Electricity, gas and water and Construction industries. The greatest

#### **Table 5.2:**

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

	England		Scotland		Northern Ireland		Wales	
	2007	2009	2006	2008	2005	2008	2003	2005
All vacancies								
% of establishments reporting	18	12	19	18	11	12	25	21
Number of vacancies (000s)	620	386	77	70	12	17	51	38
Hard-to-fill vacancies								
% of establishments reporting	7	3	12	10	6	4	15	10
Number of vacancies (000s)	183	85	37	35	6	5	20	13
Skill shortage vacancies								
% of establishments reporting	5	3	7	5	4	3	9	4
Number of vacancies (000s)	130	63	23	16	3	3	11	5

**Source:** England: National Employer Skills Survey, 2007 and 2009; Scotland: Skills in Scotland, 2006 and 2008; Northern Ireland: Northern Ireland Skills Monitoring Survey, 2005 and 2008; Wales: Future Skills Wales, 2003 and 2005. **Base:** England, Scotland, and Wales: all establishments; Northern Ireland: all establishments excluding the agricultural sector

#### **Table 5.3:**

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

	England		Scotland		Northern Ireland		Wales	
	2007	2009	2006	2008	2005	2008	2003	2005
Total vacancies as a % of employment	2.8	1.7	4.0	3.1	2.1	2.4	4.9	3.5
Hard-to-fill vacancies as a % of employment	0.8	0.4	2.0	1.6	1.1	0.7	2.0	1.2
Skill shortage vacancies as a % of employment	0.6	0.3	1.0	0.7	0.4	0.4	1.1	0.5

**Source:** England: National Employer Skills Survey, 2007 and 2009; Scotland: Skills in Scotland, 2006 and 2008; Northern Ireland: Northern Ireland Skills Monitoring Survey, 2005 and 2008; Wales: Future Skills Wales, 2003 and 2005. **Base:** England, Scotland, and Wales: all establishments; Northern Ireland: all establishments excluding the agricultural sector

density of skills shortages is to be found in the Agriculture, Electricity, gas and water, Hotels and catering, Health and social work and 'Other' services.

In regional terms, hard-to-fill vacancies are disproportionately concentrated in the East of England, Yorkshire and the Humber and North East regions. Skills shortage vacancies are disproportionately located in London, the East of England and Yorkshire and Humberside. They are disproportionately low in the North West, East Midlands, South East, and West Midlands.

As noted in the UK Commission's National Strategic Skills Audit<sup>66</sup>, there is no necessary relationship between the existence of unmet skill needs (in the form of skills shortages) and the skills or qualifications of a region's workforce. High skill regions like London and the East of England still experience relatively high skills shortages, as does a relatively low skill region like the North East. Similarly skills shortages are relatively low in the Midlands and the North West despite them being relatively low skill regions. This is because skills shortages reflect the level and pattern of skills demand as much as skill supply as well as the specifics of conditions in particular occupations.

#### 5.2.2 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 that are affected by skills gaps, though the extent of these skills gaps differs across nations and they are much more prevalent than skills shortages. The most recent survey results show that 19% of employers in England report that at least one of their employees exhibit skills gaps. This is similar in Scotland and Wales, but 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 7% in England are considered by their employers to be less than fully proficient, 8% in Scotland and Northern Ireland and 6% in Wales. Nonetheless, this does amount to nearly 2 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 (see Table 5.4).

In England and Northern Ireland, the proportion of employing establishments reporting skill gaps increased and this led, in England, to the proportion of the workforce thought to have skill gaps also to increase. This increase may reflect growing employer awareness of existing skill

<sup>66</sup> UK Commission for Employment and Skills, Skills for Jobs: Today and Tomorrow, The National Strategic Skills Audit for England 2010, 2010.
#### **Table 5.4:**

Level of skill gaps across the UK

	England		Scotland		Northern Ireland		Wales	
	2007	2009	2006	2008	2005	2008	2003	2005
Proportion of establishments reporting internal skills gaps (%)	15	19	22	20	9	14	19	18
Skills gaps as a proportion of employment (%)	6	7	8	8	9	8	5	6

**Source**: England: National Employer Skills Survey, 2007 and 2009; Scotland: Skills in Scotland, 2006 and 2008; Northern Ireland: Northern Ireland Skills Monitoring Survey, 2005 and 2008; Wales: Future Skills Wales, 2003 and 2005. **Base:** England, Scotland, and Wales: all establishments; Northern Ireland: all establishments excluding the agricultural sector

gaps and/or changes in the nature of the work staff are required to do, especially as business pressures have increased during the recession.

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.

It should be noted that the reality of the labour market is that there will be a good deal of substitution between skills shortages and gaps. When faced with applicants that are in some way inadequate, some employers may prefer to leave the vacancy unfilled (thus leading to a hard-to-fill vacancy and possibly a skills shortage vacancy), whilst other employers may feel it is better to recruit someone, albeit who is not appropriate skilled and, in which case, the deficiency will reveal itself as a skills gap. To overcome this issue the two separate indicators (of skills shortage and skill gaps) can be combined into a single measure: the proportion of establishments who report that they face a 'skills issue'. When expressed in this form, we can see that in England in 2009, 21% of establishments were suffering from a skills issue.

Looking over time, on this combined measure in England, the proportion of employers with a skills issue decreased over the period 2003–07 but increased during the recession. Whilst this may seem counter-intuitive, the decrease in skills shortage vacancies is out-balanced by the increase in establishments reporting skill gaps.

#### **Table 5.5:**

Proportion of employers reporting skills issues in England, 2003–2009

	2003	2005	2007	2009
With skills issue	25	20	18	21
No skills issue	75	80	82	79

**Source:** National Employer Skills Survey for England, 2003, 2005, 2007 and 2009

As with skill shortage vacancies, the incidence of skill gaps varies:

- by occupation, most skill gaps are found in Elementary, Managerial, Sales and Administrative occupations.
- the incidence of establishments reporting skill gaps is highest amongst Electricity, gas and water, Hotels and catering and Education sectors. When expressed as a proportion of staff with skill gaps, these are highest amongst Hotel and catering, Manufacturing and Electricity, gas and water sectors.
- regionally, more employers report skill gaps in the South West, South east and the West midlands – though the distribution of skill gaps is remarkably even. The absolute number of employees with skill gaps is highest in London and the South East, reflecting their absolute size.

## **5.2.3** Nature and impact of skills 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. Skills lacking are closely related to the nature of the job to be done, e.g. employers struggling to recruit staff to Sales occupations reported difficulty finding appropriate customer handling skills, and communication skills. Similarly, those employers having difficulties recruiting to skilled trade occupations reported one of the main skills lacking as being technical and practical skills (see Table 5.6).

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<sup>67</sup>. 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.

#### **Table 5.6:**

Key skills lacking in skills shortage vacancies across the UK

% of establishments reporting a skill shortage vacancy

#### England

Technical and practical skills	62
Customer-handling skills	41
Problem-solving skills	38
Oral communication skills	35

#### 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**

Technical and practical skills	52
Any communication skills	47
Oral communication skills	42
Customer-handling skills	37

**Source:** National Employer Skills Survey 2009; Skills in Scotland 2008; Northern Ireland Skills Monitoring Survey 2008; 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

**67** Questions relating to the cause of skills gaps were not asked in the Wales Employer Skills Survey.

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.

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.

The existence of these skills shortages and gaps needs to be placed in a wider context. Indeed, the extent of skill gaps in particular may be under-estimated. Where this occurs this gives rise to '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)<sup>68</sup>. There are two broad types.

First, 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. The evidence<sup>69</sup> indicates that such companies have failed to keep pace with other 'good' business practices.

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. This suggests skills gaps may be bigger that those reported and measured above<sup>70</sup>. These types of 'latent' skills gaps 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.

Because of these concerns that (a) skill gaps were possibly being under-reported, and (b) that as a result this was under-playing the development needs of the workforce. Additional questions designed to explicitly examine this were inserted into the NESS 2009 for England. Employers were asked if any of their staff would require new

**<sup>68</sup>** Discussed in Bosworth D. et al, Employers Skill Survey: Statistical Analysis, 2001.

**<sup>69</sup>** Hogarth T. and Wilson, R., Skills in England 2007, Volume 2: Research Report, 2007.

**<sup>70</sup>** 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.

skills or training over the next 12 months for a variety of reasons, including keeping up to date with legislative requirements or as a result of the development of new products and services.

As opposed to the findings on skill gaps, where only a minority (19%) of employers thought that skill gaps existed, almost 7 out of 10 employers expected that at least one of their staff would need to acquire new skills or knowledge over the next 12 months. In some cases this is likely to reflect a dynamic environment of fast changing skill needs. It is also likely that it often reflects that for many employers staff that they classify as 'proficient' still have plenty of scope to develop and improve their skills and knowledge.

#### **5.3 UNDEREMPLOYMENT**

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 do by examining the *Skills at Work* research, which provides evidence on the overall balance of the supply and demand for qualifications and how it has changed over time. This suggests that:

- the supply of skills exceeds demand, at all levels except at the 'no qualifications' level, i.e. there is a considerable excess of jobs for people with no qualifications. This 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;
- 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, i.e. the supply of graduates is outpacing the growth of jobs that require them.

Table 5.7 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, i.e. whether they are 'over-qualified', 'underdeployed' and 'under-utilising' their skills. Low and/or declining levels would indicate both strong 'matching' of skills to jobs and limited

#### **Table 5.7:**

#### Qualification demand and supply, 1986–2006

	Demand (000s)	1986 Supply (000s)	Demand (000s)	1992 Supply (000s)	Demand (000s)	1997 Supply (000s)	Demand (000s)	2001 Supply (000s)	Demand (000s)	2006 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

over-qualification/underemployment/under-use of skills – high or rising levels – would indicate weak matching and more extensive over-qualification/ underemployment and under-use of skills. The data shows that:

- between 1986–1997, 'underemployment' was relatively stable at around 30% but, since then, it has risen markedly by 5 percentage points since 2001. This means that two in every five workers are in jobs in which they are 'underemployed'. This trend has the greatest impact on those holding Level 4+ qualifications the proportion of graduates underemployed has increased by 50% over the last 20 years, but three quarters of this average has occurred within the last five years;
- the level of 'under qualification' where people's qualifications fall short of the level required to get the job they currently occupy
  has declined in recent years and by four percentage points since 2001.

Overall then, the growth in supply of skills, as measured periodically in Skills at Work has outpaced the growth in demand. Or, put another way, the demand for skills has lagged behind the increase in supply, at a number of skill levels. Whilst some of have questioned the validity of this research because it is based on job holder's perceptions of the qualifications required to get the job, the survey results are consistent with wider international measures. Indeed, last year we also reported on the OECD data which showed that the supply of higher skills in the UK has been increasing at a faster rate than demand. Indeed, when we look at changes in skills supply compared to skills demand, we find that the former has grown in recent years at fully six times the rate of the latter. Moreover, we find that the growth in skills demand is one of the lowest in the OECD. Such trends provide something of a 'level indicator' of potential future imbalances between high level skills availability and skills demand (i.e. a potential over-supply or deficient demand, for high level skills, which would represent underemployment of some/ many of those with high level skills unless the growth of supply is shared, or growth of demand stimulated). This is discussed in more detail in section 6.3 of this report.

This is not the only measure of underemployment in use. The Office for National Statistics also use underemployment to describe the position where a person wants to work more hours than is usual or stated in their employment contract.

In the UK this is measured (using the LFS) by identifying people who are in work, who are willing to work more hours, but able to do so and currently working less then 'threshold' levels (set at 40 or less for people aged under 18 and 48 or less for people aged 18 and over). On this basis, the ONS<sup>71</sup> calculates that:

- 2.8 million people were underemployed in the UK in 2009, some 9% of the economically active population. This suggests that 10% of those in employment are underemployed on this definition;
- the number of underemployed has increased during the period of the recession, from 2.2 million in 2008 to 2.8 million in 2009;
- a second measure of underemployment the number of extra hours wanted was 31.6 million in 2009, some 6.2 million hours higher than 2009. Approximately 3.4% of the potential hours of work for people already in employment were unutilised due to underemployment.

Some element of underemployment is to be expected at any given time – employers cannot be expected to be perfectly flexible in terms of the number of hours they offer, nor to be able to respond to employees requests. But the impact of the recession suggests that some people are clearly in jobs that do not meet their needs in terms of hours worked (and therefore earnings).

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.

**<sup>71</sup>** Walling A and Clancy G, Underemployment in the UK labour market, Economics and Labour Market review, Vol 4, No 2, February 2010.

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. The relatively low levels of skills in the UK, when combined with the existence of only limited skills shortages/gaps and a potentially excessive supply of skills relative to demand, strongly implies 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.

#### **5.4 UNEMPLOYMENT**

Over the period of the recession the unemployment level for the UK rose by nearly half, from 1.67 million to 2.46 million. The percentage increase in England was 44%, in Scotland 74%, Northern Ireland 71% and Wales 66%. All English regions had increases in the unemployment level, ranging from 26% in the North East to 74% in the South West. The unemployment rate increased by 2.5 percentage points to stand at 7.8% in September 2009. In the current recession, the rate of increase in unemployment has been less marked than in previous recessions as employers appear to be retaining labour to ensure that they have the skills to capitalize on in the economic recovery<sup>72</sup> (see Chart 5.2).

The rise in unemployment rates and levels are not equally spread across society. A group particularly affected is young people. Young people have experienced the largest percentage point increase in unemployment rates compared with other age groups and the largest decrease in employment rates.



### Chart 5.2: Rate of change in unemployment rate in past recessions

Source: ONS (2009) Labour Force Survey, all those aged 16 and over, seasonally adjusted

72 National Strategic Skills Audit, 2010.

However, it is important to note that the employment rates for 16 to 17-year-olds and for 18 to 24-year-olds has been declining for some time (since the late-90s for 16 to 17-year-olds, since 2002 for 18 to 24-year-olds). This partly reflects an ongoing upward trend in the number and proportion of young people participating in full-time education.

