NEW SKILLS AT WORK
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REPORT

SKILLS 2030

WHY THE ADULT SKILLS SYSTEM IS FAILING TO BUILD AN ECONOMY THAT WORKS FOR EVERYONE

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and Clare McNeil
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Institute for Public Policy Research

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SUMMARY

60-SECOND SUMMARY

The government is seeking to build an economy that works for everyone. As we leave the European Union, we will need to ensure that our country can compete in a global economy, and the government has set goals of boosting living standards, growth and productivity, and addressing deeply engrained regional inequalities. However, England's adult skills system is ill-equipped to deliver this, or to address the trends that will affect our economy between now and 2030.

- **Demand for skills among employers is low.** Employer investment has fallen in recent years and there is a large investment gap with the EU average. Poor skills utilisation means improvements in qualifications haven't delivered improvements in pay and productivity.
- **Too much provision is low quality with poor outcomes.** In the absence of clearly articulated employer demand, providers have relied on government-designed funding and regulatory systems. This has led to perverse incentives, mismatched supply and demand, and a focus on courses with poor labour market outcomes. Efforts to build a more 'employer-led' system risk exacerbating this.
- **The training system has failed to tackle regional and social inequalities.** Adults who stand to benefit most from training are the least likely to participate. The adult skills system has failed to support regions scarred by deindustrialisation, and it has failed to address stark regional disparities in economic performance. The apprenticeship levy may accentuate regional skills inequalities by boosting investment most in London and the south east.

The apprenticeships levy as currently formulated would fail to restore employer investment to the levels of a decade ago. The government should therefore expand its apprenticeship levy into a 'skills levy', set at 0.5 per cent of payroll for employers with 50 or more employees, and 1.0 per cent for the largest. This would raise £5 billion. Contributions from larger employers should be top-sliced and devolved to provide a regional skills fund for high quality vocational education and training.

KEY FINDINGS

Our economy is set to change significantly between now and 2030. The prime minister has pledged to build an economy that works for everyone, rooted in a more proactive industrial strategy. With two-thirds of the workforce of 2030 having already left full time education, the adult skills system[1] will be crucial in helping us compete in a global economy. But as currently configured it is incapable of delivering the government's

1 This paper is focussed on the publicly funded further education system for adult learners and employer-funded training; it does not include analysis of the higher education system. For previous IPPR work on higher education see Pearce N, Muir R, Clifton J and Olsen A (2013) *A critical path: Securing the future of higher education in England*, IPPR. http://www.ippr.org/publications/a-critical-path-securing-the-future-of-higher-education-in-england

objectives of increasing living standards, productivity, and growth across the country.

In the past, policymakers in England have left decisions on training to the market: the assumption has been that with the right incentives, employers will invest in training for the benefit of all. Successive governments have invested in training in the hope that a more skilled workforce will drive growth.

However, our market-led system has neither delivered the quantity nor the quality of training that we need, and it has failed the people and the places that need it most.

If we are to build a skills system fit for the future, we need to overcome three key weaknesses:

- First, levels of employer demand for skills are low, **and employer investment in continuing vocational training per employee in the UK is half the EU average**; investment in training and learning per employee fell by 13.6 per cent per employee in real-terms between 2007 and 2015. Neither are employers using the skills of the workforce effectively: the UK has the highest levels of overqualification in the EU. While the apprenticeship levy will stimulate investment, it will only affect large employers, and questions remain about the quality of training and the extent to which skills will be utilised to improve business performance and job quality.
- Second, in the absence of strong and clearly articulated employer demand, providers have relied on centrally set funding and regulatory systems. These have led to a focus on lower-quality courses which often fail to meet the needs of learners or employers. **Half of qualifications taken by adult learners are below NVQ level 2, and many offer poor wage or employment returns.** Yet at the same time, many skilled sectors face persistent skills shortages that are not met by current provision. Efforts to build a more 'employer-led' system risk exacerbating these problems.
- Third, the current system has failed to tackle entrenched regional and social inequalities. It has not supported those affected by economic change in the past, leaving many post-industrial areas trapped in low skills equilibria. While the devolution of adult skills training will help, proposals are poorly coordinated and the budget has been slashed. The apprenticeship levy will stimulate investment most in the areas where it is needed least; London and the south east have more businesses who will pay the levy and invest in training, but they have higher levels of qualifications, and lower skills needs. The levy will raise less, and stimulate training less, in the regions which have greater need. **Adults who would most benefit from training – those with low skills, in low-pay occupations and in lower socio-economic groups – are the least likely to participate.** Individuals looking to upskill can face numerous barriers, and the decision to charge adults for the full cost of some courses has led to a 31 per cent fall in participation.

Many of the problems with the adult skills system stem from England's relatively 'hands-off' approach to vocational training, including low training standards and a reluctance to intervene in the quantity or quality of training used and delivered by employers.

A shift to a more innovative, higher skilled economy that works for everyone and can help us compete in a global economy will require far more focus on how the skills of the adult working population are being developed and utilised in the workplace. A more ambitious adult skills policy should be informed by the following goals:

- improving investment in, and utilisation of, skills among employers
- increasing the availability of high quality specialist vocational provision
- supporting industries and communities facing economic decline to adapt to the demands of the global economy.

The first order problem we tackle here is underinvestment in the skills system to deliver on the government's objectives. The apprenticeship levy could help boost investment in skills. But it would neither bring spending back to the levels of a decade ago, nor would it bring us close to the EU average. In the absence of further public investment and demonstrable underinvestment by employers, we recommend that the government expands the apprenticeship levy into a wider skills levy, which would:

- apply to all employers with 50 or more employees
- be set at 0.50 per cent of payroll for employers with 50 or more staff and 1.0 per cent of pay roll for the largest employers with 250 or more staff
- be more flexible, and redeemable against the cost of high quality training beyond just apprenticeships
- top-slice contributions from larger employers to form a regional skills fund, devolved according to local need, to invest in high quality, specialist vocational training.

We estimate that the skills levy would raise over £5 billion in 2017/18 – double the £2.6 billion raised by the apprenticeship levy. Top-slicing a quarter of the contributions of the largest firms would create a regional skills fund worth £1.1 billion, to be devolved to regions with lower skills. While the apprenticeship levy may accentuate regional inequalities, top-slicing the skills levy would narrow them. It would also restore the adult skills budget to close to the levels of 2010/11 in real terms and it would increase employer investment from 52 per cent of the EU average to at least 80 per cent.

The introduction of a skills levy will also provide greater scope for tackling the second and third order problems we identify here: a collective action failure and persistent regional and social inequalities. We will set out how government can address these failures in our next report.

1.
THE CHALLENGE
MEETING THE FUTURE DEMAND FOR SKILLS

The economic turmoil of the last decade has drawn attention to significant weaknesses in the UK's economic model, including stagnating living standards for a large proportion of the population, a large pool of low skilled, low paid jobs, and weak productivity growth relative to our main competitor countries. Over the coming decades we can expect to see unprecedented and accelerating changes that will further transform our economy and our labour market (Lawrence 2016). Our response to these challenges and opportunities will determine the effects that these trends will have.

This chapter explores the key factors that will shape demand for skills between now and 2030. We argue that it is essential that Britain develops a skills system which is not only able to respond to these trends, but also actively shapes them in a way that supports stronger economic growth and the creation of more good jobs for the population.

1.1 FUTURE CHANGES IN THE JOBS MARKET

Current forecasts suggest there will be two major shifts in the pattern of employment over the next decade – both continuations of already well-established trends. First, the projections show a continuation of the decrease in the number of jobs in manufacturing and an increase in the number of service sector jobs. Second, they show a continued polarisation of the workforce – with an increase in higher-skilled and lower-skilled jobs at the expense of middle-skilled jobs.[2]

While these projections suggest that the overall balance of jobs will shift to more professional and high skilled occupations, in absolute terms there will still be a large number of middle and low skilled jobs becoming vacant as a result of people retiring from the workforce. Ninety per cent of the jobs that will be created over the next decade will be a result of 'replacement demand' – as people leave the workforce. A large number of new workers will therefore be required in sectors and occupations that tend to rely on mid-level and technician skills (Clifton et al 2014). Efforts to improve the supply of skills to the economy need to focus on higher-level skills, but they should encompass middle-level skills too.

These changes will not affect all areas of the country in the same way. According to the UKCES (2016b), the biggest declines in employment share[3] in manufacturing over the next decade are expected to occur in Yorkshire and Humberside, the North East, the West Midlands and Northern Ireland –

2 The most detailed recent attempt to project future changes in the jobs market comes from the UKCES *Working Futures* forecasts (see figure 1.1).

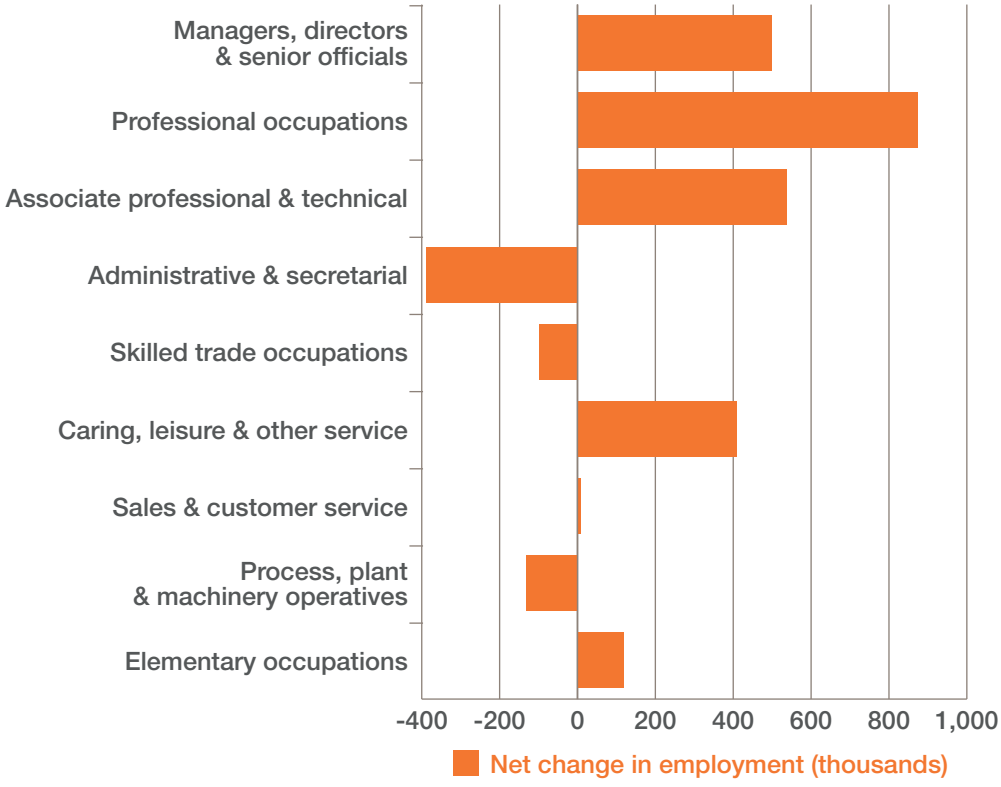
3 Percentage of the workforce

areas where the existing share is relatively high, and which have struggled to adapt to industrial change in the past. In other regions of the country, the largest fall in employment share is in administrative and secretarial occupations. There is, however, little difference across the nations and regions in terms of occupations seeing an increased share of employment. In every case, increases are spread over managers, directors and senior officials; professional occupations; associate professional and technical occupations; and caring, leisure and other services (ibid: 112). This suggests an increased polarisation of the workforce will be common to all the nations of the UK and regions of England. In the past the fall in the proportion of mid-level jobs has been associated with problems of weak progression and social mobility (Hatfield and Thompson 2015).

FIGURE 1.1

Manufacturing jobs and middle-skilled jobs are in decline

Changing composition of employment (+/- thousands) by occupation, UK, 2014–2024



Source: UKCES 2016a

1.2 WHICH TRENDS ARE DRIVING CHANGES IN THE JOBS MARKET?

It is inherently difficult to predict changes to the jobs market. In the past, changes have been shaped by shifts in the overall industrial structure of the economy and by employers' strategies about how to respond to global competition, consumer demand, and new technologies. Yet there is no guarantee that employers will respond in the same way in the future. This

section explores the trends that are most likely to affect the nature of work and skills between now and 2030.

Technology: the next fifteen years will see a wave of technological changes that could transform the way goods and services are delivered to consumers. These include advanced robots with senses, intelligence and dexterity; artificial intelligence; autonomous vehicles; 3D printing and the on-demand manufacture of personalised products; big data; and advanced materials. These developments are likely to increase the need for general digital skills across the population, and will lead to a continued growth in demand for high-skilled tech-savvy workers in particular parts of the economy.

Whereas, in the past, the jobs most affected by the introduction of new technologies have been those involving largely routine tasks – machine operatives in manufacturing and clerical administrators in services have been among the groups most affected – these latest developments are projected to affect a much wider range of jobs, including those that involve complex interactions and require knowledge, experience and judgement. As a result, the impact of technological change is likely to spread to jobs further up the skills ladder, including many of the professions (Susskind and Susskind 2015). One estimate suggests that a third of all the jobs in the UK are at risk of at least some automation (Frey et al 2016).

Technological change does not just destroy jobs, however; it also creates new ones and affects the nature of existing ones. History suggests the jobs that are created will be more highly skilled than the ones that are lost.

Decarbonisation: the government is committed to reducing the UK's greenhouse gas emissions by at least 80 per cent between 1990 and 2050. This decarbonisation will entail the creation of many 'green jobs' and the 'greening' of other jobs. Although this will happen across all sectors of the economy and in many occupational categories, the most significant shifts will be for skilled workers. More scientists and engineers will be needed to develop environmentally friendly products and services, and technicians will be needed to install and maintain them.

Demographics: over the next fourteen years, the population of the UK will get older. The latest projections from the Office for National Statistics suggest the number of people in the UK aged 60 and over will rise from 20.1 million in 2014 to 27.6 million in 2029, or from 31 to 39 per cent of the total population (ONS 2015). This will create increased demand for hospital services, more trips to GPs for diagnoses, more care in the home and in specialised homes. It will also mean increased demand for medicines and medical products. The Centre for Workforce Intelligence (CfWI) has estimated that the demand for health and care skills in the UK could increase at more than twice the rate of overall population growth between now and 2035, largely due to an increase in the number of people with long-term physical and mental health problems (CfWI 2015).

The ageing of the UK's population is, in part, due to the post-war generation of 'baby boomers' reaching retirement age. This will also have an impact on UK businesses' ability to deliver products and services. As they leave the workforce, the 'baby boomers' will be taking their skills and experience with them. If businesses are unable to replace them

with people with equivalent skills, they are likely to face worsening skills shortages. For example, Engineering UK has estimated that, on average, the economy will need 182,000 new people per year between 2012 and 2022 with engineering skills, mostly to replace those that are retiring during this period (Engineering UK 2016). At present, there is a shortfall of 69,000 a year in the number of people acquiring the needed skills.

Globalisation: the decline in formal and informal trade barriers and the exploitation of technological advances to establish more international supply chains has had a profound effect on the demand for skills in developed economies in recent decades. There have been negative consequences for some localities where workers found their skills no longer in demand. Most economists believe that this trend will continue.

At the same time, further technological advances will enable multi-national companies to move more jobs offshore, and not just low-paid ones. Higher-skilled work is not immune to offshoring. Investment banks in the United States and Europe have, for example, for many years taken advantage of time differences to employ skilled workers, particularly in India, to analyse data 'overnight'. Rapid internet connections mean that an x-ray can be examined just as easily in another country as in the hospital in which it is taken.

Brexit: following the referendum, the government has committed to triggering article 50 this year and to leaving the EU. It has also reaffirmed the ambition to reduce immigration to under 100,000, a reduction of nearly two-thirds compared to current levels. This could have very significant impacts on the demand for skills in the UK. First, depending on the outcome of negotiations, there may potentially be a significant decline in exports from the UK to the EU, which will be difficult to offset in by increasing exports to other countries. This may affect demand in the economy. However, if the UK abandons freedom of movement and reduces immigration, this may require UK employers to invest more in training to meet skills gaps, rather than recruiting workers from elsewhere in the EU.

Responding to future changes: the role of adult skills policy

The impact of these trends is not predetermined and political choices can help shape their impact on workers in the UK. Future governments will also make a number of political choices that will affect the demand for skills. This will include decisions about the level of government spending and its subsequent impact on demand in the economy, and the way it regulates the labour market with, for example, changes to the minimum wage.

The challenge is to ensure that employers and employees are able to respond to and shape forthcoming trends in a way that supports stronger economic growth and the creation of more good jobs for the population.

This report examines the role of skills policy in delivering these goals. The skills system is important because it can help meet employer demand for skilled workers; it can help to train people for jobs in new areas of demand; and it can support them to progress or move from declining industries to new areas of growth. But it can also be a tool to help firms to redesign jobs to improve their productivity.

We focus on the adult skills system as a particularly important piece of the jigsaw in the years to come. Around two-thirds of the 2030 workforce has already left full-time education and is in employment, so we cannot rely on changes to the schools system alone to meet changing skills needs. Addressing the skills needs of the existing adult workforce will also be important, including how and whether employers are developing their employees in response to change.

The following chapters set out the current approach to adult skills policy in England, and ask why, despite significant investment in education and training, policy approaches since the 1980s have struggled to support employers and individuals to respond effectively to large changes in the demand for skills. We argue that far more needs to be done to raise training standards and help employers and workers both respond to and shape forthcoming social and economic trends if we are to deliver an economy that works for all.[4]

4 Skills policy is devolved, and although there are similarities in the challenges and approaches across the UK, we focus here primarily on England. For our assessment of the Scottish skills system and the changes needed to meet the needs of the future economy, see Gunson and Thomas 2017.

2. ADULT SKILLS POLICY IN ENGLAND

Since the 1980s, skills policy has formed the backbone of government efforts to support employers and employees to cope with the impact of global, industrial and technological change. The Thatcher government abandoned many of the traditional levers of industrial policy, and sought instead to drive improvements in productivity by reducing business costs and making the labour market more flexible. In the absence of more active intervention in the economy, successive administrations have invested in education and training in the hope that a higher skilled workforce would enable employers to innovate and grow, as well as supporting individuals to access and progress in work.

The current Conservative government sees a more active role for the state than its predecessor in intervening in the economy to deliver stronger and more sustained growth. The Prime Minister recently announced her intention to develop a modern industrial strategy that would 'encourage growth, innovation and investment and ensure that as we aim to increase our overall prosperity – that prosperity is shared by people in every corner of our country' (May 2017).

The skills system will play an important role here. The government sees the adult skills system as crucial to growing the economy, raising productivity, and driving greater prosperity and security for individuals (BIS and DfE 2016). An ambitious set of reforms is being implemented to increase employer and individual investment in skills, while also making training provision more responsive to their needs. This chapter examines the current approach to adult skills policy, and asks whether the system is capable of contributing to the government's ambitious goals, and shaping the trends discussed above in a way that benefits employers and employees alike over the next few decades.

2.1 SKILLS POLICY IN CONTEXT

State investment in education and training had expanded considerably over recent decades up to 2010 – often underpinned by targets to increase the level of workforce skills in the UK relative to other countries. Increased access to university since the 1970s, unprecedented levels of investment in schools and colleges under the Labour administration, various workforce development programmes, and the recent growth in apprenticeships have all contributed to steady improvements in the qualification levels among the British workforce.

Outside the compulsory education system, the mix of available vocational education and training relies on a market of training providers, who are tasked with identifying and reconciling the skills needs of employers

and learners across the country. Independent training providers were initially encouraged to compete to deliver government-funded workforce development schemes in the 1980s. The approach was consolidated in the 1990s when further education colleges were removed from local government ownership and given self-governing status. This sought to enable colleges to better respond to the needs of employers and individuals, and shifted funding and regulatory oversight to central government agencies.

Various waves of reform have since attempted to make this 'training market' more responsive to end users. Reforms have included:[5]

- **Vocational qualification reform:** To support training providers to respond to demand from employers, greater flexibility has been introduced into vocational training standards. National Vocational Qualifications (NVQs) were introduced in the 1980s and have since underpinned most government-funded training schemes, including those targeting adults. NVQs focussed on accrediting learners' ability to complete a set of defined 'competencies' or tasks associated with particular jobs, rather than specifying the training content, structure or assessment process required. A market of awarding bodies design and validate vocational qualifications in England. Training providers and employers are at liberty to choose which qualifications they offer.
- **Formula-based funding:** successive government agencies[6] have tried to create a funding formula which rewards further education (FE) providers for attracting individual learners or providing qualifications that are deemed desirable for the economy. The aim is to provide a common 'unit cost' for delivering a particular course and then leave FE providers to compete with each other to attract learners and deliver courses in the most efficient way possible. It is assumed that learners will make choices that are in their own economic interest and therefore providers will have to put on courses that will improve the skills base of the economy.
- **Inspection:** following incorporation in 1993, central government created an inspectorate to replace local government education advisors. The inspectorate has had various incarnations over time – including the FEFC Inspectorate, the Training Standards Council, the Adult Learning Inspectorate and, most recently, Ofsted. The assumption is that an external inspection resulting in a simple 'grade' will help the government to hold providers to account for their performance and provide a means to withhold funding or intervene in the case of poor performance. It is also assumed that a public and simple comparative judgement will provide more information for learners and employers to choose which provider they want to use – further bolstering a market dynamic in FE.
- **Performance indicators:** in a similar vein to inspection, successive governments have introduced and published performance indicators to help shape provider behaviour. League tables were introduced in 1992 to help students decide where to study, and a series of other

5 See Fletcher et al 2015 for a detailed description of the changing approach to funding and regulation of FE since incorporation.

6 A number of government agencies have been responsible for funding adult FE over recent years including the Further Education Funding Council (FEFC), the Learning and Skills Council (LSC) and the Skills Funding Agency (SFA) today. The SFA uses a formula to determine how much funding a provider is eligible to receive, largely based on the number and type of qualifications it delivers. The SFA also sets national rules for which learners are eligible for government support.

