THE VALUE OF SOFT SKILLS TO THE UK ECONOMY

A REPORT PREPARED ON BEHALF OF McDONALD'S UK JANUARY 2015



CONTENTS

EXECUTIVE SUMMARY	3
1: INTRODUCTION	5
2: WHAT ARE SOFT SKILLS AND WHY DO THEY MATTER? What are soft skills? Why do soft skills matter? Skills and employment policy in the UK: Links to soft skills Soft skills and the UK productivity gap	7 7 9 11 12
Soft skills and the entry of young people into the workforce	13
3: CONTRIBUTION OF SOFT SKILLS TO THE ECONOMY Current contribution of soft skills Future contribution of soft skills (2020 and 2025)	16 16 17
4: PENALTIES OF UNDERINVESTING IN SOFT SKILLS Future labour shortages due to soft skills deficits Future skills gaps due to soft skills deficits Output costs of soft skills deficits Costs of soft skills shortages Costs of soft skills gaps Overall costs of soft skills deficits Sectors, regions and countries most at risk from soft skills deficits Potential lost business investment	20 23 25 25 27 29 30 33
5: CONCLUSIONS, METHODOLOGY AND APPENDIX Conclusions Implications for employers Implications for those in the workforce Implications for education institutions Implications for government Methodology	36 36 37 37 37 37
APPENDIX 1: GLOSSARY OF TERMS AND ABBREVIATIONS	39

EXECUTIVE SUMMARY

- 1. Soft skills enable the qualities, behaviours and attributes needed to succeed in the workplace. They encompass an individual's ability to listen well, communicate effectively, be positive, manage conflict, accept responsibility, show respect, build trust, work well with others, manage time effectively, accept criticism, work under pressure, be likeable, and demonstrate good manners.
- 2. The five linked soft skillsets that are vital for all UK workers are:
 - · Communication and interpersonal skills
 - Teamwork
 - · Time and self-management
 - · Decision-making and initiative-taking
 - · Taking responsibility.
- 3. When these five soft skillsets are available, utilised and nurtured, the positive outcomes for individuals include employment opportunities, career progression, and the development of employee confidence and satisfaction.
- 4. The contribution of soft skills matters because of the importance of team-working, collaboration, worker-to-worker interaction and worker-to-customer interaction in most if not all modern workplaces.
- 5. McDonald's is one of a growing number of major employers and other organisations in the UK that recognise the value of soft skills as a key component of the overall skillset of the UK workforce, and of its own 100,000 UK employees. These skills are vital to people's success in their careers and lives. They are also essential to creating high-performing and successful organisations.
- 6. As one of the UK's largest private sector employers, McDonald's is concerned that soft skills are not currently given the recognition they deserve. The purpose of this research is to demonstrate the contribution that soft skills make to the UK economy, today and in the future.
- 7. Today, soft skills are worth over £88 billion in Gross Value Added to the UK economy each year, underpinning around 6.5% of the economy as a whole.
- 8. Soft skills are important to all parts of the UK economy. They make a particularly important contribution to financial and business services, retail, and public services, including education and health.
- 9. The annual contribution of soft skills is expected to grow strongly over the next five years. By 2020, the annual contribution of soft skills to the economy is expected to grow in real terms to £109 billion, and to just over £127 billion by 2025.
- 10. However, deficiencies in the UK's current stock of soft skills impose severe penalties on our economy, affecting all sectors and regions of the UK. These skills deficits are not just a minor irritant for employers: they can cause major problems for business and result in diminished productivity, competitiveness and profitability.
- 11. Individuals and organisations will be affected by a combination of skills shortages and skills gaps. Soft skills shortages will prevent employers from filling workforce vacancies because they cannot find recruits with sufficient skills. Soft skills gaps will cause employees to operate significantly below required levels.

12. We estimate that over half a million (535,000) UK workers will be significantly held back by soft skills deficits by 2020, an issue expected to affect all sectors of the economy. In absolute terms, the accommodation and food services, retail, and health and social work sectors will be most affected. The annual overall expected loss of production due to expected soft skills deficits is anticipated to amount to just under £8.4 billion per year by 2020. If the current weaknesses in the UK's soft skills base are not addressed, we face an economic penalty that will impact on sectors, businesses, individuals and society as a whole. To tackle this, individuals, businesses, education institutions, and policy-makers should take action to recognise and promote soft skills.

1: INTRODUCTION

- 1.1 McDonald's is one of a growing number of major employers and other stakeholders in the UK that recognise the crucial value of soft skills as a key component of the overall skillset of the UK workforce. For the purposes of this research the following traits and attributes are considered to comprise the broad skill set labelled as 'soft skills': communication and interpersonal skills; teamwork; time and self-management; decision-making and initiative-taking; and taking responsibility.
- 1.2 McDonald's employs around 100,000 people in the UK, and is continually developing the skills of its employees to enable the business to respond to the changing needs of its customers. In particular, McDonald's places a premium on the development of the soft skills of its own workforce, including communication, teamwork, and time and self-management.
- 1.3 As part of this ongoing development, McDonald's uses sophisticated systems and tools to assess the current stock of soft skills among the candidates who apply for a job with the company each year. Development of soft skills is also afforded a high priority in the training programmes deployed by McDonald's to develop its employees, and the continued performance of employees with respect to their soft skills is used in the staff appraisal system and in staff promotion, progression and reward decisions.
- 1.4 Confirmation of the importance of the skills imparted by training committed by McDonald's was provided recently through a survey of employees conducted as part of the 'Serving the UK: McDonald's at 40' report published in June 2014.¹ In particular, a staff survey found that current employees regarded the soft skills that had been developed during their time with McDonald's would be highly relevant to their future careers:
 - the development of communication skills was considered highly relevant by 96% of current employees
 - team-work skills by 94% of current employees
 - decision-making skills by 93%
 - time management skills by 91%
- 1.5 Moreover, the survey found that over 50% of current employees reported that the soft skills they had developed whilst working at McDonald's had provided a major boost to their self-confidence.
- 1.6 As one of the country's largest private sector employers, McDonald's is concerned that soft skills are not given the recognition they deserve. The purpose of this research is therefore to demonstrate the contribution soft skills make to the UK economy, today and in the future.

¹ Serving the UK: McDonald's at 40, available at: http://www.mcdonalds.co.uk/content/dam/UK01NewsAssets/Press%20releases/Serving%20the%20UK/McDonald%2527sReport-FINAL.pdf

- 1.7 The remainder of this report is structured in the following way:
 - Chapter 2 provides a more detailed explanation of what soft skills are, and how they relate to other skills and attributes of the workforce. This chapter also assesses the current and expected future importance of soft skills to the UK economy, with reference to current government skills, education, productivity and other relevant policies.
 - Chapter 3 estimates the value of the current contribution of soft skills to economic output in the UK, broken down into industrial and business sectors and also broken down into the constituent parts of the UK (i.e. for each of the four nations and also each of the nine English regions). Chapter 3 also provides an assessment of the potential future contribution of soft skills to the UK economy, for each of the years 2020 and 2025, again broken down by sector and geography.
 - Chapter 4 considers the potential scale of the economic costs and penalties that could be borne by the UK economy if expected skills gaps and skills shortages that pertain to soft skills are not addressed.
 - Chapter 5 provides some conclusions and offers some implications if action is not taken now to recognise and promote soft skills.

2: WHAT ARE SOFT SKILLS AND WHY DO THEY MATTER?

WHAT ARE SOFT SKILLS?

- 2.1 Soft skills enable those qualities and attributes needed to succeed in the workplace. They encompass an individual's ability to listen well, to communicate effectively, to be positive, to manage conflict, accept responsibility, show respect, build trust, work well with others, manage time effectively, accept criticism, work under pressure, be likeable, and to demonstrate good manners.² Other authors have also added trust, empathy, work ethic, enthusiasm, optimism, integrity, motivation, professionalism and above all communication³.
- 2.2 Soft skills sit alongside and complement other types of skills, including technical or job-specific skills, literacy, numeracy and information technology skills. Soft skills are relevant to all workers and employees of all occupations and staff grade levels, including senior executives.
- 2.3 It is possible to group soft skills into clusters of linked skills. The disaggregation of soft skills as set out in the table below is based on research undertaken in 2011 by a team at Michigan State University.⁴

Table 2-1 Six Key Soft Ski	lls Clusters		
Communication skills	, , , , , , , , , , , , , , , , , , ,	Ask good questions	
	Accurate and concise communication	and professionally Effective written	Communicate appropriately using social
	Effective oral communication	communication	media
Decision-making/ Problem solving skills	Identify and analyse problems	Creative and innovative solutions	Engage in life-long learning
	Take effective and appropriate action	Transfer knowledge between situations	Think abstractly about problems
	Realise the effect of decisions		
Self-management skills	Efficient work habits Self-starting	Sense of urgency to address and complete	Adapt and apply appropriate technology
	Well-developed ethics and sense of loyalty	tasks Work well under pressure	Dedication to continuing professional development
Teamwork skills	Productive as a team member	Maintains accountability to the team	Aware of and sensitive to diversity
	Positive and encouraging attitude	Works with multiple approaches	Shares ideas to multiple audiences
	Punctuality and meets deadlines		

² Todd Smith: Little Things Matter, 2010

 $^{{\}it 3\ The\ Growing\ Importance\ of\ Soft\ Skills,\ Human\ Resources\ Insight,\ 2012}$

⁴ Crawford et al: Comparative Analysis of Soft Skills, Michigan State University, August 2011. A seventh cluster – Experiences – described there has been excluded from the table above.