The rise in unemployment matters. The impacts of unemployment have been summarised<sup>73</sup> and cover:

- the loss of output, leading to a generally poorer society;
- the degradation of the individuals' 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.

#### **Table 5.8:**

Previous occupation and qualification level of inactive and unemployed adults, July to Sep 2009

					3 months	6 months		
				Less	but less	but less	12	
	JS/	4	ILO	than 3	than 6	than 12	months	
	claimant	sι	inemployed	months	months*	months*	or over	Inactive
	%	6	%	%	%	%	%	%
Managers and senior off	icials	7	8	8	11	7	7	10
Professional occupations	S 4	4	6	8	6	5	3	9
Associate professional								
and technical	(	9	8	10	9	8	6	9
Administrative and secre	tarial 8	8	9	12	9	7	7	11
Skilled trades occupation	ns 10	6	13	11	12	17	14	8
Personal service occupa	tions	5	7	8	7	5	6	11
Sales and customer serv	/ice							
occupations	(	9	12	14	9	12	9	12
Process, plant and mach	nine							
operatives	1	5	12	8	12	13	14	8
Elementary occupations	28	8	26	21	24	27	34	21
Total	10	0	100	100	100	100	100	100

Source: ONS (2009) Labour Force Survey

\* ILO Unemployed

**73** Bell, D. N. F. and Blanchflower, D. G., What Should be Done About Rising Unemployment in the UK?, 2009. It is worth noting that the skills of those in work and those in unemployment are considerably different: we can see this from two aspects, occupational distribution (Table 5.8) and qualification level (Table 5.9).

In terms of **occupation**, the occupational distribution of those out of work is significantly different from those that are in work (and indeed, from the main sources of jobs growth in the labour market). 43% of Jobseeker's Allowance claimants, 38% of the ILO unemployed and 48% of the long-term unemployed were previously in operative or elementary occupations. This is between twice and three times the proportion of the unemployed found in the 'top' three occupational groups (managers, professionals and associate professionals). Obviously there is a profound mismatch between the jobs that need to be done and the jobs that the unemployed are probably able to do without significant upskilling. This represents a major 'surplus' of skills that are not in high demand in the labour market. This problem is even more severe for those on the JSA and the long-term unemployed than for the short term unemployed and economically inactive.

When we compare the **qualifications** of the unemployed and those in work, we can see at both the top and bottom of the qualification distribution that the unemployed have substantially lower qualifications levels than those in employment. For example, only 7% of those in work have no qualifications compared to 21% of the long-term unemployed. Nevertheless, it is still the case that, for example, nearly one in seven of the ILO unemployed have a degree, and nearly 40% have a level 3 gualification or above. So, while there is a substantial mismatch between the skills of those not in work (as measured by qualifications and their previous job) and those in work, it is also the case that many have at least the qualification level that mirrors that of those in work. Whether these skills are appropriate for the job opportunities available is another question.

#### **Table 5.9:**

#### Highest level of qualifications for unemployed and economically inactive adults

	In employment %	ILO unemployed %	JSA claimants %	Economically inactive %	Long-term unemployed (12 months+)* %	All working age adults %
Degree or equivalent	26	13	10	11	8	22
Higher educa	ition 10	6	6	5	4	8
GCE A Level or equivalent	24	21	20	20	17	23
GCSE grades A–C or equiv	s alent 22	28	26	24	28	23
Other qualific	ation 11	16	17	14	20	12
No qualificati	on 7	15	20	25	21	11
Don't know	1	1	1	1	1	1
Total	100	100	100	100	100	100

Source: ONS (2009) Labour Force Survey

\* ILO Unemployed

Despite this, it is worth noting that there has been a significantly lower increase in the number of people leaving the labour market in the current recession compared with previous recessions (which may be related to changes in the benefit system) (see Chart 5.3).

Contrary to the views as the recession began, this recession has not turned out to be concentrated 'amongst white collar workers in Financial Services'. The data shows that there has actually been a lower level of job loss in 'white-collar' occupations (such as managers and professionals) than amongst lower-skilled elementary and intermediate skilled occupation. The National Strategic Skills Audit identified the 20 fastest declining occupations during the recession – the biggest losses are in a wide range of operative, manual and elementary occupations (see Table 5.10).



### Chart 5.3: Rate of change in inactivity since start of recessions: 1980/81; 1990/91; 2008/09

Source: ONS (2009) Labour Force Survey

#### Table 5.10:

The fastest declining occupations in England since the start of the recession

Occupation	Spring 2008 (000s)	Summer 2009 (000s)	Numerical change (000s)	% change
Car park attendants	14	7	-7	-51
Scientific researchers	18	9	-9	-49
Steel erectors	16	9	-7	-42
Assemblers (vehicle and metal goods)	50	30	-20	-40
Floorers and wall tilers	51	32	-19	-37
Textile process operatives	17	11	-6	-37
Metal making and treating process operatives	20	13	-7	-36
Bricklayers, masons	109	70	-39	-36
Mobile machine drivers and operatives	57	38	-19	-34
Production and process engineers	36	25	-11	-32
Advertising and public relations managers	59	41	-18	-30
Veterinarians	17	12	-5	-30
Communication operators	39	28	-11	-28
Glaziers, window fabric and fitters	47	34	-13	-28
Career adviser and vocational guidance specialists	32	23	-9	-28
Metal working machine operatives	87	64	-24	-27
Telecommunications engineers	51	38	-14	-27
Lines repairers and cable jointers	15	11	-4	-26
Midwives	44	33	-11	-25
Clergy	52	40	-13	-24

Source: Skills for Jobs: Today and Tomorrow: The National Strategic Skills Audit for England 2010, Volume 2. Based on ONS (2009) Labour Force Survey

Note: Data are taken from the Labour Force Survey and refer to occupations categorised at the 'four digit' level

#### Table 5.11:

Inactivity level and rate by country and region

	Level (000s) 2008	Level (000s) 2009	% change	Rates (%) 2008	Rates (%) 2009	% point change
UK	7,861	7,997	1.7	20.8	21.1	0.2
Great Britain	7,572	7,673	1.3	20.7	20.8	0.1
England	6,510	6,593	1.3	20.6	20.7	0.1
North East	375	391	4.2	23.7	24.5	0.9
North West	958	940	-1.8	22.8	22.3	-0.4
Yorkshire and the Humber	702	703	0.1	21.8	21.8	-0.1
East Midlands	530	516	-2.8	19.5	18.9	-0.6
West Midlands	735	714	-2.9	22.5	21.8	-0.7
East	635	600	-5.4	18.4	17.3	-1.1
London	1,158	1,239	7.0	22.9	24.0	1.1
South East	862	911	5.7	17.0	17.9	0.9
South West	554	578	4.3	18.0	18.7	0.7
Wales	420	428	1.7	23.5	23.9	0.4
Scotland	642	653	1.6	20.0	20.2	0.2
Northern Ireland	289	314	8.8	26.5	28.7	2.1

Source: Jenkins and Leaker, 2010

**Note:** changes are April–June 2008 to July–September, 2009. All data based on the Labour Force Survey. Levels and employment rates is for men aged 16–64 and women aged 16–59

Across the UK, the numbers of individuals who were economically inactive increased by 1.7% from 7.86 million to 8 million. Each of the UK's 4 Nations had similar increases in inactivity levels, though within England 4 of the English regions actually had declines in the levels of economic inactivity. Allowing for population changes the economic inactivity rate for the UK increased by 0.2 percentage point over the period, to 21.1% in September 2009 (see Table 5.11).

#### **5.5 MIGRATION**

Another potential measure of imbalance between the skills available and the skills needed is migration. Both migrants and employers will respond to situations where the latter is not effectively met by the former. Migrants may be attracted by employment opportunities, may fill skills shortages, or hard-to-fill vacancies, or may compete with indigenous workers. In some senses, then, migrant labour market participation reflects something of a 'mismatch' between the skills required by the labour market, and those available in the domestic labour force. This will be especially true of jobs held by migrants from within the EEA and those entering the UK from outside the EEA via the Points Based Migration system.

This was examined in the National Strategic Skills Audit<sup>74</sup> and found that:

those occupations which have a high proportion of employment accounted for by migrants include a mix of higher and lower

<sup>74</sup> It should be noted that the definition of migrants used here is anyone that does not have the UK as their country of birth. This is one approach to measuring migration, and it is not the only way of doing so. It includes migrants that have been in the country for a long period of time as well as new migrants. Another approach to measurement is to focus on flows of migration, where the emphasis is placed on more recent migrants.

level occupations: elementary process plant occupations; health professionals; food preparation trades; process operatives; and research professionals are the top five 'migration intensive' occupations;

- these occupations vary according to whether the migrant is from within the EEA or from outside the EEA. On the whole, non-EEA immigrants tend to be employed in relatively high level occupations – for example health professionals, health associate professionals, ICT professionals, and research professionals. EEA immigrants tend to be more heavily represented in lower level occupations: elementary process plant occupations, process operatives, elementary agricultural occupations, assemblers and routine operatives;
- migration intensive sectors (i.e. those that have between a fifth and a quarter of their employment accounted for by migrants) are clothing, hotels and restaurants, recycling, food and drink, computing and transport. The figures also vary depending on whether we look at EEA/extra EAA migrants. Reliance on migration in these sectors can be due to the nature of the occupations within them. For example, some occupations require seasonal work and therefore suffer from cyclical shortages, whilst others rely on specific global talent.

### **5.6 CONCLUSIONS**

The subject of this chapter has been the issue of mismatch – the extent to which the people and their skills are matched (or not) to the jobs that employers need. These can be at 'either end' of a scale – at the one end with employers not being able to recruit to jobs that they need filling or that the workforce that they have is not completely skills, to the other end, where people cannot find jobs or the jobs that they are doing leaves them underemployed.

Overall, skills shortages are relatively small, affecting only a minority of employers. Whilst this in part reflects the recessionary conditions, this is also consistent over time. Current skill gaps, are more common and impact about one in five employers. 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 as we come out of 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.

## **Raising employer ambition**

## **6.1 INTRODUCTION**

In the first Ambition 2020 report last year, we set out a strategic framework to inform thinking, action and our assessment of progress on the employment and skills agenda and questions around supply and demand. Core to this framework was the need to set a World Class Skills Ambition (as examined earlier). This was predicated on the fact that raising skill levels will lead to higher levels of productivity, employment and prosperity. However, our analysis sought in addition to show that whilst it is fundamental to raise skills levels, this is not enough on its own to automatically generate improved economic performance. It is therefore not enough that these skills exist but, also, that:

- businesses develop sufficiently high value added and high quality products and services to demand and hence make full use of these skills;
- they are used effectively in the workplace to turn the 'potential' into actual 'performance' and to ensure that companies can continually innovate to enhance competitiveness and seek to become leading edge; 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 (as discussed in section 5).

Thus how organisations are managed and the extent to which they can become competitive, innovative, high performance work organisations has a major bearing on whether and how skills are used in the workplace and, in turn, how firms perform.

In this section, therefore, we seek to explore the side of the framework concerning the question of employer demand. We do this by revisiting and discussing some of the evidence around (i) the low skills equilibrium, (ii) skills utilisation and (iii) management and leadership. We start by setting this within a wider labour market context and seeking to understand the broad shape of demand.



Rate of change in GDP in past recessions



Source: ONS GDP (ABMI): Chained volume measures, seasonally adjusted

## 6.2 THE CHANGING NATURE OF THE UK LABOUR MARKET

Unless we have a better understanding of the structure of the labour market, broad patterns of employer demand and long term trends, we will fail to effectively understand demand and hence respond to the changes that are taking place in a way that leads to stronger and fairer economy in the future. If this is the case, attempts to raise the level and nature of skills have to be rooted in a longer-term understanding of labour market trends.

#### 6.2.1 Historic changes in the labour market

As would be expected, the onset of the recession in 2008 has had a number of impacts on the labour market. These have been discussed in detail in two Government publications<sup>75</sup> and are summarised here.

The recession, which began in the 2nd quarter of 2008, appears to have been more severe than the two most recent previous recessions in terms of the rate of decline in GDP. This sharp decline seems to have ended in the last quarter of 2009 (see Chart 6.1).

The number of jobs, employment levels and the employment rate all fell over the period April 2008 to December 2009. Looking first at the employment level, this fell across this period by 2.1% across the UK as a whole, by 1.8% in England, 2.1% in Scotland and 4.2% in Wales. Northern Ireland experienced the biggest fall in the level of employment at 5.10%. Within England, the largest fall in employment level was in the West Midlands (2.9%) followed by the North East (2.8%). The smallest fall was in the East Midlands, where the employment level fell by just 0.1%.

Looking at the employment rate, the UK experienced a 2.3 percentage point fall. Again, Northern Ireland saw the largest fall (4.2 percentage points), with the rate falling by 3.1 percentage points in Wales, 2.7 percentage points in Scotland and 2.1 percentage points in England (see Table 6.1).

<sup>75</sup> Jenkins J and Leaker D, The Labour Market Across the UK in the Current Recession, Economic and Labour Market Review, Vol 4, No. 1, January 2010, ONS and Clancy G, The Impact of the Recession on the Labour Market, ONS, May 2009.