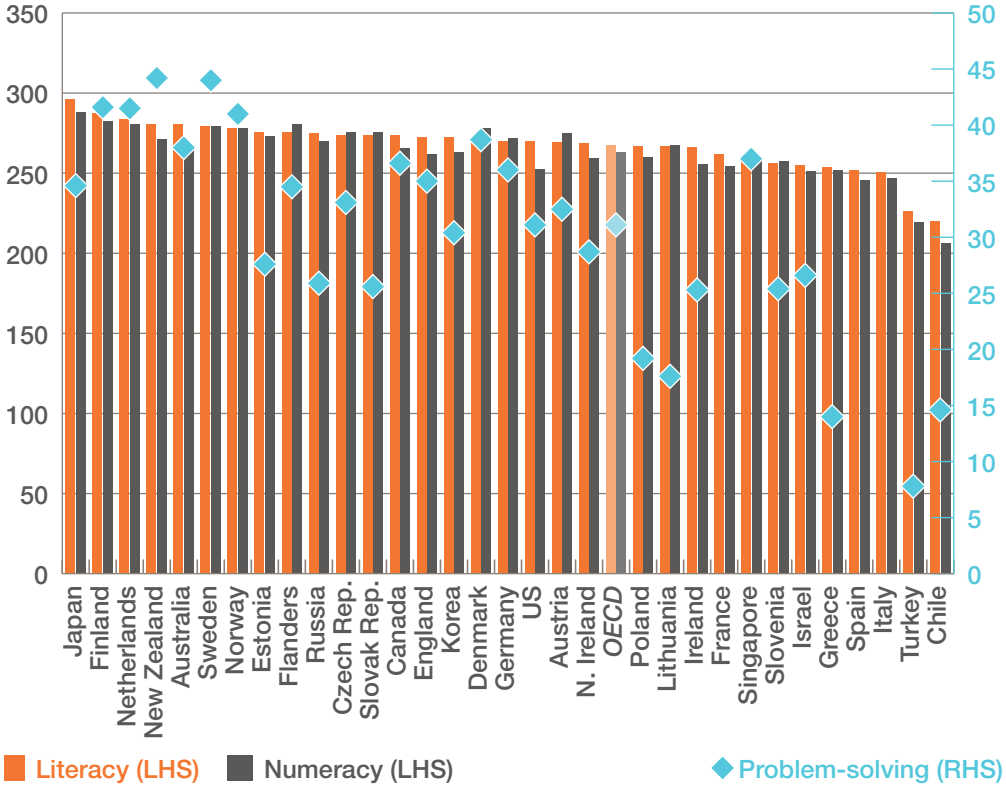
performance metrics have been brought in over the years depending on the priority of the government at the time. These metrics have rewarded colleges for meeting targets on everything from student retention and student success rates, through to meeting recruitment targets and measures of financial efficiency.

- **Employer ownership:** policymakers have sought to make provision more demand-led by incorporating the voices of employers into institutions set up to articulate skills needs in different sectors and areas. In the 1990s, local Training and Enterprise Councils were created to give employers more control of training provision in their area. The Labour government replaced these with a national Learning and Skills Council, which had a statutory duty to engage with employers, and Sector Skills Councils, which had company representatives on their boards and a remit to identify the skills needs of different sectors. The Coalition government moved away from permanent institutions towards a number of standalone programmes that provided grant funding for groups of employers to design and deliver training in different sectors and areas, such as the Employer Ownership and Trailblazer pilots – the latter of which underpins current reforms (see below).

FIGURE 2.1

Adult skills in England lag behind those of other developed countries

Adult skills measures for selected countries from the OECD Survey of Adult Skills, 2013–2016*



Source: OECD 2016

*Note: 'literacy' and 'numeracy', measured on the left-hand y-axis, show each country's score on the Programme for International Student Assessment (PISA) reading and numeracy scales respectivey; 'problem-solving', measured on the right-hand y-axis, shows scores on the PISA problem-solving scale.

Despite these wide-ranging reforms to the skills system and significant increases in investment in education and training, concerns remain about both the quality and quantity of training in the UK. State-funded vocational provision has been criticised for being poorly tailored to industry needs and lacking relevance or currency in the labour market (for example Wolf 2011, Ofsted 2016, Wilshaw 2014). The UK lags behind other countries in international league tables when it comes to even the most basic skills. The most recent OECD adult skills survey noted that an estimated nine million working aged adults in England (more than a quarter of those aged 16 to 65) have low literacy or numeracy skills, including many young people and those with university-level qualifications (OECD 2016).

Although demand for skills has increased over the last few decades, employer investment, innovation and ambition also remain below the levels the government would like. There are a number of indicators that the current policy approach has not been good at responding to big economic and industrial shifts in the past:

- **Low productivity:** the UK's average productivity levels – the amount of output produced per worker – have been below the average for both the G7 and the EU since 1970. The gap narrowed slightly in the 1990s and 2000s when the UK experienced relatively strong and sustained productivity growth. However, since 2007 productivity in the UK has stalled, growing by just 1.3 per cent in eight years, compared to 5.1 per cent in the rest of the G7. Overall productivity levels in the UK are around one-fifth lower than the other G7 countries.[7] This is largely due to the prevalence of low-skilled, low-paid jobs in this country (Dolphin 2015).
- **Low pay:** low pay grew sharply in the 1980s and has since remained relatively stable at more than one in five working people, or over five million people (Clarke 2016). Nearly half of all low-paid workers work in retail and hospitality, with younger workers, the self-employed, low-skilled and part-time employees most likely to be affected (Clarke and D'Arcy 2016, Tinson et al 2016, ONS 2011).
- **Sectoral imbalances:** the UK economy has developed a number of imbalances that have become structural weaknesses with the potential to hold back growth. In general, the UK relies too heavily on certain sectors such as finance and business services. The UK has a huge trade deficit with the rest of the world because it is not producing enough of the high quality goods and services that people in other countries want to buy. The current account deficit in 2015 was £100 billion, equivalent to 5.4 per cent of GDP (ONS 2016c). This is the largest deficit among the G7 countries.
- **Structural unemployment:** as industries have declined, many people have found it hard to switch into different sectors. This has led to a problem of structural unemployment, with large numbers of people remaining out of work, even during periods of strong economic growth.

7 Productivity in the UK is 27 per cent lower than in France, 30 per cent lower than in the US, and 35 per cent lower than in Germany. This means the average worker in these three countries produces more in four days than the average UK worker produces in five (ONS 2016a). https://www.ons.gov.uk/economy/economicoutputandproductivity/productivitymeasures/bulletins/internationalcomparisonsofproductivityfinalestimates/2014

- **Geographic inequality:** there are large geographic variations in terms of economic development, productivity, and the number and quality of jobs that are available. As table 5.1 shows, there is a larger proportion of the workforce with degree-level qualifications and a greater proportion of people in higher level occupations in London and the south east, as well as far higher levels of pay and productivity compared to the rest of the UK. Some rural and coastal towns in particular have been 'left behind' as old industries have closed and not been replaced.

The limitations of UK adult skills policy

The focus of adult skills policy in recent years has been to drive up the level of qualification among the working age population, with the hope that this will deliver in terms of tackling low pay and boosting productivity.

It has had some significant achievements in increasing the level of qualification. In 2006, the Leitch review set a number of 'stretching ambitions' for driving up skills in the UK. It suggested that by 2020, the target should be to have 40 per cent of the working age population qualified to NVQ level 4 (graduate level or equivalent) or above and 90 per cent qualified to NVQ level 2 or above (GCSE equivalent) (Leitch 2006).

Performance on NVQ level 4 has been very impressive. The proportion of the working age population with a degree level qualification or above has increased by 10 percentage points in the decade since the Leitch review. The UK is on course to reach the target of 40 per cent in 2018, two years ahead of schedule. While progress has been slower on NVQ level 2, there has still been an 11 percentage point increase in the proportion of the working age population with level 2 or above.

However, despite these significant improvements in the level of qualification and skills among the working age population, there has been very little progress in terms of pay and productivity. As figure 2.2 shows, over the past decade, productivity has increased by only 1 per cent. Over the same period, pay has actually declined in real terms; median full time gross weekly wages were 4.8 per cent lower in 2015 than 2005 (ONS 2016b). Low pay remains a significant problem, with one in five employees (21 per cent) on low pay (Resolution Foundation 2016).

This demonstrates that boosting the level of skills among the population alone is not enough to deliver economic success. Leitch recognised this in his review, explaining:

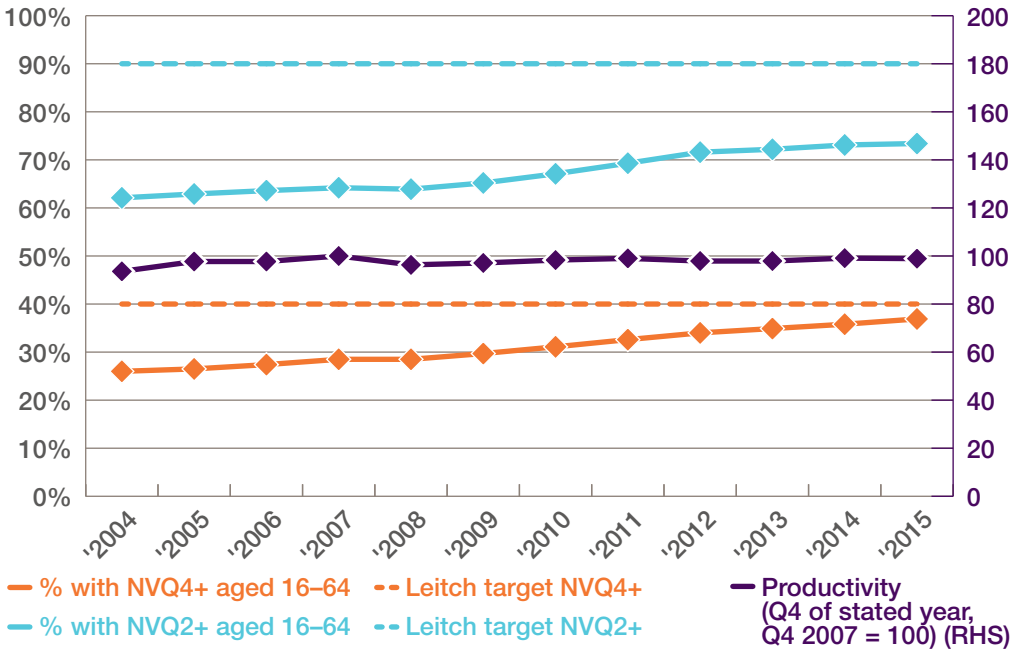
> *'Crucially, however, these ambitions will not deliver economic benefits unless they are based on economically valuable skills that are effectively used in the workplace.'*
> Leitch 2006

The evidence suggests that while there has been significant progress in terms of boosting the skills among the working population, the training delivered is all-too-often not economically valuable, and the skills delivered are not effectively utilised in the workplace.

FIGURE 2.2

Improvements in qualifications have not been matched by improvements in productivity in the last decade

Qualification level (% with NVQ level 2 and level 4 qualifications and above, left-hand side) and productivity in the UK (2007=100, right-hand side), 2004–2015



Qualification level; Labour Force Survey, Productivity (ONS 2017b)

2.2 THE CURRENT APPROACH

There is increasing political consensus that the impact of globalisation, industrial and technological change has had significant downsides for many people who have felt left behind in the changing economy. The Conservative administration under Theresa May has pledged to build an economy that works for everyone, rooted in a more proactive strategy that supports industries of strategic value, revives regional cities outside the southeast, and ensures working people can access the jobs of tomorrow (May 2016). A reformed skills system remains a key plank of the strategy.

As with past approaches, current skills reforms seek to ensure that training provision better matches demand from employers. The expectation is that this, in turn, will improve the prospects of individuals in the labour market. A key goal is to improve levels of work-based learning, underpinned by a target to deliver three million apprenticeships for people of all ages by 2020. The employer-led Trailblazers set up under the Coalition government are in the process of designing new apprenticeship standards, and it is hoped that these will also provide a basis for college-based training over the coming years, overseen by a new national Institute for Apprenticeships. Meanwhile funding reforms seek to put more 'purchasing power' for apprenticeship training in the hands of individual employers – rather than funding going

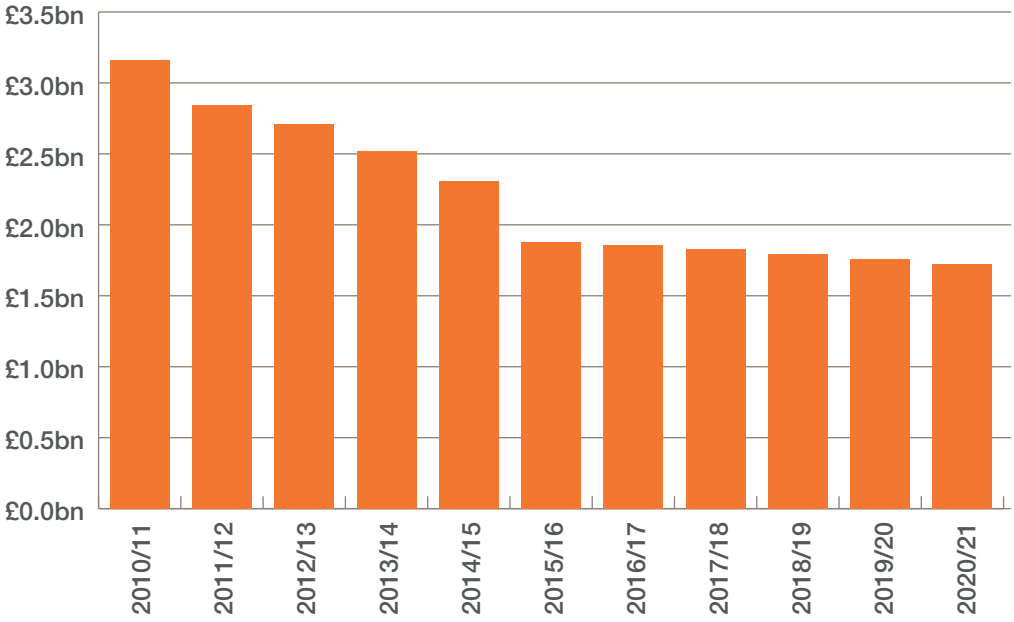
to providers who then engage employers.[8] Some of the wider adult skills budget is also being devolved to combined authorities that meet eligibility criteria to enable regions to better match provision with the needs of the local economy.

The adult skills budget was subject to deep cuts in the last parliament and is to be held flat in cash terms for the duration of this parliament, meaning four more years of real terms reductions. This means that, by 2020/21, government funding for adult skills will have been nearly cut in half in real terms from 2010/11 (see figure 2.3) – exacerbating its status as the 'poorer cousin' to educating under 18s and university students (Wolf 2015a). In 2015/16, the government spent £2.94 billion on the adult FE and skills system – just 8 per cent of the total spend on secondary education at £38.12 billion (HM Treasury 2016). The Association of Colleges has warned that the scale of the cuts last year alone risked eliminating 190,000 places for learners aged over 19, and suggested that if this continues, adult education and training could cease to exist by 2020 (AoC 2016).

FIGURE 2.3

Government funding for adult skills will have been cut by almost half by 2020/21

Adult skills budget in England, real terms actual and projected change, 2009/10–2019/20 (£ billions)



IPPR calculations based on Foster 2016

8 The government will change the way funding flows in the apprenticeship system. Under the current system, government funding flows directly to training providers. Under the new system, there will be two significant changes. First, for large employers, government and employers will both contribute funds into a digital apprenticeship 'account'. Employers will then be able to use this money to buy any off-the-job training from a training provider. Second, for medium-sized and small firms, employers will have to purchase training from a provider who will then be able to draw down additional funding from the government.

In the context of reducing public spending, the government is seeking instead to leverage greater coinvestment from employers and individuals. Adult learners who have not yet achieved a level 2 qualification are still entitled to a free (government funded) place, but in 2016 Advanced Learner Loans were introduced for those aged 19 and over wishing to study for a qualification at level 3 or above – an expansion of loans previously introduced for those aged 24 and above. From 2017 a levy will be introduced for all employers with an annual pay bill of over £3 million to fund apprenticeships. The levy will be set at 0.5 per cent of the total pay bill and is expected to raise over £3 billion a year by 2020/21. The cost of the levy can be redeemed by employers to cover the cost of off-the-job training for apprentices by approved providers.

The government argues that, taken together, the remaining skills budget, adult loans and the levy will provide more funding for adult further education participation by 2020 than at any time in England's history (Halfon 2016). But there is no doubt that it requires a significant cultural shift when compared to past approaches, and the quality and quantity of individual and employer investment will depend on how they respond to the new funding environment.

Devolution

As part of their devolution agenda, the government is seeking to transfer control of the Adult Education Budget (AEB) and commissioning of adult education to local areas through devolution agreements. Where areas are not covered by combined authorities, the government will seek to devolve either to the local authority, or to the area covered by a Local Enterprise Partnership (SFA 2016). The timetable for devolution, and the exact powers being handed down to local areas vary between different devolution deals.

Ahead of the full devolution of the AEB, the SFA has from this year (2016/17) been supporting the development of local delivery agreements, to support local areas in influencing funding (Boles 2016).

It is hoped that the devolution will ensure that provision is better aligned with local need, and better able to boost productivity. Devolving budgets and commissioning to local areas aims to ensure colleges and other training providers are more focussed on responding to local economic priorities and outcomes (ibid).

2.3 CONCLUSION

The current reforms seek to tackle persistent weaknesses in the skills system by making skills provision more 'employer-led'. However, history suggests that a demand-led skills system has not been very effective at ensuring that employers and workers are equipped to deal with major economic and social changes. Although qualification levels have improved in recent decades, there has not been enough focus on the quality of training or the extent to which employers are investing in or utilising skills in the workplace. The adult skills system has also failed to address ingrained regional inequalities.

Questions remain about how to meet the interests of individuals and employers in the design of vocational training provision; how to ensure that investments in skills lead to real economic and social improvements in the workplace; and how to tackle entrenched pockets of disadvantage in some areas and communities – all in the context of a significant reduction in state funding for adult training. The following three chapters examine these questions in more detail. They identify the underlying barriers and problems that need to be addressed if the skills system is to deliver on the government's ambitious aims and effectively support employers and individuals to respond to and shape future trends in ways that deliver a fairer, more prosperous society.

3.
THE QUALITY AND QUANTITY OF EMPLOYER INVESTMENT IN TRAINING

The need to respond to changing demand and address forthcoming challenges in the labour market cannot be left to the education system alone. The majority of the workforce of 2030 have already left the education system, and some skills can only be learned in workplace settings. Importantly, whether as a country we are able to take advantage of new opportunities or shape the nature of the economy towards higher skill, higher wage work will depend to a large extent on the strategies adopted by employers, including how they develop and utilise the skills of their employees.

This chapter examines the evidence on employer demand for and investment in skills. We argue that the core weakness of the training market approach is the limitations of seeking only to 'match' demand for skills with supply, rather than trying to stimulate demand and ensure that employers are effectively using skills to innovate and raise standards. This approach will need to change if England is to develop an adult skills system fit for the 2030s and beyond.

3.1 WORKFORCE TRAINING IN THE UK: A STRUCTURAL DECLINE

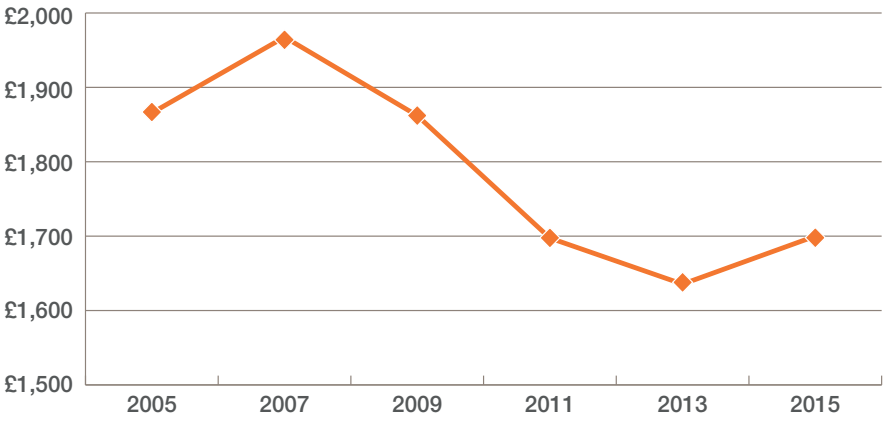
The market-based approach to skills policy in England expects training providers to respond to unmet demand from employers. However, over the past 20 years there has been a sustained and significant fall in employer investment in training in the UK. The average volume of training per worker nearly halved between 1997 and 2012. The Eurostat survey of continuing vocational training found that employer investment in the UK fell by 29.3 per cent between 2005 and 2010 (Green et al 2013). The number of employees who worked fewer hours than usual in a reference week because they attended a training course away from their own workplace declined from a peak of just over 180,000 in 1999 to less than 20,000 in 2014 (BIS 2015).

IPPR analysis of the UKCES Employer Skills Survey shows that employer investment in training has declined significantly in recent years. In England, employer spending per employee fell by 16.9 per cent in real terms between 2007 and 2013. It recovered slightly in 2015, but remains well below the levels of 2005–2009 in real terms per employee.