Professionalism skills	Effective relationships with customers, businesses and the public Accept critique and direction in the workplace Trustworthy with sensitive information	Understands role and has realistic career expectations Deals effectively with ambiguity	Maintains appropriate decorum and demeanor Selects appropriate mentors and sources of advice
Leadership skills	Sees the 'big picture' and thinks strategically	Recognises and deals effectively with conflict	Motivates and leads others
	Recognises when to lead, and when to follow	Builds professional relationships	Recognises when change is needed, and
	Respects and acknowledges contributions from others		contributes to the change effort

- 2.4 For the purposes of this research, we have further refined the long list of characteristics, attributes and skills that are included under the heading 'soft skills'. The starting point is the recognition of a set of qualities and attributes that are necessary for all employees to succeed in the workplace, which are the ability to:
 - Listen well
 - · Communicate effectively
 - Be positive
 - Manage conflict
 - · Accept responsibility
 - Show respect
 - · Work well with co-workers
 - · Manage time effectively
 - Work well under pressure.
- 2.5 In order to enable these behaviours, McDonald's has identified that the following five linked soft skill sets are vital for all workers:
 - Communication and interpersonal skills
 - Teamwork
 - · Time and self-management skills
 - Decision-making and initiative-taking
 - Taking responsibility.
- 2.6 When these five soft skill sets are available, utilised and nurtured, the positive outcomes for individuals include the provision of employment opportunity, the progression of careers (including promotion and reward), and the development of employee confidence and satisfaction.

2.7 The five-point typology of soft skills developed by McDonald's is the one used in this report. However, there is clearly little real difference between this typology and that developed by others, such as the University of Michigan definition set out in Table 2-3 above.

WHY DO SOFT SKILLS MATTER?

- 2.8 The contribution of soft skills arises because of the importance of team-working, collaboration, worker-to-worker interaction and worker-to-customer interaction in most if not all modern workplaces.
- 2.9 At many major companies including McDonald's soft skills lie at the heart of employee recruitment and staff development at all levels. Since 2005 McDonald's has increasingly put the development of soft skills at the centre of its 'people profit chain' business model, with clear links established between the investment of time, energy and financial resources into developing people and engaging employees through training, education, reward, recognition and respect, leading in turn to: improved staff competence and confidence; enhanced customer experience; enhanced sales revenues; and steadily improving business profitability.
- 2.10 Soft skills are obviously vital to businesses where customer care, personal attention and face-to-face human interaction are central to the business model (for example: businesses operating in leisure, hospitality, travel, and personal care; and public sector organisations involved in delivering healthcare, education and other services).
- 2.11 However, soft skills are also important to any business and organisation where teamwork and worker interactions are important, even where the opportunities for customer interaction are minimal or absent. This includes sectors such as manufacturing, construction and transportation, where collaboration between workers is increasingly vital to safe, efficient and productive working.
- 2.12 The fact that soft skills matter to the great majority of companies is confirmed by evidence of survey responses from senior business executives. For example, a recent large-scale survey of businesses conducted in the United States revealed that amongst the top three attributes that companies are currently looking for in new employees are communication skills (83%) and an ability to work within a team (74%).⁵
- 2.13 Another recent national survey of nearly 2,200 businesses conducted in the US identified that 77% of employers considered that soft skills are just as important as hard skills (i.e. skills that are learned to perform a specific job function) and that 16% of employers considered soft skills to be more important than hard skills when evaluating recruitment job candidates.⁶
- 2.14 Moreover, it is not just in customer-facing or sales occupations where companies appear to be finding soft skills to be increasingly important. A survey of senior business executives published by Grant Thornton in 2010 identified that 55% of chief financial officers considered that the biggest challenge in recruiting accountancy professionals was finding applicants with the necessary soft skills beyond the normal competences and qualifications expected of an accounting professional.⁷
- 2.15 Soft skills are also consistently reported as being highly valued by employers throughout the UK economy, and are recognised as 'key competencies that employees need to secure employment and succeed in the workplace.'8

⁵ Millennial Branding, Multi-generational Job Search Study, May 2014

 $^{6 \} http://www.careerbuilder.com/share/aboutus/pressreleasesdetail.aspx?sd=4/10/2014 and id=pr817 and ed=12/31/2014 and ed=12/31/201$

⁷ Grant Thornton: The evolving accounting talent profile: CFO strategies for attracting training and retraining accounting professionals Public Policy and External Affairs, Summer 2010

 $^{8\} International\ Youth\ Foundation,\ April\ 2013.\ Getting\ Youth\ in\ the\ Door:\ Defining\ Soft\ Skills\ Requirements\ for\ Entry-level\ Service\ Sector\ Jobs$

- 2.16 Also in the UK context, recent research published by the UK Commission for Employment and Skills (UKCES the non-departmental public body that advises the UK Government and the devolved administrations on skills and employment policy), based on a survey of 91,000 businesses across the UK, identifies that soft skills are associated with between 33%-40% of all reported skills-shortage vacancies.⁹
- 2.17 The UKCES survey identified that softer skills were deficient among applicants for all occupational types, but they were more frequently reported among applicants for sales and customer service occupations, administrative/clerical occupations and among elementary occupations. The UKCES survey also identified the extent to which UK employers have existing employees with skills gaps that are related to soft skills. On average, UK establishments surveyed reported that they currently had problems with soft skills being lacking among their staff.
- 2.18 The Confederation of British Industry the country's peak employer organisation has also affirmed that many of the UK's businesses place more value on skills and achievements that boost someone's attractiveness as a potential employee or candidature for career advancement and progression.¹⁰
- 2.19 Soft skills gaps and shortages are not just a minor irritant for employers: these skills deficits can cause major problems and disruptions for business and result in increased costs and diminished competitiveness and profitability. Altogether, around one quarter of UK establishments reported that their overall skills gaps resulted in increased operating costs: a component of these additional costs is attributable to the soft skills gaps evident among a proportion of employees. Other consequences of skills gaps were reported as including:¹¹
 - · increased workload on other staff
 - · difficulties meeting quality standards
 - difficulties introducing new working practices
 - losing business to competitors
 - · delays in introducing new products or services
 - the need to outsource work
- 2.20 Moreover, the research evidence is clear that soft skills gaps affect staff of all occupational grades, from managers through to manual and elementary occupations.
- 2.21 Altogether, only 37% of UK establishments surveyed reported that these skills gaps had no impact on the performance of their organisation. Clearly, skills gaps including gaps in soft skills are a major problem for the UK economy across all sectors, nations and regions.
- 2.22 A range of sector-specific skills studies commissioned by the UKCES in 2012 confirmed the current and/ or rising importance of soft skills, often in combination with information technology skills, as the following examples across a wide range of different sectors illustrate:
 - The assessment for the Health and Social Care sectors cites evidence from a study by the University of Warwick that considered that advances in medical treatment and technology coupled with new ways of organising health service delivery would likely fuel the development of flexible new roles, requiring softer, employability skills in negotiating and facilitating change.¹²

⁹ A skills-shortage vacancy occurs when an employer wishes to recruit but cannot because the employer cannot find applicants with the appropriate skills, qualifications or experience

¹⁰ CBI: Building for Growth – education and skills survey 2011, p 4

¹¹ UKCES: UK Commission's Employer Skills Survey 2013: UK Results, January 2014, p 47

¹² UKCES: Sector Skills Insights: Health and Social Care, p 55

- The assessment for the Professional and Business Services sector identified that the increasing importance of soft skills such as customer service delivery is expected to become more influential on ways of working and demand for skills in the sector, and that 'means focusing on understanding and meeting customer demands, multi-skilling and more effective use of technology.'13
- The assessment for the Retail and Wholesale sectors confirms in particular the increasing importance of soft skills such as team-work and communication in recruitment decisions by retail employers.¹⁴
- The assessment for the Creative Industries, Media and Entertainment sector identifies that ensuring the industry has the right soft skills (as well as technical skills) to maximise its growth potential will be vital in ensuring that the UK maintains its position as a world leader in creative industries and media, and can continue to innovate and develop new international and domestic markets.¹⁵
- The assessment for the Manufacturing sector confirms the need for rising demand for softer skills including team-work and communications across a range of sub-sectors including chemicals, pharmaceuticals, technical textiles, engineering and others.¹⁶

SKILLS AND EMPLOYMENT POLICY IN THE UK: LINKS TO SOFT SKILLS

2.23 The coalition Government has – like its predecessor – made skills a top priority within education, business competiveness and economic growth policies. Policy objectives set out in the *Rigour and Responsiveness in Skills* policy paper (jointly published by the Department for Education and the Department for Business, Innovation and Skills in April 2013) identified the key role of soft skills as follows:

We need to offer high quality training in the skills people need entering employment, and to provide a platform for acquiring new skills throughout their working lives. In addition, the offer for unemployed people needs to be genuinely responsive, giving them the mix of education and training that fits their needs and supports them into work, rather than what is convenient for the provider. This must include developing the essential 'soft skills', such as team working, collaboration and punctuality, which are needed for the workplace. This will only happen where providers are truly responsive to the needs of employers, engaging them fully to ensure that the education and training provided will genuinely equip the trainee for the workplace

(Rigour and Responsiveness in Skills, 2013, page 21, emphasis added).