#### **Table 6.1:**

Employment level and rate by country and region

			Change	
(000s)	2008	2009	N	%
Employment Levels				
UK	28,534	28,927	-607	-2.1
Great Britain	28,743	28,188	-555	-1.9
England	24,824	24,381	-443	-1.8
North East	1,162	1,130	-32	-2.8
North West	3,162	3,116	-46	-1.5
Yorkshire and the Humber	2,461	2,399	-62	-2.5
East Midlands	2,151	2,148	-3	-0.1
West Midlands	2,486	2,414	-72	-2.9
East	2,830	2,811	-19	-0.7
London	3,768	3,720	-48	-1.3
South East	4,246	4,150	-96	2.3
South West	2,559	2,493	-66	-2.6
Wales	1,364	1,306	-58	-4.2
Scotland	2,555	2,500	-55	-2.1
Northern Ireland	791	751	-40	-5.1
			% point	
Employment rate			change	
UK	74.8	72.5	-2.3	
Great Britain	74.9	72.8	-2.2	
England	74.9	72.8	-2.1	
North East	70.5	68.0	-2.4	
North West	72.1	70.8	-1.4	
Yorkshire and the Humber	73.3	71.2	-2.1	
East Midlands	75.8	74.9	-0.9	
West Midlands	72.5	70.0	-2.5	
East	77.7	77.2	-0.6	
London	71.8	69.0	-2.9	
South East	79.4	77.0	-2.4	
South West	78.8	75.7	-3.0	
Wales	72.4	69.2	-3.1	
Scotland	76.6	73.9	-2.7	
Northern Ireland	70.3	66.1	-4.2	

Source: Jenkins and Leaker, 2010

Note: changes are April–June 2008 to July–September, 2009. All data based on the Labour Force Survey. Levels are for those aged 16 and over, employment rates is for men aged 16–64 and women aged 16–59

In sectoral terms, the biggest decline in employment has been seen in the manufacturing sector, down over 8% since the start of the recession. The Financial services and Retail sectors have seen a less dramatic decline in employment. Employment in the construction sector remained relatively buoyant at the start of the recession, but has since been in rapid decline. Meanwhile, employment in the public service sector has risen by more than 2% since the start of the recession (see Chart 6.2).

However, these recent changes do need to be seen in a longer term context. The last 20 years (1990–2010) have seen a substantial growth in total employment in the UK, with an increase from just below 27 million in 1990 to just below 29 million in 2010. The peak in employment occurred in mid-2008 at 29.5 million, since when employment levels have fallen back slightly, but remain high when viewed over the long term.

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 of England. 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, which now comprises 19.5% of total employment<sup>76</sup>.

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. 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

#### **Chart 6.2:**

Employment by broad sector indexed to 2008 quarter 2 = 100



Source: ONS (2009) Labour Force Survey

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

occupations such as operatives (-350,000) have been declining, despite the large overall growth in jobs.

We have seen earlier (Chapter 3), how the qualification level of people in work has grown significantly in recent years with, for example, a considerable growth at Level 4+ and a 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 since 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.

- the proportion of jobs requiring a degree level qualification rose 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.
- alongside this growth in qualification requirements, the level of training needed to become competent at a job has also increased. The proportion of jobs requiring only one month's learning to be able to do well fell from 27% in 1986 to 19% in 2006.

Overall, therefore this all points to a growing "skills intensity" in the labour market. But what issues does this raise for the future?

### 6.2.2 Future Employer Demand

There is a strong need to anticipate 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. The UK Commissions' *Working Futures 2007–2017* research provides the most comprehensive projections of future skill demand in the UK<sup>77</sup>. This research has not yet been updated<sup>78</sup> and as we reported on this at length in last year's Ambition 2020 we only briefly summarise that work here.

It remains the case that the current uncertainties facing the UK economy and labour market remain considerable and that, in such circumstances, producing meaningful and robust economic and labour market projections is difficult. There are substantial economic uncertainties pertaining to our forecasts of jobs over the next 10 years: current economic conditions: the impact of uncertainty in the financial markets, the housing market, global uncertainties, and the timing/planning of the current recession and subsequent recovery. This means that our assessment of future labour market prospects should be treated with care. However, in the long term renewed growth will return and changing patterns of employment are largely dominated by long-term trends. As such, the forecasts in Working Futures can be regarded as the best currently available guide to likely longterm future developments in employment.

According to *Working Futures*, 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. In particular there is 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. The forecasts suggest a growth of just over 6% over the next 10 years, only two thirds as fast as in the previous decade. In more detail:

the geographical pattern of these expected changes is significant. Over the next 10 years, jobs growth is expected to be fastest in London, the South East, the East and the

<sup>77</sup> UKCES, Working Futures 2007–2017.

**<sup>78</sup>** The intention is to begin work on updating this work in 2010 in order to produce forecasts spanning 2010–2020.

South West of England. 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.

- regarding the expected sectoral changes in the pattern of jobs, the most significant growth (in percentage terms) 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)79. On the other hand, manufacturing employment is expected to continue its long-term decline, with a net loss of around 400,000 jobs by 2020. Manufacturing employment 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.
- regarding occupational changes, managerial, professional occupations, associate professional/technical occupations and personal service occupations are expected to show the most significant increases in employment. Declines are expected to 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 period of steady job losses.

It is also important, however, to take account of expected **'replacement'** demand. 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.

Based on similar occupational forecasts, it has been suggested<sup>80</sup> 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 and occupations with a low incidence of low pay (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 which suggested that over 20 million new jobs were expected to have be created across the EU between 2006 and 2020 have been significantly revised as a result of the recession. Newer forecasts<sup>81</sup> suggest that there are about 10 million fewer jobs now and over the next few years than would have been expected in the absence of the recession. It is forecast that employment in 2020 is likely to be higher than in 2010 (by around 7 million jobs), but will not reach the peak of 2008. Recessions tend to accelerate sectoral change and the broad 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. Between 2010 and 2020 a substantial decline is forecast for employment in primary industries (a loss of 2.5 million jobs), particularly in agriculture, and job losses of around 2 million are also expected in manufacturing and

<sup>80</sup> Lawton, K., Nice Work If You Can Get It, 2009.

**<sup>81</sup>** CEDEFOP, Skills Supply and Demand in Europe: medium term forecast up to 2020, CEDFOP, 2010.

production industries. The main areas of growth are in services, especially marketed services. The projected (moderate) growth of employment in non-marketed services results from anticipated job creation in health care and education.

Pulling together this evidence on historical, current and likely future developments in the labour market, importantly, points to an increasing "skills intensity" in the overall nature and shape of employer demand. This has been an important development, as 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. A crucial question however has been whether this growth in skills demand and skills intensity has been sufficient for the UK to keep pace with our international competitors. This is something we now turn to.

### 6.3 LOW SKILLS EQUILIBRIUM

Although, as we have seen, the general trend in the UK is for an increase in skill levels, the question is whether this is sufficient. There are persistent concerns as to whether a perceived qualification-dominated approach is enough, or whether there is a need for measures to stimulate demand through on-going business development and to encourage effective skills utilisation. An important component too is how competitive UK business is globally and hence whether our skills and employment are amongst the best in the World?

Where there may be concerns over skills 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. This also leads to questions over the quality of work.

A low skill equilibrium exists where a 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' (i.e. managerial reliance on historic ways of production and of dealing with competition) and low domestic demand for higher quality goods and services mean that employers are unwilling (or unable) to break free from this equilibrium. Demand for higher level skills is therefore limited.

It is important to note that the response to low skills equilibrium is often couched in terms of the need to address market failures. However, it could be argued that the market is not failing per se, but simply that an equilibrium has been reached which has particular negative consequences for industry/economy/society. The response is therefore not always about remedying market failure, but also about trying to change the equilibrium position. 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 leads 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 doing 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.

There has been long standing concern that the existence of skill gaps may inhibit economic growth in the UK and attempts by employers to move 'upmarket'. The risk is that skills deficiencies therefore can constrain firm performance. Interestingly, there is 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 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 developments in working methods or workforce organisation may stimulate the demand for

training<sup>82</sup>. For example, Green et al report that where employers are undergoing technical change, (i.e. 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<sup>83</sup>.

#### **Evidence from England**

Given the importance of the low skill equilibrium, in the last year the UK Commission has commissioned analysis in this area<sup>84</sup>. This has in part focused on the latest (2009) National Employer Skills Survey (for England only). The analysis gives further insight into the existence of a low skills equilibrium in England and, in particular, of the links between establishments product market strategies, average skill levels of their workforces and other skill-related indicators, such as skills shortages and gaps and the perceived need upskilling. The evidence on level of product market strategy is based on a series of questions (included for the first time in NESS 2009, but similar to questions used in the Employer Skills Survey of 2001) which determine the level of an establishment's product market strategy by asking respondents to compare themselves to others in the same industry in respect of production volumes, price strategy, nature of product and level of innovation.

Mason's research finds clear evidence of interdependence between product market strategies and skills. On the one hand, as firms shift to higher value added product strategies in response to competition in their principal markets, this generates higher levels of skill requirements for the establishments concerned. This was shown by analysis of earlier surveys (particularly the Employer Skills Survey in 1999) which found that new or additional skill requirements arose out of a result of a change in product market specification<sup>85</sup>. On the

- 82 Kitching, J and Blackburn, R., The Nature of Training and Motivation to Train in Small Firms, 2001, p.20–21.
- 83 Green F. et al, Employer Perspectives Survey, 2003, p.47.
- 84 Mason G, Product Strategies, skills shortages and skill updating needs in England: new evidence from the National Employer Skills Survey in England, 2009, UKCES, forthcoming.
- **85** National Skills Task Force, Skills for All: Research Report; NSTF, London, Department for Education and Employment, 2000.

other hand, an establishment's willingness, or ability, to move up-market in terms of product market strategy is enhanced by having a ready availability of the skills required to do so.

This work shows that:

- the level of product market strategy and average skill level within establishments are positively correlated: the higher the product market strategy, the higher the average level of skill required within the workforce;
- that the higher the product market strategy and skill level, the less likely it is that the establishment will suffer from skill gaps;
- there is some evidence that development of higher product market strategies may be constrained by skill gaps, particularly if these skill gaps involve managers; and
- the higher the product market strategy and the skill level of the workforce, the higher will be perceived future upskilling needs.

This provides further support confirming the relationship between product market strategies and skills. It does, however, leave a number of issues to consider:

- if product market strategies are generally key in determining skills needs then what does this mean for the current structure of the economy? How many employers consider themselves to be operating at the high-end of this spectrum and how does the distribution vary?
- if there are any exceptions to the generally positive relationship between skill levels and product market strategies, what implications does this raise? What we can learn?
- what can be done to drive businesses upmarket and subsequently to demand higher levels of skills?

#### **Table 6.2:**

Distribution of product market strategies

	-	Low				High	
		1	2	3	4	5	
Quality	1 = Standard or basic quality	6	5	24	28	37	5 = Premium
Range/volume	1 = High volume, wide range	29	23	25	10	13	5 = One-off, limited range
Innovation	1 = Very rarely lead the way	19	12	26	20	22	5 = Often lead the way
Price dependence	1 = Wholly price dependent	16	13	39	18	15	5 = Not at all price dependent

Source: NESS, 2009

The assessment of product market strategies was based on a series of factors: price dependency (from 'not price dependent' to 'wholly price dependent'), quality (from 'standard or basic' through to 'premium quality'), product range (from a 'one/off limited range' through to 'high volume, wide range') and innovation (from 'rarely leading the way' to 'often leading the way'). The distribution of these tends to be towards the higher end of the spectrum, particularly for product/service quality, range or volume or being an innovator, with more employers considering their position being above rather than below the market average. The exception to this is price dependency, where more employers said their product was price dependent than did not (33% compared to 29%). This usefully starts to help us understand the broad distribution of the labour market and demand. But, is it ambitious enough? Do we need to do further work to understand in more depth the detailed variations? Furthermore, what about those employers who sit outside this relationship? In other words, what do we know about those employers who are following a high product market strategy with a low skilled workforce or have a low product market strategy with a high skilled workforce? Furthermore, how does this general pattern compare internationally? Are other countries more ambitious?

In terms of the exceptional employers, there is some evidence from Mason that establishments who are operating high end product market strategies may be doing so partly (to a limited extent) because they are constrained by internal skill gaps and partly because they are less able to recognise upskilling needs. What we do not know is whether establishments who are operating outside the low skill/low product market strategy – high skill/high product market strategy continuum are surviving successfully, with adequate profits and are able to maintain this for their foreseeable future. Commercial performance cannot be measured using NESS alone, but further analysis should be able to explore this further by matching data sets. This therefore may be an area that we would wish to focus future research?

#### International evidence

We also examine our position relative to other countries. A means of examining the extent to which the UK suffers from low levels of demand is to see how we compare against our international competitors. International evidence on the nature and extent of skills mismatches was provided for the first time by the OECD in 2008<sup>86</sup>. 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 to 64-year-olds have acquired a tertiary level

86 OECD, Education at a Glance, 2008.

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 6.3 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).

The difference between the proportion of skilled jobs and the proportion of skilled workers can be seen more clearly in Chart 6.4. 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, i.e. 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 7 to 1, more than in any other country, with the exception of the 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, i.e. potential 'over-supply' or 'deficient demand' for high level skills. This would represent 'over-skilling' or 'underemployment', depending on whether this is viewed as an outcome generated by too many people with too high a level of skills, or too few employers with high skills requirements. The future challenge and hence key focus for policy becomes how to raise the demand for skills.

#### **Chart 6.3:**

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

#### **Chart 6.4:**

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

## 6.4 SKILLS UTILISATION AND HIGH PERFORMANCE WORKING

Given the importance of not only developing skills but ensuring they are effectively deployed, over the last year, the UK Commission has published a series of reports seeking to develop its understanding of skills utilisation and the means to achieving it<sup>87</sup>. These reports built on initial work conducted by the Scottish Government<sup>88</sup>. As we have seen earlier, skills utilisation is about ensuring the most effective application of skills in the workplace to maximise performance. It is achieved, through the interplay of a number of key agents (e.g. employers, employees, learning providers and the state) and the use of a range of HR, management and working practices. Effective skills utilisation seeks to optimise the use of skills and to ensure they match to business needs and by so doing optimise performance. 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). This therefore was a key lens through which the research was focused.

After carefully considering the literature, the UK Commission defines HPW as a general approach to managing organisations that aims to stimulate more effective employee involvement and commitment to achieve high levels of performance. The precise form this takes within an organisation varies depending on context, but will include activities in the areas of: human resource management (e.g. pay and incentives, appraisals, workforce development), work organisation (e.g. team working and job design), employment relations, management and leadership (including strategic management and business development as well as line management), and organisational development. Importantly, the HPW approach is specifically designed to enhance the discretionary effort employees put into their work, and to fully utilise and further develop the skills that they possess.