FIGURE 3.1

Employer investment in skills has declined in England over the last decade

Employer investment in skills per employee in 2015/16 prices in England 2005–2015

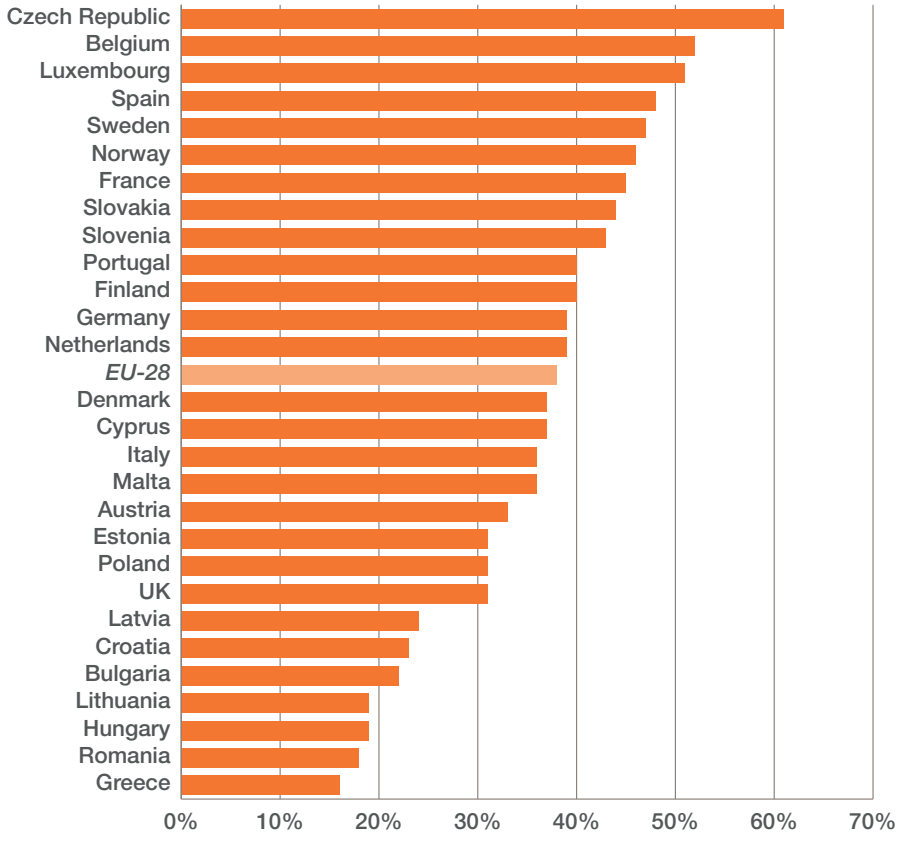


Source: IPPR calculations based on UKCES 2016

FIGURE 3.2

The UK has among the lowest levels of employee participation in continuing vocational training in the EU

Employee participation in continual vocational training (%) by EU country, 2010



Source: Eurostat 2014

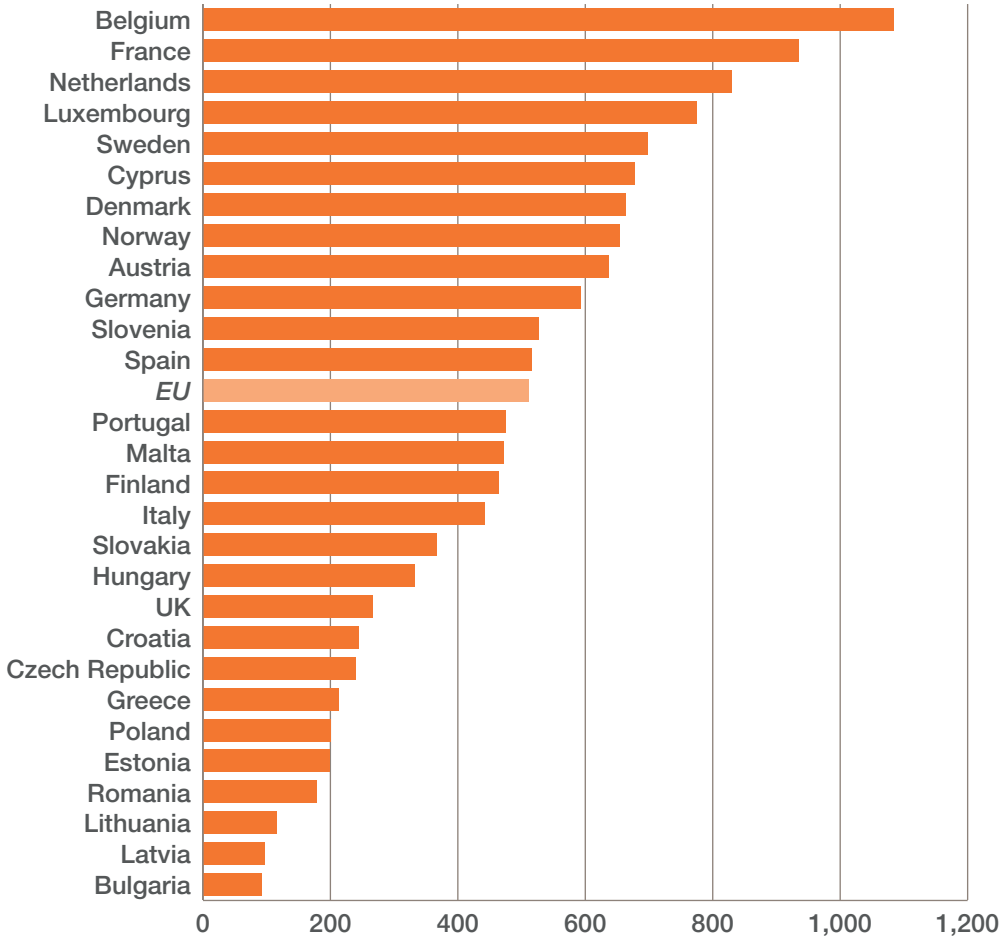
This situation reflects a worsening of long term concerns about the quality and quantity of workforce training in the UK when compared to our main competitor countries in Europe, which are seen as both indicators and drivers of the move towards a knowledge-based economy and thus the UK's long term competitiveness in a globalised economy (for example Javid 2015). The UK scores poorly on participation in employer-sponsored non-formal training when compared to other European countries (see figure 3.2). Studies show that many comparable jobs and industries train more and to a higher standard in other countries (see, for example Gospel et al 2011, Clarke 2011, Mason and Wagner 2002, Mason et al 1994, Appelbaum 2010).

Employer investment in continual vocational training in the UK is low by international standards. As figure 3.3 shows, spending on vocational training in the UK is half the EU average, and just over a quarter of the level spent in France and Belgium.

FIGURE 3.3

UK employers invest half as much per employee as the EU average in vocational training

Cost per employee (purchasing power standard) of continuing vocational training courses, by EU country, 2010



Source: Eurostat 2014

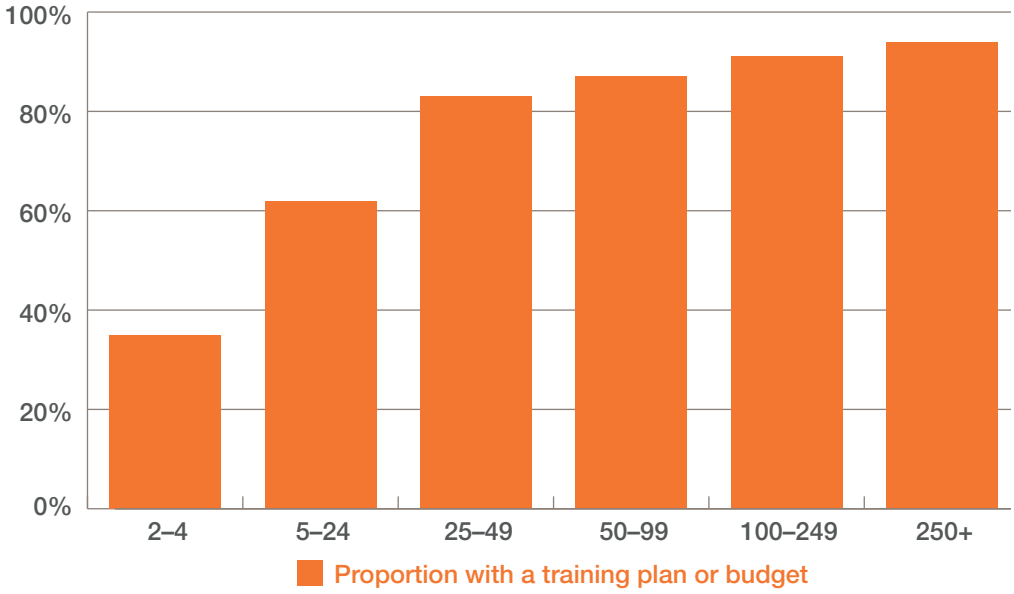
One area of training that appears to have seen rapid growth in recent years is apprenticeships, with numbers nearly tripling between 2006 and 2016. However, in practice this growth is at least partly due to the expansion of the definition of what can be funded under the government apprenticeship programme over time. This appears to have enabled some firms to use government funding to subsidise existing low level training for their current workforce, rather than being a sign that employers are engaged in training up the next generation of their workforce (see box 4.1 for a discussion of the growth in apprenticeships, or Pullen and Clifton 2016, for more detail).

3.2 WHO TRAINS?

The latest Employer Skills Survey (ESS) shows that in 2015 less than half (42 per cent) of employers in the UK had a training plan and less than a third (31 per cent) had a training budget. Low levels of training are particularly pronounced in smaller organisations, which make up a large proportion of the British economy (UKCES 2016).

FIGURE 3.4

Low levels of training are particularly prevalent in smaller organisations
UK employers with a training plan or budget, by number of employees (%), 2015



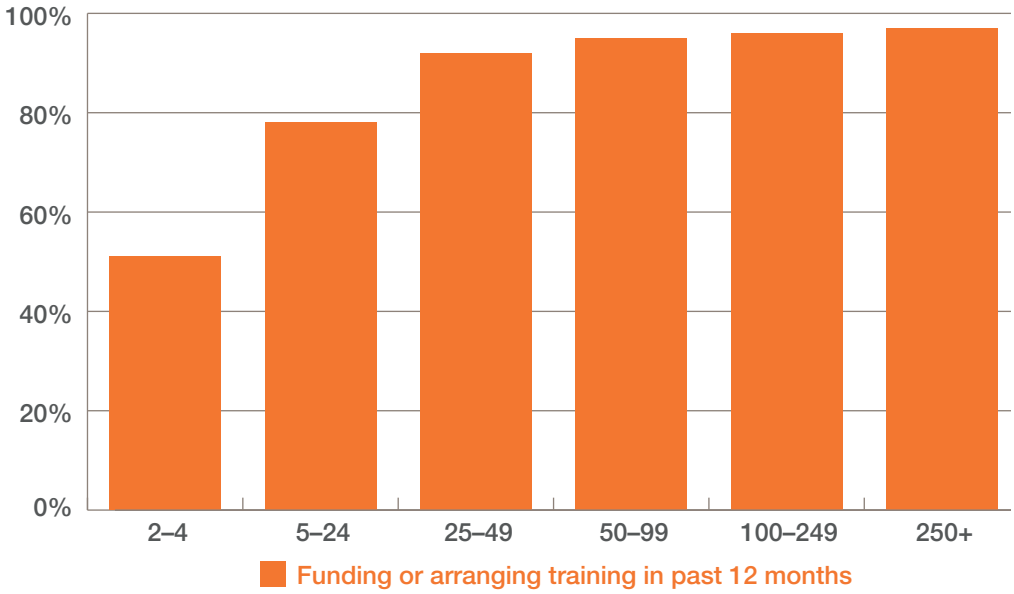
Source: Employer Skills Survey (ESS) 2015: Table 115

There is a similar pattern in terms of the provision of training. A third of employers in the UK provide no on- or off-the-job training at all, rising to nearly half among small establishments with between two and four employees (UKCES 2016).

FIGURE 3.5

A third of employers in the UK provide no training at all

UK Employers that have funded or arranged training in past 12 months, by number of employees (%), 2015



Source: ESS 2015: Table 118

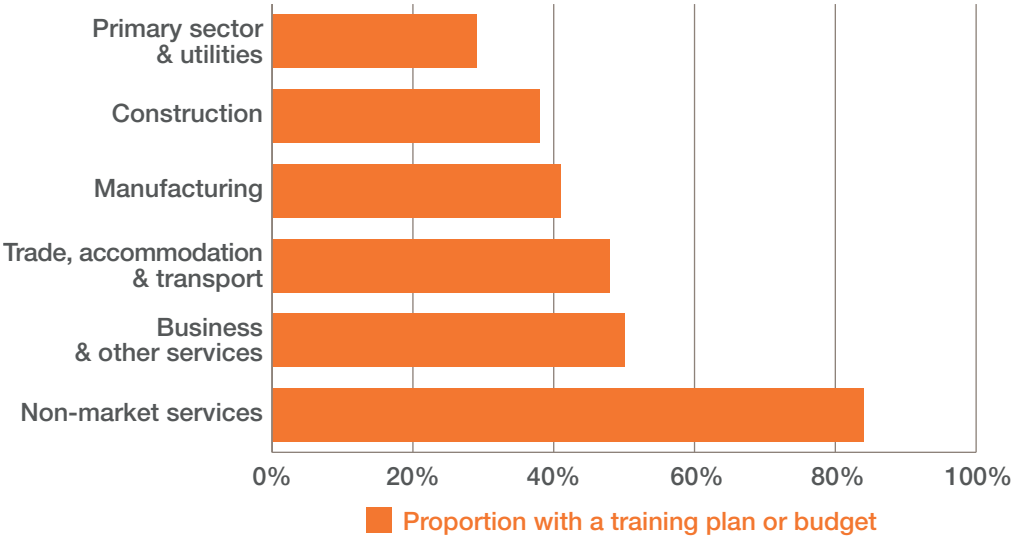
There are also variations across sectors. The overall numbers are boosted by the high proportion of organisations that train in the 'non-market services' sector – that is, primarily the public sector. Only 46 per cent of establishments seeking a profit have a training plan or budget compared to 89 per cent that are local or central government funded. Similarly, while 92 per cent of establishments that are funded by local or central government had funded or arranged training in the previous 12 months, just two-thirds (63 per cent) of establishments seeking a profit had done so. In the market sector of the economy, service sector establishments are more likely than other sectors to have a training plan or budget. Firms in financial and business services are more likely to invest in training than those in the lower skilled service sectors such as retail, hospitality and transport.

In addition to the incidence of training within firms, there are concerns about the quality of training content. In a third (32 per cent) of establishments that train, more than half of all training is either induction or health and safety training – training that is often linked to compliance with basic statutory requirements, rather than the sort of broader investments that might underpin product or service innovation. In more than one in 10 training firms this accounts for all training.

FIGURE 3.6

Firms in financial and business services are more likely to invest in training than those in the lower skilled service sectors

Employers with a training plan or budget, by broad sector (%) 2015

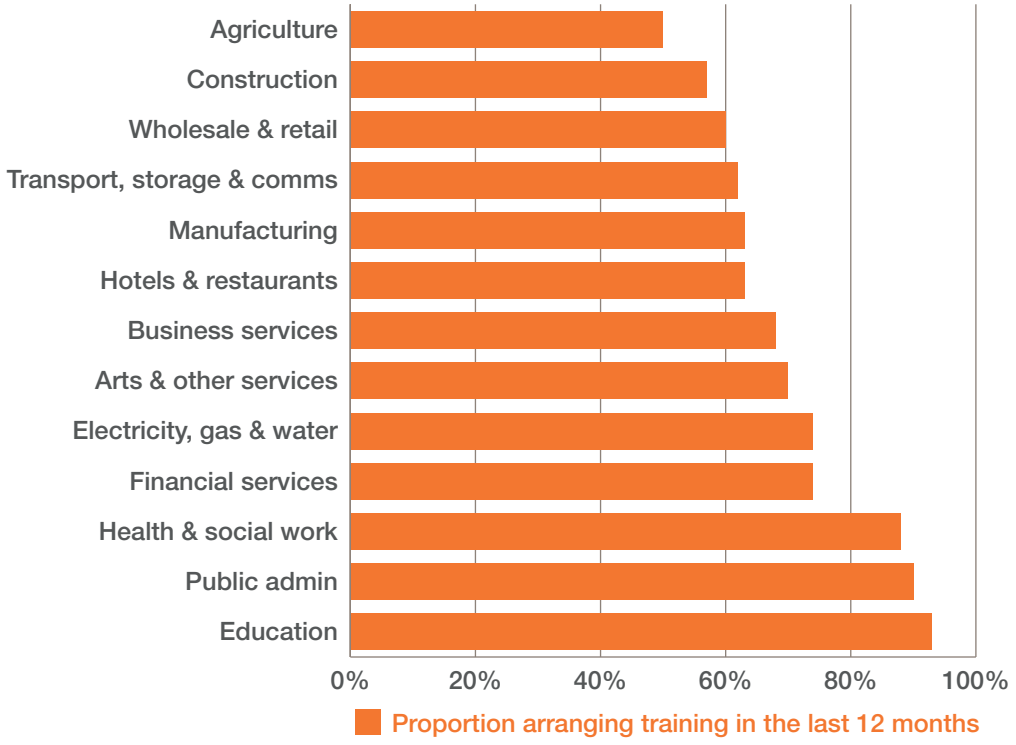


Source: ESS 2015: Table 115

FIGURE 3.7

Training levels are highest in the 'non-market services' sector

Employers that have funded or arranged training in past 12 months, by sector (%), 2015

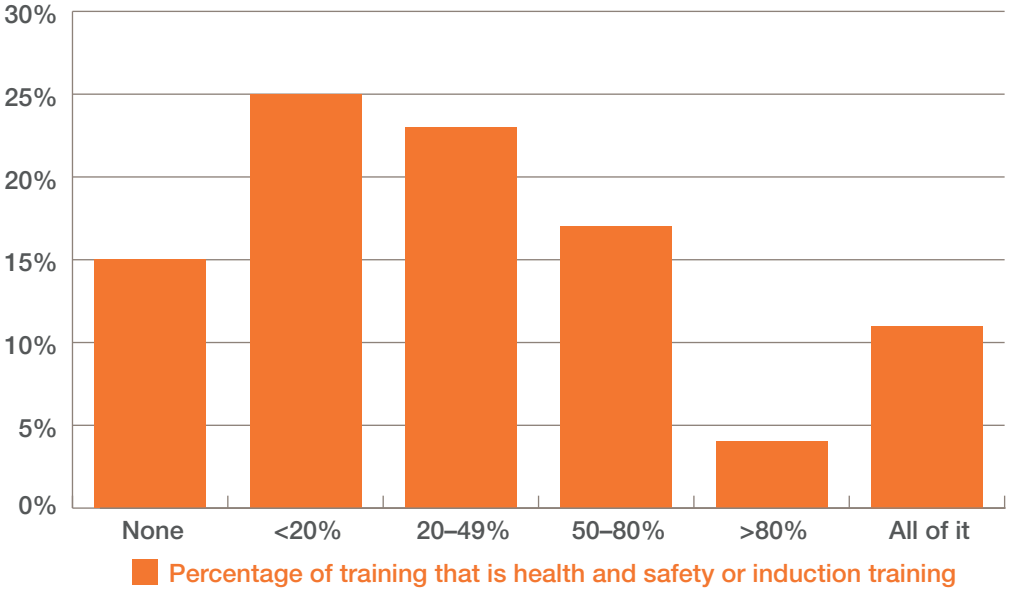


Source: ESS 2015: Table 118

FIGURE 3.8

Training is often linked to compliance with basic statutory requirements

Percentage of training employers whose training offer includes health and safety or induction training, by percentage of training that is related to health and safety or induction, 2015



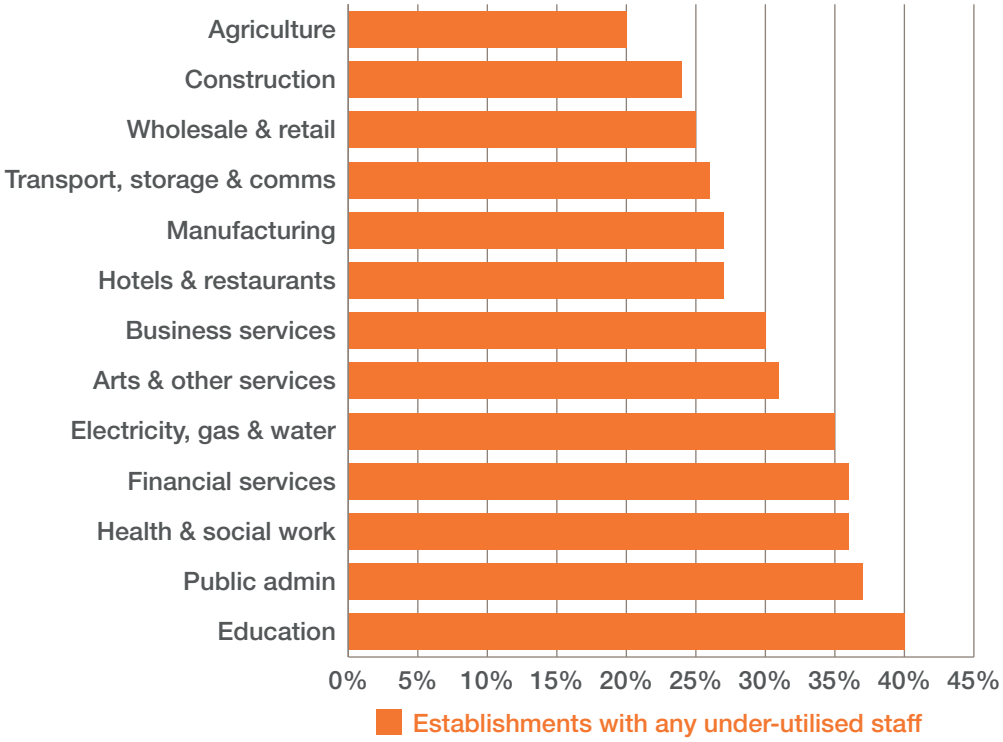
Source: ESS 2015: Table 123
Note: Percentages do not add up to 100 per cent due to 'don't knows'.

Education and training are most effective where employees have opportunities to apply and build on their skills and knowledge in the workplace. Yet three in 10 UK employers report that they do not fully utilise the skills of their employees. This problem appears to be more pronounced in the public sector than in the private sector, and in the lower skilled sectors associated with high numbers of routine jobs, such as hotels and restaurants, leisure and retail. Employer surveys suggest that two million people, or seven per cent of the workforce, have skills and qualifications that are not currently being used in the workplace. Overqualification is a particular problem among graduates. Three in five graduates are in non-graduate roles, a figure exceeded only by Estonia and Greece in Europe (CIPD 2015).

FIGURE 3.9

Employers report that they do not fully utilise the skills of their employees

Percentage of employers with any under-utilised staff, by sector, 2015



Source: ESS 2015: Table 107

3.3 WHY EMPLOYERS DO NOT TRAIN

The rest of this chapter explores why employers do not train, and the barriers that need to be overcome if they are to engage more systematically in upskilling the workforce.

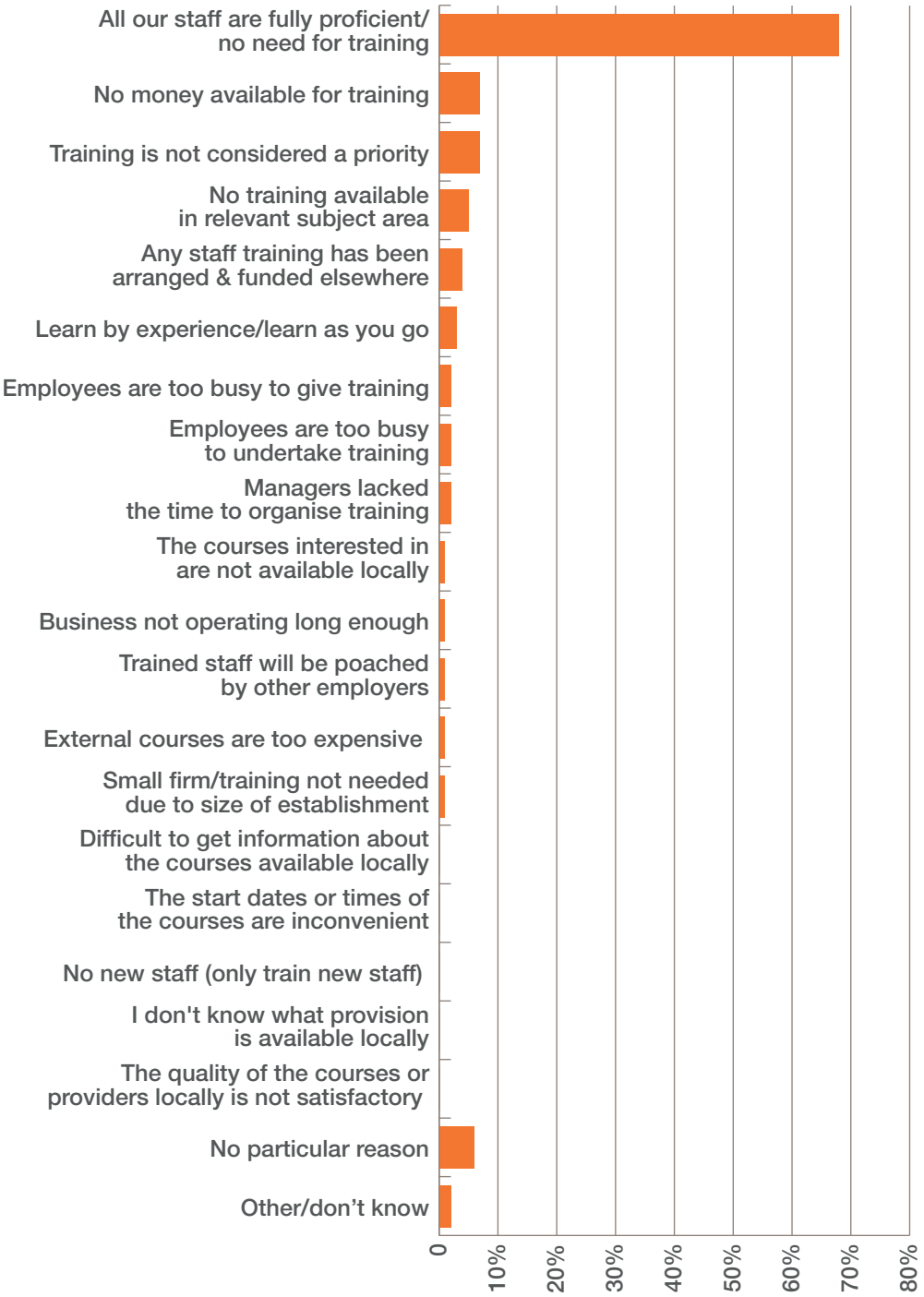
The use of low skill business models

Figure 3.10 shows that by far the biggest reason employers give to explain why they do not train is that their staff are fully proficient in their roles, cited by 68 per cent of employers. This suggests that many managers do not consider the continuous development of their workforce to be an important component of their competitive strategy. Employers do cite some other barriers to providing more training – including cost and time constraints and the availability of local provision – but these problems typically affect a very small proportion of employers. This evidence suggests that further tweaks to the cost or quality of local training provision alone would have a limited impact on levels of workforce development among unengaged companies.