2.24 The importance of soft skills is also emphasised in the Scottish Government's skills strategy paper *Skills for Scotland* (2010)

Ensuring Scotland's people have the appropriate support to meet the essential skills criteria is fundamental to the long-term economic goals. Employers will also look for the softer skills that can be crucial to productivity and success. These can include teamwork, communication, problem solving ability, analytical skills, enterprise and entrepreneurial skills, career management skills, leadership and customer service skills as well as personal characteristics such as motivation, self-confidence, and career aspiration.

(Skills for Scotland, page 9, emphasis added)

¹³ UKCES: Sector Skills Insights: Professional and Business Services, August 2012, p 27

¹⁴ UKCES: Sector Skills Insights: Retail and Wholesale, August 2012, p 38

¹⁵ UKCES: Sector Skills Insights: Creative Media and Entertainment Sector, October 2012, p 140

¹⁶ UKCES: Sector Skills Insights: Manufacturing, November 2012, p 94 etc.

2.25 The Success through Skills – Transforming Futures skills strategy published by the Northern Ireland government (2011) is not quite so explicit in identifying the importance of soft skills. However, the strategy does acknowledge that Northern Ireland lags behind the rest of the UK not only in technical skills but also in soft skills, and cites research undertaken in 2006 that confirms this.¹⁷ The strategy also provides the following statement that by implication underlines the need for a new emphasis on soft skills and modern methods of management and working:

If we are to achieve our economic ambitions we cannot allow ourselves to get locked into a low skill, low value added economy. We must find ways of ensuring the skills that are produced are closely related to the current and future needs of the economy. We must find ways of ensuring that employers are encouraged, not only to articulate their skill needs but also to harness fully the skills that are available to them, and this may require in some cases a comprehensive re-engineering of business models and stronger management and leadership to drive forward the required change. (Success through Skills – Transforming Futures, page 14, emphasis added).

- 2.26 Surprisingly, the Welsh Government's recent (January 2014) *Policy Statement on Skills* does not explicitly refer to soft skills as being an issue in Wales. The policy statement does highlight the need to enhance both the skills of those individuals who are out of work but are seeking employment, as well as upgrading the skills of existing employees. However, the document mainly emphasises skills issues with respect to: literacy and numeracy; Welsh language skills; qualifications and the pre-19 curriculum; and higher level skills; but is silent on the topic of soft skills.
- 2.27 The apparent lack of acknowledgment of the importance of soft skills among policy-makers in Wales is a concern, and exemplifies the fact that full recognition of the contribution of soft skills to economic and business competitiveness and opportunity for individuals has still some way to go in the UK.

SOFT SKILLS AND THE UK PRODUCTIVITY GAP

- 2.28 A key aim of the economic policy of successive Governments over the past decade has been to reduce the significant productivity gaps between the UK and its main competitors such as the US, Germany, France and Japan. 18 Consequences of low productivity in the UK include: lower profits for businesses; lower quality products and services provided by both private and public sector organisations; and vulnerability to the loss of jobs to overseas competition.
- 2.29 Moreover, increased skill levels help firms adapt more quickly and effectively to change. This in turn gives them more confidence to invest, to innovate, to seek out new markets and to grow.
- 2.30 In responding to this agenda, HM Treasury and the former Department for Trade and Industry (DTI) now the Department for Business, Innovation and Skills (BIS) identified five key drivers of productivity: skills; enterprise; innovation; competition; and investment.¹⁹
- 2.31 Skills in particular have been identified as a driver over which Government and public bodies have the ability to exert influence through education and training policies and budgets. However, although skills are vitally important they cannot be considered in isolation: both the 2003 and more recent 2011 *Skills Strategy* White Papers acknowledge that skills alone cannot drive productivity improvements.

¹⁷ Northern Ireland Employee Skills Survey, 2006

¹⁸ HM Treasury/DTI (2004), Productivity in the UK 5: Benchmarking UK Productivity Performance, Stationery Office: London

¹⁹ For example, see HM Treasury (2000): Productivity in the UK: the evidence and the Government's approach

- 2.32 However, skills improvements are vital when combined with improvements in the other four drivers (enterprise, competition, investment and innovation).²⁰ Skills are considered to raise productivity in a number of ways, including:²¹
 - Enabling workers to undertake more complex tasks, to work more effectively and to produce higher value products and services
 - Enabling efficiencies potentially obtained when investing in technology to be fully captured
 - Enabling greater levels of workplace adaptability, allowing businesses and organisations to be able to implement new processes and technologies more speedily, efficiently and effectively.
- 2.33 Other authors have also highlighted the spillover effects from more highly trained workers that positively influence the productivity of co-workers in the workplace.²² That is, the presence of more highly trained workers providing role models and sources of learning for others working in the same teams or in the same workplace environment.
- 2.34 This aspect points towards the importance of soft skills as well as hard skills as a key component of productivity: workplaces that emphasise and invest in soft skills are more likely to be ones where such positive spillovers (i.e. positive learning between co-workers) occur more frequently and more effectively.
- 2.35 The contribution of soft skills to organisational productivity was underlined by a study undertaken in 2003 by Haskel et al.²³ Focusing on manufacturing, the study found that soft skills including interpersonal skills and communication skills were positively related with total factor productivity. The authors also highlighted that the overall productivity in an establishment depended not just on average levels of skills but also how skills were deployed within the organisation i.e. emphasising the importance of soft skills among management as well as in production units or the factory floor.
- 2.36 Evidence drawn from the 2005 *Work and Enterprise Survey* reveals that high performance and high productivity organisations in the UK are characterised by workforces employed in workplace environments characterised by a high degree of informality, with trusting relationships between members of the workforce, and with visible and accessible business leaders, all of which facilitated and encouraged quicker and more effective decision making.²⁴ Hence, workplace environments where soft skills are emphasised, developed and valued at all levels are much more likely to be high productivity and innovative workplaces.

SOFT SKILLS AND THE ENTRY OF YOUNG PEOPLE INTO THE WORKFORCE

2.37 Youth unemployment has been and remains a major and well-reported economic and social issue for the UK, with policy-makers concerned about both the numbers of young people who are unemployed and the proportion of such young people who are neither in education nor training. There has been a widespread perception that young people experienced a significant proportion of the unemployment and underemployment consequences of the 2008 recession and subsequently sluggish economic recovery.

²⁰ BIS: Skills for Sustainable Growth, 2011

²¹ Gamblin: Exploring the links between skills and productivity, Warwick Institute for Employment Research, 2009

²² Prosperity for all in the Global Economy – World Class Skills (Leitch Review of Skills, published by HM Treasury), 2006

²³ Skills and productivity in the UK using matched establishment, worker and workforce data CeRiBA Discussion Paper: London, 2003

²⁴ Work Foundation (2005) *People Strategy and Performance: Results from the Second Work and Enterprise Survey*, Department for Trade and Industry Employment Relations Research Report, No. 46

- 2.38 As recently as 2012, over one million young people were unemployed in the UK. Although this number has now fallen by around one quarter²⁵, there still remains a larger proportion of 18-24 year olds out of work than any other similarly banded age group.
- 2.39 Apart from the human cost to the young people themselves, this situation is estimated to have cost £600 million in forgone revenues and up to £10.7 billion in lost economic output in 2012 alone. These financial estimates of course do not account for the long term social and economic costs to individuals, families and society caused by a failure to secure sufficient employment opportunities for the UK's young people.
- 2.40 Employment is not the only challenge for youth: full engagement in education or training is another key challenge. Nearly one in every six young people in the UK in 2012 was classified as being Not in Education, Employment or Training (NEET). Those who are categorised as NEET are increasingly unlikely to have meaningful work experience: 48% of NEETs have no experience of paid work, a figure which has increased from 41% in 2001.²⁷
- 2.41 One barrier to young people entering the workplace through the gaining of their first job is a perception that too many young people leave the education system insufficiently prepared for the workplace.
- 2.42 The ACEVO report on youth unemployment (2012) places emphasis on the increasing importance of soft skills in the workplace, and explains that while many young people have acquired these skills there is evidence that many among Britain's young unemployed have not. For these young people, the lack of soft skills is a barrier to employment.²⁸
- 2.43 The CBI has also placed particular emphasis on the employability skills of graduates and other young people. According to the CBI:²⁹

Businesses want graduates who not only add value but who have the skills to help to transform their organisation in the face of continuous and rapid economic and technological change. All graduates need to be equipped with employability skills. Employability covers a broad range of non-academic or softer skills and abilities which are of value in the workplace. It includes the ability to work in a team; a willingness to demonstrate initiative and original thought; self-discipline in starting and completing tasks to deadline.