In early work in this field there was considerable interest in identifying, measuring and understanding which specific practices make up HPW, and what combination of practices works best. Over time, views have developed from 'the more the better' (in other words, that practices provide an additive benefit). to identifying the best practices to adopt (often known as the universalistic approach), to a recognition that there is no single, universal, or indeed, 'offthe-shelf' formula or set of practices to fit all circumstances. Rather, the most meaningful combination or 'bundle' of practices will be context-specific (known as the contingency or best fit approach), and needs will be shaped and managed to suit each specific organisation. Increasingly, now, there is recognition of the complexity of HPW, and a desire to understand how HPW operates as a system and is best implemented on the ground, adapting to different workplaces. Researchers have turned their attention in particular to investigating the mechanisms by which HPW might positively influence performance outcomes. This has involved looking more closely at the ways in which organisations work internally, and getting inside the ever-elusive 'black box'.

The research pulls together a number of theories and models developed in an attempt to facilitate a better understanding of HPW. These models can act as analytical tools for employers and practitioners, demonstrating what factors are most important, highlighting inter-dependencies and the importance of chains of impact. They can also help, on a practical level, to shape management decisions and influence implementation. Several key factors are highlighted in the models of HPW within the research and offer potential for employers and practitioners to deploy. These include: the need to take a holistic and balanced approach where careful consideration is given to how practices integrate and work together to suit the business context; the crucial role for managers, from senior to line management level, as well as those responsible for human resources; the pivotal importance of employee commitment and achieving a partnership between managers and their employees; and the need for a clear vision and ethos, underpinned by strong values and culture.

**<sup>87</sup>** E.g. Belt, V. and Giles, L., High Performance Working: a Synthesis of Key Literature, 2009.

**<sup>88</sup>** http://www.scotland.gov.uk/Publications/2008/12/15114643/0

The research points to significant benefits of HPW, and although some are more cautious about its impact on employees, the weight of the evidence pointing to the positive link between HPW, performance and employee well-being is difficult to ignore<sup>89</sup>. Indeed, this evidence shows that HPW is positively associated with a range of measures of organisational performance such as company profits, sales and profitability. It also points to beneficial outcomes for *employees* in terms of higher job satisfaction and motivation, greater opportunities for innovation and creativity, greater task discretion, greater employee involvement and commitment and lower labour turnover.

It is also possible that HPW, and the subsequent more effective skills utilisation, will have wider benefits to the economy too. 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. 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 tend 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.

Whilst the research does not claim that simply adopting HPW will provide a panacea that will *immediately* bring benefits for all, no matter what, and acknowledges its complexity, it does argue that HPW offers a lot of potential. Indeed, it provides one important mechanism for improving organisational performance, employee well-being and competitive advantage over the long term and assuming implementation is right. As such, HPW warrants further attention from policy makers.

Despite the significant body of evidence that exists on the benefits of adopting HPW, it appears that take-up is not widespread in the UK, and that this has not changed dramatically over time. The 2008 Employer Survey undertaken by the UK Commission for Employment and Skills found just under a third of organisations could be classified as taking a HPW approach. However, measurement of HPW is very difficult due to variation in the definitions that are used. Subsequent research from the UK Commission has therefore sought to pool existing ways of measuring HPW and to develop a common way of measuring take up in future<sup>90</sup>. The current evidence points to considerable variation by sector and size of employer, with HPW being more common in the public sector (according to the UK Commission's Employer Survey, around seven in ten employers adopt HPW practices here), parts of manufacturing (especially engineering) and amongst larger employers<sup>91</sup>. However, it is important not to jump to conclusions from this about the perceived lack of relevance of this approach to other types of organisations. Given its context-specific nature, HPW has the potential for wider application if it is tailored appropriately.

The research shows that the adoption of HPW is low in the UK for a range of reasons, including: ignorance and a lack of awareness; doubts and inertia (including concerns about complexity and managing costs); inability and difficulties overcoming a range of impediments to effective implementation<sup>92</sup>. HPW, by its holistic nature (which involves it touching and having implications for all parts of the business), is undoubtedly an extremely difficult and complex thing to achieve and get right. There is no single 'silver bullet', or ready-made blueprint to follow, and there is a significant time lag before the effects can be totally realised.

92 Ashton, D. And Sung, J., Workplace Learning for High Performance Working, 2002. p.11.

**<sup>89</sup>** See also Garrett, R., Campbell, M., and Mason, G. (forthcoming) The value of skills: An evidence review. Wath-Upon-Dearne.

**<sup>90</sup>** Belt, V. and Giles, L., High Performance Working: a Synthesis of Key Literature, 2009.

<sup>91</sup> Shury, J., Davies, B., Riley, T. and Stanfield, C., Skills for the Workplace: Employer Perspectives, 2008, p.ii.

Furthermore, many employers, whether intentional or not, are not *fully* adopting the approach, but may introduce parts of it. However, in the context of changing external pressures in the market (e.g. globalisation, growing international competition, the expansion of trade, on-going technological developments and changes in consumer demand), there are questions about whether this stance is enough and if a more selective approach is sustainable over the longer term.

Given the importance of the business context to effective HPW, commentators have argued for more case studies to clearly demonstrate the precise nature and value of HPW to UK employers in different sectors, jobs and types of businesses and to demonstrate how it might be effectively implemented<sup>93</sup>. This could undoubtedly help to tackle specific issues around the lack of employer knowledge or cynicism about the effectiveness/suitability of HPW amongst managers. It could also serve to bring some of the analytical tools to life and offer practical advice. Strengthening and harnessing the evidence more effectively may enable the development of *targeted* guidance and promotional material, to more clearly communicate the key messages, and provide concrete and specific examples to facilitate understanding, stimulate action and help overcome implementation difficulties. The UK Commission has therefore sought to strengthen the evidence base in this area by undertaking some case study work also as part of its skills utilisation research programme. Key findings highlight: the central importance of leaders in making HPW the approach of choice; the key role played by the HR function; the importance of new business strategies emphasising quality as triggers for change; the role of strong vision and values in creating consistency.

The research also identifies four key core practices as the cornerstones of effective HPW: performance management systems, learning and development, communication processes and job design. Organisations tend to begin by focusing on one key practice that responds to a particular issue they face, and then add to and strengthen this over time.

Managers and leaders therefore (across a range of functions) play a crucial role in fully implementing HPW and ensuring that when it is put into operation it is done so in a way that not only fits the business context, but utilises full organisational capacity and optimises the business benefits. Crucially, effective implementation also depends on achieving employee involvement and commitment, which needs to be underpinned by a strong partnership between employers and their employees. HPW also offers an important potential vehicle for converting public policy messages on skills and productivity into the kind of language that can inspire organisations to act. By so doing, it can enhance not only the competitive advantage and success of individual organisations, but ultimately, too, the performance of the broader economy. A key consideration for policy makers, therefore, is how to tackle the currently low take-up of HPW practices in the UK.

Clearly, employers are, and must remain, in control of the management of their own organisations and businesses. But that is not to say that there is no role for public policy in encouraging employers to adopt HPW. As a consequence the research conducted by the Commission has reviewed the range of policy initiatives currently available in the UK and how they directly or indirectly support the uptake of HPW practices and, in turn, more effective skills utilisation. We have not only been interested in the key initiatives and services relevant to this area but the strategies they connect to. Our analysis of the existing policy frameworks relevant to this area suggests that HPW, and to a slightly lesser extent skills utilisation, is currently a cross cutting agenda, touching different policy areas but without a clear home across the UK. In other words, whilst policy makers increasingly recognise the value of HPW and skills utilisation, a common system wide vision for HPW has not

**<sup>93</sup>** E.g. Guest, D (2006) Smarter Ways of Working. SSDA Catalyst Research Paper, Issue 3, SSDA Wath-Upon-Dearne. Purcell, J and Kinnie (2007) HRM and Business performance. The Oxford Handbook of Human Resource Management, P Boxall, J Purcell and P wright (eds) Oxford University Press, Oxford. Philpott J (2006) Raising productivity: from skills to high performance working. Chapter 3.1 in S Porter and M Campbell (eds), Skills and Economic Performance. SSDA.

been explicitly articulated in the different parts of the UK, which can inspire and drive all the different components of the system that touch on employer practices nationally and regionally. Neither is there a common and consistent system wide analysis in different parts of the UK of the current HPW challenge. A key question is whether this is needed to make the case for change, support delivery in a more holistic way and to strengthen impact. Whilst policy interest has heightened in this area within all parts of the UK the time is right arguably for a more concerted attempt at engaging more actively with the relevant issues surrounding HPW and skills utilisation and exploring what policy instruments might be effectively deployed to achieve it. Further implications of the research and how this might be done are provided in chapter seven.

#### 6.5 MANAGEMENT AND LEADERSHIP

Crucially, if we are to meet our Ambition, it is also important to consider how our organisations are managed, and the extent to which they are competitive, innovative and high performance workplaces. As we noted in the 2009 report, for some time 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. Concerns about the quality of UK managers have grown through the 1990s and beyond. Most recently this has been exemplified through the National Strategic Skills Audit conducted by the UK Commission which, having reviewed a wide range of labour market and skills evidence, identified management and leadership as one of the most pressing skills priorities<sup>94</sup>. This is in the context of a growth in management responsibilities and demands associated with a range of factors, including innovations in business and technological developments, globalisation, market liberalisation and organisational and industrial restructuring, and a growing number of other employees also undertaking management tasks. Clearly then, concerns remain over whether the

94 UK Commission, Skills for Jobs: today and tomorrow. National Strategic Skills Audit for England 2010, 2010.

UK has sufficient managers and leaders of high quality and whether they are being adequately developed and deployed to fully optimise individual potential and organisational performance.

Our earlier assessment has drawn attention to the considerable evidence of what management capability brings to organisations in terms of better performance and business gains. This is not least in terms of the decisions and actions managers and leaders take which 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.

We have previously reported on the work of LSE/McKinsey<sup>95</sup>, for example, which shows that companies that apply accepted management practices perform significantly better than those that do not. Improving management practices, in particular, is likely to increase both business and national economic performance, with particular points to note being that:

- in broad terms, the strong relationships between management practices and performance hold true across countries, with the UK being in the 'second division' of countries studied;
- it is important to recognise that management practices vary much more within countries than between 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. There is also a considerable spread within sectors and a significantly smaller one across regions;
- a key driver of the UK average management score is its relatively low skill levels. Better managed firms have a more highly educated workforce amongst both managers and non managers alike. In the UK, it should be noted we have the lowest share of managers with
- **95** Bloom, N. et al, Management Practice and Productivity: Why They Matter, 2007.

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 – multinationals 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.

Moreover, a number of studies point to shortfalls in management capability based on a range of measures including qualifications held and 'softer' assessments of management quality. For instance, Bosworth highlights wide variations in gualification levels of managers. Further, Horne and Stedman Jones and Charlesworth et al<sup>96</sup> have based their assessments on staff perceptions. In a survey of 15,000 managers, they found that over a third of managers and almost half of junior managers rated the quality of leadership in their organisations as poor. 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. 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<sup>97</sup>.

Whilst management capability was not seen as the core of the UK competitiveness challenge by Porter and Ketels, 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. Given these on-going concerns, the UK Commission was asked to consider the range of leadership and management support currently offered across the UK and how, working with employers, existing support might be improved. Whilst it was recognised that there is no single solution or silver bullet and a wide array of support will be both appropriate and beneficial, the intention has been to consider where action could be taken to add value. This work is still underway and is expected to report over the summer 2010.

### 6.6 CONCLUSIONS

In this section, we have reviewed the evidence concerning employer demand for skills. We started by setting this within a wider review of the labour market structure to ensure we understood broad patterns of employer demand and long term trends. This has shown that overtime, the intensity of skills has been gradually growing and it is expected to continue to grow in the future.

It seems clear that there is a significant positive relationship between product market strategy and the skill levels of the workforce in the UK, with the higher the product market strategy the higher the average skill level required from the workforce. Product market strategies drive skill use, and it therefore follows that to increase skills used in the workplace, there is a need to drive companies up the product market value chain.

If the skills that are being embedded in the workforce are not to be wasted, it is important that they are effectively used in the workplace. HPW offers an important potential vehicle for inspiring organisations to act to enhance their competitiveness and performance. At the moment, take-up of high performance working practices is low and there are questions about the level of skills demand compared to other countries.

Both development of high value-added product market strategies and skills utilisation will be affected crucially by the ability of our management and leaders. There remains a concern that management levels and deployment is relatively poor compared to our main competitors and this must therefore remain a key priority for action.

**<sup>96</sup>** 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.

<sup>97</sup> Porter, M.E. and Ketels, C.M., UK Competitiveness: Moving to the Next Stage, 2003.

## Skills and employment policy

## 7.1 INTRODUCTION

Having reviewed UK progress on skills and employment, this chapter reflects on the implications for policy and practice. It considers what further action might be taken in pursuit of the World Class Ambitions. It is rooted in evidence and insight compiled over the last year, drawing from our Commissioners' perspectives and wider research and advisory work conducted with stakeholders and international thought leaders.

This year's assessment has been shaped by the recent economic developments associated with the financial crisis and ensuing economic downturn. The policy challenges that this brings with it are considerable, especially in the context of substantial constraints on public expenditure. In framing our assessment; in setting out world class ambitions for the UK in the future; and in putting forward proposals for action, we have had to be, even more than ever, particularly mindful of the need for **more innovative approaches to achieving more, and better, for less**.

This final chapter discusses our view of what this analysis means for policy and the operation of the skills and employment system across the UK. It sets out how we believe we can ensure that the system works most effectively to deliver the highest calibre services to support the achievement of the 2020 Ambition and to ensure that we are on track to become a world leader in skills and employment. We are currently not on track to achieve this ambition and therefore set out how to achieve the step change required. We consider:

- what further reforms are necessary to support continual investment in peoples' skills development throughout their working lives so that they can be more productive at work and so that the returns to business and the broader economy are maximised;
- what more needs to be done to support businesses to 'raise their game' and compete with the best in the world. How can we encourage ongoing innovation to move more business up the value chain, to create high skilled jobs and, in turn, improve skills development, utilisation and, ultimately, productivity; and

how the skills and employment system can adapt to ensure it continually supplies the 'right' skills to meet, and to respond to, ongoing changes in the structure of the economy and labour market.