FIGURE 3.10

Most employers do not believe their workforce needs additional training

Employers' reasons for not providing training, by reason (%), 2015



Source: ESS 2015: Table 120

The level and nature of the skills employers require, and thus the extent to which they train, depends on the needs of their production regime and the way they choose to organise work. Low employer investment in training therefore in part reflects the structure of the UK's economy,

which has long been characterised by a 'long tail' of businesses that do not require skilled employees in order to succeed (Vivian et al 2016). Business strategies are complex and unique, but these firms are associated with price-based competition models – competing principally on the cost rather than the quality of product or service – which generally demand low-cost, low-skilled workers, little innovation, and lower levels of investment (Lanning and Lawton 2012).

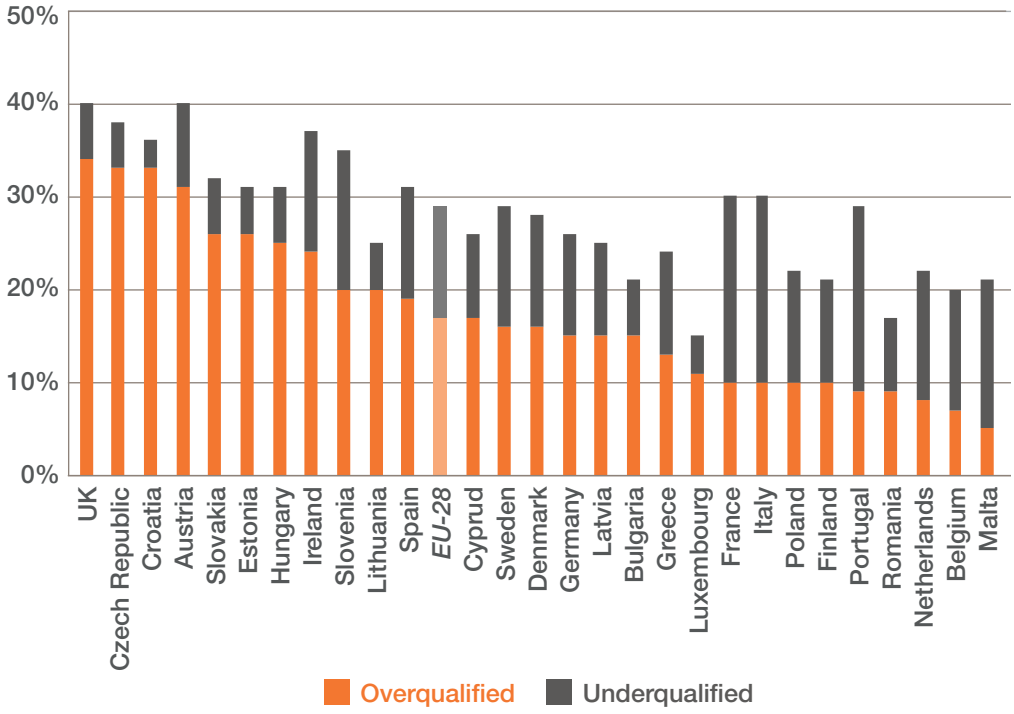
Weak demand for skills means that many employers are not benefitting from the productivity gains that should flow from a higher skilled population. As we showed in figure 2.2 above, increases in productivity have not kept up with improvements in the skill level of the population. 'Low road' competitive strategies can be found across all parts of the economy, but are particularly prevalent in the lower paid, lower skilled sectors and occupations, such as retail, hospitality, and care (ibid). In line with the evidence on the importance of firm size to training, smaller firms are also less likely to adopt high value competitive strategies (Shury et al 2010). This suggests that low training rates are at least partly related to the high proportion of small firms with limited investment capacity in the UK.

This is demonstrated in the data on skills-utilisation and overqualification. According to the Cedefop ESJ survey, the UK has the highest levels of overqualification in the EU. One in three employees in the UK say that they have a level of education qualification higher than that actually needed to do their job.

FIGURE 3.11

One in three employees in the UK is overqualified

Overqualification and underqualification by EU country (%)



Source: Cedefop 2015

Managers' decisions about how to compete reflect the wider legal and institutional framework in which they operate. A number of research studies have criticised the 'short termist' approach to business development in England, including the fact that our finance system doesn't lend enough to small firms to make long term investments in their productive capacity; the fact that our corporate governance system rewards making quick profits rather than long term investments; and the fact that our labour market regulation makes it easy to hire and fire people with fluctuations in demand, rather than encouraging firms to hold on to workers and redeploy them (Lawrence and McNeil 2014). These factors all lie behind the prevalence of 'low skill' business models in England, and highlight the need for a more holistic approach to skills and economic policy.

A problem of 'collective action'

The UK, and particularly the English, system has historically been based on a consensus that training is best left to the market, with individual employers deciding on whether and how they train their staff. As such, governments have done very little to intervene. If an employer would benefit from upskilling their workforce, the logic goes, then why wouldn't they work directly with training providers to do precisely that?

The trouble is that while upskilling workers might be good for the economy as a whole, it does not necessarily mean that it is in the interest of each individual employer to invest in training their employees. There is also a risk that somebody who gets trained up will leave and work for a competitor. In the current English system, where the state delivers a lot of education and training, it might make sense to rely on publicly funded programmes rather than invest your own resources to upskill the workforce. This means there is a problem of 'collective action', where individual firms will not invest enough in skills for the common good (Wolf 2015b).

Other countries have overcome this problem by introducing requirements that all firms contribute to the cost of training up the workforce – to reduce the chance of 'freeloading' on the efforts of others. This takes a number of forms including legal training requirements for certain sectors; the use of 'licences to practice'; or training levies which act like a tax on all employers in a particular sector. These approaches are common across coordinated economies such as Germany and Denmark – but licences to practice are also used more frequently in other liberal market economies such as the United States and Australia (Humphris et al 2009).

The introduction of an apprenticeship levy in 2017 will force greater employer investment in skills in the UK – but it is modest in scope, covering around 2 per cent of larger employers, and in scale, amounting to only 0.5 per cent of payroll bills. While the levy may encourage some employers to invest in training, questions remain about the quality of training investments that will result from the levy (Pullen and Clifton 2016). And while government action to stimulate demand for training is welcome, the levy is not part of an integrated strategy to raise standards, innovation and demand for skills among employers.

Management skills and business support

The problem of business models which do not involve upskilling the workforce or enhancing productivity is exacerbated by weak leadership and management skills. Managers need to have the right skills in place to see the potential for organising their business in a different way and improving productivity. This in turn will require them to effectively identify the training needs of their organisation. However, many managers do not have the capacity accurately to identify their skills needs, and the UK lacks a strong tradition of tailored business support to help them to develop their business models in this way. This is a particular challenge for small and medium sized enterprises, where management skills gaps hamper performance and growth (Hayton 2015).

Without specialist support, some employers also lack the skills, experience or buy-in to monitor training quality. This can result in supervisors being reluctant to provide time off and training that is seen as less relevant or useful by employees (Morris 2016).

The training market approach may have exacerbated this issue by encouraging firms to outsource their organisational training capacity to private training providers. Manager and supervisor involvement in training are crucial to ensure relevant content and assessment, appropriate time off for training, and a workplace environment that consolidates skills and creates further learning opportunities. The best specialist providers know this, and work closely with employers to ensure training is integrated into the business. However, the outsourcing of training capacity can encourage a transactional relationship between employers and training providers, limiting the involvement of managers and supervisors, and therefore the extent to which training is effectively integrated into the business.

Raising standards, articulating and coordinating skills needs across sectors and areas

The current approach to skills in England does little to support employers to raise standards or articulate and coordinate skills needs across different sectors and locations. The UK lacks institutional knowledge of how to effectively set and improve the quantity and standard of training in the workplace. Compared to other countries, there is a lack of understanding of the sector and firm-level interventions that could help employers innovate, and ensure jobs and work are designed and organised in ways that make the most of workforce skills (Lanning and Lawton 2012).

The institutions at the heart of skills and economic policy in England are weak, which makes it difficult to effectively balance the diverse needs of different employers with those of employees. This is partly due to having been subject to periodic reforms by successive governments, which have tended to swing between sector- and local-level approaches (see chapter 2 for a summary). Repeated institutional upheavals make it difficult to build certainty and effective relationships with stakeholders. Furthermore, in most cases engagement with employers has been through individual firms and chief executives, who are not always representative of the wider interests in their sectors. The apprenticeship Trailblazers, for example, are led by temporary collaborations of employers, who may be more highly engaged than others in their sectors. Reconciling the interests of different employers

has sometimes led to a focus on the lowest common denominator rather than the high quality training and development that benefits employees (Keep 2015).

The effectiveness of the institutions that govern the skills system has been limited by a remit to simply 'articulate' the skills needs of the sector/area, and the absence of any powers or resources to improve the quality or quantity of publicly-funded training being provided in colleges or the workplace. This contrasts with the more coordinated systems in Germany, Denmark and the Netherlands, where the social partners play a bigger role in the design, delivery and assessment of training provision. In these countries strong industry-led institutions provide a strong strategic function in managing the system to meet the different training needs of employers, employees and the country, and have the power to set the standards, content and assessment procedures for both work- and college-based training (Lanning and Lawton 2012).

England does not have this tradition of collective action or sector wide alliances between different firms and it is therefore difficult to coordinate efforts to upskill the workforce and improve innovation and productivity.

3.4 WILL THE APPRENTICESHIP LEVY BRIDGE THE INVESTMENT GAP?

The apprenticeship levy will raise £2.6 billion from employers in 2017/18 to invest in skills. While action to boost employer investment is clearly necessary, we find that the apprenticeship levy would neither reverse the recent decline, nor would it bridge the investment gap with the rest of the EU.

Had the apprenticeship levy been in place in 2015, it would have increased employer investment in England by £2.14 billion. This would still have been lower in real terms per employee than the levels invested between 2005 and 2009.

Had the apprenticeship levy been in place in 2015, it would have increased employer investment in England by £2.14 billion.[9] Even with this boost, employer investment would have still been well below the levels invested between 2015 and 2009. Indeed, that total is less than half the value of the real-terms decline that occurred between 2007 and 2015.

3.5 SUMMARY

This chapter has shown that the low levels of demand for skills in the UK, linked to the prevalence of low-productivity business models, has limited the effectiveness of our supposedly 'employer-led' or 'demand-led' skills system. Without efforts to raise the demand for skills, the capacity of employers to train or to promote skills utilisation, the ability of the skills system to improve productivity, pay and progression will inevitably remain limited. There are four key barriers that need to be overcome in order

9 Total spending has been adjusted for inflation using an economy-wide measure (year-on-year GDP deflator for financial years). Spending figures are taken from the UKCES Employer Skills Survey (2011–2015) and National Employer Skills Survey (2005–2009) and include indirect costs such as wage costs. Some weighting procedures changed between the surveys in 2009 and 2011 and the change between these two dates should therefore be interpreted as an estimate.

to increase employer involvement in skills and ensure they adapt to the trends that will shape the economy in future.

- The use of low skill business models – which itself is driven by legal and financial barriers that incentivise 'short-termist' business practices
- A problem of collective action – where employers are incentivised to 'freeload' rather than invest in upskilling their own workforce
- Poor management skills and a lack of business support – which prevents firms from innovating and becoming more productive and upskilling their workforce
- A lack of institutions to help employers raise workplace standards and effectively identify and coordinate to meet the skills they need for the future across sectors and local areas.

4.
THE QUALITY AND QUANTITY OF STATE-FUNDED VOCATIONAL TRAINING

In a well-functioning market, the assumption is that providers should supply goods or services that meet the needs of end consumers. In the case of the skills system, providers are expected to supply the training and skills support that are valued by employers and learners. This chapter examines the evidence on the quality of training delivered by providers across England. The findings suggest that, faced with low demand from employers, relatively low and flexible standards set by the state, and a set of 'perverse incentives' in terms of funding and assessment, many providers have tended to focus on courses that are cheaper and easier to deliver, rather than working in a meaningful way with local employers to help upskill the workforce. At the same time, the lack of high quality specialist vocational training means that the needs of skilled sectors go unmet.

We argue that current reforms to make the system more 'employer-led' risk further exacerbating this problem unless the firm-specific needs of employers are better balanced with the needs of employees. Far more focus will be required on the quality of vocational training, and the way in which providers work with employers, if the skills system is to deliver meaningful outcomes over the next few decades.

4.1 TRAINING PROVISION IN ENGLAND

Skills training for adults is delivered by a mixed market of public, private and third sector providers. The provider base is extremely diverse and varies over time and by region. In some areas, providers will have to compete with each other to offer courses. In other areas, there will be one dominant provider offering particular courses or programmes, or, in some cases, there will be no provision available at all. Table 4.1 summarises the main providers of adult education and training in England. It shows that specialist providers make up a very small proportion of the total number of funders and receive the smallest proportion of government funding.

TABLE 4.1

Providers of adult education in England

Provider	Size of sector	Description
General FE colleges & tertiary colleges	Around 235 colleges serving 2.3 million learners (including 16–18 year olds); government funding worth £2.3 billion.	Large institutions that offer a broad range of subjects for all adult learners (and increasingly for 16–19-year-olds as well). They deliver the majority of classroom-based courses for adults classified as 'education and training' by the SFA. These were historically run by local government but, following incorporation in 1993, were given self-governing status.
Independent providers	Around 600 providers have direct contracts with the SFA (although many more will operate as subcontractors). They serve around 950,000 learners and receive government funding worth £1.5 billion.	There is an extremely wide range of independent skills and training providers in England. The majority will be for-profit companies who provide skills training and apprenticeships for particular sectors and employers. The majority of adult apprenticeships (up to 75 per cent) have their education component delivered by independent providers. Some employers will also receive government funding to deliver training to their staff.
Adult community learning providers	Around 250 community learning providers, including many local authorities. They serve around 360,000 learners and receive government funding worth around £300 million.	Local learning provision targeted towards helping 'hard to reach groups' engage in more formal education. They also deliver recreational learning (usually on a cost-recovery basis by charging fees to learners).
Specialist providers	Around 75 providers with government funding worth £200–£300 million.	There are a number of providers which offer specialist provision – for example to learners with disabilities or learning difficulties; or to learners specialising in particular disciplines, eg agriculture and horticulture. This is a very disparate group of providers who deliver a small amount of adult FE in niche areas.

Source: BIS 2016
Note: All data is for 2013/14

Around half of government funding for adult skills flows to FE Colleges. Over the last five years there has been a trend towards consolidation in the FE sector, as the tight financial climate has led a number of colleges to merge. Many FE colleges are therefore increasingly large, and often provide a wide range of general provision from GCSE resits to higher education and community courses, as well as vocational provision. The government has embarked on a number of ongoing area reviews which seek to help colleges strengthen their financial viability in the context of reductions to the adult skills budget (see chapter 2) and are likely to further accelerate the trend towards large, general colleges.

The next largest recipients of the adult skills budget, receiving about a third of the total, are independent providers. These provide most apprenticeship training on a mostly for-profit basis.[10] Critics have argued that the training market approach has tended to encourage a transactional relationship, with too many of these providers effectively 'selling' off-the-shelf training products to employers based on a list of their skills needs – leading to poorly integrated training that is seen as having little relevance by managers and employees alike (Morris 2016, Keep 2015). As a result the adult training market tends to be characterised by a large number of generic courses with

10 A complicating feature of the provider landscape is the growth of subcontracting – with many colleges or larger private providers subcontracting the delivery of particular courses to smaller private providers.

poor labour market outcomes, while at the same time failing to meet the skills needs of employers.

Specialist training providers can play a key role in helping employers to build strong training pathways that are integrated with the business: providing the right environment to consolidate and make the most of trainees' skills, based on an understanding of the way goods and services are produced, and the challenges and possibilities facing the organisation (Fuller and Unwin 2016). However, a relatively small proportion of the training market in England is characterised by specialist providers operating in this way.

TABLE 4.2

Most adult learners are enrolled on classroom-based vocational programmes and basic skills courses

Funded adult learners, by type of training/courses enrolled in, 2014/15

Education & training	1,355,000
Apprenticeships	677,600
Community learning	609,700
Workplace learning	68,000

Source: SFA Further Education and Skills Statistical First Release June 2016
Notes: Education and Training is a broad category including most classroom-based vocational programmes, as well as basic/functional skills

Poor labour market outcomes

There is much evidence that the current skills system often fails to deliver the desired labour market outcomes.

TABLE 4.3

Most adult skills provision is at or below level 2

Adult learners by qualification level and age (2014/15)

	Below level 2 (excl. English and maths)	English & maths (predominantly below level 2)	Level 2	Level 3	Level 4+
Total learners	597,300	905,600	1,015,600	451,800	43,500
Age					
19–24	*136,900*	*275,900*	*328,100*	*217,700*	*13,200*
25–49	*337,100*	*533,000*	*553,900*	*201,400*	*25,400*
50+	*123,300*	*96,700*	*133,600*	*32,700*	*4,900*
Proportion	19.8%	30.0%	33.7%	15.0%	1.4%

Source: SFA Statistical First Release Learner participation, outcomes and level of highest qualification data tables March 2016
Note: Some learners may be studying for multiple qualifications at different levels (for example they could be studying towards a level 2 and level 3 qualification simultaneously) and may therefore be counted 'twice' in this data.

Table 4.2 shows that over half of all adult learners (aged 19 and above) in 2014/15 were enrolled on classroom-based vocational programmes or basic skills courses, followed by adult apprenticeships and community learning.[11]

11 Non-apprenticeship workplace learning programmes are a much smaller proportion of the overall cohort – reflecting the fact the government has shifted resources from earlier workforce development programmes into adult apprenticeships in recent years.

Both classroom-based courses and apprenticeships tend to be dominated by lower level qualifications. Half (49.8 per cent) of all qualifications being studied by adult learners in 2014/15 were below level 2, and 83.5 per cent of all adult learners were studying for a qualification below level 3 (see table 4.3 below). The proportion of people on lower level courses is even higher among older age categories – 87 per cent of learners aged over 25 are studying towards a qualification that is below level 3.

Many of these qualifications appear to hold relatively limited value in the jobs market. A number of studies have compared the earnings of those who hold a qualification with those who do not (see for example BIS 2011, 2014). These show that there are good returns for having a level 2 or 3 qualification, with two notable exceptions:

- First, the wage returns for people who complete their qualifications after the age of 30 are particularly low. This suggests that the supply of skills programmes and qualifications that is on offer to older workers is not helping them to progress in terms of wages.
- Second, those people taking NVQs do not achieve good wage returns – especially at level 2. Indeed, those completing an NVQ over the age of 30 actually have negative returns. This is a problem because NVQs are predominantly taken by older adults (41 per cent of people attaining NVQs between 2001 and 2009 were aged 30+) (BIS 2011), and because NVQs have underpinned most state funded workforce development plans in recent years. Those with City and Guilds (C&G) and BTECs appear to fair better – suggesting these qualifications have more enduring appeal for employers.

TABLE 4.4

Level 3 qualifications have lower wage returns for older learners

Estimated returns to qualifications at level 3, compared to those with a level 2 qualification, by age of acquisition

Age	Wage return C&G	Wage return BTEC	Wage return NVQ
15–16	11%	12%	1%*
17–18	11%	15%	9%
19–20	14%	15%	11%
21–25	14%	13%	11%
26–30	6%	12%	6%
>30	4%	7%	-1%*

Source: BIS 2011 'Returns to intermediate and low level vocational qualifications'
*Lack of statistical significance

The studies referenced above also tried to calculate the wage returns for qualifications that are below level 2. This is important given nearly half of all qualifications being studied by adults are at this level. Unfortunately, the analysis on wage returns for this group of learners was not robust enough to present. A more recent study compared various labour market outcomes for learners who achieved a qualification with those who enrolled on a programme with the same learning aim, but did not achieve the qualification. Those completing a full level 2 qualification or above saw a material improvement in their earnings, and were more likely to be in work and off benefits than those who did not achieve the qualification.

Those who achieved a qualification below level 2, however, were no more likely to be in work or to have avoided being on benefits than those who enrolled on the same programme and did not achieve the qualification. The study also confirmed the finding from earlier studies that those who achieve their qualifications aged 19–24 generally see bigger returns than those who achieve their qualifications aged 25 and over.

TABLE 4.5

Level 2 NVQs have low wage returns, especially for older workers

Estimated returns to qualifications at level 2, compared to those with a level 1 qualification, by age of acquisition

Age	Wage return C&G	Wage return BTEC	Wage return NVQ
15–16	3%*	-12%*	1%*
17–18	5%	7%	4%
19–20	12%	2%*	4%
21–25	11%	10%*	7%
26–30	9%	17%	0%*
>30	6%	0%*	-6%

Source: BIS 2011 'Returns to intermediate and low level vocational qualifications'
Notes: The content of qualifications has changed over time – so the wage return for older workers may reflect the labour market value of BTECS, NVQs, and C&Gs from several years ago, rather than the current offer.
*Lack of statistical significance

TABLE 4.6

Low level qualifications have relatively little labour market value

Estimated three to five year average returns for different qualification levels

	Earning returns (%)	Employment probability (percentage points	Benefit probability (percentage points)
Below level 2	2%	0	0
Level 2	1%	1	-1
Full level 2	11%	2	-2
Level 3	3%	1	-1
Full level 3	9%	4	-2
Level 4+	8%	1	-1

Source: BIS 2014
Note: Returns compare those who achieved a qualification, with those who had the same learning aim but didn't achieve the qualification.