- 2.44 The biennial UK national employer survey, last conducted in 2013, asks questions that are directly relevant to this topic. The survey revealed that just over one quarter of establishments had recruited an education-leaver directly into their first job in the past 2-3 years, but the subsequent experience had been disappointing for some of these organisations. For example, 18% of establishments recruiting school-leavers found that these recruits had poor attitudes to work and a lack of motivation (the equivalent figure for FE college leavers was 10%, and for university/higher education leavers was 4%).³⁰
- 2.45 The trait of poor attitudes to work and poor motivation are linked to soft skills deficits among some school/college/university leavers. It is also possible that encountering these traits among some young people may contribute to decisions made by some employers not to recruit education leavers at all.

²⁵ House of Commons Library, August 2014

²⁶ ACEVO: Youth unemployment – the crisis we cannot afford (2012)

²⁷ Labour Force Survey, via Sissons and Jones (2012).

²⁸ ACEVO: Youth unemployment – the crisis we cannot afford (2012), page 37

²⁹ http://www.cbi.org.uk/business-issues/education-and-skills/in-focus/employability/

³⁰ UKCES: UK Commission's Employer Skills Survey 2013: UK Results, January 2014, page 88

- 2.46 Of course, Britain is not the only country where youth unemployment is a major problem. A pan-European review of the problem of young people who are NEET identified soft skills as a major barrier to young people accessing job opportunities, and highlighted a number of responses in different EU countries that had focused on developing young people's communication and inter-personal skills, as well as tackling issues of self-esteem, confidence and personal development.³¹
- 2.47 A recent pan-European survey of Chief Executives also highlighted the widespread perception that many young people lack the soft skills to gain their first job and to progress up the career ladder.³² The survey found that 54% of respondents felt that young people were lacking in soft skills. 'Entrepreneurship skills and acumen' were also considered to be lacking among young people by 24% of respondents.

Of course, McDonald's itself plays a vital role in employing young people in the UK. Of the 100,000 or so people employed by the company, about three quarters are young people aged 16 to 25. This makes McDonald's one of the largest private sector employers of young people in the UK. For many of these young people, working at McDonald's is their first key step on their career ladder and helps them to develop the skills and confidence to succeed at work, whether that's at McDonald's or elsewhere.

³¹ European Foundation for the Improvement of Living and Working Conditions: NEETs: young people not in employment, education or training: characteristics, costs and policy responses in Europe, 2012

³² Closing the Gap between business and education, 2011

3: CONTRIBUTION OF SOFT SKILLS TO THE ECONOMY

3.1 This chapter estimates the current and expected future contribution of the stock of soft skills in the workforce to the UK economy. For the assessment of the current contribution of soft skills, the focus (because of the availability of data) is on the year 2012. The future assessment considers two future years, respectively 2020 and 2025.

CURRENT CONTRIBUTION OF SOFT SKILLS

- 3.2 Overall, we estimate that the value of soft skills to the UK economy is worth just under £88.5 billion, indicating that the current stock of soft skills in the UK workforce underpins about 6.5% of the economy as a whole.
- 3.3 As set out in the table below, soft skills make an important contribution to the economies of the different nations and regions of the UK. The particular importance of soft skills to London (£20.4bn, over 23% of the total) and the South East (a further £13bn or so, an additional 14.7% of the total) in part reflects the importance of financial and professional services in those regions of England.

Table 3-1 Value of output (GVA) attributable to soft skills, 2012, £m (2011 prices)			
Nation / region	£m	% of contribution	
England	76,758	86.7%	
Wales	3,048	3.4%	
Scotland	6,842	7.7%	
Northern Ireland	1,847	2.1%	
North East	2,752	3.1%	
North West	9,452	10.7%	
Yorkshire and the Humber	5,770	6.5%	
East Midlands	5,103	5.8%	
West Midlands	6,433	7.3%	
East	7,416	8.4%	
London	20,403	23.1%	
South East	12,979	14.7%	
South West	6,452	7.3%	
Total contribution of soft skills	88,493	100.0%	

3.4 The table below sets out the contribution made by soft skills to 18 broad business and commercial sectors that together comprise the UK economy. Soft skills are important to all parts of the UK economy, but they make a particularly important contribution to financial and business services, retailing, and public services, including health and education.

Table 3-2 Value of output (Gross Value Added) attributable to soft skills, 2012 £m (2011 prices)			
Sector	£m	% of contribution	
Agriculture, forestry and fisheries	635	0.7%	
Mining, quarrying and utilities	2,599	2.9%	
Manufacturing	9,044	10.2%	
Construction	5,504	6.2%	
Motor trades	1,467	1.7%	
Wholesale	4,482	5.1%	
Retail	5,475	6.2%	
Transport and storage (including postal services)	3,829	4.3%	
Accommodation and food services	2,392	2.7%	
Information and communication	5,648	6.4%	
Financial and insurance	7,547	8.5%	
Property services	10,005	11.3%	
Professional, scientific and technical	6,399	7.2%	
Business administration and support services	4,137	4.7%	
Public administration and defence	4,348	4.9%	
Education	5,537	6.3%	
Health and social work	6,887	7.8%	
Arts, entertainment, recreation etc.	2,557	2.9%	
Total contribution of soft skills	88,493	100.0%	

FUTURE CONTRIBUTION OF SOFT SKILLS (2020 AND 2025)

- 3.5 The expected future contribution of soft skills to the UK economy assuming current trajectories of growth and demand continue has been assessed using bespoke econometric forecasts for UK industries and regions.
- 3.6 Overall, the contribution of soft skills to the UK economy is expected to increase from just under £88.5 billion to just over £109 billion by 2020, and to just over £127 billion by 2025 (2011 prices). This is equivalent to a real increase of around 44% (this excludes the potential effects of price inflation over this period).

3.7 The table below sets out the future contribution of soft skills by nation and region. The value of soft skills is expected to increase by the greatest proportion in those areas of the country that have the greatest share of financial service and professional service industries – in particular, London, the South East and the East of England.

Table 3-3 Value of output (GVA) attributable to soft skills, 2012, 2020, 2025 £m (2011 prices)				
Nation/ region	2012	2020	2025	
England	76,758	94,833	110,810	
Wales	3,048	3,668	4,213	
Scotland	6,842	8,333	9,646	
Northern Ireland	1,847	2,241	2,581	
North East	2,752	3,327	3,833	
North West	9,452	11,455	13,256	
Yorkshire and the Humber	5,770	6,969	8,015	
East Midlands	5,103	6,162	7,107	
West Midlands	6,433	7,806	9,024	
East	7,416	9,201	10,801	
London	20,403	25,859	30,603	
South East	12,979	16,143	18,977	
South West	6,452	7,913	9,193	
Total contribution of soft skills	88,493	109,075	127,250	

3.8 The regions with the smallest expected increases are those where tertiarisation of the economy (the process through which the service sector has become the dominant component of the economy) has lagged behind the national average, such as Wales and Yorkshire.

- 3.9 The table below sets out the future contribution of soft skills in each sector. There are certain sectors where the expected increases in the contribution from soft skills is expected to be significantly greater than this average level of increase. In proportionate terms, the sectors where the increases are expected to be greatest include the following:
 - Information and communication services 72% increase expected by 2025 compared to 2012
 - Professional, scientific and technical services 65% increase
 - Business administration and support services 64% increase
 - Financial services 63% increase

Table 3-4 Value of output (GVA) attribut	table to soft skills, 20	12, 2020, 2025 £m (20 ⁻	11 prices)
Sector	2012	2020	2025
Agriculture, forestry and fisheries	635	758	810
Mining, quarrying and utilities	2,599	3,149	3,694
Manufacturing	9,044	10,615	12,041
Construction	5,504	6,632	7,806
Motor trades	1,467	1,776	2,073
Wholesale	4,482	5,429	6,341
Retail	5,475	6,593	7,672
Transport and storage	3,829	4,532	5,269
Accommodation and food services	2,392	2,774	3,267
Information and communication	5,648	7,930	9,734
Financial and insurance	7,547	10,230	12,330
Property services	10,005	12,435	14,960
Professional, scientific and technical	6,399	8,529	10,569
Business admin and support services	4,137	5,530	6,789
Public administration and defence	4,348	5,213	5,580
Education	5,537	6,323	6,685
Health and social work	6,887	7,889	8,694
Arts, entertainment, recreation etc.	2,557	2,735	2,935
Total contribution of soft skills	88,493	109,075	127,250

3.10 Sectors such as arts and entertainment, the public services and manufacturing are expected to see much lower rates of growth in the overall value of soft skills contribution over the 2012-2025 time period.