# 7.2 THE POLICY CHALLENGE IN PURSUIT OF AMBITION 2020

After a significant period of economic growth over the last decade or so, the UK is now emerging from, arguably, the largest global financial crisis and deepest international downturn for 80 years. In this context, the most critical imperative for public policy is to focus on the means to transform and, in particular, rebalance the economy to secure economic recovery, renewal and growth. This is essential to reducing the public deficit and achieving long term prosperity. At the same time, there is a growing emphasis on how to manage increasingly scarce public resources more efficiently and effectively to achieve greater economic benefits and improved outcomes for individuals, employers and communities. This provides an important lens through which to focus our assessment on the skills and employment policy landscape this year and, indeed, into the future.

A key priority for skills and employment policy is therefore to support business to create more and better jobs and, in particular, to supply the most skilled and productive people to fill them. This is important not only to ensure we survive the recession but to maintain our long term trajectory to be world class in skills and employment by 2020. This report has sought to review the UK's skills and employment performance in recent years and, in particular, progress since we published our first Ambition 2020 report. We start this policy chapter with a brief overview of the key messages and issues that arise in order to highlight the key challenges and opportunities for skills and employment policy and practice. We use this as a mirror with which to reflect how well the current system is working.



#### 7.2.1 Key Policy Priorities

The framework we developed in our first Ambition 2020 has been used to inform our thinking, assessment of progress and proposed action (see Chart 7.1). In summary, our prosperity depends fundamentally on the contribution of jobs and productivity and how this prosperity is spread amongst society's members. In turn this prosperity is strongly influenced by the skills of our workforce. So increasing the availability of skills is crucial but so is ensuring that these skills are appropriate to, and, hence match, evolving economic and labour requirements or demands and that levels of demand are sufficient in quantity and quality to effectively utilise the skills available. Action may be required in all three 'spheres' to maximise the impact of skills on prosperity.

The key findings from the analysis are that:

- the UK remains a significant economic force internationally – it is still the 6th largest economy in the world and the 4th largest in the OECD. However, the WEF's Global Competitiveness Report<sup>97</sup> ranks the UK 13th in the world – down one from last year;
- **97** World Economic Forum, The Global Competitiveness Report, 2009.

- on the two key drivers of prosperity jobs and productivity – we remain within touching distance of being world class. The most recent internationally comparative data shows that the UK position is unchanged since last year, remaining ranked 10th on our 'employment rate' and 11th in terms of our 'productivity rate' – just outside the top quartile of OECD countries;
- in terms of inequality, the UK position (24th least equal in the OECD) has not changed since last year;
- we have continued to make progress in the last year in raising the skill levels of the UK workforce. This continues the positive trend observed over the last decade. We have seen the numbers achieving high level qualifications increase over the decade by more than 3 million or 44% whilst the numbers without any qualifications declined by more than 1.5 million or 26%. Over the last two years (2007 to 2009), the proportion of adults not qualified to Level 2, has declined from 30% to 28% and the proportion qualified to at least Level 4, has increased from 30% to 32%;
- whilst UK skills levels have been progressing, so too have those in other countries, often at

a faster rate. So, when it comes to estimating our **likely future progress** towards the 2020 Ambition, we conclude that **the UK is unlikely to improve its relative** 

international position. The UK's 'current' international ranking on the three measures of low, intermediate and high level skills, has changed little since last year and longer term forecasts suggest this is unlikely to improve. Indeed in the future, we anticipate that the UK will remain in the bottom half of OECD countries on low and intermediate level skills. On high level skills we expect to be ranked 11th by 2020 – just short of World Class.

So, whilst there has been a small positive improvement in our 2020 forecast of some skills areas in the last year, there is a need for further significant improvement if we are to ensure that the UK can achieve the step change in its skills performance to enhance its position internationally on the world stage and hence to be a world leader in skills.

This assessment, however, only captures part of the challenge. Not only do we need to upskill, we **need to ensure that these are the 'right' skills**: those that are required by people to secure and sustain successful jobs; those that are required by employers to meet their skills needs; and those that are needed for the economy to be successful. It is imperative that we **meet the changing needs and requirements of the labour market**. That's why this assessment has explored the nature and extent of **skills mismatches** (where there are imbalances between, on the one hand, the availability of skills and, on the other, the skills that are required for the jobs that need them).

Skills shortages (which occur where employers

face difficulties recruiting new workers due to a lack of available skills in the external labour market) require action on the supply side to tackle unmet needs as do skill gaps (which indicate deficiencies in skills in the internal labour market). Increasing migration in recent years shows that migrant workers are often a more readily available or preferred source of skills in some occupations, sectors and areas. There is also evidence of over-gualification and underemployment in the workforce which raises questions about the appropriateness of supply; about whether employers are fully utilising their employee's skills (e.g. are their business strategies ambitious enough?); and the adequacy of job matching in the labour market.

Demand matters too and needs to be stimulated. To compete with the best in the world, we also need our businesses to be world class and to generate real opportunity for individuals and for business success. This calls for ongoing business development, innovation, and a continual drive for higher quality, value add and effectiveness. But in fact we find too few employers in the UK currently adopt High Performance Working practices where they invest in business development, treat skills as a long term investment, and regularly evaluate training needs. There are also shortfalls in management and leadership and questions over the sophistication of employers' business strategies. In addition, despite the recent growth in high skilled jobs, there are indications that the UK has a relatively slow rate of high skilled job growth compared to other OECD countries and certainly one which is well below the overall growth of high skilled people. This raises questions not only about the level and relevance of supply but, also about the level and nature of skills demand

#### Table 7.1:

The UK's current and forecast international position

Skill Level	Current Rank, 2010 Report*	Expected 2020 Rank: 2010 Report
Low Skills	19	20
Intermediate Skills	21	21
High Skills	12	11

\* Data relates to the end of 2007

and whether employers are sufficiently developing their businesses and fully optimising their employee's skills, as well as the adequacy of job matching in the labour market.

Our analysis has also drawn attention to significant geographical, sectoral and social dimensions to the findings. For example, major spatial variations in productivity, employment and skill levels; large differences in skill levels across different types of employer (e.g. sectors, size); and major differences in skills amongst individuals (e.g. by age, disability, ethnicity, employment status, occupation). We need to understand these differences if they are to be effectively tackled. In turn it is important that we work to ensure that having captured how much productivity, employment and skills issues vary across the UK that we continue to track progress and changes at these levels and seek to target action appropriately to tackle any these persistent inequalities. Doing so will not only reduce these inequalities but will make it easier to achieve the overall Ambition.

In summary, our performance is currently not world class in skills, employment or productivity, and not yet on a trajectory to be world class by 2020 either. There are three underlying issues which need to be addressed:

individual aspiration – despite our progress in skills attainment, too few adults still possess the skills needed to succeed in tomorrow's labour market or the motivation, confidence and opportunity to gain them. The ageing workforce and the associated decline in the number of 15 to 24-year-olds, is also an important consideration. In the future, we will be increasingly dependent on upskilling our older workers who are already in the labour market, which raises issues about future modes of provision. Over 80% of our 2020 workforce is now already in work. We must fix the 'stock' of adult skills as well as the 'flow' of young people into the labour market.

- employer demand whilst our leading employers are amongst the best in the world, there are questions about the balance of our economy as a whole. Relative to other industrialised nations, we have too few businesses in high skill, high value added industries, too few high performance workplaces are creating too few high skilled jobs. Compared to our ambition, we simply don't have sufficient employer demand for skills. We need more and better jobs which can only come from more and better businesses.
- responsive provision we have important strengths in our skills and employment systems in the UK but, there are significant improvements needed too. In particular, providers need to be responsive to ongoing developments in the labour market so that provision and learners skill acquisition, is well aligned to labour market needs and varying consumers' (employers and learners) demands. This raises questions about the forces driving the system, whether it is too complex and sufficiently empowers customers, the pattern of future demand, its performance and scope for quality improvement.

When we combine these challenges with the existence of difficult economic conditions and a serious public spending squeeze, we have to be prepared to think differently about the public policies we require in pursuit of the 2020 Ambition for world class skills, jobs and growth. We need a strategy that pursues greater effectiveness and does so efficiently. This means transforming our current thinking and approach so we can achieve more and better, for substantially less. We therefore apply this lens to our assessment of policy and practice and the operation of the skills and employment system.

## 7.3 WHAT NEEDS TO BE DONE?

As highlighted in last year's report, there have already been considerable reforms in recent years in the separate policy frameworks that exist for skills and employment across the UK<sup>98</sup>. Although the detail of these vary in different parts of the UK, reflecting devolved responsibilities and a degree of distinctiveness in the nature of the issues in different parts of the UK, they have shared a range of common features. Many of the policies and reforms developed have been designed to raise skills and employment **Ambitions** to ensure different parts of the UK can effectively compete on the world stage (albeit often deploying slightly different objectives, benchmarks and measures of success in the different parts of the UK). The reforms have consistently sought to make the system work better and, arguably, to ensure greater responsiveness to changes in the labour market and that services are more 'demand-led'. However, the scale and frequency of developments and changes in initiatives, procedures and delivery organisations has led to complexity<sup>99</sup>. This has especially been the case for the consumers of the system, not least to individuals and employers, who often report finding it hard to navigate and difficult to understand.

In our report last year, we identified a threefold policy challenge: **a policy gap** where there was insufficient attention given to the demand side and the dynamic relationship between supply and demand and, hence, too little emphasis on integrating the skills and employment agenda with that of economic development and performance; a 'policy to practice' or implementation gap where delivery on the ground does not always meet the policy promise; and a measurement gap which occurs because the current success measures, influencing policy and practice, do not sufficiently capture our ultimate employment and skills goals and as a consequence, do not always sufficiently inspire and/or drive the system in the right direction.

A number of Commission studies over the last year have highlighted a range of key issues<sup>100</sup>.

- the alignment of services to labour market needs: despite various reforms in the skills system, questions remain over the impact of the current funding and financial regime, and associated performance management process, and the extent to which this has affected the responsiveness of the system and patterns of provision. In particular there are concerns about how effectively priorities are aligned and whether action is always incentivised in the right areas. There are issues around the quality of matching processes and careers information and advice.
- excessive bureaucracy: concerns have been raised about whether there is too much central planning and too tight control on the detail of provider activity. In particular, there are questions about burdensome external quality improvement, monitoring and audit, which risks generating additional costs and complexity, which then in turn risks diverting scarce resources from the frontline.
- **the narrow focus on outputs:** as we saw earlier in terms of the largely qualification-based measures of success, progress is primarily measured within the system in terms of outputs which are centrally defined. There has been a general reliance in most nations (bar Scotland) in capturing qualification attainments rather than monitoring success and performance through a broader basket of measures which would better align and connect to policies and practice associated with achieving the broad World Class Skills and Employment Ambition 2020. The focus on qualification based measures of skills is therefore thought to be too narrow and fails to pick up on broader forms of informal learning and work based training which are also important to enhancing individual progression and wider business performance. These narrower qualification-based measures have then been used to drive funding in the system and the performance management process

**<sup>98</sup>** See for example: BIS, Skills for Growth. 2009; DELNI, A Statement of Skills in Northern Ireland 2008; DCELLS Skills That Work for Wales, 2008; SG, Skills for Scotland 2007.

**<sup>99</sup>** OECD (2009) Learning for jobs: The OECD policy review of vocational education and training in England and Wales.

<sup>100</sup> See for example, UK Commission (2008) Simplification of Skills in England. Wath-upon-Dearne; UK Commission (2009) Skills Jobs Growth, Wath-upon-Dearne and UKCES (2010) and Towards Ambition 2020: skills, jobs, growth for Scotland, Wath-upon-Dearne.

which has as a result often led to unintended consequences, affecting the nature of skills take up in areas most supported by public funding.

- whether demand is sufficient: a primary focus more recently within the system has been on upskilling the workforce and responding to demand (i.e. seeking to ensure that the system is more demand-led). But the analysis has questioned what demand-led really means and whether it is clear what demand the system is responding to? This is exemplified by recent economic developments, which have raised further issues about whether employers in the UK are ambitious enough, whether the balance of the economy is right, and hence whether there is a need to question the current shape and nature of employer demand that the supply side is responding to.
- the effectiveness of system-wide integration and consistency in policy and **practice:** there are substantial differences relating to employment and skills between different types of people and businesses and within the nations and regions of the UK. For instance geographically, the prevalence of higher level skills across the English regions varies by as much as 19 percentage points and the employment rate in the South East of England is 8 percentage points higher than in Northern Ireland. The UK faces the challenges not only of raising productivity, employment and skills to unprecedented levels, but also simultaneously narrowing the gaps between individuals and between the nations and regions of the UK. Whilst changes in the system have been driven by a desire to customise policy and practice to varying needs and circumstances, personalise services and target action appropriately, such developments risk creating inconsistency in the 'offer' and imbalance in the system. The strong interdependencies between different areas of policy (such as industrial, skills, employment and economic development) and at different levels (national, regional and local) across different parts of the system, call for alignment and more effective integration to ensure a balanced approach is achieved for the system as a whole whilst not compromising services.
- **over-reliance on public funding:** in recent times, we have experienced historically high levels of public investment in the skills and employment system. These are not sustainable in the near future during a period of severe public expenditure retrenchment. In the coming years, we will have less public resource available to invest in the skills of our people and our businesses as the fiscal deficit puts pressure on public education and training expenditure. We must therefore prioritise increasingly scarce public resources to meet the most pressing and significant skill needs and find innovative approaches to achieving 'more with less' and eliminating processes, structures and costs that do not add real value.
- adequacy of private investment: with severe constraints on public funding and the ongoing need to increase both the volume and level of workforce skills for the UK to secure economic growth and its world class ambitions, this places ever more emphasis on securing co-investment from individuals and employers, alongside public expenditure. With the benefits of such investment accruing to individuals, businesses and the wider economy, it is important to ensure that responsibilities for investing in the skills needs of the labour market are appropriately shared.

We believe that these are longstanding issues that, now more than ever, given the current economic position, need to be addressed. The challenge is formidable and urgent.