Failing to match employer demand

The UK has a liberal market economy which means that we generally assume people will gain a qualification and then try and find a job in the labour market – as opposed to more actively coordinating the supply of skills to the needs of employers. Many people study courses at HE and FE that therefore don't directly lead to a specific career. The advantage is that this creates a relatively flexible jobs market – where people can move into different sectors and fields. The disadvantage is that the supply of skills through the HE and FE systems does not always match employer needs.

The lack of high quality vocational training provision in England means that employers can struggle to find providers to meet their specialist skills needs, exacerbating small but persistent skills gaps in some sectors. The UKCES Employer Skills Survey found that 14 per cent of employers reported a skills gap in their workforce. Over one in five (22 per cent) unfilled vacancies were the result of skills shortages, amounting to 209,000 vacancies, up from just 91,000 in 2011. Over two-thirds of businesses that experienced difficulty in recruiting, saw a direct financial impact on their organisation (UKCES 2016c).

Previous research has shown that there is a particular issue for 'intermediate technical jobs' because they are often roles which require relevant training or qualifications. Those in 'lower skilled jobs' tend to require generic work-readiness; while those in 'higher skilled professional' jobs tend to be supplied through the higher education system. The Employer Skills Survey shows that 39 per cent of existing vacancies for workers in 'skilled trades occupations' are the result of skills shortages (Winterbotham et al 2014).

Overall, the generic nature of skills provision means that the system leads to significant skills mismatches. IPPR has recently partnered with Burning Glass Technologies to create a new tool which matches data on the supply and demand for different skills in England. This tool allows us to see the demand for different skills, gathered from online job adverts and normalised against official labour market statistics. It then compares the supply of qualifications through the FE system and whether they match labour market demand – based on previous employment patterns of people with the same qualifications.[12] Data on the supply and demand for intermediate skilled occupations is shown in table 4.7. This shows that:

- There is a large 'skills gap' in some occupations. In terms of the absolute number of vacancies outstripping supply, the largest gaps are in: administrative occupations; food preparation and hospitality trades; metal machining, fitting and instrument making trades; sales, marketing and related associate professionals; and health associate professionals. In proportional terms, there is a particularly big gap in Health Associate Professionals, where there are 7 vacancies for every individual completing FE with the relevant qualifications.
- There is also a problem of 'oversupply' in some occupations. The biggest over supply is in: Sports and Fitness Occupations; Administrative Occupations Finance; Protective Service Occupations (such as security); Artistic, Literary and Media Occupations; and Construction and Building Trades. The gap is proportionately largest in Protective Service Occupations where there are nearly seven FE finishers for every entry level vacancy, and for Transport Associated Professionals and Administrative occupations, where there are four finishers for every vacancy.

12 To access the 'Where the work is' tool, visit: http://wheretheworkis.org/about.html

TABLE 4.7

The supply of intermediate skills through the FE system does not match employer demand[13]

Current demand (vacancies) and current supply (qualified new-entrants) in England, 2014

Occupation	Demand (entry-level vacancies)	Supply (FE finishers with relevant qualifications)	Gap (number)	Gap (ratio)
Other administrative occupations	68,622	32,931	35,691	2.08
Food preparation & hospitality trades	49,614	23,524	26,090	2.11
Metal machining, fitting & instrument making trades	20,595	7,242	13,353	2.84
Sales, marketing & related associate professionals	29,004	16,104	12,900	1.80
Health associate professionals	14,989	2,142	12,847	7.00
Public services & other associate professionals	20,565	9,705	10,860	2.12
Welfare & housing associate professionals	17,801	7,915	9,886	2.25
Business, finance & related associate professionals	20,818	14,827	5,991	1.40
Science, engineering & production technicians	24,206	18,250	5,956	1.33
Secretarial & related occupations	24,055	19,042	5,013	1.26
Metal forming, welding & related trades	7,649	2,878	4,771	2.66
Vehicle trades	25,636	21,281	4,355	1.20
Administrative occupations: office managers & supervisors	8,135	4,115	4,020	1.98
Information technology technicians	18,357	15,422	2,935	1.19
Administrative occupations: records	17,154	14,460	2,694	1.19
Electrical & electronic trades	16,328	15,147	1,181	1.08
Skilled metal, electrical & electronic trades supervisors	1,970	1,019	951	1.93
Textiles & garments trades	1,257	696	561	1.81
Draughtspersons & related architectural technicians	3,257	3,270	*-13*	1.00
Conservation & environmental associate professionals	134	170	*-36*	0.79
Printing trades	1,343	1,452	*-109*	0.92
Other skilled trades	5,778	5,943	*-165*	0.97
Construction & building trades supervisors	838	1,838	*-1,000*	0.46
Transport associate professionals	321	1,356	*-1,035*	0.24
Legal associate professionals	1,802	3,132	*-1,330*	0.58
Agricultural & related trades	4,179	8,917	*-4,738*	0.47
Building finishing trades	5,959	12,151	*-6,192*	0.49
Design occupations	4,039	13,353	*-9,314*	0.30
Administrative occupations: government & related organisations	3,914	15,873	*-11,959*	0.25
Sports & fitness occupations	7,977	20,083	*-12,106*	0.40
Administrative occupations: finance	16,186	28,632	*-12,446*	0.57
Protective service occupations	2,375	15,459	*-13,084*	0.15
Artistic, literary & media occupations	8,770	22,527	*-13,757*	0.39
Construction & building trades	29,786	46,102	*-16,316*	0.65

Source: Burning Glass Technologies 2016
Note: The demand for skills is calculated from vacancies for 'entry level' jobs (that require less than 2 years' experience), in intermediate skilled roles, as defined by the Standard Occupation Classifications. The supply of skills is calculated by the number of people who gained a qualification defined as relevant to an occupation by the occupational patterns of previous entry-level workers with qualifications in that subject area. This helps to take account of the fact people may work in occupations that are not directly tied to their qualification.

13 The problem of skills mismatch is not quite as simple as looking at the supply and demand of skills using qualifications. That is because people might learn skills qualifying on a particular course – but then go and use those skills in a different sector after they have qualified. Many people qualify as hairdressers, for example, but go on to work in other customer facing jobs (Durman 2016). They may also develop a set of foundational skills and knowledge that help them in later life. To some extent, this is captured in the data presented above, because it is based on the occupational patterns of previous entry-level workers with qualifications in that subject area.

4.2 PERVERSE INCENTIVES: WHY DO PROVIDERS OFFER PROGRAMMES THAT DO NOT GENERATE LABOUR MARKET RETURNS?

The evidence on the training market presented above suggests that providers are failing to effectively match supply with demand for skills, with skills shortages being one of the results, and that a large number of adult learners are taking low level qualifications that have little or no material impact on their earnings. The rest of this chapter examines why providers offer skills programmes that do not always generate the desired economic and social returns.

A striking feature of the current system is the extent to which provision is shaped by national decisions, rather than local demand from employers or informed demand from learners. There are a large number of pressures on providers to deliver particular outcomes, including through the funding and accountability regime. There are usually desirable intentions lying behind these pressures, such as promoting value for money or encouraging course completions. However, when they are combined these pressures can generate perverse incentives that lead providers to deliver programmes that take little account of the interests of learners or the needs of different regional economies.

There is a particular concern with the way the funding regime interacts with performance measures and government targets to deliver a high volume of low level programmes. Providers are rewarded for attracting learners onto short courses that result in a qualification and that they are likely to successfully complete. The perverse consequence is that this can incentivise providers to enrol learners onto 'easier' and lower-level courses rather than supporting them to progress onto high skill levels. This helps explain why 83 per cent of adult learners are placed on courses below level 3. In their recent review of funding and accountability in Further Education, Fletcher et al (2015) argued that the introduction of 'Floor standards' and 'Notices to improve' had a particularly profound effect on provider behaviour:

> *'Minimum levels of performance proved to be a powerful tool for changing behaviour among college managements in terms of the courses they chose to offer and how they organised themselves. They also led many to concentrate on work which most readily yielded good results, regardless of national priorities to enlarge provision in the most challenging subjects. [...]*
>
> *'Notices to improve had an immediate impact on those who received them. With a year to have them lifted, college managers closed courses, replaced staff or advised students to take lower-level qualifications.'*
>
> Fletcher et al 2015

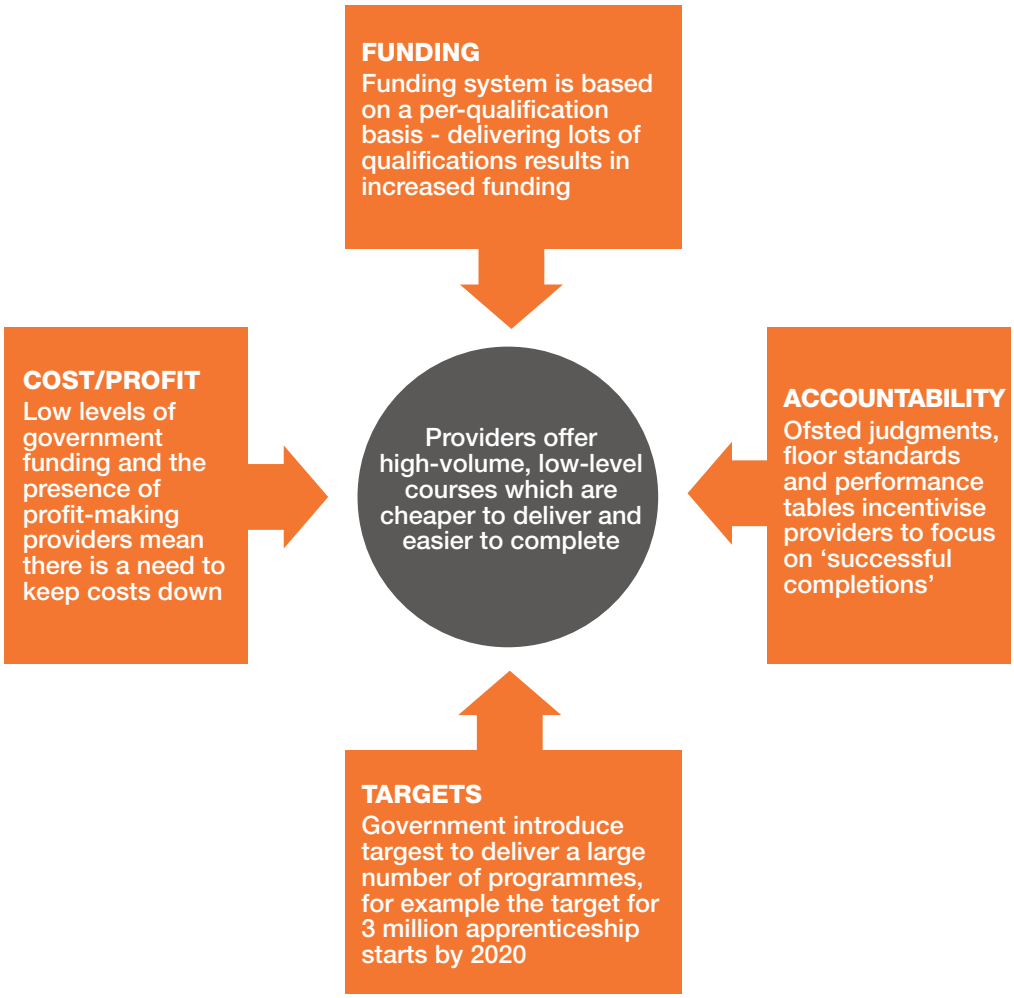
The problems facing the adult skills system are comparable to the problems that Alison Wolf identified in her review of vocational education for 16–18 year olds (Wolf 2011). Wolf argued that schools and colleges had been incentivised to offer lots of short low level qualifications which do not always help learners to progress into work or high levels of study. She recommended sweeping changes to funding and accountability system for 16–18 year olds, including removing some qualifications from league tables and the introduction of 'programme funding' – where

schools and colleges are given an amount of funding for each pupil and then left to tailor their course to their needs – as opposed to being funded for each qualification they successfully deliver. This challenge is exacerbated in the adult skills system by the presence of profit making providers and low levels of government funding – which mean that providers have added incentives to keep costs down and only offer high volume courses that can generate a profit.

This has been compounded by the fact that learners who already hold a full level 2 qualification are no longer eligible for government funding if they want to study a level 3 or level 4 course. These learners are eligible for advanced learner loans (ALL) to cover the costs of learning, but they have to be repaid. This seems to have led to a decline in demand for such courses; the year ALLs were introduced there was drop of 31 per cent in the number of learners aged 24 and over on the courses eligible for ALL funding (Adams et al 2016).

FIGURE 4.1

The pressures on skills providers to offer lower level qualifications



The adult training sector is perhaps better characterised as an arm of state-led basic skills training for disadvantaged groups in society – as opposed to a vehicle for engaging employers to improve productivity, pay and progression. This helps explain why the adult skills system has struggled to address deeply engrained regional inequalities in terms of skill levels, pay and productivity.

4.3 HIGH LEVELS OF DEADWEIGHT

Current reforms seek to address the quality problems in the current system by making it more employer-led. However, previous attempts to make the adult skills system more 'employer-led' have led to concerns about high levels of deadweight in the system, where existing workplace training that would otherwise be funded by the employer, including basic induction or health and safety training, is rebadged to make it eligible for taxpayer subsidy. The Labour government's flagship workforce development programme, Train to Gain, was criticised for high levels of deadweight. An evaluation by the National Audit Office found that half of employers who received Train to Gain funding said they would have provided the same or similar training in the absence of the programme (NAO 2009).

This problem was given as one of the main reasons for scrapping the programme, and led the Coalition government to shift most funding for workforce development into apprenticeships. However, it appears that the current government's apprenticeship programme is also beset by problems with deadweight (see box 4.1). A series of highly critical reports have highlighted the growth of apprenticeships in lower paid, lower skilled sectors such as retail and business administration, and the increasing use of apprenticeships to accredit the existing skills of people who have already been doing their jobs for a long time (for example, Ofsted 2015, Social Mobility and Child Poverty Commission 2016).

In the absence of strong demand from employers, the risk is that the current reform focus on better meeting firm-specific priorities will further entrench the focus on narrow, job-specific qualifications that fail to provide the broader, more transferable skills that benefit employees. Currently employee voice is almost completely absent from the institutions overseeing training design, while the state does little to set minimum standards that safeguard learners' interests in broader, higher quality training. The legal framework governing what counts as an apprenticeship is weak, for example, and the lack of substantive training content specified in NVQs means that there is no focus on the broader theoretical or contextual knowledge required to support mobility and progression in the labour market and effectively innovate and apply knowledge in the workplace (see Fuller and Unwin 2016).

BOX 4.1 APPRENTICESHIPS: A CASE STUDY OF ENGLAND'S 'PROVIDER-LED' SKILLS SYSTEM

Apprenticeships traditionally provide a unique combination of classroom- and work-based training to support young people with the transition into work and responsible adulthood. In recent years, they have also been championed by politicians as a tool to increase national productivity and improve the wage and employment prospects of individuals of all ages. The current government hopes to deliver three million apprenticeships over this parliament.

As with other areas of adult skills policy, the apprenticeship system relies on training providers to engage employers in efforts to provide more transferable training for their employees. However, the growing reluctance among employers to hire and train young people appears to have led these providers to focus on learners that are easier and cheaper to accredit.

This focus has been accelerated over the last decade by the increasingly flexible approach to what can be funded under the government's apprenticeship programme. The Labour administration expanded apprenticeships to include level 2 training and courses for adults, and cuts to the adult skills budget under the Coalition government led to a sharp spike in the number of older and existing employees doing apprenticeships, suggesting other government-funded workplace training schemes were simply rebadged as apprenticeships (see graph below).

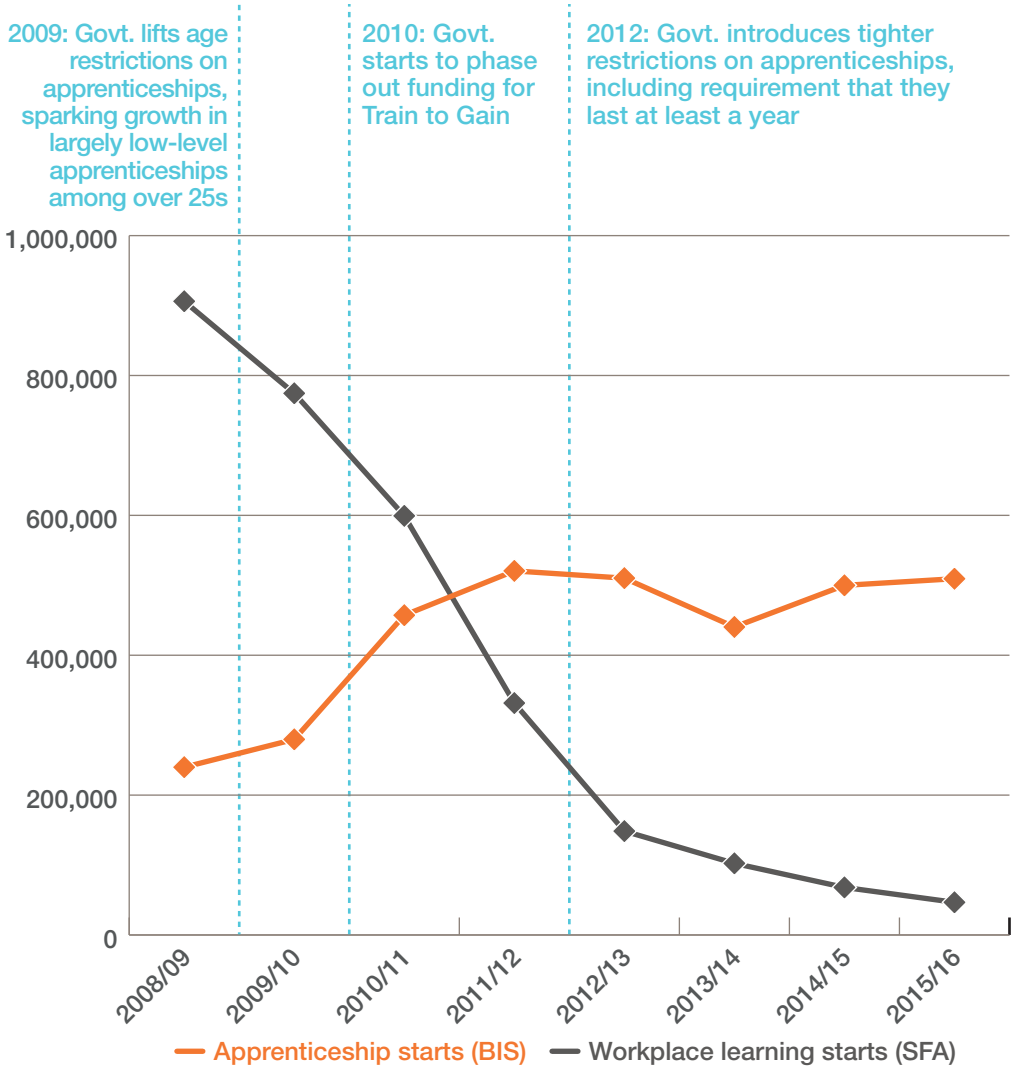
As a result of these trends the profile of apprenticeships has changed dramatically. In 2015/16, under 25 year olds accounted for just 56.0 per cent of apprenticeship starts. A decade previously, 99.5 per cent of apprenticeship starts were under 25 year olds (DfE 2016). In addition to the changing age profile, Increasingly the majority of apprentices across all ages are existing employees rather than new entrants to the labour market (see Lanning 2016). The duration, level and standards of apprenticeship training, particularly in England are well below what would be expected in other countries. A fifth of apprentices receive no formal training at all (BIS 2014), and wage returns on some courses are non-existent (for example Broughton 2015).

The Conservative government has introduced stronger minimum standards to tackle low quality provision, and current reforms seek to make the system more 'demand-led' by enabling employers to directly draw down funding in order to pay training providers. However, and at the same time, the government is further increasing flexibility by removing the requirement that apprenticeships include a nationally recognised qualification and enabling employers to set standards. There are concerns that this may provide insufficient oversight of the content and delivery of training, and thus replicate some of the weaknesses and deadweight inherent in the current system (Pullen and Clifton 2016).

FIGURE 4.2

Workplace training programmes largely follow government incentives

Number of apprenticeship and workplace learning starts, 2008/9–2015/16



Source: FE Data Library 2017 and SFA 2016

4.4 SUMMARY

This chapter has highlighted the lack of high quality specialist vocational training provision in England. It has shown that providers do not always offer courses and qualifications that match labour market demand. This means that many adults may be enrolled on courses which have relatively little benefit in terms of pay, progression and productivity. It is clear that our skills system will not be up to the job of meeting the economic challenges of the future.

Part of the problem is the assumption that the interests of firms and individuals are aligned. Employers' interests lie in meeting their own firm-specific needs. Given the difficulty policymakers have had engaging them in the need to invest in transferable skills, providers have instead tended to design their offer to meet central government funding and accountability

rules. Many of these rules have inadvertently incentivised providers to focus on delivering low level courses which can be delivered cheaply and at volume. Some of the key barriers identified in this chapter include:

- **Perverse incentives:** the adult funding system pays providers on a 'per qualifications' basis, while the accountability system rewards them for completions. In the context of reducing funding and the predominance of profit-making providers, this incentivises them to offer lots of short and low level qualifications, rather than focussing on progression into high skilled courses.
- **High levels of deadweight:** the state funds training that would otherwise be funded by the employer, exacerbated by a flexible approach to setting vocational training standards and poor quality control by the state.
- **A nationally designed system with insufficient local focus:** themajority of vocational training provision is driven by a funding and accountability system set by central government agencies, which means that providers are not incentivised to respond to the needs of employees or local employers.

5. LEARNERS AND THE SKILLS MARKET

This chapter explores how adult learners fare in the skills market. It examines the patterns in terms of who is accessing learning and who is not, as well as the barriers to doing so. It explores how the current system is failing to tackle the entrenched problems of regional and social disadvantage in England, and argues that the barriers learners face mean the demand for skills training from learners is likely to remain weaker than expected.

5.1 LEARNERS: WHO PARTICIPATES IN ADULT FURTHER EDUCATION?

In 2014/15 there were 2.6 million adults participating in government-funded further education (FE Data Library 2017).[14] Learners come from a wide range of backgrounds. Over half (56 per cent) of learners in FE are female, nearly 20 per cent are from black, Asian and minority ethnic backgrounds, 15 per cent have learning difficulties or disabilities, and 15 per cent are on work-related benefits.[15] Many adults enrolled in FE will either be in work, have families and caring responsibilities, or be on low incomes. They are therefore constrained in their ability to travel, with 70 per cent of learners travelling less than 10 kilometres from their home to reach their learning provider. This means that most FE providers serve a relatively small local community (BIS 2016).

Adults choose to enrol in FE for a wide variety of reasons. Many of these will be economic reasons, including a desire to retrain for a different career, to improve their skills in order to progress at work, or to gain skills in order to help them find a job. Some people who are out of work are required to enrol on a training programme in order to receive Jobseeker's Allowance. In addition to these economic reasons for taking part in FE, a number of adults may opt to enrol on a programme for other reasons, for example to help build their confidence or have a 'second chance' at education if they didn't fulfil their potential at school, to gain English qualifications if they have arrived from a foreign country, or purely out of personal interest.