4: PENALTIES OF UNDERINVESTING IN SOFT SKILLS

- 4.1 The estimates of current and future contribution of soft skills to the UK economy presented in the previous chapter are based on current and expected future levels of employment in the economy.
- 4.2 However, as was discussed Chapter 2, there are good reasons to believe that the UK is currently underperforming as an economy because of previous under-investment in the soft skills of the workforce. And, under present trajectories, it is likely to continue to underperform in future.
- 4.3 This under-investment has a number of consequences and manifestations, including lost employment opportunities and diminished productivity performance for workers, businesses and other organisations.
- 4.4 This chapter estimates the extent of some of the quantifiable future penalties that might be incurred by the UK economy once again focusing on future years 2020 and 2025. The estimates are once again broken down in terms of sectors, nations and regions.

FUTURE LABOUR SHORTAGES DUE TO SOFT SKILLS DEFICITS

- 4.5 Underinvestment in soft skills is expected to contribute to skills shortages where employers are unable to fill workforce vacancies because they cannot find recruits with sufficient skills. As was identified in Chapter 2 of this report, research and policy documents from a range of sources confirm that skills shortages are a long-term problem for UK employers.
- 4.6 There are two main elements to expected future recruitment needs on the part of UK employers. These are:
 - Expansion demand the expectation that, across the economy as a whole, there will be increased demand for workers in line with growth in the economy as a whole. However, expansion demand is not evenly distributed across countries and regions, and nor is it evenly distributed across industrial and commercial sectors. Indeed, for some sectors such as primary industry and manufacturing the expectation is that there will be declining overall demand for workers between 2012-2020 and 2012-2025 respectively.
 - Replacement demand all nations/regions and sectors also require a steady flow of new workers
 to replace workers who leave their industry for a variety of reasons (e.g. moving to another job,
 retirement, death, return to permanent study, assumption of caring responsibilities, etc.). Over the
 period 2012 to 2020/2025, replacement demand is expected to be net positive across all sectors, even
 for those sectors that in overall terms are expected to experience a net decline in overall employment,
 such as manufacturing.
- 4.7 When expected future expansion demand and replacement demand are considered together, the overall net recruitment is dominated by replacement demand. For example, the table below sets out the overall cumulative levels of future recruitment expected to be needed across UK nations/regions for the periods 2012-2020 and 2012-2025 respectively. In overall terms, an additional 11.6 million workers are expected to be needed to be recruited over the 2012-2020 period, with nearly 1.25 million contributed by the expansion requirements (10.8% of the total) and the remaining 10.36 million deriving from replacement demand.

Nation / region	Expansion demand	Replacement demand	Overall demand	Expansion demand as a % of overall demand
England	1,082	1,082	9,825	11.0%
Wales	36	36	472	7.7%
Scotland	97	97	972	10.0%
Northern Ireland	31	31	335	9.4%
North East	31	31	374	8.2%
North West	108	108	1,245	8.7%
Yorkshire and the Humber	73	73	857	8.5%
East Midlands	59	59	771	7.7%
West Midlands	80	80	975	8.2%
East	151	151	1,036	14.6%
London	280	280	1,991	14.1%
South East	196	196	1,623	12.1%
South West	104	104	953	10.9%
UK total	1,248	10,356	11,603	10.8%

4.8 When the period 2012-2025 is considered, overall demand is (of course) even higher, amounting to an additional 19.35 million workers needed to be recruited over the 2012-2025 period, of which 2.09 million is expected to be contributed by the expansion requirements and the remaining 17.30 million deriving from replacement demand.

Nation / region	Expansion demand	Replacement demand	Overall demand	Expansion demand as a % of overall demand
England	1,814	14,578	16,392	11.1%
Wales	61	720	781	7.8%
Scotland	163	1,457	1,620	10.0%
Northern Ireland	53	505	558	9.6%
North East	52	570	622	8.3%
North West	181	1,871	2,052	8.8%
Yorkshire and the Humber	123	1,296	1,420	8.7%
East Midlands	100	1,173	1,272	7.8%
West Midlands	133	1,487	1,620	8.2%
East	254	1,481	1,735	14.6%
London	467	2,889	3,356	13.9%
South East	329	2,393	2,723	12.1%
South West	174	1,419	1,593	10.9%
UK total	2,091	17,259	19,351	10.8%

4.9 By 2025, the areas with the largest requirement for recruitment (expansion plus replacement) are, not

- surprisingly, expected to be London and the South East, together accounting for 31% of the UK total.
- 4.10 Of course, the expected overall requirement for labour across the UK economy (i.e. expansion and replacement demand together) can also be broken down by sector. The tables below summarise the expected overall need for workers for both 2012-2020 and 2012-2025.
- 4.11 The sectors with the largest overall labour demand (expansion and replacement demand), by 2025, are

Table 4-3 Expected future overall labour requirement by sector, 2012-2020 and 2012-2025 (thousands)			
Sector	2012 - 2020	2012 - 2025	
Agriculture, forestry and fisheries	86	142	
Mining, quarrying and utilities	180	299	
Manufacturing	843	1,403	
Construction	572	956	
Motor trades	145	240	
Wholesale	320	531	
Retail	816	1,353	
Transport and storage	952	1,589	
Accommodation and food services	538	893	
Information and communication	307	514	
Financial and insurance	307	513	
Property services	144	240	
Professional, scientific and technical	629	1,050	
Business admin and support services	661	1,102	
Public administration and defence	787	1,314	
Education	1,470	2,456	
Health and social work	2,112	3,526	
Arts, entertainment, recreation etc.	735	1,227	
Total	11,603	19,351	

expected to be:

- Health and social work (nearly 3.53 million, 18.2% of the total);
- Education (nearly 2.5 million, 12.7% of the total);
- Transportation (nearly 1.59 million, 8.2% of the total); and
- Manufacturing (just over 1.4 million, 7.3% of the total).
- 4.12 Although overall future requirement for labour across the UK economy results in impressively large numbers, for the purpose of this study the element that is particularly relevant is the proportion of future demand for workers that is expected to be thwarted by employers failing to recruit because of insufficient soft skills among available candidates for recruitment.
- 4.13 In order to identify the potential proportions of employees across sectors and regions that are unlikely to be filled due to soft skills shortages, we have utilised a series of assumptions based on existing skills shortages across the UK economy, notably research focusing on skills shortages across specific sectors and occupations published by UKCES and others.³³

³³ Such as data contained in the appendices to the Employers Skills Survey 2013, published by UKCES in January 2014

4.14 Our overall assessment is that the cumulative levels of unfilled jobs due to soft skills shortages across the different sectors of the UK economy over the period 2012-2020 and 2012-2025 are likely to be as follows:

Table 4-4 Expected unfilled vacancies due to soft skills shortages, 2012-2020/2025 (thousands)			
Sector	Expected unfilled vacancies due to soft skills shortages,	Expected unfilled vacancies due to soft skills shortages,	
	2012-2020 ('000s)	2012-2025 ('000s)	
Agriculture, forestry and fisheries	8	13	
Mining, quarrying and utilities	17	28	
Manufacturing	77	129	
Construction	53	88	
Motor trades	13	22	
Wholesale	29	49	
Retail	75	124	
Transport and storage	87	146	
Accommodation and food services	49	82	
Information and communication	28	47	
Financial and insurance	28	47	
Property services	13	22	
Professional, scientific and technical	58	97	
Business admin and support services	61	101	
Public administration and defence	72	121	
Education	135	226	
Health and social work	194	325	
Arts, entertainment, recreation etc.	68	113	
Total	1,067	1,780	

- 4.15 Hence, the total cumulative number of unfilled vacancies over the period 2012- 2020 anticipated to have occurred because of soft-skills shortages among available candidates for recruitment is expected to amount to 1.067 million. By 2025, this cumulative total is expected to have increased to 1.78 million.
- 4.16 Based on these estimates, about 9.2% of the estimated overall demand for labour over the period 2012 to 2025 is expected to be thwarted by soft skills shortages that are likely to occur over this period.

FUTURE SKILLS GAPS DUE TO SOFT SKILLS DEFICITS

4.17 So far we have only considered the potential effect of soft skills deficits on the ability of employers to recruit successfully. Where businesses fail to recruit, this can be expected to impose productivity and efficiency costs, which are considered below.