Last year, we proposed a new strategic framework to inform our thinking, assessments of progress and proposals for action. It sought to provide a conceptual map which connects the various dimensions of the Ambition 2020 agenda into a system which can better align and integrate skills, employment and economic development policy. It was deployed to organise the analysis in this report. It has also provided an important steer to the Commission's thinking and work programme. Following a range of work conducted throughout this year on key priorities<sup>101</sup>, the Commission has used the framework to develop four broad policy principles

**<sup>101</sup>** See full references in UK Commission (2010) Annual Report. Wath-upon-Dearne.

for driving economic growth through skills and jobs and which have been used to develop our recommendations for action:

- 1. support businesses to create **more jobs** and **more high skilled jobs**
- 2. invest in the right skills
- 3. use **information** and **incentives** as the key levers for raising investment in skills
- 4. **empower** customers, **focus** on outcomes and place greater **trust** in providers in the delivery of skills and jobs services, in order to achieve more and better for less.

Commissioners believe that only with substantial, sustained and serious action taken on all these fronts, will the UK achieve the transformational change required. The next section sets out these policy principles and draws out our recommendations for action.

## 7.4 THE IMPLICATIONS FOR ACTION

To transform our economic performance and so raise productivity and employment levels to world class levels, we need to secure a more balanced economy. We need to build the capacity and capability for private sector competitiveness, job generation and help businesses to succeed. Investment in skills is a key means through which such economic performance can be achieved. We need to renew our commitment to our Ambition 2020: to be world class in skills, jobs and productivity. We also need to secure the wholehearted approval of business, providers and the community at large.

Such an approach would be coherent as well as comprehensive and would provide the framework for securing the necessary 'virtuous circle' of improvements in both the supply of, and demand for, skills.

It is a core task of the UK Commission to assess the UK's progress towards its world class ambitions and regular, systematic, independent monitoring of our progress against agreed benchmarks would provide a sustainable foundation for policy development as well as business and individual behaviour.

## We recommend that the UK Governments, working with key partners

- commit to a World Class Ambition of being in the top quartile/top 8 of OECD countries by 2020 in skills, jobs and productivity;
- agree to the establishment of transparent benchmarks against which to assess progress towards that goal;
- approve the following metrics as the key benchmarks:
  - Employment Rate
  - Productivity Level
  - Skill Levels
    - Qualifications of the Workforce
    - Training
    - Individual and Employer Investment
  - Skills/Jobs Mismatch
  - Employer Ambition
    - Growth in Skilled Jobs
    - Skill Utilisation

## 7.4.1 Support businesses to create more jobs and more high skilled jobs

Our prosperity ultimately depends on how many people are in work and how productive they are when they are there. We need more jobs and more highly skilled jobs, higher levels of employment combined with higher levels of productivity. Not only does raising skill levels help us towards these goals, the pursuit of these goals, per se, creates the economic 'pull' to further lever up skill levels and ensure that they are put to use in productive jobs. After all, the demand for skills is ultimately a derived demand. In this way, a 'virtuous circle' of increased skills supply and demand is created, with each stimulating the other towards an ever higher skills equilibrium.

We need this World Class Ambition because in this rapidly developing world, there are increasing competitive pressures internationally, due to the

effects of globalisation, ongoing technological developments, and changes in consumer demand and the like. These pressures set enormous challenges and opportunities to which we must respond if we are to secure future economic success. We need to set a goal which provides a compelling vision for the future and strategic leadership in the development of the economy and which can inspire ambition and the achievement of world class performance. The World Class skills and employment Ambition is very stretching indeed. Yet, if the challenge is great so indeed is the prize. For instance, to edge into the top 8 for productivity and employment, we need to increase our employment rate by close to 1% point and our productivity levels by 13% points. Every 1% point increase in each is worth around £10 billion a year in perpetuity. The UK's business environment, business ambition and business leadership are key

to our future success.

First, it is widely acknowledged that achieving this World Class Ambition depends on developing a competitive, high value added and high quality *business environment* and economy, where businesses compete on the basis of product and service specification. Essentially, this seeks to support moves up the value chain by producing, selling and servicing higher quality products and services, towards more tradeable, export oriented businesses, and to foster growing ambition. Crucially, this is about rebalancing the economy and creating the right conditions for growth. Government needs to work with business to see developments in the economy and our competitive strengths in a strategic way, so that when it develops policy and acts that this shapes the business environment in a way that enables businesses to capitalise on competitive advantages, achieves the right balance in the economy, and supports economic renewal and growth. Crucially too, this calls for greater integration in thinking and action across Government between different, albeit related, areas of policy (such as industrial, skills, employment and economic development), and at different levels (national, regional and local) so that strategies for economic development, skills, and employment acting across different parts of

the system work to support the bigger goal and promote business competitiveness and success.

Second, this then, critically, calls for a commitment amongst employers to achieving this Ambition and an acknowledgement of the vital role they play alongside Government, individuals and providers in meeting it - thus securing **business ambition**. Crucially, this means businesses must recognise that they are not only key players in the traditional powerhouse industries of today, but also a force to reckon with in the emerging industries of tomorrow. As such they need to ensure that each national industrial base is leading edge, innovative, flexible and responsive to global competitive challenges, agile and efficient. This calls for on-going business investment and development. Success in today's and tomorrow's markets will depend on having a highly skilled and motivated workforce, able to compete with the best in the world.

The demand for skills is a 'derived' demand skills requirements develop from the mix of industries in the economy, changing industrial and technical requirements of industries, the nature of national and international competition, and evolving customer expectations. Higher levels of skills associated with achieving this world class ambition are increasingly required and utilised by sectors, products and businesses, to enable these businesses to take full advantage of new opportunities to move up the value chain, raise productivity and expand their reach and success. In turn, new materials, productive techniques, technologies, environmental developments and consumer expectations and demands also lead to the developments of new business opportunities and even new sectors and industries, as well as placing increasing pressure on existing industries to adapt and change over time. As consumer demands, industries, businesses, and work processes change, so too must the skills of the workforce to create a "virtuous circle" of demand and supply where a balance is achieved over time.

Third, to secure this business success in the UK, and to compete with the best in the world, calls for effective world class **business leadership**. Business does see skills as vital to achieving its
goals and makes a substantial investment (for example see investment figures presented earlier). However, the position is a dynamic one, and significant and concerted action must be sustained over time. A range of indicators presented earlier for this assessment question the extent of the UK's current Ambition relative to international competitors and, on many dimensions, we also lag behind international best practice, in key areas such as High Performance Working and leadership and management performance in the UK. Furthermore, some employers appear in any one year not to invest in training at all. Consequently, we have to create a "fierce urgency of now" and reaffirm our World Class Ambitions in skills and jobs by sustaining a supportive business environment, raising business ambition and business leadership which in turn will create more jobs and more high skilled jobs.

# We recommend that the UK Governments, working with key partners

- develop a strong strategic approach, at national and local levels to economic development, skills and employment which actively designs approaches to confirm the commitment amongst employers and individuals to the World Class Ambition and ensures the UK improves its business competitiveness and success in today's key sectors, and tomorrow's emerging high added value, high skill sectors and in specialist areas such as STEM skills;
- develop and deliver business support services to provide modern, leading edge business advice to encourage enterprise;
- enhance the capacity of more UK firms to be high growth, high skill, high value added, high performance working businesses;
- prioritise, target and align actions to where they offer the greatest value and stimulate the growth of new industries and greater innovation;
- seek to develop better leadership and management across a wider range of companies, especially in those sectors most exposed to international competition;
- establish and deploy high quality labour market intelligence, enhanced by foresight on emerging strategic skills requirements, to inform national and local priorities, anticipate and better match the supply of skills to emerging demand, and thus enhance economic competitiveness;
- stimulate greater employer networking, collaboration and collective action on skills, within sectors, labour markets, and/or supply chains, to create more high skill, high performance workplaces and increase UK competitive advantage.

## 7.4.2 Invest in the right skills

It is not only a matter of upskilling but ensuring the skills acquired bring real, sustainable benefits to the individuals concerned. This means encouraging the acquisition of those skills that are most in demand that generate the most value to the individual, to their employer and to the economy and society as a whole. Skill acquisition which does not enhance employability, earnings, labour market progression or which does not bring other economic and social returns, is a waste of public and private resources.

In an era of severe public spending reductions, we must seek to secure 'more for less'. Increasing employment, skills and productivity will generate more resources for the economy over the period from now to 2020, resources which could be used in part to reduce the public deficit as well as to raise living standards and levels of employment. To secure this Ambition requires a step change in behaviour.

We have to fundamentally change how individuals and businesses treat skills acquisition and development: from a one-off experience in our youth to a lifelong commitment; from a business expense to an essential recurring investment in competitive advantage and business success. There are substantial returns to investing in skills for individuals, employers and the economy as a whole. It is therefore important to ensure that responsibilities for investing in skills are also shared and that individuals and employers are prepared to co-invest in their future development and, in particular, contribute proportionally to where they receive the greatest returns. The role of government is to enable this change by influencing the attitudes and behaviour of key players:

- ensuring a basic platform of skills for all to enable individuals to secure employment and to advance and to provide the basis on which to build future investment;
- enhancing understanding of the benefits of skills investment in securing entry to and progression through the labour market;

- tackling under-investment and helping to overcome resistance, doubt and the wider barriers to learning and finding sustainable work;
- building ambition and aspiration, challenging inequalities, securing employment and progression through the labour market and targeting help where it is most needed;
- improving linkages with, and the resources to better navigate the labour market and to enable effective skills and career development which presents a ladder of opportunity to sustainable employment and progression.

We need to focus more on policies and action that leverage greater shared responsibility and investment between individuals, employers and government.

But, we need to do more than raise skill levels. We also need to ensure that the skills acquired develop knowledge and capabilities in areas of greatest value: are responsive to labour market changes; and better align, match and balance, what is required both in volume and composition. We should put more focus on developing the skills which help achieve business success and which will open opportunities for individuals. It is about investing in the "right skills" - economically valuable skills. An imbalance between what the skills system produces and what the economy requires risks perpetuating skills mismatches; risking skills shortages and gaps; raising unemployment; creating a potentially greater dependency on migrant workers; and, perhaps most damaging of all, the underemployment of talented people already in work whose full potential is never realised. The UK Commission's 'National Strategic Skills Audit for England' (2010), developed with input from the Sector Skills Councils, provides the most detailed breakdown vet of England's skills profile and its future needs. The Skills Audit gives, at least in England and next year in Wales, a firm foundation to get a better match between the skills we have and the skills we require. We need also to ensure that information is effectively translated through the skills and employment system and careers service and disseminated in a way that it can be accessed and appreciated by young people, adults, parents, providers and hence a wide range of stakeholders. In all of this, it is necessary not only to focus on the 'flow' of those young people entering the labour market for the first time from school, college and university but, on the 'stock' of adults, those already in the workforce. Indeed, 4 in 5 of our 2020 workforce are already in work now. We will not successfully achieve our 2020 ambitions and create the workforce of tomorrow without a laser focus on the workforce of today.

Moreover, given the wide geographical variations in skill levels (and indeed, in levels of employment and productivity) it is essential that action is taken at the local level to reduce such wider inequalities.

# We recommend that the UK Governments, working with key partners

- 'nudge' the system to work better by improving the quality, transparency and accountability of information, pricing signals, strategic leadership and services that perform against tough criteria, showing value for money to encourage take up, greater labour market participation and a more skills intensive economy;
- prioritise public funding towards (i) basic skills, employability skills, lower level skills and to those people facing significant disadvantage in the labour market; and (ii) stimulating greater co-investment with employers and individuals in higher level skills which generate the greater private returns;
- ensure the content of vocational learning (such as apprenticeships) and qualifications is shaped by the needs of the relevant sector with choice in provision being aligned to local labour market needs and where informed customers drive supply, performance and quality;
- take the opportunity provided by the new 'cap' on non EU migration to ensure that the opportunities created thereby for the indigenous workforce are secured through appropriate upskilling of the workforce.

## 7.4.3 Use information and incentives as the levers for raising investment in skills

Clearly, a reliance on detailed, centrally driven planning of skills investment is undesirable. However, there is an important role for Government to provide high quality information reinforced by targeted incentives to give signals to businesses, individuals and providers to help shape skills development and to encourage appropriate changes in behaviour.

Well presented, high quality economic and labour market intelligence can play a valuable role by providing insights on how well markets are working, where developments are taking place now demand and supply trends are evolving and where they are well aligned and not so well aligned. As such, it can help create a 'virtuous circle' of skills supply which adjusts to meet changing skills demand in a rapidly changing world, which helps ensure that developing economic opportunities, are more fully exploited in future in the different nations of the UK. The importance of high quality LMI is something increasingly valued internationally as well as in the UK<sup>102</sup>.

The UK Commission's Skills Audit has substantially enhanced the level and depth of labour market intelligence available in England on a consistent and comparable basis to inform current and future decisions of businesses, individuals and providers<sup>103</sup>. The UK Commission has sought to add value by pooling LMI in one resource, reviewing and assessing information in a consistent manner, and, consequently, providing advice on developments in the labour market and current and future skill requirements to inform an active skills and employment strategy. As part of its future strategic skills assessment programme, the Commission will continue to work to improve the quality of existing labour market intelligence and foresight to better match the best international practice, and will integrate this with our strategic skills findings to help shape economic development, industrial, skills and employment policy, inform

**<sup>102</sup>** For example see New Skills for New Jobs Action Now. European Commission February 2010.

**<sup>103</sup>** UK Commission (2010) Skills for Jobs: Today and Tomorrow. Volume 1 and 2.

improved careers information and advice for young people and adults, and enhance the relevance of job matching services, work-related learning programmes and qualifications. Other parts of the UK have shown an interest in replicating this analysis for their nations. Given that skills policy and delivery is devolved, the development of such intelligence and the identification of strategic skills needs has to be nation specific. This will help to ensure that any subsequent investment decisions and action based on the skills and employment priorities identified is appropriately targeted according to the varying context in which those devolved skills systems operate.