There is a significant difference in participation in further education by region, with higher levels in the north than in the south of England. As figure 5.1 shows, in the East of England, 63 adults per 1,000 are in further education, and in the South East 66 adults per 1,000 are participating. This rises to 93 per 1,000 in the North West and 116 in the North East.

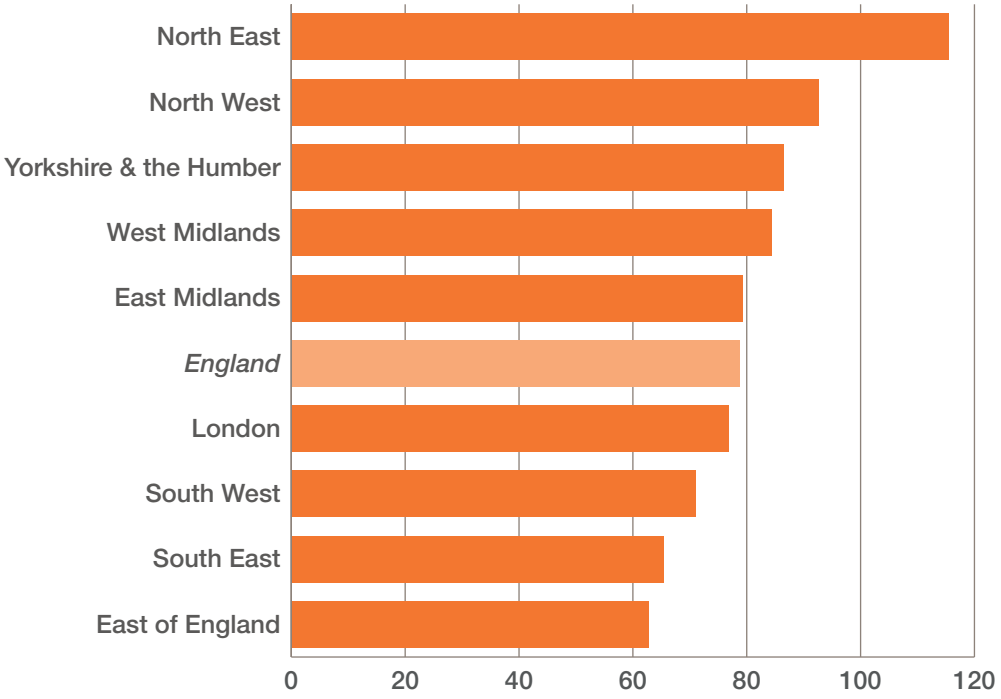
14 This includes learners who are studying on a course at a further education college, learners studying courses within their local community, employees undertaking an apprenticeship, and employees undertaking other qualifications in the workplace

15 Defined as Jobseeker's Allowance or Employment Support Allowance.

FIGURE 5.1

Further education participation levels are highest in the north of England

Adults participating in further education, by region (per 1,000 adults)



Source: IPPR analysis of FE Data Library 2016 and ONS MYEDE population estimates (2016)

Data collected by the Skills Funding Agency shows that there has been a significant decline in participation in adult learning in recent years. As figure 5.2 shows, there has been a decline in participation by adults aged 19 and over in every region of England, with a particularly steep decline in the South West, the East Midlands and the West Midlands.

Alongside the SFA data, the NIACE Adult Participation in Learning Survey provides some useful insights. While there are a number of limitations to the survey's usefulness (including the fact it adopts a very broad definition of what counts as learning[16]), it provides the most detailed assessment available of the overall scale of adult learning in the UK and, importantly, of the characteristics of the people who are – and are not – participating in learning.

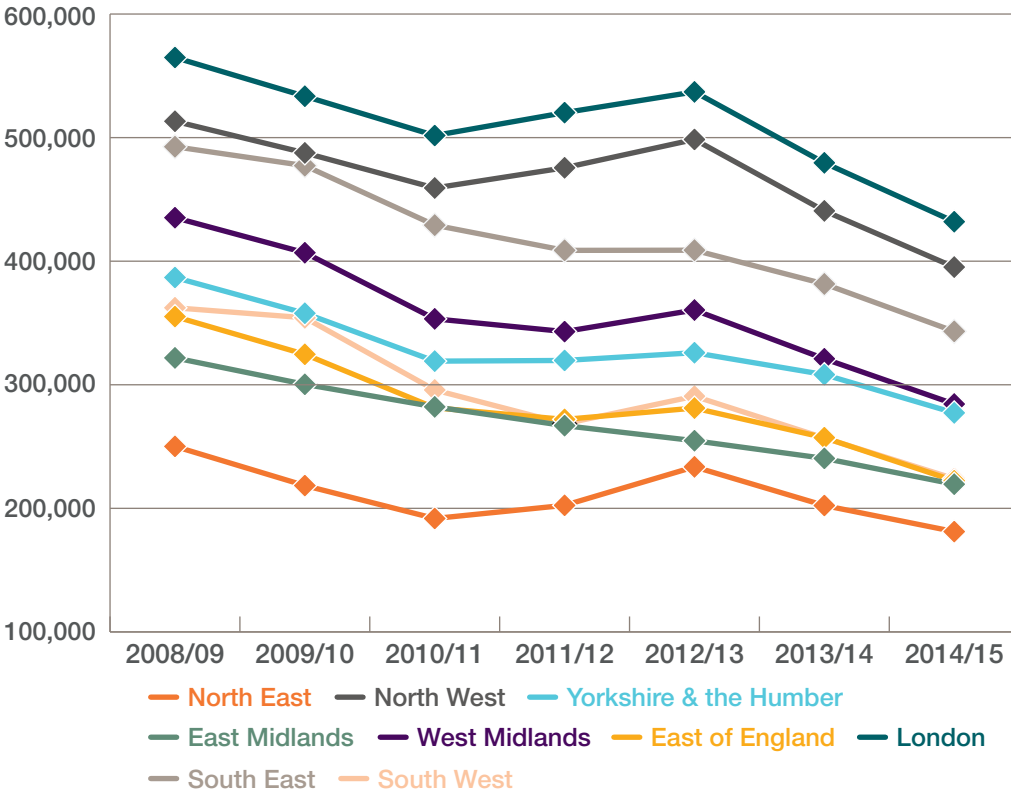
16 The definition of learning in the survey is very broad and will encompass a huge range of activity:

> *'Learning can mean practising, studying or reading about something. It can also mean being taught, instructed or coached. This is so that you can develop skills, knowledge, abilities or understanding of something. Learning can also be called education or training. You can do it regularly (each day or month) or you can do it for a short period of time. It can be full time, or part time, done at home, at work, or in another place like a college. Learning does not have to lead to a qualification'.*
>
> NIACE 2015

FIGURE 5.2

Participation in adult further education has declined in every region in recent years

Number of adults in further education, by region (2008/09–2014/15)



Source: IPPR analysis of FE Data Library 2016

The main findings[17] from the survey are:

- Participation declines progressively with age. Levels of recent participation are high among those in their early twenties, with two-thirds (67 per cent) having participated in learning in the last three years. This falls to just under half for those aged 25–34. It remains stable at that level before falling to three in 10 (31 per cent) of those aged 55–64.
- Adults in higher socio-economic classes are far more likely to participate in learning. Over half of those in socio-economic classes A, B and C1 had participated in some form of learning, compared to one-third of skilled manual workers (C2) and one-quarter of unskilled workers and those on low incomes (D and E). Half of those in the lowest socio-economic classes (D and E) have not taken part in any learning since leaving full-time education.
- Those in employment are more likely to have participated recently in learning than those who are unemployed or inactive. Half (49 per cent) of adults in work had taken part in learning, compared to one-third (35 per cent) of those who were registered as unemployed and

17 These figures cover all respondents (aged 17 and above, not just those aged 25 to 64) and report those who have taken part in learning in the past three years.

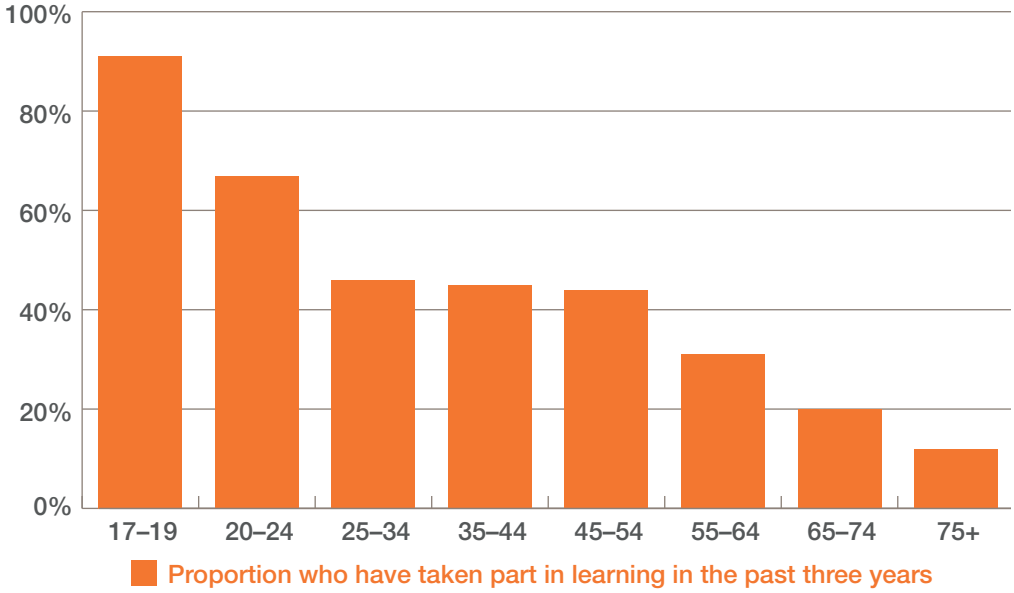
looking for work and just over one-quarter (28 per cent) of those not looking for work.

- There are significant differences by occupation. Two-thirds (66 per cent) of those in professional occupations had participated in learning, compared to one-third of those in skilled trade occupations (33 per cent), sales and customer service occupations (37 per cent), process, plant and machine operatives (35 per cent) and those in elementary occupations (34 per cent).
- Those who left education earlier are less likely to participate in learning. Among those who left full-time education aged 21 or over, 52 per cent have participated in learning in the last three years, compared to just 26 per cent of those who left full-time education at or before age 16.
- There are variations by region. While the North East again has the highest levels of participation (see figure 5.5), the differences are less significant than in the SFA data, and the pattern between regions is different.
- Previous participation in learning seems to affect future intention to learn. Two-thirds (68 per cent) of those who have taken part in learning in the previous three years expect to do so again in the next three years, compared to just 17 per cent of those who haven't taken part in learning since leaving full-time education.

FIGURE 5.3

Participation in learning declines with age

Percentage of adults who have taken part in learning in the last three years, by age group, 2015

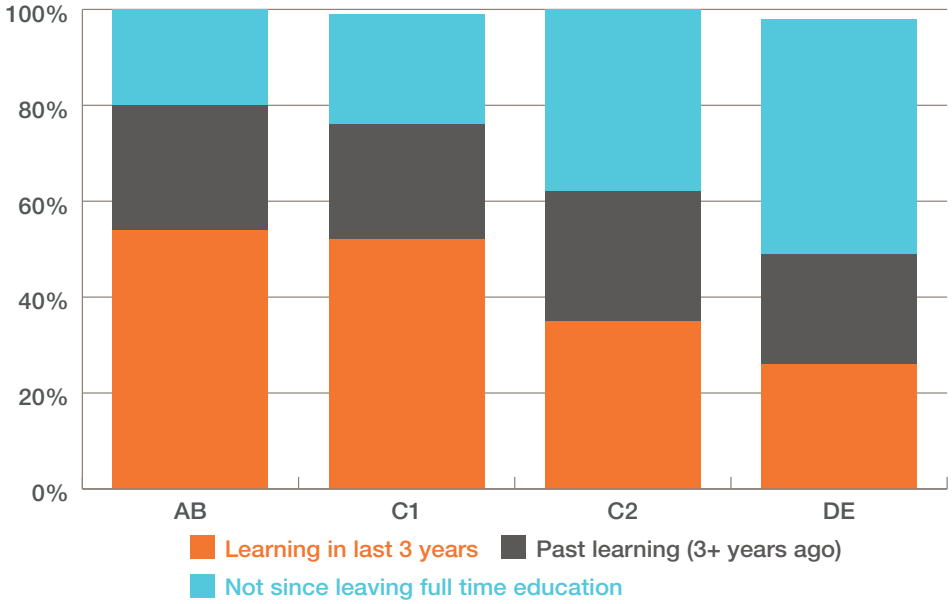


Source: NIACE 2015

FIGURE 5.4

Adults in higher socio-economic classes are more likely to participate in learning

Participation in learning by social class, 2015



Source: NIACE 2015

FIGURE 5.5

The North East has the highest levels of participation in learning

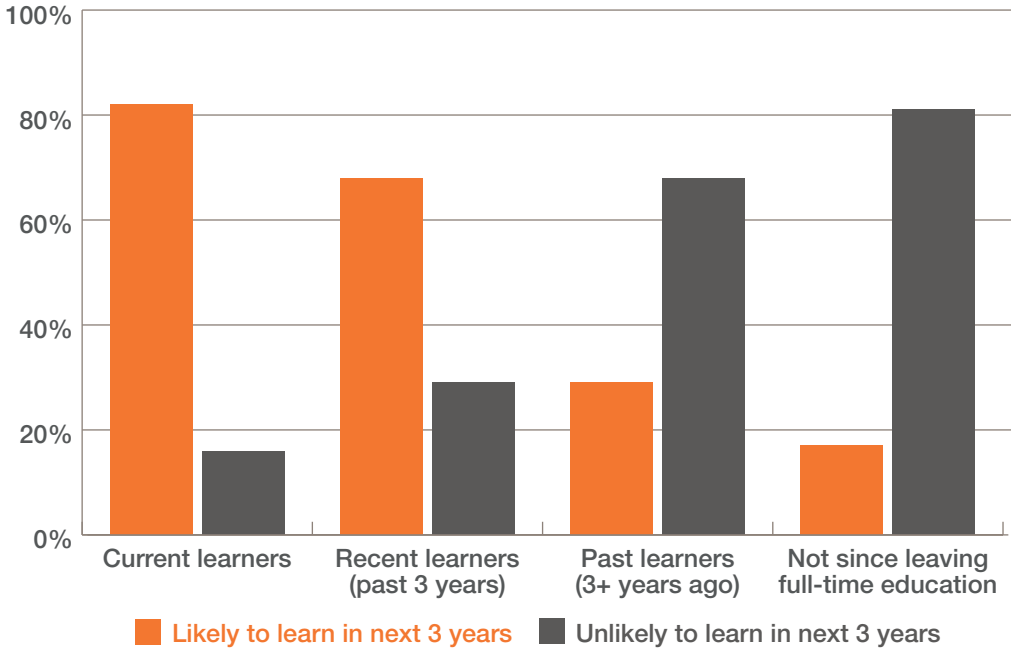
Adults participating in learning, by region (%), 2015

Source: NIACE 2015

Overall, the picture that emerges from this survey is that participation in adult learning is skewed in favour of the 'haves' and against the 'have nots'. If someone has post-compulsory level education, is in a higher socio-economic class, is in a better-paid occupation and has participated in some form of adult learning in the past, they are far more likely to be participating now, and to participate in the future. To the extent that there are barriers to adult learning in the UK, therefore, they appear to affect particularly those who left school at the earliest opportunity, those who are working in low-paid occupations or not working, older people. This is unfortunate because it appears that those who could most benefit from participating in training, and indeed those who are most likely to be vulnerable to shifts in the demand for skills in coming years, are those who find it hardest to engage with the training opportunities that would help them find better-paid jobs and enhanced job security.

FIGURE 5.6

Previous participation in learning seems to affect future intention to learn
Expected future participation in learning by previous participation (%), 2015



Source: NIACE 2015

5.2 THE IMPACT OF GEOGRAPHY ON ACCESS TO TRAINING AND SKILLS

The English skills system has struggled to support people to adapt to the very significant economic and industrial changes we have seen over the past half century.

There has been a rapid and sustained relative decline of manufacturing over the past fifty years in the UK. In 1961, manufacturing accounted for one in three of all employees. By the last census, this had fallen to one in 11 (ONS 2015). The number of jobs in the sector has fallen from 8.9 million to 2.9 million in 50 years, with a further 500,000 jobs lost in coal mining (Beatty and Fothergill 2016).

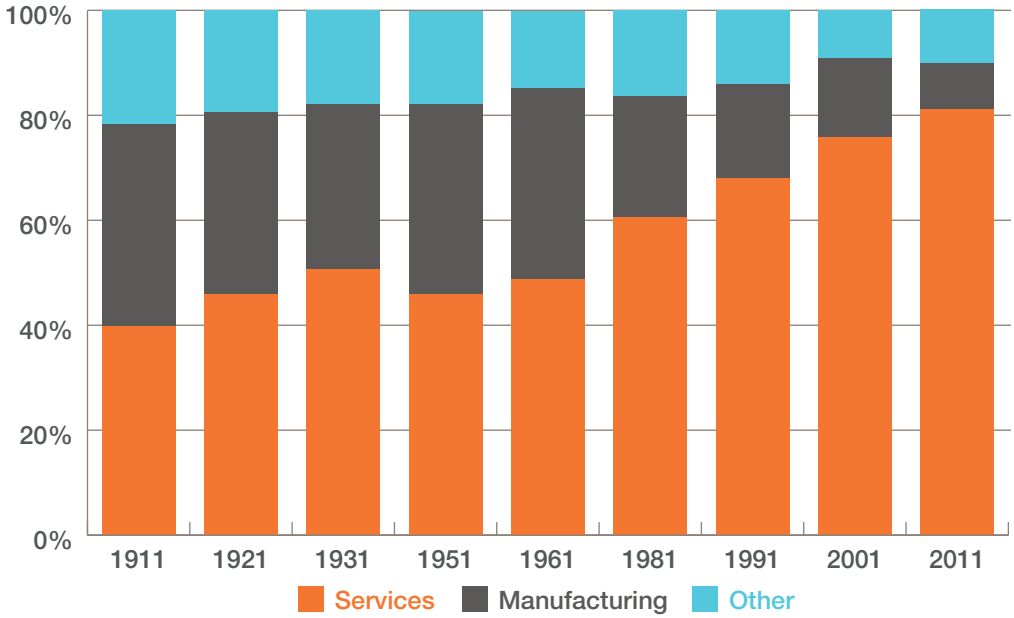
The UK has a very poor record in terms of supporting workers who are affected by industrial and economic change. Many of those who lost their jobs as a result of de-industrialisation simply moved on to long-term health related benefits. The legacy of this failure is still seen today; nearly all of the areas with the highest rates of Employment and Support Allowance claimants (10 per cent or more), are in old industrial centres (Beatty and Fothergill 2016).

The failure to manage or adapt to deindustrialisation partially explains the ongoing and significant imbalances across the UK in terms of both skills and the economy. Some areas such as the south east, and London in particular, have higher levels of skills and qualifications among the working age population. These areas also tend to have far higher levels of productivity and higher pay than other regions.

FIGURE 5.7

The proportion of workers in manufacturing has declined significantly since the 1960s

Percentage of UK workers in the services, manufacturing and other sectors over time



Source: 2011 Census Analysis, Office for National Statistics

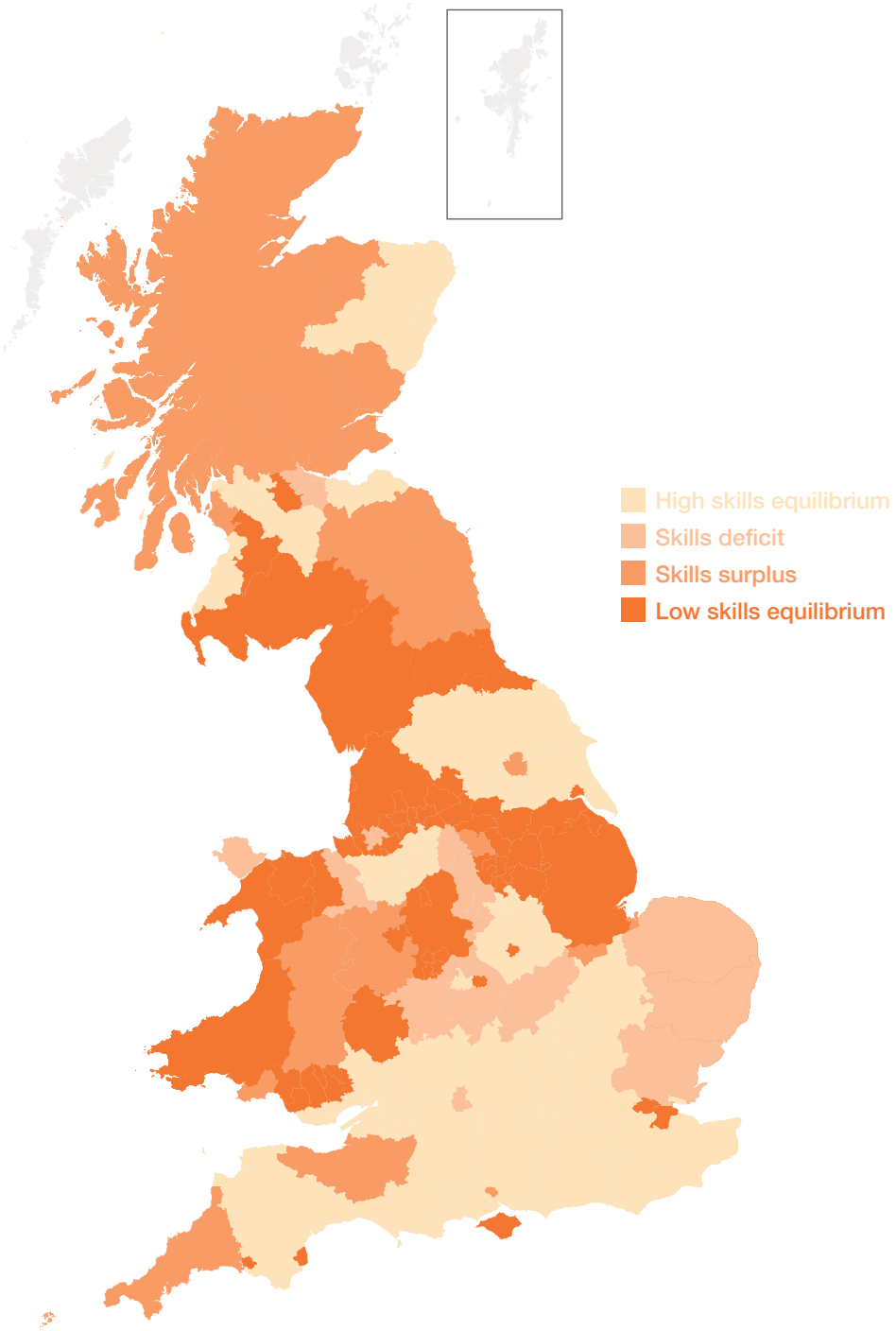
This is partly due to the imbalances in the UK economy. With London being a significant – and perhaps dominant – economic centre, graduates from across the UK are attracted to move to the capital for work. However, the skills system has failed to address the challenges of low levels of skills in many regions across the UK.