- 4.18 However, although the result of a soft skills shortage may be a failure to recruit, there is also the possibility where recruitment has taken place that the soft skills attributes of employees is insufficient to the extent that those employees operate significantly below required levels. A skills problem of this type is called a skills gap. Of course, skills gaps can occur because the needs of a role changes due to external or internal factors, and where investment in upgrading an individual's skills lags behind. But soft skills gaps can also occur when employers recruit staff whose soft skills are not completely adequate in the first place.
- 4.19 Skills gaps are a major problem for all UK sectors, and research has been undertaken over a number of years that has investigated the extent and nature of the problem across different occupational types and different sectors, and also by region.
- 4.20 We have taken this research and used it to model the potential current extent of (and recent trends in) soft skills gaps different across UK sectors and regions. We have also developed projections of the potential future extent of skills gaps that are associated with soft skills deficits across those same sectors and geographical areas.
- 4.21 The tables below summarise the extent to which future skills gaps associated with soft skills deficits are considered likely to occur in the UK.
- 4.22 The numbers of workers with soft skills deficits can be broken down by geography, as set out below:

Table 4-5: Expected future skills gaps due to soft skills deficits, 2020 and 2025 (thousands)			
Nation / region	2020	2025	
England	452	465	
Wales	23	24	
Scotland	45	46	
Northern Ireland	15	15	
North East	19	19	
North West	57	59	
Yorkshire and the Humber	41	42	
East Midlands	36	37	
West Midlands	44	45	
East	48	49	
London	89	92	
South East	73	75	
South West	45	46	
Total contribution of soft skills	535	550	

4.23 Again, the most significant spatial concentration is expected to occur in London and the South East.

Table 4-6 Expected future skills gaps due to soft skills deficits, 2020 and 2025 (thousands)		
Sector	2020	2025
Agriculture, forestry and fisheries	7,444	7,214
Mining, quarrying and utilities	8,688	8,495
Manufacturing	44,473	42,507
Construction	24,044	25,851
Motor trades	10,610	10,887
Wholesale	23,564	24,206
Retail	60,573	62,187
Transport and storage	19,917	20,460
Accommodation and food services	61,549	63,206
Information and communication	17,590	18,630
Financial and insurance	32,144	34,001
Property services	9,352	9,900
Professional, scientific and technical	40,786	43,174
Business admin and support services	43,116	45,648
Public administration and defence	23,698	24,144
Education	34,812	35,468
Health and social work	52,948	53,948
Arts, entertainment, recreation etc.	19,849	20,222
Total	535,160	550,148

4.24 The numbers of employees in the overall workforce who are expected to exhibit significant levels of suboptimal productive performance due to soft skills deficits is expected to total some 535,000 by 2020, and 550,000 by 2025. Although this problem is expected to occur across all sectors of the economy, in absolute terms, the largest concentrations are expected to be found in accommodation and food services, retailing, and in the health and social work sectors.

OUTPUT COSTS OF SOFT SKILLS DEFICITS

4.25 In order to convert these estimates of unfilled vacancies (soft skills shortages) and insufficiently skilled employees (soft skills gaps) into estimates of foregone economic output, additional assumptions have been used regarding expected future levels of productivity growth and output per worker originating from bespoke econometric forecasts for the UK economy (in total, and broken down by sector and country/region). The results are estimates of expected future lost productive potential that is linked to soft skills shortages and gaps across the UK economy. A series of tables below present these results for both sectors and spatial areas, and for the single years 2020 and 2025 respectively.

COSTS OF SOFT SKILLS SHORTAGES

4.26 The annual expected loss of production due to expected soft skills shortages is anticipated to amount to just over £7.44 billion per annum (in 2011 price terms) by 2020. By 2025, the annual cost to business and public sector organisations is expected amount to just under £13.99 billion (again, in 2011 prices).

4.27 The costs of soft skills shortages are expected to be significant for all nations and regions, as the table below shows:

Table 4-7: Annual expected lost economic output due to soft skills shortages, 2020 and 2025 (£m, 2011 prices)		
Nation / region	Foregone economic output, 2020	Foregone economic output, 2025
England	6,447	12,137
Wales	248	454
Scotland	588	1,093
Northern Ireland	161	301
North East	206	385
North West	750	1,394
Yorkshire and the Humber	458	840
East Midlands	411	764
West Midlands	525	975
East	645	1,222
London	1,776	3,386
South East	1,111	2,115
South West	566	1,057
Total contribution of soft skills	7,444	13,985

^{4.28} The largest shares of costs by area are borne by London and the South East, which together account for about 39% of the total. These two regions are also expected to experience the fastest growing costs due to soft skills shortages between 2012 and 2020/2025 respectively.

4.29 In terms of soft skills shortages, our overall assessment is that the cumulative levels of unfilled jobs due to soft skills shortages across the different sectors of the UK economy over the period 2012-2020 and 2012-2025 are likely to be as follows:

Table 4-8 Annual expected lost economic output due to soft skills shortages, 2020 and 2025 (£m, 2011 prices)		
Sector	Foregone economic output, 2020	Foregone economic output, 2025
Agriculture, forestry and fisheries	28	52
Mining, quarrying and utilities	299	599
Manufacturing	745	1,515
Construction	484	891
Motor trades	86	167
Wholesale	271	520
Retail	334	628
Transport and storage	633	1,193
Accommodation and food services	135	263
Information and communication	383	745
Financial and insurance	495	955
Property services	613	1,147
Professional, scientific and technical	421	825
Business admin and support services	270	526
Public administration and defence	534	934
Education	646	1,127
Health and social work	787	1,412
Arts, entertainment, recreation etc.	282	486
Total	7,444	13,985

4.30 The largest single cost is expected to be borne by the manufacturing sector (just over £1.51 billion in 2025, 10.8% of the total) reflecting the generally higher levels of output per worker in that sector. However, just about half of the total cost is expected to be borne by private sector services (including financial services, business services and retailing) with public services accounting for nearly 25% of the overall total.

COSTS OF SOFT SKILLS GAPS

- 4.31 The costs of soft skills gaps is expected to be lower than that associated with soft skills shortages, but the cost to industries and regions is still expected to be significant.
- 4.32 The overall expected cost of soft skills gaps is expected to amount to £923 million per annum for the economy as a whole by 2020, and this is expected to increase to £1.08 billion per annum by 2025 (both 2011 prices), representing a real terms increase of about 17%. By 2025, the largest shares of these costs are expected to be borne by: financial services (15%); property services (11%); and manufacturing (10%).

4.33 The future annual costs of soft skills gaps are also expected to be significant for all nations and regions, as the table below shows:

Table 4-9: Annual expected lost economic output due to soft skills gaps, 2020 and 2025 (£m, 2011 prices)		
Nation / region	Foregone economic output, 2020	Foregone economic output, 2025
England	802	940
Wales	31	35
Scotland	72	83
Northern Ireland	18	21
North East	27	32
North West	96	112
Yorkshire and the Humber	58	67
East Midlands	51	59
West Midlands	65	76
East	76	89
London	229	272
South East	133	156
South West	67	78
Total contribution of soft skills	923	1,080

4.34 The table below sets out the expected costs for industries and sectors, for the years 2020 and 2025 respectively.

Sector	Foregone economic	Foregone economic
	output, 2020	output, 2025
Agriculture, forestry and fisheries	5	6
Mining, quarrying and utilities	36	42
Manufacturing	97	110
Construction	49	58
Motor trades	16	19
Wholesale	50	58
Retail	60	70
Transport and storage	31	36
Accommodation and food services	39	46
Information and communication	55	67
Financial and insurance	130	157
Property services	98	118
Professional, scientific and technical	67	83
Business admin and support services	43	53
Public administration and defence	39	42
Education	38	40
Health and social work	50	55
Arts, entertainment, recreation etc.	19	20
Total	923	1,080

OVERALL COSTS OF SOFT SKILLS DEFICITS

- 4.35 The annual overall expected loss of production due to expected soft skills deficits is anticipated to amount to just under £8.4 billion per annum by 2020 (2011 prices).
- 4.36 The costs of soft skills shortages are also expected to be significant for all nations and regions, as the table below shows. As may be expected, the largest share of the potential annual lost output associated with skills shortages and skills gaps is, by 2025, London (24%) and the South East (15%), with North West England also contributing significantly (10%).