There may also be a role for Government to not only strengthen information to improve decisions but to utilise carefully targeted levers which encourage individuals, employers and providers to act in particular ways and change their behaviour. Recent policy thinking in this area is increasingly drawing on psychology, behavioural sciences and behavioural economics and it is important that this is applied to policy development in the skills and employment arena<sup>104</sup>. In essence, this work has drawn attention to different ways of thinking about changing behaviour. In general, there are two broad approaches: one is based on influencing what people consciously think about when confidently making choices and acting in particular ways - known as the rational model. With this information, intelligence, advice and facts can be most effective. The other approach acknowledges that we can also act on more subtle and automatic signals, processes and judgment, which are more sub-conscious, and can lead to people appearing more irrational and inconsistent in their choices. This is sometimes called the context model as people are more influenced by the surrounding environment and factors and, with this alternative approach, it is accepted that behaviour may change without changing minds.

104 See for example, Cialdini (2007) Influence the psychology of persuasion. New York: Harper Business, Revised Edition. Thaler and Sunstein (2008) Nudge: Improving Decisions about Health, Wealth and Happiness. Dolan P et al (2010) Mindspace: Influencing behaviour through public policy. Cabinet Office and Institute for Government. This work offers crucial insights to policy makers about the mechanisms through which to influence and "nudge" the behaviour of employers and individuals in particular ways and it is important that this is put to practical use in the development and deployment of future policy levers.

The Commission has extensively reviewed the full range of policy levers and incentives open to Government to incentivise individuals and employers. It has evaluated their specific costs and benefits, as well isolating the different circumstances in which they have operated and what factors are more likely to bring success<sup>105</sup>. It has also drawn upon the latest thinking about the best means to influence behaviour. As part of the its 2010/11 work programme the UK Commission has been asked to investigate the priority areas for public spending and the opportunities for additional private investment – its 'More for Less' project. This work will deliver later in the autumn 2010.

<sup>105</sup> UK Commission (2009) Collective Measures Final Report. Evidence Report. Wath-upon-Dearne. UK Commission (2009) Employee Demand. Evidence Report. Wath-upon-Dearne. UK Commission (2009) A Synthesis of High Performance Working. Evidence Report. Wath-upon-Dearne.

# We recommend that the UK Governments, working with key partners

- transform the quality and availability of information, advice and guidance on career and learning opportunities, through high quality labour market intelligence and the use of Web 2.0 technologies to widen availability and use;
- review the UK Commission's forthcoming evidence around policy incentives for individuals and employers through its 'More for Less project' which seeks to provide further advice about where scarce public resources should be prioritised to add the greatest value and in particular to leverage the greatest investment from individuals and employers. Following this advice to:
  - take action to raise employer ambition and commitment to investing in business development and skills through promotion, evidence, high quality provision and consider supplementing current services where appropriate with appropriately targeted action/levers;
  - take action to raise individual aspiration, confidence and commitment to lifelong learning and skills through promotion, evidence, high quality provision and progression and consider supplementing current services where appropriate with appropriately targeted action/levers;
- deploy existing labour market intelligence more effectively translating it in a way that empowers individuals, employers and providers to make the right decisions, whilst choice in provision is aligned to local labour market needs and informed by customers.

## 7.4.4 Achieve more and better for less by empowering customers, focusing on outcomes and placing greater trust in providers in the delivery of skills and jobs services

As leading business people and stakeholders, our Commissioners fully recognise the strain on public services. Not only are there increasing fiscal pressures to consider, but the ever rising expectations that businesses and society places upon them. Urgent action must be taken, not only to meet these growing expectations, but also to seek ongoing improvements. Thus there is a crucial need to set tough new standards for delivery which as well as ensuring quality also provide confidence that public money is well spent.

As the UK Commission set out in 'Towards Ambition 2020: Skills, Jobs, Growth' (Oct 2009), there are three key areas of reform which will bring a transformation in service outcomes: ambition, alignment of needs and more money to the frontline. In our work programme we have been asked to investigate these areas further and to reflect on how and where to achieve greater efficiency savings and value for money in future as well as ensuring services offer the greatest value, we feel our current proposals are already highly pertinent to this agenda, hence:

- businesses and individuals as customers need to be given the power of choice – and the added power from the resource which follows it – empowering customers to drive performance, quality and innovation in meeting their skill and job needs;
- service delivery should be commissioned on the basis of real world outcomes; business success, jobs, personal progression and customer satisfaction – indeed there should be no justification for spending public money without evidence that programmes have considered impacts. There must be real incentives for universities, colleges and trainers to work with industry to meet business needs;

colleges, universities and trainers should be trusted to serve their communities and markets. Less intervention, granularity of planning and oversight would slash bureaucracy and cost, improve responsiveness and release innovation. But in return they must show greater transparency of performance and impact for businesses, individuals and the wider community through performance measures such as 'balanced scorecards'.

# We recommend that the UK Governments, working with key partners

- develop a system of support for individuals which offer certain core features such as access to career information and counselling with emphasis on progression, immediate access to targeted entitlements, support and subsidies as appropriate, and opportunities to save and privately top up investment all with the emphasis on creating real choice;
- simplify and prioritise public funding towards developing economically valuable skills, whilst at the same time looking at incentives to increase employer and individual coinvestment and improving value for money;
- review how current systems can buy and report against a wider basket of skills outcomes; with specific emphasis on learning and labour market progression, sustainable employment outcomes and wholesale simplification of processes;
- improve the quality and access of information, advice and guidance on career and learning opportunities, including simple 'food labelling' style advice on individual courses and business approval of learning valued by sectors;
- expect that colleges, universities and trainers who are trusted as professionals to better meet employer, individual and community need will in turn develop simple and transparent outcome based performance frameworks which create greater accountability and connection with their immediate customers;
- work to deliver a flexible and simple qualification system in which only provision which meets employers and industry needs is eligible to receive significant public funding.

## 7.5 FUTURE CONSIDERATIONS

Achieving Ambition 2020 would generate real, sustainable economic and social benefits for the UK. We are, however, not on course to achieve this ambition. A step change is required – by individuals, employers and by Government – if we are to secure the extensive benefits that would be generated by achieving our ambitions. Indeed, not achieving this ambition would put the UK's prosperity at risk.

The combination of difficult economic circumstances and severe restraint in public spending makes securing the ambition both all the more necessary but also more difficult. What is required is an absolute commitment to the cause: a re-engineering of the public expenditure contribution (on which we will report in the early Autumn); an absolute commitment to raising aspiration and ambition; and recognition of the greater contribution that individuals and employers will both have to make. In that context, it is essential that we more effectively make 'the case for skills'. Parallel to this report, we are publishing<sup>106</sup> The Value of Skills – a review of the economic and social benefits that increased skills generates. It is also essential that we secure greater accountability for, and transparency in, the outcomes of people's skill acquisition so that all of us get better returns from our investment in skills.

Our approach in Ambition 2020 both depends on, and has contributed, to the approach of multi-lateral organisations:

the European Union's new approach to skills and jobs<sup>107</sup> focuses on three things, as well as 'making the case' for skills: incentives to upgrade and make better use of skills; action to bring the worlds of education, training and work closer together to get the right mix of skills, and better anticipation of future skill needs.

- the OECD's work on skills strategy<sup>108</sup> not only will focus on increasing skill levels to help secure 'strong, sustainable and balanced growth' but also on getting the mix of skills right (so employers can find workers with the skills they need); increase skills utilisation; understand the evolution of skills demand; and recognise the importance of local action through its LEED programme;
- the G20 countries training strategy<sup>109</sup> seeks to equip the workforce with the skills required for strong, sustainable and balanced growth and sets out three main objectives for a successful skill development strategy: matching of the supply of, and demand for, skills; assist adjustment and adaptation to change by individuals and enterprises; and building competences to meet future skill needs.

Many countries and multi-lateral organisations now recognise the extraordinarily important contribution that skills can make in securing sustainable recovery and economic growth. Many countries are making considerable progress on this agenda. The UK must re-double its commitment and efforts if it is to become one of the small number of countries that will be world class in skills and whose future prosperity will be driven by the skills of its people.

- **108** OECD, Proposal for a Horizontal Skills Strategy: Building Maintaining and Improving Skills, 2010. OECD, LEED Work Programme, 2010, LEED Directing Committee.
- **106** Garrett, R., Campbell, M., and Mason, G., The Value of Skills. Evidence Report, 2010
- **107** European Commission, New Skills for New Jobs Action Now. February 2010.
- 109 ILO, Equipping the Workforce with the Skills Required for Strong, Sustainable and Balanced Growth for the 21st Century. A Preliminary Report on a training strategy submitted to the G20 Employment and Labour Ministers Meeting, 20–21 April 2010, Washington D.C. April. ILO

## **Glossary of terms**

## 20/20/20

The EU target on greenhouse gases reduction and renewable energy: the target is for a 20% reduction in emissions and 20% of energy generation to be from renewable sources by 2020.

## CEDEFOP

## European Centre for the Development of Vocational Training

#### CIPD

Chartered Institute of Personnel and Development

#### DDA

**Disability Discrimination Act** 

DWP

**Department of Work and Pensions** 

## EEA

**European Economic Area** – In 2010 the EEA comprised all 27 EU member states plus Iceland, Liechtenstein and Norway.

#### ENI

**Equivalent Net Income** – ENI looks at income at a household rather than an individual level. This is the main measure used in the Department for Work and Pension's Households Below Average Income (HBAI) publication.

## G20

The Group of 20 major industrialised countries.

## GCSE

## **General Certificate of Secondary**

**Education** – Standardised examinations taken by 16-year-olds in compulsory education.

## 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)
- As the total of all expenditures made either in consuming finished goods and services or adding to wealth, less the cost of imports (expenditure).

## **Gini coefficient**

A summary measure of inequality in the distribution of household income. The lower its value, the more equally household income is distributed. The Gini coefficient is a measure of the way in which different groups of households receive differing shares of total household income.

## **GVA**

**Gross Value Added** – A measure of productivity. 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.

## Hard-to-fill vacancy

A vacancy classified by the survey respondent as hard to fill.

## HTFV

See hard-to-fill vacancy.

## HBAI

Households Below Average Income -

A publication from the DWP. See also ENI.

## **High level skills**

Defined as NQF Level 4 and above. For example, a university degree.

#### High performance working

A general approach to managing organisations that aims to stimulate more effective employee involvement and commitment to achieve high levels of performance.

#### HPW

See High performance working.

## ICT

Information and Communications Technology

## **IER/CE**

Institute of Economic Research/Cambridge Econometrics

#### ILO

## International Labour Organisation –

A UN labour market body. ILO produces internationally-comparable unemployment figures.

Intermediate level skills Defined as NQF Level 3. For example, A-levels.

## ISCED

#### International Standard Classification of

**Education** – A UNESCO measurement of education levels.

## ISCO

#### International Standard Classification of

Occupations – An ILO classification of occupations.

## LFS

Labour Force Survey

#### LMI

Labour Market Information / Labour Market Intelligence

#### Low level skills

Defined as NQF Level 2 and below. For example, below 5 GCSE grade  $A^*-C$ .

## NEET

## Not in Employment, Education or Training

#### NEP

## **National Equality Panel**

## **NESS**

National Employer Skills Survey for England

## NIACE

## National Institute of Adult Continuing Education

## **NSNJ**

**New Skills New Jobs** – An EU programme looking at future skills needs in Europe.

## NQF

**National Qualifications Framework** – A UK standardised system of classifying qualifications.

## **NUTS**

## Nomenclature of Territorial Units for Statistics

– An EU standard for classifying geographical units. In UK terms:

- NUTS1 corresponds to an English region or UK nation
- NUTS2 corresponds to a county or group of unitary authorities
- NUTS3 corresponds to a unitary authority or district

## NVQ

## **National Vocational Qualification**

## OECD

## Organisation for Economic Cooperation and Development

## **Off-the-job training**

Training away from the individual's immediate work position, whether on the establishment's premises or elsewhere.

## ONS

## **Office for National Statistics**

## **On-the-job training**

Informal training and development activities that would be recognised as training by staff, but not the sort of learning by experience which could take place all the time.

## PIAAC

Programme for the International Assessment of Adult Competencies

**PSA** 

**Public Service Agreement** 

## Skills gap

A lack of skills, work experience or qualifications among workers already employed in a job. Note that skills gaps refer to gaps internal to an organisation. For skills shortages in applicants to a role, see *skills shortage vacancy*.

## Skills shortage vacancy

A subset of job vacancies where a role is hard to fill due to a lack of skills, work experience or qualifications in the applicants for the role. Note that SSVs refer to skills shortages external to an organisation. For skills shortages within an organisation, see *skills gap*.

## SME

**Small and Medium Sized Enterprise** – Defined as a business employing fewer than 250 people.

## SSDA

**Sector Skills Development Agency** – Now defunct; a precursor of the UK Commission for Employment and Skills.

## SSV

See skills shortage vacancy.

## **UK Commission**

## **UK Commission for Employment and Skills**

## **UKCES**

See UK Commission.

## Upskilling

An employer is described as having upskilling needs where they say that any of their staff need to acquire new skills or knowledge over the next 12 months, for example to keep up-to-date with legislative requirements or as a result of the development of new products or services.

## WEF

## **World Economic Forum**

## Weighted base

Weighting is undertaken to adjust for sample design and non-response to ensure that survey results are representative of the population of employers. *Weighted base* refers to the base used to calculate percentages.