In some areas of the UK a 'low skills equilibrium' has developed. These areas are characterised both by low levels of skills among the population, and employers operating business models based on low value added product market strategies. Such employers tend to compete mainly based on cost rather than quality, and they tend to have low demand for skills,

and pay low wages (OECD 2012). In such cases, adults tend to have low levels of skills, and weak incentives to improve their skills. Figure 5.9 shows the areas of the UK which are characterised by such low skills equilibria. In these areas in particular, concerted effort is needed to raise not only the supply of skills, but also employer demand for skills.

FIGURE 5.8

Pay, productivity, skill levels and occupational make-up in the UK, by region

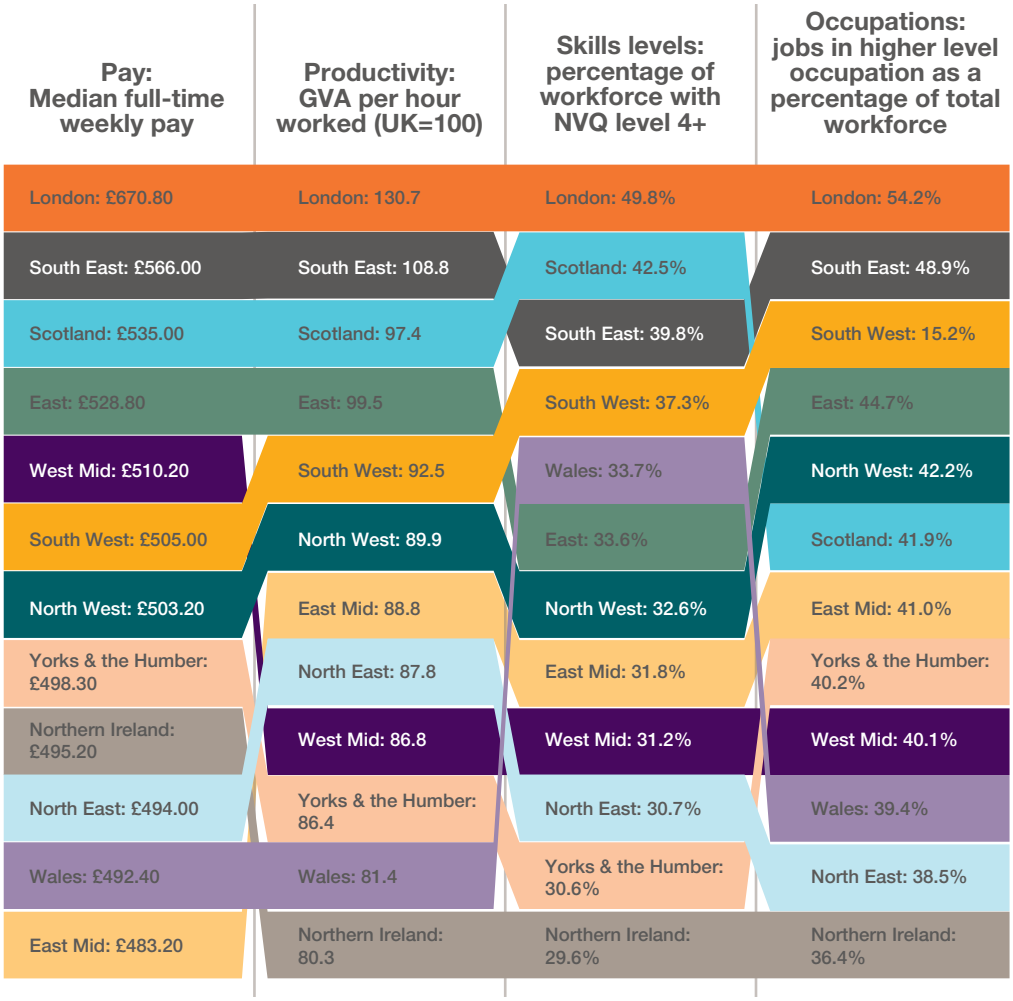


Sources: Pay – ONS ASHE (April 2016), GVA per hour worked (ONS 2017), Skills levels (Annual Population Survey 2015), Occupations (Annual Population Survey 2016)

FIGURE 5.9

In some areas of the UK a 'low skills equilibrium' has developed

Sub-national variation in skills supply and demand in the UK



Source: Barr 2016[18]

5.3 THE APPRENTICESHIP LEVY AND REGIONAL INEQUALITIES

The apprenticeship levy – the government's flagship policy to boost employer investment in training – will affect employers with a payroll of over £3 million. While no figures have been produced by DfE on the regional impact, it is likely to raise more from employers based in London and the South East than from other regions of the country as a result of the uneven distribution of large employers. Two out of five (38 per cent) enterprises with more than 100 staff are located in London and the South East; more than in Wales, North East, Yorkshire and the Humber and the South West combined (ONS 2016d). Pay is also higher on average in London and the South East, which, as the levy is based on payroll rather than number of employees, will accentuate this disparity.

18 In order to approximate the demand for skills, a composite index is used, including the proportion of the population employed in medium-high skilled occupations and GVA per worker. The supply of skills is measured using the percentage of the population with post-secondary education. The indices are standardised using the inter-decile method and are compared with the national median.

Employers will be likely to invest their apprenticeship levy funds in training in areas where they already operate. This may mean that the levy stimulates employer investment more in London and the South East than in the rest of the country. While the number of apprenticeships per head is lower in this region than the national average, levels of skills, pay and productivity are far higher. Without government action to redistribute any of the apprenticeship levy funds therefore, the policy may have a differential regional impact, accentuating rather than reducing regional skills and economic inequalities.

5.4 SURVEY AND OTHER EVIDENCE ON BARRIERS TO PARTICIPATION IN ADULT LEARNING

There is little direct evidence from which to deduce which barriers to the take up of adult learning in the UK are most important, not least because it is hard to identify those members of the population who have been discouraged from participating. The evidence that is available is confined to formal education and training, and comes from asking people who *have* taken up adult learning what *might have* discouraged them; and from asking people in groups who might be felt most likely to benefit from adult learning, for example those out of work, why they have not participated.

The Warwick Institute for Employment Research (WIER) adopted this approach in its recent study of adult education for the All Party Parliamentary Group for Adult Education. Half of the respondents to WIER's survey said they faced no barriers to starting or completing an adult education course, reflecting that most respondents had taken part in some form of recent learning (Hughes et al 2016).

Of those who did identify barriers to participating in learning, the most common barriers were financial (see table 5.1). A significant proportion of respondents also expressed concerns about their ability to benefit from education and training, saying they had low confidence or self-esteem (14 per cent), were put off education at school (8 per cent), or did not possess the skills needed to complete a course (6 per cent).

Another survey of adult learners and non-learners was conducted by the Office for National Statistics on behalf of the Department for Business, Innovation and Skills in 2010 (BIS 2012). This survey also revealed that cost was the main reason for not participating in adult education or training, however the second biggest barrier listed was not having the time to take part.

The next section of this chapter explores some of the barriers that suppress the demand for learning in many adults. It starts by considering the main barriers identified in the surveys above (finance, time and self-esteem), and then moves on to consider barriers that might affect particular groups of learners – including those on Jobseeker's Allowance – and wider barriers such as a lack of information or advice.

TABLE 5.1

Barriers to starting and/or completing a course

Percentage of survey respondents citing each potential barrier

Barriers	% survey respondents
No barriers	50%
Financial barriers	27%
Low confidence or self-esteem	14%
Mental health issues	9%
Personal health issues	9%
Caring commitments	8%
Age	8%
Put off education at school	8%
Lack of study skills	6%
Few opportunities to progress at work	6%
Lack of transport	6%
Fitting around work	3%
Discrimination	3%
Other	2%
Time pressure	1%
Cultural or linguistic barriers	1%
Lack of housing	1%

Source: Barnes et al 2016: 19

Financial constraints

Financial constraints are listed as one of the major barriers to participating in adult learning. The precise nature of financial constraints, however, will vary for different types of learners.

First, there will be a set of constraints for those who are on low incomes and have low levels of formal education. Financial constraints appear to be a major reason for low participation for this group – both in Britain and in Europe more widely (Gloster et al 2016, EAEA 2015, Cedefop 2014). The direct cost of enrolling on a course should not, in theory, be a major barrier for this group as courses for those who have not yet achieved a full level 2 qualification are funded directly by the government and are free or subsidised for learners (see box 5.1 below for a description of the entitlements for government funding). It is therefore likely that the indirect costs of participating in learning are a bigger barrier for this group of learners – for example the cost of lost earnings, transport or having to find childcare. People can, however, borrow money to help with the cost of their learning. Professional and career development loans of between £300 and £10,000 can be taken out to help meet the cost of course fees, books, childcare and travel if the course specifically helps with a person's career, but these must be paid back after the course has been completed.

Second, there will be a set of more direct financial costs for those learners who already hold a full level 2 qualification and want to enrol on a higher level course. This is because they are not eligible for government funding and have to pay the upfront cost of their course. Advanced Learning Loans (ALLs) are available for anyone studying for a level 3 or level 4 qualification. These operate in a similar way to student loans for higher education, with the amount that can be borrowed dependant on the course, qualification and fee level and repayment commencing once

a person's earnings pass certain threshold. A study for the Department of Business, Innovation and Science found that in the 2013/14 – the year ALLs were introduced – there was drop of 31 per cent in the number of learners aged 24 and over on the courses eligible for ALL funding compared to the previous year (Adams et al 2016).

The large drop in participation, and the low take-up of ALLs may be due to low levels of awareness of the support available. It appears many adults are unaware of the financial support available for study, which is complex and not well-advertised. For example, 64 per cent of learners who were eligible for Advanced Learning Loans in 2013/14 were not aware of their existence when they first began thinking about studying (Adams et al 2016: 17). However, the low take-up may also be due to a perception that the returns to such learning through higher wages, would be insufficient to justify the costs to the individual.

Box 5.1: Entitlements to government funding for adult education

For learners aged 25 and over, the following courses attract financial assistance from the government:

- English and mathematics qualifications and units to help adults reach GCSE grades A* to C (level 2) – full funding
- Qualifications and units up to and including level 2 to help adults get into work – full funding
- Apprenticeships – free to the learner (government and employer cover the cost of training)
- Entry, level 1 and level 2 qualifications – contribution to funding
- Level 3 and level 4 qualifications – no funding but Advanced Learning Loans are available.

In addition to the contributions listed above, the government makes bursaries available for people studying in certain fields such as healthcare and social care.

Source: Delebarre 2016

The Learning and Work Institute have identified three key groups who are poorly supported by the current funding system, and more likely to be put off learning by the costs involved (LWI 2016).

1. Support for learning that is not an apprenticeship or full qualification.
2. Support for people in low-paid work, including Universal Credit claimants.
3. Support for career changers and those needing to update their skills given the employment system is focussed on those out of work, and the publicly funded skills system is focussed on the young and those with fewer previous qualifications.

Time barriers

The surveys also suggest that time constraints reduce the demand for learning because provision is inflexible and people's lives are complex.

Some workers might find it difficult to enrol on a programme of education or training because the course they want to study is not available at a convenient time and location. It might be that the course is only offered during working hours and that their employer is not flexible enough to allow them to take time off for study. In addition, people may find it difficult to make time to do work that is required between lessons.

Other workers may find it hard to complete a programme of study because of the nature of their work commitments. People who work variable shifts, for example, may be unable to attend a number of weeks of a regularly-scheduled course, even if that course was offered in the evenings.

Time barriers are more likely to affect women, often due to the uneven distribution of caring responsibilities (Larson et al 2006). Here cost and time constraints interact. Without affordable childcare, finding time to attend courses becomes increasingly difficult.

Low confidence and negativity towards re-entering education barriers

Surveys suggest that, after financial and time constraints, the most significant barriers to adult learning are personal: a lack of confidence or self-esteem, or a more general belief that 'learning is not for me'.

Low levels of confidence regarding learning seem to be more pronounced for older (55-64) and younger (16-24) learners, those who left school at a younger age, and those not in employment (Larson et al 2006). The same report found that negativity towards re-entering education was a particularly significant barrier for older workers (55-64) who, as we demonstrated above, are least likely to participate in learning. As Tuijnman found, the best single predictor of participation in education later in life is earlier participation (Tuijnman 1991).

These strong personal barriers to engaging in learning, at least in the formal sense, help explain why people with the fewest qualifications are the least likely to be participating in adult learning. People with few qualifications are more likely to have struggled when they were at school, and to have disengaged early. It would be unsurprising if this experience left them with a lack of confidence in their ability to learn new skills, an aversion to formal education and a strong perception that learning is for others and not for them.

Negative perceptions about their ability to learn appear to act as a serious deterrent to people with few skills and qualifications taking part in formal education and training. As a result, those who are often most in need of upskilling are least likely to take part in training.

Barriers created by the welfare system

The UK welfare system has traditionally focussed on a 'jobs first' approach, whereby the priority is to help the unemployed back to work as soon as possible, rather than invest in upskilling.

Claimants of Jobseeker's Allowance (JSA) can only study for a limited number of hours, they must demonstrate they are doing all they can to look for work, and they must accept a job if it is offered. This can limit an individual's ability to engage in the sort of work-focussed training which might help them enter sustainable employment.[19]

In many circumstances, this may be the best approach. But it does not take into account the possibility that a period of training that prepares the individual for employment in a different occupation or at a different level may result in a better and more sustainable long-term outcome. Such an approach would seem to be particularly appropriate in an area where a large employer has closed down or made a large number of employees redundant, leading to an excess supply of certain types of skills.

The introduction of in-work conditionality under Universal Credit could have significant implications for adult learning. DWP is currently trialling a scheme under which conditionality would be extended from those out of work to those in work on low incomes. Recipients of Universal Credit who are earning below the equivalent of 35 hours per week on the National Living Wage would be required to seek more hours, higher pay, or both. Subject to the outcome of ongoing trials, the scheme is set to be rolled out in 2018, and will affect up to 1 million claimants.

Should it be rolled out, helping those in work to boost their skills will be essential to making a success of this change. The Work and Pensions Select Committee has highlighted how this reform would require a significant change in the role and capacity of Jobcentre Plus Work Coaches, with a greater focus on supporting people with structural barriers to progression, including skills development (Work and Pensions Committee 2016). If those in work are subjected to greater conditionality and required to increase their earnings, DWP must ensure that these individuals are able to access flexible learning opportunities with proven labour market outcomes, in order to offer them the opportunity to progress.

Information barriers

One key challenge facing adults in making decisions on learning is the lack of clear and well-understood pathways for people to develop their skills and build a career. Sainsbury identified the fact that many technical education systems in other countries have far more clearly defined pathways, which set out the skills, study programmes and qualifications required to enter a chosen occupation. Having such clarity is seen as being a '*key plank of successful technical education systems*', as it helps learners make informed decisions on how to progress in their chosen career. Sainsbury therefore recommended the creation of 15 'technical education routes' that would provide training for skilled occupations with a substantial requirement for technical knowledge and practical skills (Sainsbury 2016).

The government accepted these recommendations and are looking to implement 15 high quality technical education routes. A more coordinated 'licence to practice' system, such as those found in some other European

19 In some cases, claimants of JSA and Universal Credit may be required to attend training courses or risk losing their benefit payments. If this is the case, the training will be fully funded.

countries, would be even better at making clear exactly what is expected for a particular job in a particular industry.

In the absence of clear and well-understood pathways, access to accurate information about career paths, and the education and training options required to pursue these, is crucial in order to help people make rational decisions. However, there is evidence that many adults do not have access to high quality information, advice and guidance to help inform their decisions.

The primary source of information, advice and guidance (IAG) for adults in considering training and career options is the National Careers Service. Launched in 2012, the service is available primarily online. An evaluation found that while satisfaction of users is high, public awareness of the service is limited (BIS 2013). In addition to the National Careers Service, Jobcentre Plus provides advice for the unemployed, but their 'work first' approach means this is largely focussed on getting people immediately into work, rather than addressing underlying skills needs.

One weakness in terms of IAG provision is the limited use of Labour Market Information (LMI) to guide decisions on learning and development in England. In his review of technical education, Lord Sainsbury described the panel as being '*struck by how little information is collected in England about what knowledge, skills and behaviours are required for different occupations*' (Sainsbury 2016). Sainsbury highlighted how O*NET is used in the United States to provide up to date LMI in order to inform decision making on learning and skills (see box 5.2).

O*NET is based on a database of hundreds of standardised occupational-specific descriptors. It is updated annually based on a survey of workers in each occupation. Developed under the sponsorship of the US Department of Labor and the Employment and Training Administration, O*NET was launched in December 1998.

O*NET provides easy-to-use tools for students and job seekers to explore potential occupations and understand the tasks involved, the skills, experience and qualifications required, salary information and even job postings. It helps match an individual's interests and experience to potential careers. It has specialist paths for veterans and Spanish-speaking job seekers.

Box 5.2: O*NET

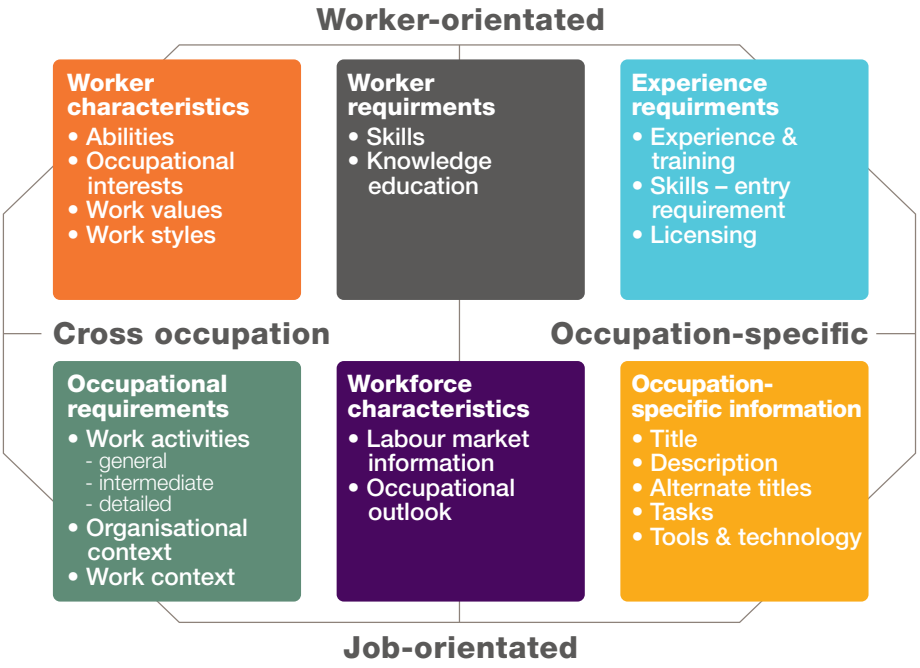
The O*NET program is the primary source of occupational information in the United States. It describes the knowledge, skills and attributes required for different occupations, as well as how the work is performed in terms of tasks, work activities and other descriptors.

It is intended to be used by:

- **Careers advisors**, enabling the use of accurate LMI to help guide decisions
- **Students** who are looking for suitable career options, or for the requirements to pursue a chosen career

- **Businesses** who can use the information to inform recruitment and HR planning
- **Researchers** interested in labour market trends
- **Developers** who are able to use O*NET data to create bespoke applications.[20]

Figure 5.10
O*NET database content model



In the context of patchy IAG provision, and the underuse of LMI, adults are too often left with an insufficient understanding of the current demand for skills, let alone the future demand for skills. In this context, adults may be less likely to make the time and effort to undertake learning when they can't be confident of any reward in terms of higher pay or increased employability.

There are also information failures around the provision and efficacy of education and training. Surveys suggest a belief that 'education is not for me' is prominent in parts of the labour force, and interviews with unemployed people conducted as part of the WIER study (Hughes et al 2016) found that they were unaware of their learning options. These views may be backed up by a belief that adult learning is wholly classroom-based and just like a return to school.

5.5 SUMMARY

The current approach to the adult skills system has failed to tackle entrenched social and regional inequalities. Not enough has been done to support people to adapt to deindustrialisation, leaving many people left behind by economic change and unable to take advantage of

20 Source: www.onetcenter.org

new opportunities. It is those who would most benefit from learning – the unemployed and inactive, people who left full-time education early, those in lower socio-economic classes and in lower paying occupations – are the least likely to be learning. These groups are also the most vulnerable to significant and disruptive future changes in the economy and the labour market.

There are a number of barriers that prevent adults engaging in learning opportunities, which in turn will hamper the ability of a 'skills market' to respond to their needs. The key barriers identified in this chapter are:

- **Financial constraints** – both in terms of the direct cost of enrolling on a course, and indirect costs such as lost earnings, transport costs and childcare.
- **Time barriers** – linked to the location, timing and duration of courses.
- **Motivation and self-esteem** – particularly for those who have not succeeded in formal compulsory education.
- **Welfare system** – our 'work first' system means that job seekers are constrained from enrolling on courses that might help them to substantially 'upskill' or switch occupation.
- **Information barriers** – given the lack of clear vocational pathways, high quality IAG, and effective Labour Market Information, learners lack clear information about which courses and qualifications will benefit them in the jobs market.

6. CONCLUSION AND RECOMMENDATIONS

The challenges set out in this report do not lend themselves to quick fixes. The results from years of strong investment in education and training and successive attempts to engage employers in the vision for a higher skilled economy have been disappointing. In particular, we argue that England's market-based approach to skills has run its course. It has failed to deal with weak demand from employers, low employer investment in skills, and poor skills utilisation in the workplace. Our system has relied on individual employers to invest in the high quality training that would benefit learners and the economy. But in too many cases, and for too long, they have failed to do so.

This fundamental flaw underlies the severe lack of high quality specialist training that supports mobility and progression for employees, meets the needs of employers, and helps drive improvements in innovation and productivity in the workplace.

As part of their aim to build a high skill, high wage economy, the Conservative government is seeking to reverse the structural decline in employer investment in training. Frustrated with attempts to cajole employers, the government is forcing large employers to invest via the new apprenticeship levy. However, the decision to spend the proceeds on a voucher system, where employers buy training courses from approved providers, reinforces the idea that employers are simply consumers in a training market – rather than active participants whose decisions and strategies are by far the biggest factor in the quality and quantity of adult training in the UK. The apprenticeship levy will do little to boost demand among the vast majority of small and medium sized employers. And it risks worsening – rather than addressing – the large regional skills and economic inequalities, as it will stimulate spending on training to a greater extent in London and the south east.

Attempts to make the system more 'employer-led' risk exacerbating persistent problems of deadweight by enabling some employers to access state funding and redesign qualifications to meet their existing low level workplace training needs.