Table 4-11: Annual overall expected lost economic output due to soft skills deficits, 2020 and 2025 (£m, 2011 prices)		
Nation / region	Foregone economic output, 2020	Foregone economic output, 2025
England	7,249	12,840
Wales	279	480
Scotland	659	1,156
Northern Ireland	179	317
North East	233	409
North West	846	1,478
Yorkshire and the Humber	516	891
East Midlands	462	808
West Midlands	590	1,031
East	721	1,289
London	2,005	3,587
South East	1,244	2,232
South West	633	1,116
Total contribution of soft skills	8,367	14,793

4.37 We estimate that the impact of cumulative levels of unfilled jobs due to soft skills shortages across the different sectors of the UK economy over the period 2012-2020 and 2012-2025 are likely to be as follows:

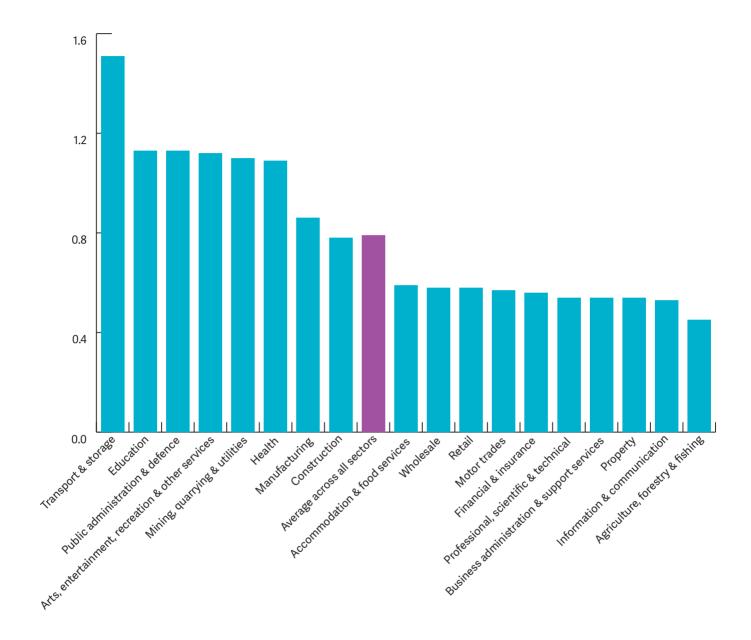
Table 4-12: Annual overall expected lost economic output due to soft skills deficits, 2020 and 2025 (£m, 2011 prices)		
Sector	Foregone economic output, 2020	Foregone economic output, 2025
Agriculture, forestry and fisheries	33	56
Mining, quarrying and utilities	335	627
Manufacturing	841	1,588
Construction	533	940
Motor trades	102	181
Wholesale	320	564
Retail	394	681
Transport and storage	664	1,221
Accommodation and food services	174	299
Information and communication	438	790
Financial and insurance	625	1,066
Property services	710	1,239
Professional, scientific and technical	488	884
Business admin and support services	313	564
Public administration and defence	574	968
Education	683	1,162
Health and social work	836	1,458
Arts, entertainment, recreation etc.	301	504
Total	8,367	14,793

4.38 By 2025, the annual cost to business and public sector organisations is expected to amount to just under £14.8 billion (2011 prices). The largest single cost is expected to be borne by the manufacturing sector (£1.59 billion in 2025, 10.8% of the total) reflecting the generally higher levels of output per worker in that sector. However, just over half of the total cost is expected to be borne by private sector services (including financial services, business services and retailing) with public services accounting overall for nearly 25% of the total.

SECTORS, REGIONS AND NATIONS MOST AT RISK FROM SOFT SKILLS DEFICITS

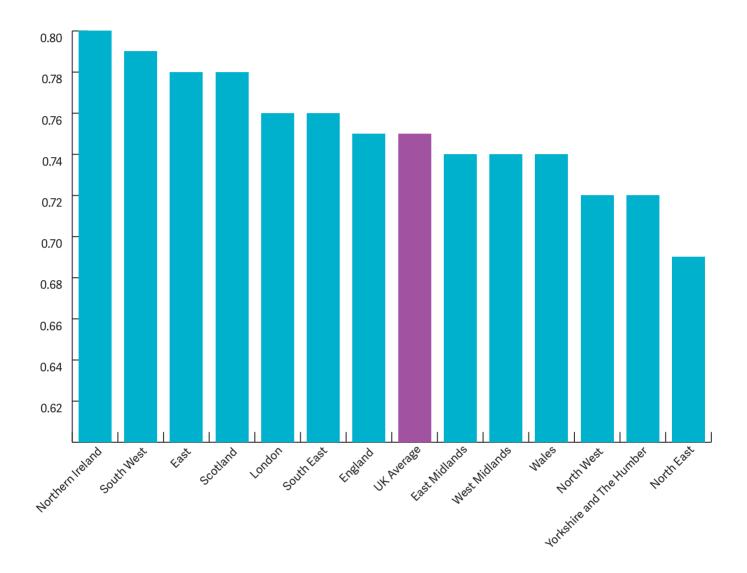
- 4.39 The extent to which the overall potential for lost output by 2020 and 2025 is accounted for by specific sectors has already been set out in tables above. However, this assessment of the scale of impact doesn't take into account the expected overall scale (in terms of expected value of output) of these sectors by 2025: in other words, the assessment presented above considers the absolute, rather than the relative scale of impact across all sectors.
- 4.40 When relative impacts are taken into account, the sectors that are most 'at risk' from soft skills deficits are seen to include transport and storage and three of the public sector service areas: public administration; education; and arts, entertainment and recreation services.

Figure 4-13. Sectors most at risk of output losses from soft skills deficits: potential lost production as a proportion of expected sectoral production, 2025.



4.41 Similarly, the figures previously given for the potential absolute levels of anticipated lost output from soft skills shortages do not take into account the differential impacts relative to the scale of the different regional economies. When scale is factored in, the regions that are potentially most vulnerable to lost output include Northern Ireland, South West England and Scotland.

Figure 4-14: Nations and regions most at risk of output losses from soft skills deficits: potential lost production as a proportion of expected overall economic output, 2025.



POTENTIAL LOST BUSINESS INVESTMENT

- 4.42 An additional theme that also pertains to potential penalties associated with soft skills deficits is foregone employer investment. In particular, the lost opportunity for businesses and public sector organisations to invest in the training and development of the workers who were never hired (i.e. the vacancies that were never filled) because of soft skills shortages.
- 4.43 Earlier in this chapter we highlighted that over the period 2012-2020 there are expected to be, in cumulative terms, 1.067 million unfilled vacancies due to soft skills shortages. Over the period 2012-2025 the total is expected to be even larger, at 1.78 million.
- 4.44 These totals can be otherwise thought of as, respectively, 1.067 million person-years of lost employment to the British economy over the period 2012-2020 and 1.78 million person-years lost over the period 2012-2025. Had the vacancies been filled, it would be expected that these workers would have been invested in by their employees by exposure to the usual forms of staff training and development. The fact that the employees weren't in position to receive this training means that there was foregone investment in those people to the detriment of the individuals, businesses and public sector organisations, the sectors in total, and the wider UK economy.
- 4.45 It is possible to form an estimate of the potential scale of this investment in human capital development that would otherwise have taken place by applying national estimates of annual investment in training and staff development by businesses and other employers operating in the different sectors of the economy. Average levels of annual investment in training for businesses operating in different sectors can be developed from data provided in the annexes to the 2013 *Employer Skills Survey* published by UKCES (January 2014).
- 4.46 The table below sets out estimates for employer investment in training and staff development that would have occurred if all of the lost recruitment had taken place and the staff received training at the levels that would have been expected, on average, for employees in each of the respective sectors. The estimates are provided in cumulative terms, for both 2012-2020 and 2012-2025 respectively.

4.47 In terms of soft skills shortages, our overall assessment is that the cumulative levels of unfilled jobs due to soft skills shortages across the different sectors of the UK economy over the period 2012-2020 and 2012-2025 are likely to be as set out in the table below. Overall levels of lost investment are expected to amount to just over £1.7 billion by 2020, and £2.8 billion by 2025 (both in terms of 2011 prices).

Table 4-15: Expected lost cumulative investment in skills training due to soft skills shortages, 2012-2020 and 2012-2025, (£m, 2011 prices)		
Sector	Lost investment 2012-2020	Lost investment 2012-2025
Agriculture, forestry and fisheries	9	14
Mining, quarrying and utilities	20	33
Manufacturing	85	142
Construction	103	172
Motor trades	19	32
Wholesale	42	70
Retail	108	179
Transport and storage	134	224
Accommodation and food services	73	121
Information and communication	43	72
Financial and insurance	36	60
Property services	25	42
Professional, scientific and technical	111	185
Business admin and support services	117	195
Public administration and defence	111	185
Education	280	468
Health and social work	276	461
Arts, entertainment, recreation etc.	127	212
Total	1,718	2,868

- 4.48 As can be seen in the table, the largest contributors to lost investment in skills are expected to be among some of the public sector organisations, in particular education (£468 million by 2025) and health and social work (£461 million). Together, these two sectors account for 32% of the total estimate of lost investment in skills by 2025.
- 4.49 It is also possible to provide estimates of lost business investment in training and human capital development broken down on a regional basis. These additional estimates are set out below.
- 4.50 As may be expected, the largest share of the potential annual lost output associated with skills shortages and skills gaps is, by 2025, London (24%) and the South East (15%), with North West England also contributing significantly (10%).