## **Bibliography**

- Ananiadou, K., Jenkins, A. and Wolf, A. (2003) The Benefits to Employers of Raising Workforce Basic Skills Levels: A Review of the Literature. National Research and Development Centre for Adult Literacy and Numeracy, London.
- Ashton, D. and Sung, J. (2002) Supporting Workplace Learning for High Performance Working. ILO, Geneva.
- Bell, D. N. F. and Blanchflower, D. G. (2009) What Should be Done About Rising Unemployment in the UK? IZA Discussion Paper No. 4040. IZA, Bonn.
- Belt, V. and Giles, L. (2009) High Performance Working: A Synthesis of Key Literature. UKCES Evidence Report 4. UK Commission for Employment and Skills, Wath-upon-Dearne.
- Berthoud, R. (2003) Multiple Disadvantage in Employment: A Quantitative Analysis. Joseph Rowntree Foundation, York.
- BIS (Department for Business, Innovation and Skills) (2009) *Skills for Growth.* The Stationery Office, Norwich.
- Bloom, N., Dorgan, S., Dowdy, J., Genakos, C., Sadun, R. and Van Reenan, J. (2007) *Management Practice and Productivity: Why They Matter.* Centre for Economic Performance, London.
- Bosworth, D., Davies R. and Wilson, R. (2001) Employers Skill Survey: An Econometric Analysis of Skill Deficiencies and Performance 1999. Department for Education and Skills, Nottingham.
- Bosworth, D. and Kik, G. (2009) *Ambition* 2020: *Technical Report*. UK Commission for Employment and Skills, Wath-upon-Dearne.
- - (2010) Adult Training Policy with Respect to Basic Skills. Spring 2010. Paper for the XIX Meeting of the Economics of Education Association.
- Cabinet Office (2010) State of the Nation Report: Poverty, Worklessness and Welfare Dependency in the UK. Cabinet Office, London.
- Campbell, M. (2002) Learn to Succeed: The Case for a Skills Revolution. Policy Press, Bristol.
- Cedefop (2010) Skills Supply and Demand in Europe: Medium Term Forecast up to 2020. Cedefop, Thessaloniki.
- Charlesworth, K., Cook, P. and Crozier, G. (2003) Leading the Change in the Public Sector: Making A Difference. Chartered Management Institute, London.

- Clancy G. (2009) The Impact of the Recession on the Labour Market. ONS, Newport.
- Collier, W., Green, F. and Young-Bae, K. (2007) Training and Establishment Survival. SSDA Research Report 20. Sector Skills Development Agency, Wath-upon-Dearne.
- Curran, J., Blackburn, R., Kitching, J. and North, J. (1997) 'Small Firms and Workforce Training: Some Results, Analysis and Policy Implications from a National Survey', in Ram, M., Deakins, D. and Smallbone, D., (eds.) *Small Firms: Enterprising Futures.* Paul Chapman, London, pp. 90–101.
- DCELLS (Department for Children, Education, Lifelong Learning and Skills) (2008) Skills that Work for Wales: A Skills and Employment Strategy and Action Plan. Welsh Assembly Government, Cardiff.
- Dearden, L., Reed, H. and van Reenan, J. (2000) Who Gains When Workers Train? Training and Corporate Productivity in a Panel of British Industries. IFS Working Paper 00/04. Institute for Fiscal Studies, London.
- - (2005) The Impact of Training on Productivity and Wages: Evidence from British Panel Data. Centre for Economic Performance, London.
- Dearden, L., McIntosh, S., Myck, M. and Vignoles, A. (2000) The Returns to Academic, Vocational and Basic Skills in Britain. Centre for the Economics of Education, London.
- DELNI (Department for Employment and Learning, Northern Ireland) (2007) The Northern Ireland Skills Monitoring Survey 2005: Main Report. DELNI, Belfast.
- - (2008) A Statement of Skills in Northern Ireland. DELNI, Belfast.
- DfES (Department for Education and Skills) (2003) The Skills For Life Survey: A National Needs and Impact Survey of Literacy, Numeracy and ICT Skills. Her Majesty's Stationery Office, Norwich.
- DfES and DWP (Department for Education and Skills and Department for Work and Pensions) (2007) A Shared Evidence Base: The Role of Skills in the Labour Market. Department for Education and Skills and Department for Work and Pensions, Norwich and London.
- DIUS (Department for Innovation, Universities and Skills) (2007) World-Class Skills: Implementing the Leitch Review of Skills in England. The Stationery Office, Norwich.

- EEF and CIPD (2003) Maximising Employee Potential and Business Performance: the Role of High Performance Working. CIPD, London.
- Edwards, P. (2010) Skills and the Small Firm: A Research and Policy briefing, UKCES Briefing paper Series, June 2010.
- European Commission (2009) Progress Towards the Lisbon Objectives in Education and Training: Indicators and Benchmarks. Commission Staff Working Document.
- - (2010a) European Adult Education Survey. European Commission, Brussels. Available: http://epp.eurostat.ec.europa.eu/portal/page/ portal/education/data/database. [Accessed 18th June 2010].
- - (2010b) New Skills for New Jobs: Action Now. European Commission, Brussels.
- - (2010c) Europe 2020: A European Strategy for Smart, Sustainable, and Inclusive Growth. European Commission, Brussels. Available: http://ec.europa.eu/eu2020/pdf/COMPLET%20 EN%20BARROSO%20%20%20007%20-%20 Europe%202020%20-%20EN%20version.pdf [Accessed 13th July 2010].
- European Council (2000) Lisbon Extraordinary European Council: Presidency Conclusions: 23rd and 24th March 2000. Europa, Brussels. Available: http://www.ena.lu/conclusions\_ lisbon\_extraordinary\_european\_council\_2324\_ march\_2000-02-27303. [Accessed 18th June 2010].
- Felstead, A., Gallie, D. and Green, F. (2002) Work Skills in Britain, 1986–2001. Department for Education and Skills, London.
- Futureskills Scotland (2009) Skills in Scotland 2008. Scottish Government, Edinburgh. Available: http://www.scotland.gov.uk/Resource/Doc/ 263613/0078884.pdf. [Accessed 18th June 2010].
- Futureskills Wales (2005) Sector Skills Survey Summary Report. Futureskills Wales, Caerphilly.
- Garrett, R., Campbell, M. and Mason, G. (2010)

*The Value of Skills: An Evidence Review.* UK Commission for Employment and Skills, Wath-upon-Dearne.

## Green, F., Felstead, A., Mayhew, K. and Pack, A.

(2000) 'The Impact of Training on Labour Mobility: Individual and Firm-Level Evidence from Britain', in *British Journal of Industrial Relations*, Vol. 38, No. 2, pp. 261–275.

- Green F., Mayhew, K. and Molloy, E. (2003) *Employer Perspectives Survey.* Department for Education and Skills, Nottingham.
- Guest, D. (2006) Smarter Ways of Working: The Benefits of and Barriers to Adoption of High Performance Working. SSDA Catalyst No. 3. Sector Skills Development Agency, Wath-upon-Dearne.
- Hills, J., Brewer, M., Jenkins, S., Lister, R., Lupton, R., Machin, S., Mills, C., Modood (2010) An Anatomy of Economic Inequality in the UK – Report from the National Equality Panel. Government Equalities Office, 2010.
- Hogarth, T. and Wilson, R. (2007) Skills in England 2007, Volume 2: Research Report. Learning and Skills Council, Coventry.
- - (2001) Employers Skill Survey: Skills Matter: A Synthesis of Research on the Extent, Causes, and Implications of Skill Deficiencies. Department for Education and Employment, Nottingham.
- Horne, M. and Stedman Jones, D. (2001) Leadership: The Challenge for All? Chartered Management Institute, London.
- Huggins R. and Thompson P. (2010) UK Competitiveness Index 2010. Centre for International Competitiveness, Cardiff.
- IER (Institute for Employment Research) and IFF Research (2004) National Employers Skill Survey 2003: Key Findings. Learning and Skills Council, Coventry.
- IMD (2010) World Competitiveness Yearbook. IMD, Lausanne.
- Jenkins J. and Leaker D. (2010) 'The Labour Market Across the UK in the Current Recession', in *Economic and Labour Market Review*, Vol, 4, No. 1, January, pp. 38–48.
- Johnson, S. (2002) 'Lifelong Learning and SMEs: Issues for Research and Policy', in *Journal of Small Business and Enterprise Development*, Vol. 9, No. 3, pp. 285–295.
- Johnson, S. and Devins, D. (2008) Training and Workforce Development in SMEs: Myth and Reality. SSDA Catalyst No. 7. Sector Skills Development Agency, Wath-upon-Dearne.
- Johnson, S., Sawicki, S., Pearson, C., Lindsay, C., McQuaid, R. and Dutton, M. (2009)

*Employee Demand for Skills: A Review of Evidence and Policy.* UKCES Evidence Report 3. UK Commission for Employment and Skills, Wath-upon-Dearne.

- Kent, K. (2008) 'Employment Changes Over 30 Years', in *Economic and Labour Market Review*, Vol. 3, No. 2, pp. 30–36.
- Kitching, J. and Blackburn, R. (2001) The Nature of Training and Motivation to Train in Small Firms. DfES Research Report RR330. Department for Education and Skills, Nottingham.
- Lawton, K. (2009) Nice Work If You Can Get It. Institute for Public Policy Research, London.
- MacInnes, T., Kenway, P. and Parekh, A. (2009) Monitoring Poverty and Social Exclusion. Joseph Rowntree Foundation, York.
- Mason, G. (2010) Product Strategies, Skills Shortages and Skill Updating Needs in England: New Evidence from the National Employer Skills Survey in England. UK Commission for Employment and Skills, Wath-upon-Dearne.
- Mason, G. and Bishop, K. (2010) Adult Training, Skills Updating and Recession in the UK: the Implications for Competitiveness and Social Inclusion. LLAKES Research Paper 10. Centre for Learning and Life Chances in Knowledge Economies and Societies, London.
- 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, pp. 1–18.
- National Skills Task Force (2000) Skills for All: Research Report. Department for Education and Employment, London.
- Organisation for Economic Cooperation and Development (OECD) (2008) Education at a Glance 2008: OECD Indicators. OECD Publishing, Paris.
- - (2009a) Learning for Jobs: The OECD Policy Review of Vocational Education and Training in England and Wales. OECD, Paris.
- - (2009b) OECD Employment Outlook 2009: Tackling the Jobs Crisis. OECD, Paris.
- - (2009c) OECD Productivity Database 2009.
  OECD, Paris. Available: www.oecd.org/statistics/ productivity. [Accessed 15th June 2010].
- - (2009) Education at a Glance 2009: OECD Indicators. OECD Publishing, Paris

## Office for National Statistics (ONS) (2009)

Measuring Inequality of Household Income: The Gini Coefficient. ONS, Newport.

- - (2010a) Productivity Statistical Bulletin: Q. 4 2009. ONS, Newport.
- - (2010b) Labour Market Statistics First Release. ONS, Newport.
- - (2010c) Economic and Labour Market Review: Data Tables. ONS, Newport. Available: www. statistics.gov.uk/elmr/04\_10/data\_page.asp. [Accessed 18th June 2010].
- Porter, M.E. and Ketels, C.M. (2003) UK Competitiveness: Moving to the Next Stage. DTI Economics Paper No. 3. Economic and Social Research Council, London.
- Scottish Government (2007) Skills for Scotland: A Lifelong Skills Strategy. Scottish Government, Edinburgh.
- Shury J., Winterbotham M., Davies B., Oldfield K., Spilsbury M. and Constable S. (2010) National Employer Skills Survey for England 2009: Main Report. UK Commission for Employment and Skills, Wath-upon-Dearne.

Shury, J., Davies, B., Riley, T. and Stanfield, C. (2008) Skills for the Workplace: Employer Perspectives. UKCES Evidence Report 2. UK Commission for Employment and Skills, Wath-upon-Dearne.

Skills Strategy Division, Department for Innovation, Universities and Skills (2007) Explaining the Employment Gap Between High and Low Educational Attainers. [Internal Discussion Paper].

- Snape, D., Tanner, E., and Sinclair, R. (2005) National Adult Learning (NALS). Department for Education and Skills, London.
- Stanfield, C., Sloan, J., Cox, A. and Stone, I. (2009) Review of Employer Collective Measures: Final Report. UKCES Evidence Report 10. UK Commission for Employment and Skills, Wath-upon-Dearne.
- Tamkin, P., Giles, L., Campbell, M. and Hillage, J. (2004) Skills Pay: The Contribution of Skills to Business Success. SSDA Research Report No. 5. Sector Skills Development Agency, Wath-upon-Dearne.

- UK Commission for Employment and Skills (UKCES) (2008) Simplification of Skills in England: Expert Advice to Government on Simplification of the English Post-compulsory Skills System for Employers. UK Commission for Employment and Skills, Wath-upon-Dearne.
- - (2009) Towards Ambition 2020: Skills Jobs Growth. UK Commission for Employment and Skills, Wath-upon-Dearne.
- - (2010a) Skills for Jobs: Today and Tomorrow: The National Strategic Skills Audit for England 2010
   - Volume 1: Key Findings. UK Commission for Employment and Skills, Wath-upon-Dearne.
- - (2010b) Skills for Jobs: Today and Tomorrow: The National Strategic Skills Audit for England 2010 – Volume 2: The Evidence Report. UK Commission for Employment and Skills, Wath-upon-Dearne.
- - (2010c) Towards Ambition 2020: skills, jobs, growth for Scotland. UK Commission for Employment and Skills, Wath-upon-Dearne.
- Unwin, L. Felstead, A., Fuller, A., Lee, T., Butler, P and Ashton, D. (2005) Worlds Within Worlds: The Relationship Between Context and Pedagogy in the Workplace. Centre for Labour Market Studies, Leicester.
- Wilkinson, R. and Pickett, K. (2009) The Spirit Level: Why More Equal Societies Almost Always Do Better. Aller Lane, London.
- Wilson, R., Homenidou, K. and Gambin, L. (2008) Working Futures 2007–2017. UKCES Research Report No. 2. UK Commission for Employment and Skills, Wath-upon-Dearne.
- World Economic Forum (2009) Global Competitiveness Report 2009–2010. World Economic Forum, Geneva.

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.

## **UKCES**

3 Callflex Business Park Golden Smithies Lane Wath-upon-Dearne South Yorkshire S63 7ER

## T +44 (0)1709 774 800

F +44 (0)1709 774 801

## UKCES

28–30 Grosvenor Gardens London SW1W 0TT

## T +44 (0)20 7881 8900

F+44 (0)20 7881 8999

This document is available at **www.ukces.org.uk** as a downloadable pdf. Limited numbers of hard copies are available, and can be requested from **info@ukces.org.uk.** 

© 280710/1stEd/100