A far more active approach will be needed if the country is to respond effectively to the risks and opportunities driving workplace change between now and 2030. This will require a move away from the market-led approach to skills and towards a more strategic, coordinated approach that drives collective commitment to skills among employers, employees and the state. Training to improve basic skills among disadvantaged adults will continue to play an important role in the skills system. But a wider set of goals will need to inform adult skills policy if

it is to deliver the national vision for a more ambitious, productive and inclusive economy. These must include:

- improving the investment in and utilisation of skills by employers
- increasing the availability of high quality specialist vocational provision offered by training providers
- supporting industries and communities facing economic decline to deal with workplace change and adapt to the demands of the global economy.

We will set out how the government can deliver on these goals over the next decade in subsequent papers. But given the critical importance of sufficient and sustainable funding to deliver on these goals, here we set out proposals for increasing funding for adult skills over the next five years.

Employers in the UK are spending far less on vocational education than the EU average (international comparisons are not available for England). The apprenticeship levy will not close the investment gap with the EU. Had it been in place in 2010, when the last international survey was conducted, it would have raised the UK from spending 52 per cent of the EU average to 72 per cent.[21]

Employer spending on skills has fallen in recent years. Between 2007 and 2015, employer spend per employee in England declined in real terms by 13.6 per cent. Had the apprenticeship levy been in place in 2015, employer investment would still have been lower than in 2007.

In addition to low and declining employer investment, public spending on adult skills has also declined significantly in recent years. The Adult Skills Budget fell by 40.5 per cent between 2010/11 and 2015/16.

In the context of low and declining private investment, and declining public investment, the government must do more if it is to deliver on its stated goals. In the absence of additional public funding, we propose that the government should consider the following options:

Extending the apprenticeship levy into a wider skills levy which would:

- apply to all employers with 50 or more employees
- be set at 0.50 per cent of payroll for employers with 50 or more staff and 1.0 per cent of pay roll for the largest employers with 250 or more staff
- be more flexible, with employers able to redeem it against the costs of high quality training, beyond just apprenticeships
- contributions from larger employers would be top-sliced to form a regional skills fund, and devolved according to local need, to invest in high quality, specialist vocational training.

We estimate that the skills levy would raise over £5 billion in 2017/18 – double the £2.6 billion raised by the apprenticeship levy.

21 This, and the similar calculation based on the skills levy funds, assumes that levy funds passed to devolved authorities are invested by employers in training, in the same way as in England.

Excluding the top-slice for the regional skills fund, this would raise £3.9 billion for employers to invest in high quality vocational training. This would help reverse the decline in employer investment – bringing levels close to those reached in 2007 – and narrow the investment gap with other countries.

We recommend that employers be afforded greater flexibility to invest their levy funds in high quality training, beyond apprenticeships. This could include basic skills training, skills utilisation interventions, management and leadership interventions, and the commissioning of eligible adult education from providers, where it forms part of a career pathway.

Top-slicing a quarter of contributions from the largest firms would create a regional skills fund of £1.1 billion, which could be devolved to local areas according to their skills needs. As with the devolution of the adult education budget, this would go to combined authorities where they exist, or to LEPs or local authorities where they do not. This would have the effect of restoring the adult skills budget to something approaching the levels of 2010/11. If the regional skills fund of £1.1 billion were distributed in proportion to the number of adults without an NVQ level 2 qualification or above, it would provide £25 million for Liverpool city region, £41 million for the West Midlands combined authority, £36 million for West Yorkshire and £46 million for Greater Manchester. While the apprenticeship levy may accentuate regional inequalities, top-slicing the skills levy would narrow them. The West Midlands – the region with largest proportion of adults without an NVQ level 2 qualification – would receive nearly twice as much per head as Oxfordshire.

The regional skills fund would significantly boost the amount of funds available to be spent on local priorities, particularly in areas of the highest need. It would mean that some of the money raised could be spent strategically, for example to support emerging sectors or strengthen a regional cluster. This would turbo-charge devolution, giving locally accountable leaders the ability to address local need, boost their local economy and narrow regional inequalities.

Why a levy? In the first instance, hypothecated levy revenue circumvents the problem of relying on employers to fund training, which too many have shown they are unwilling to do. Introducing and strengthening a levy also addresses the problem of collective action, reducing the risk for employers who do invest in training.

A payroll levy to boost investment in training may have a small short-term impact on pay, with employers passing on some of the costs (Amin-Smith 2017). However, investment in high-quality training would boost productivity in the medium term, which will help boost pay and living standards. Doing nothing is not an option; it would likely mean a continuation of low employer investment, and a continuation of the long stall in productivity and pay.

Levies have proven successful on a sectoral basis in the UK, with the UK film skills investment fund and the construction industry training board both operating a levy for training for a significant period of time and with broad support from employers (Gospel 2012).

One concern of a larger levy would be that it could crowd out existing employer spending on training. This is unlikely to happen, as current employer investment in training in the UK is overwhelmingly restricted to firm-specific training such as induction training, and low level courses such as health and safety (UKCES 2015). Rigorous standards in setting eligible training for levy payments should exclude such training, meaning employers will have to offer high quality training in order to recoup levy payments.

The levy should also help drive improvements in the institutional frameworks that both currently administer skills funding and which will help deliver productivity improvements among businesses as part of the government's new industrial strategy. The long term goal should be a move away from the current market-led approach to skills and towards a more strategic, coordinated approach that drives collective commitment to skills among employers, employees and the state.

A second report will follow setting out the policies and institutional reforms required to drive this shift and balance the different and sometimes competing interests of employers, employees and the state.

REFERENCES

Adams L, Davies B, Riley C, Murphy L, Duncan B and Cranney M (2016) *Evaluation of 24+ Advanced Learning Loans: an assessment of the first year*, BIS research paper no. 263. https://www.gov.uk/government/publications/24-advanced-learning-loans-assessment-of-the-first-year

Amin Smith, N Cribb J and Sibieta L (2017) *Reforms to apprenticeship funding in England*, Institute for Fiscal Studies. https://www.ifs.org.uk/publications/8863

Appelbaum E (2010) 'Institutions, firms and the quality of jobs in low-wage labor markets', in Gautié J and Schmitt J (eds) *Low-Wage Work in the Wealthy World*, Russell Sage Foundation

Barnes S, Hughes D and Adriaanse K (2016) *Adult Education: Too important to be left to chance – Adult learner survey*. http://www2.warwick.ac.uk/fac/soc/ier/research/adult_education/

Barr J (2016) *Taking a place based approach to employment and skills strategies,* OECD. https://oecdskillsandwork.wordpress.com/2016/03/03/place-based-approach-to-employment-and-skills-strategies/

Beatty C and Fothergill S (2016) *Jobs, welfare and austerity.* http://www4.shu.ac.uk/research/cresr/sites/shu.ac.uk/files/cresr30th-jobs-welfare-austerity.pdf

Broughton N (2015) *The value of apprenticeships: wages*, Social Market Foundation.

Cedefop (2015) *Skills, qualifications and jobs in the EU: the making of a perfect match? Evidence from Cedefop's European skills and jobs survey.* http://www.cedefop.europa.eu/en/publications-and-resources/publications/3072

Centre for Workforce Intelligence [CfWI] (2015) *Future demand for skills: Initial results.* http://www.cfwi.org.uk/publications/horizon-2035-future-demand-for-skills-initial-results

Chartered Institute of Personnel and Development [CIPD] (2015) *Over-qualification and skills mismatch in the graduate labour market.* http://www2.cipd.co.uk/binaries/over-qualification-and-skills-mismatch-graduate-labour-market.pdf

Clarke L (2011) 'Trade? Job? Or Occupation? The development of occupational labour markets for bricklaying and lorry driving', in Brockmann M, Clarke L and Winch C (eds) *Knowledge, Skills and Competence in the European Labour Market: What's in a vocational qualification?* Routledge

Clarke S and D'Arcy C [Resolution Foundation] (2016) *Low Pay Britain 2016.* http://www.resolutionfoundation.org/publications/low-pay-britain-2016/

Clifton J, Thompson S and Thorley C (2014) *Winning the global race? Jobs, skills and the importance of vocational education*, IPPR. http://www.ippr.org/publications/winning-the-global-race-jobs-skills-and-the-importance-of-vocational-education

Delebarre J (2016) *Constituency Casework: Training*, House of Commons Library Briefing paper Number SN05444. http://researchbriefings.parliament.uk/ResearchBriefing/Summary/SN05444#fullreport

Department for Business, Innovation and Skills [BIS] (2011) *Returns to Intermediate and Low Level Vocational Qualifications*. https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/32354/11-1282-returns-intermediate-and-low-level-vocational-qualifications.pdf

Department for Business, Innovation and Skills [BIS] (2012) *National Adult Learner Survey 2010*, BIS Research Paper Number 63. https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/34798/12-p164-national-adult-learner-survey-2010.pdf

Department for Business, Innovation and Skills [BIS] (2013) *The International Survey of Adult Skills 2012: Adult literacy, numeracy and problem solving skills in England*. https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/246534/bis-13-1221-international-survey-of-adult-skills-2012.pdf

Department for Business, Innovation and Skills [BIS] (2014a) Estimation of labour market returns to qualifications gained in English Further Education. https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/383646/Estimation_of_the_labour_market_returns_to_qualifications_gained_in_English_Further_Education_-_Final_-_November_2014.pdf

Department for Business, Innovation and Skills [BIS] (2014b) *Apprenticeship evaluation: learners 2014,* BIS research paper no. 205

Department for Business, Innovation and Skills [BIS] (2015) https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/455101/bis-15-477-apprenticeships-levy-consultation.pdf

Department for Business, Innovation and Skills [BIS] (2016) *Understanding the further education market in England,* BIS research paper no. 296. https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/544310/bis-16-360-fe-market-england.pdf

Department for Business, Innovation and Skills [BIS] and DfE (2016) *Post-16 Skills Plan*. https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/536043/Post-16_Skills_Plan.pdf

Dolphin T (ed) (2015) *Technology, globalisation and the future of work in Europe: Essays on employment in a digitised economy*, IPPR. http://www.ippr.org/publications/technology-globalisation-and-the-futureof-work-in-europe

Durman (2016) *EMSI Labour Market Information: Hairdressing and Beauty Salon Managers and Proprietors, Hairdressers, Barbers*. http://www.economicmodelling.co.uk/wp-content/uploads/AOC_hairdressers_v1a1.pdf

Engineering UK (2016) *Engineering UK 2016: The state of UK engineering*. http://www.engineeringuk.com/Research/Engineering-UK-Report-2016/

European Association for the Education of Adults [EAEA] (2015) *Adult Education in Europe 2015: A Civil Society View.* http://www.eaea.org/en/policy-advocacy/eaea-policy-reports.html

European Centre for the Development of Vocational Training [Cedefop] (2016) *European sectoral trends: the next decade.* http://www.cedefop.europa.eu/en/publications-and-resources/publications/8093

European Centre for the Development of Vocational Training [Cedefop] (2014) *Policy handbook: Access to and participation in continuous vocational education and training (CVET) in Europe*, Cedefop working paper number 25, Luxembourg: Publications Office of the European Union. http://www.cedefop.europa.eu/en/publications-and-resources/publications/6125

FE Data Library (2016, 2017) https://www.gov.uk/government/collections/fe-data-library

Fletcher M, Gravatt J and Sherlock D (2015) 'Levers of power: funding, inspection and performance management' in Hodgson A (ed) *The Coming of Age for FE?,* Institute of Education Press

Foster D (2016) *Adult further education funding in England since 2010,* House of Commons Library. http://researchbriefings.parliament.uk/ResearchBriefing/Summary/CBP-7708

Frey C B, Osborne M A, Holmes C, Rahbari E, Curmi E, Garlick R, Chua J, Friedlander G, Chalif P, McDonald G and Wilkie M, with Badishkanian G R, Bazinet J B, Chang A, Fordham T M, Lai A, Lehto T, McShane K, Pritchard W H, Shirvaikar A, Wightman F, Wong K, Rogers S (2016) *Technology at Work 2.0*, Citi GPS: Global Perspectives & Solutions. http://www.oxfordmartin.ox.ac.uk/downloads/reports/Citi_GPS_Technology_Work_2.pdf

Fuller A and Unwin L (2016) 'The aims and objectives of apprenticeship', in Lanning T (ed) *Where next for apprenticeships?,* Chartered Institute of Personnel and Development. https://www.cipd.co.uk/Images/where-next-for-apprenticeships_2016_tcm18-14292.pdf

Gloster R, Marvell R, Buzzeo J, Hadjivassiliou K, Williams J and Huxley C (2016) *Mapping investment in adult skills: Which individuals, in what learning, and with what returns?*, BIS Research Paper Number 292. https://www.gov.uk/government/publications/adult-skills-mapping-investment

Gospel H, Nishikawa M and Goldmann M (2011) *Varieties of Training, Qualifications and Skills in Long-term Care: A German, Japanese and UK comparison*, SKOPE, Oxford and Cardiff Universities

Gospel H (2012) *Understanding training levies: Final report*, UKCES. http://dera.ioe.ac.uk/15033/1/evidence-report-47-understanding-levies.pdf

Green F, Felstead A, Gallie D, Inanc H and Jewson N (2013) *What has been happening to the training of workers in Britain?,* LLAKES research paper no 42, Centre for Learning and Life Chances in Knowledge Economies and Societies, Institute of Education

Gunson R and Thomas R (2017) *Equipping Scotland for the future: Key challenges for the Scottish skills system*, IPPR Scotland. http://www.ippr.org/publications/equipping-scotland-for-the-future

Halfon R (2016) *Speech by Robert Halfon MP to the Association of Colleges Conference 2016*, 18 November 2016, Birmingham

Hatfield I and Thomson S (2015) *Employee progression in European labour markets*, IPPR. http://www.ippr.org/files/publications/pdf/employee-progression-EU-labour-markets_Feb2015.pdf?noredirect=1

Hayton J (2015) *Leadership and Management Skills in SMEs: Measuring Associations with Management Practices and Performance*, Department for Business, Innovation and Skills.

Hughes D, Adriaanse K and Barnes S (2016) *Adult Education: Too important to be left to chance – Main report*. http://www2.warwick.ac.uk/fac/soc/ier/research/adult_education/

Humphris A, Kleiner M and Koumenta M (2009) *Analyzing Policies Regulating Occupations in Britain and the US*, Centre for Economic Performance, London School of Economics and Political Science

Javid (2015) Foreword to apprenticeships levy consultation paper. https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/455101/bis-15-477-apprenticeships-levy-consultation.pdf

Keep E (2015) *Unlocking workplace skills: What is the role of employers?* CIPD. https://www.cipd.co.uk/knowledge/work/trends/workforce-skills-report

Lanning T and Lawton K (2012) *No train no gain? Beyond free-market and state-led skills policy,* IPPR. http://www.ippr.org/publications/no-train-no-gain-beyond-free-market-and-state-led-skills-policy

Lanning T (ed) (2016) Where next for apprenticeships? CIPD. https://www.cipd.co.uk/Images/where-next-for-apprenticeships_2016_tcm18-14292.pdf

Larson A and Milana M (2006) *Barriers towards Participation in Adult Education and Training*. http://www.leeds.ac.uk/educol/documents/157725.htm

Lawrence M and McNeil C (2014) *Fair Shares: Shifting the balance of power in the workplace to boost productivity and pay*, IPPR. http://www.ippr.org/publications/fair-shares-shifting-the-balance-of-power-in-the-workplace-to-boost-productivity-and-pay

Lawrence M (2016) *Future Proof: Britain in the 2020s*, IPPR. http://www.ippr.org/publications/future-proof-britain-in-the-2020s

Learning and Work Institute [LWI] (2016), *Power to the People: the Case for Personal Learning Accounts*. http://www.learningandwork.org.uk/our-thinking/policy-solutions

Leitch S (2006) *Prosperity for all in a global economy – World class skills*. The Stationery Office. http://dera.ioe.ac.uk/6322/1/leitch_finalreport051206.pdf

Mason G, van Ark B and Wagner K (1994) 'Productivity, product quality and workforce skills: food processing in four European countries', *National Institute Economic Review*, 147: 62–83

Mason G and Wagner K (2002) *Skills, Performance and New Technologies in the British and German Automotive Components Industries*, Department for Education and Skills

May T (2016) speech to Conservative party conference 2016, Birmingham

May T (2017) *The shared society: Prime Minister's speech to the Charity Commission annual general meeting* https://www.gov.uk/government/speeches/the-shared-society-prime-ministers-speech-at-the-charity-commission-annual-meeting

Morris G (2016) *The use of independent training providers in vocational education and training: wider considerations for employers and policy makers,* SKOPE issues paper 34, SKOPE, University of Oxford

National Audit Office (2009) *Train to Gain: Developing the skills of the workforce*, Stationery Office

National Institute of Adult Continuing Education [NIACE] (2015) 2015 *NIACE Adult Participation in Learning Survey: Headline Findings*. http://www.learningandwork.org.uk/our-resources/promoting-learning-and-skills/2015-adult-participation-learning-survey

Organisation for Economic Co-operation and Development [OECD] (2012) *Levels of GDP per capita and productivity*. http://stats.oecd.org/Index.aspx?DataSetCode=PDB_LV

Organisation for Economic Co-operation and Development [OECD] (2013) *Survey of Adult Skills: First Results*. http://www.oecd.org/skills/piaac/Country%20note%20-%20United%20Kingdom.pdf

Organisation for Economic Co-operation and Development [OECD] (2016) *Skills Matter: Further Results from the Survey of Adult Skills.* http://bit.ly/skillsmat

Office for National Statistics [ONS] (2011) *Earnings by qualification, 2011*. http://webarchive.nationalarchives.gov.uk/20160105160709/http://www.ons.gov.uk/ons/dcp171776_229888.pdf

Office for National Statistics [ONS] (2015) *National Population Projections: 2014-based Statistical Bulletin*. http://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/populationprojections/bulletins/nationalpopulationprojections/2015-10-29#toc

Office for National Statistics [ONS] (2015b) *Transition from a manufacturing to service led labour market over past 170 years*. http://visual.ons.gov.uk/work-travel-census/

Office for National Statistics [ONS] (2016a) *International comparisons of productivity*. https://www.ons.gov.uk/economy/economicoutputandproductivity/productivitymeasures/datasets/internationalcomparisonsofproductivityfirstestimates

Office for National Statistics [ONS] (2016b) *Annual Survey of Hours and Earnings: 2016 Provisional Results*. https://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/earningsandworkinghours/bulletins/annualsurveyofhoursandearnings/2016provisionalresults#distribution-of-earnings

Office for National Statistics [ONS] (2016c) *Balance of payments pink book*. https://www.ons.gov.uk/economy/nationalaccounts/balanceofpayments/bulletins/unitedkingdombalanceofpaymentsthepinkbook1/2016

Office for National Statistics [ONS] (2016d) *Annual Business Survey: UK non-financial business economy: 2015 provisional results*. https://www.ons.gov.uk/businessindustryandtrade/business/businessservices/bulletins/uknonfinancialbusineseconomy/2015provisionalresults

Office for National Statistics [ONS] (2017) *Regional and sub-regional productivity in the UK*. https://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/labourproductivity/articles/regionalandsubregionalproductivityintheuk/jan2017

Office for National Statistics [ONS] (2017b) *Historical series of labour productivity*. https://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/labourproductivity/datasets/historicalseriesoflabourproductivity

Ofsted (2015) *Apprenticeships: developing skills for future prosperity*

Ofsted (2016) *The Annual Report of Her Majesty's Chief Inspector of Education, Children's Services and Skills 2015/16.* https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/574186/Ofsted_annual_report_education_and_skills_201516_web-ready.pdf

Pullen C and Clifton J (2016) *England's apprenticeships: Assessing the new system*, IPPR. http://www.ippr.org/publications/englands-apprenticeships-assessing-the-new-system

Sainsbury D (2016) *Report of the Independent Panel on Vocational Education* https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/536046/Report_of_the_Independent_Panel_on_Technical_Education.pdf

Shury J, Winterbotham M, Davies B and Oldfield K (2010) *National Employer Skills Survey for England 2009: Main report*, UK Commission for Employment and Skills

Skills Funding Agency [SFA] (2016) *Further Education and Skills – Statistical first release October 2016*. https://www.gov.uk/government/statistics/further-education-and-skills-statistical-first-release-october-2016

Social Mobility and Child Poverty Commission (2016) *Apprenticeships, young people and social mobility*, Social Mobility and Child Poverty Commission

Susskind R and Susskind D (2015) *The Future of the Professions: How Technology Will Transform the Work of Human Experts*, Oxford University Press

Tinson A, Ayrton C, Barker K, Barry Born T, Aldridge H and Kenway P (2016) *Monitoring Poverty and Social Exclusion*, Joseph Rowntree Foundation. https://www.jrf.org.uk/report/monitoring-poverty-and-social-exclusion-2016

Tuijnman A. (1991) 'Lifelong Education', *International Journal of Lifelong Education* 10(4): 275–285

UK Commission for Employment and Skills (2012) *The youth employment challenge*, UKCES. https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/305736/the-youth-employment-challenge.pdf

UK Commission for Employment and Skills [UKCES] (2016a) *Working Futures 2014-2024: main report.* https://www.gov.uk/government/publications/uk-labour-market-projections-2014-to-2024

UK Commission for Employment and Skills [UKCES] (2016b) *Working Futures 2014-2024: annexes.* https://www.gov.uk/government/publications/uk-labour-market-projections-2014-to-2024

UK Commission for Employment and Skills [UKCES] (2016c) *UKCES Employer Skills Survey 2015: UK Report.* https://www.gov.uk/government/publications/ukces-employer-skills-survey-2015-uk-report

Vivian D, Winterbotham M, Shury J, Skone James A, Huntly Hewitt J, Tweddle M, Downing C, Thornton A, Sutton R, Stanfield C and Leach A (2016) *Employer skills survey 2015: UK results,* Evidence report 97, UK Commission for Employment and Skills

Wilshaw M (2014) *Speech at CBI Conference*. https://www.gov.uk/government/speeches/sir-michael-wilshaws-speech-to-cbi-conference

Winterbotham M, Vivian D, Shury J, Davies B and Kik G (2014) *UK Commission's Employer Skills Survey 2013: UK Results*, UK Commission for Employment and Skills. https://www.gov.uk/government/publications/ukces-employer-skills-survey-2013

Wolf A (2011) *Review of vocational education: the Wolf report*, Department for Education and Department for Business, Innovation and Skills. https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/180504/DFE-00031-2011.pdf

Wolf A (2015a) *Heading for the precipice: can further and higher education funding policies be sustained? Kings College Policy Institute*. http://www.kcl.ac.uk/sspp/policy-institute/publications/Issuesandideas-alison-wolf-digital.pdf

Wolf A (2015b) *Fixing a broken training system, Social Market Foundation*. http://www.smf.co.uk/wp-content/uploads/2015/07/Social-Market-Foundation-Publication-Alison-Wolf-Fixing-A-Broken-Training-System-The-Case-For-An-Apprenticeship-Levy.pdf

Work and Pensions Committee (2016) *In-work support and Universal Credit*. http://www.publications.parliament.uk/pa/cm201516/cmselect/cmworpen/549/549.pdf