2020 and 2012-2025, (£m, 2011 prices)		
Nation / region	Lost investment 2012-2020	Lost investment 2012-2025
England	1,459	2,436
Wales	70	117
Scotland	141	235
Northern Ireland	48	80
North East	55	91
North West	180	299
Yorkshire and the Humber	126	209
East Midlands	113	187
West Midlands	138	228
East	159	267
London	298	502
South East	245	411
South West	145	242
Total contribution of soft skills	1,718	2,868

5: CONCLUSIONS, METHODOLOGY AND APPENDIX

CONCLUSIONS

- 5.1 The importance of soft skills for businesses and other organisations has been receiving considerable attention from senior executives, human resources specialists, economists and many public policy-makers with a responsibility for economic competitiveness, education and employment.
- 5.2 The growing importance of soft skills in the modern workplace arises because of the increasing emphasis on team-working, collaboration, worker-to-worker interaction and/or worker-to-customer interactions in most working environments.
- 5.3 We estimate that the current value of the contribution of soft skills to the UK economy is worth annually over £88 billion to the UK economy (2011 prices) in terms of Gross Value Added.
- 5.4 Soft skills are important to all parts of the UK economy. They make a particularly important contribution to financial and business services, retail, and public services, including education and health.
- 5.5 The annual contribution of soft skills is expected to grow strongly over the next five years. By 2020, the annual contribution of soft skills to the economy is expected to grow in real terms to £109 billion, and to just over £127 billion by 2025.
- 5.6 However, deficiencies in the UK's current stock of soft skills impose severe penalties on our economy, affecting all sectors and regions of the UK. These skills deficits are not just a minor irritant for employers: they can cause major problems for business and result in diminished productivity, competitiveness and profitability.
- 5.7 Individuals and organisations will be affected by a combination of skills shortages and skills gaps. Soft skills shortages will prevent employers from filling workforce vacancies because they cannot find recruits with sufficient skills. Soft skills gaps will cause employees to operate significantly below required levels.
- 5.8 We estimate that over half a million (535,000) UK workers will be significantly held back by soft skills deficits by 2020, an issue expected to affect all sectors of the economy. In absolute terms, the accommodation and food services, retail, and health and social work sectors will be most affected. The annual overall expected loss of production due to expected soft skills deficits is anticipated to amount to just under £8.4 billion per year by 2020. If the current weaknesses in the UK's soft skills base are not addressed, we face an economic penalty that will impact on sectors, businesses, individuals and society as a whole. To tackle this, individuals, businesses, education institutions, and policy-makers should take action to recognise and promote soft skills.

IMPLICATIONS FOR EMPLOYERS

5.9 Businesses and public sector employers bear the largest cost associated with insufficient soft skills. Inadequate soft skills leads to significant business costs, including lost output and poor levels of productivity. Businesses and other employers have a big part to play in addressing these softs skills deficits, particularly when existing employees have soft skills gaps that hinder their performance and potential in the workplace.

IMPLICATIONS FOR THOSE IN THE WORKFORCE

- 5.10 Of course, soft skills are not just relevant to the world of work: they are just as important in family and community life. There is therefore obviously a considerable onus on individuals to take responsibility for their own soft skills development throughout their lives. A further implication is that especially for young people who may be otherwise lacking in work experience there are many opportunities outside of the workplace to develop and enhance soft skills, so that these skills can be showcased to potential employers when they are looking for their first job.
- 5.11 For existing employees it is also important to continue to develop and invest in soft skills in order to accelerate career advancement and to make sure one's skills continue to evolve as job roles and responsibilities change.

IMPLICATIONS FOR EDUCATION INSTITUTIONS

- 5.12 Education institutions schools, further education colleges and universities obviously have an important role to play in providing students with technical knowledge and skills, as well as providing learning with respect to literacy, numeracy, ICT skills and foreign language skills. But education institutions also have a role to play in helping students develop and present their soft skills, including teamwork, self-management and communications skills.
- 5.13 Apart from continuing to give students opportunities to enhance further these vital skills, education institutions particularly schools also have a role to play in helping students understand the importance that employers attach to soft skills, and therefore in helping students better present their experience and skills to employers when they are nearing the end of their schooling and are beginning to look for their first job.

IMPLICATIONS FOR GOVERNMENT

- 5.14 Government across the UK should recognise the growing importance of soft skills in the workplace. Although soft skills are acknowledged as being crucial in both the UK national skills policy document and the Scottish Government's equivalent document, there is less recognition in the Northern Ireland equivalent and there is no mention of soft skills in the Welsh Government equivalent document.
- 5.15 It should also be remembered that Government at all levels national, devolved and local, as well as government agencies and non-departmental bodies has a vital and direct function in developing soft skills through its role as a major employer. Government departments and agencies therefore have a direct stake in developing and recognising the soft skills of its employees.

METHODOLOGY

The approach used to estimate the current contribution of soft skills to the UK economy (and its component parts, in terms of sectors and geographical regions) is explained below.

First, a baseline estimate of the value of economic activity for the UK and its component parts (both industrial sectors and national/regional geographies) was obtained from tables of data published by the Office for National Statistics. The economic output data, which covers the year 2011, was then re-based to provide an estimate for 2012 levels of output using employment data for 2012 published by the ONS (for Great Britain) and NISRA for Northern Ireland. In overall terms, the value of production in the UK for 2012 was estimated to amount to total £1.36 trillion in terms of 2011 prices.

The estimates of employment obtained from ONS and NISRA were also used to provide a breakdown of employment levels across 18 economic sectors and for the nine English regions as well as Scotland, Wales and Northern Ireland.

Estimates for the proportions of economic value contributed by different skill types were developed based on research findings from a range of academic sources, in particular research undertaken on behalf of the Economic Research Institute of Northern Ireland which provides a model that disaggregates the overall contribution to economic productivity by each of the five drivers of productivity (as defined by HM Treasury and the Department for Business, Innovation and Skills), namely: investment, skills, innovation, entrepreneurship and competition.

Other academic and non-academic research, such as the biennial UKCES national skills survey – was utilised in order to further disaggregate the skills driver of productivity into the following component parts: technical skills, technology skills, literacy, numeracy and soft skills, where soft skills covered aspects such as teamwork, communications, self-management, adaptability, etc.

This data was used to isolate the component contribution of soft skills to each of 18 sectors of the UK economy across nine occupational types (ranging from managers and professionals through to manual and elementary occupations). These component contributions – the soft skills coefficients – were defined as the soft skills component of overall factor productivity across each of the 18 sectors. These factors were then applied to the data for average levels of productivity per worker by sector across each of the nine English regions plus Scotland, Wales and Northern Ireland, in order to obtain an estimate of the current contribution of soft skills to economic output by sector and geographical area.

Having obtained estimates of current contributions, estimates for future contributions were obtained through the following approach:

- estimates of expected future annual levels of employment, economic output and productivity change for
 each sector and geographical area for the period 2013-2025 were developed using econometric forecasts
 (produced by Cambridge Econometrics) for the same 18 sectors and 12 geographical regions as per the
 current estimates;
- future values for the soft skills coefficients were estimated with reference to trend data obtained from the biennial UK national employers skills survey, and in particular data for 2009, 2011 and 2013.

APPENDIX 1: GLOSSARY OF TERMS AND ABBREVIATIONS

Econometric forecasts

Estimates of the potential future levels of employment, output and other measures of economic activity produced using mathematical models and economic statistics.

Economic output

The financial value of the economic activity – i.e. the production of goods and services – taking place in an economy or sector in a given time period.

Employability skills

The skills, attitudes and experiences possessed by individuals that enable participation and progression in the workplace.

Expansion demand

The demand for new recruits to an industry or business that is driven by the growth in demand for its products or services.

GVA

Gross Value Added, a measure of the financial value of the economic output that is attributable to a company, sector or geographical component of a national economy.

Hard skills

The technical skills and experiences that are required to perform a specific role in the workplace.

NEET

A young person who is not in employment, education or training.

NISRA

Northern Ireland Statistics and Research Agency.

ONS

The Office for National Statistics.

Productivity

A measure of the efficiency of production, often expressed in terms of the average value of output per time period divided by the total costs incurred in the same time period.

Replacement demand

The demand for new recruits to an industry or business that is driven by the need to replace workers who leave their jobs for reasons including retirement, death, return to permanent study, assumption of caring responsibilities, etc.

SIC

Standard Industrial Classification, an internationally agreed categorisation system for business and economic activities.

Skills gaps

A situation where a current employee's skills and experiences are insufficient compared to the role and responsibilities they are required to perform.

Skills shortages

A situation where an organisation or industry cannot recruit all of the skilled staff they require in order to deliver in full the level of production that the organisation or industry would prefer to achieve at that time.

Soft skills

The personality traits and other personal attributes that enable individuals to interact effectively and harmoniously with other people in the workplace, including co-workers, managers and customers. We defined these as:

- · Communication and interpersonal skills
- Teamwork
- · Time and self-management
- Decision-making and initiative-taking
- · Taking responsibility.

Spillover effects

A secondary effect that occurs as a consequence of a first effect. For example, the training of a worker may not only positively affect the trained workers' productivity, it may also have positive consequences through the transfer of newly acquired skills to co-workers. The process through which such secondary effects take place is an example of a spillover effect.

Tertiarisation

The process through which the service sector has become the dominant (i.e. largest) component of modern economies such as the UK.

UKCES

UK Commission for Employment and Skills: a non-departmental public body that advises the UK and devolved governments on skills and employment issues.

Underemployment

A situation where a person is employed but the job is inadequate to fully meet the worker's needs, for example if the worker is over-qualified for the role or the person is working part-time but would prefer a full time job.