The Modern Jobs Economy: trends in employment for study leavers

A catalyst for students' union led employment creation activity

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Contents

Introduction

Introduction

A week barely goes by without further sobering headlines about the labour market, issues around youth unemployment, and the value of education to the economy. All of these issues, so intrinsically linked, matter to our members across sixth forms, colleges and universities, and to those study leavers who are now trying to find work. Tales of unemployed college leavers and graduates serving coffee for a living have become all too common, but despite their constant repetition they have failed to catalyse enough proactive action to really change the situation.

Whilst there is much discussion about the different issues, there is not enough discussion about how they affect the UK's seven million students *and* what can be done to solve them. This report intends to spur students and students' unions to think boldly and creatively on what they can do to help tackle the current employment crisis, both in their own localities and nationally as a collective movement. Responsibility for the creation of quality employment rests on a number of shoulders, but why are we waiting for others to determine the fortunes of our members?

This report sets out key trends in the current UK labour market and how a student's education influences their future employment. It shows that there is more to the problem than just the number of jobs, or lack of, and highlights parallel and interrelated issues around the quality of employment in terms of pay, under-utilisation of qualifications, skills and experience and the opportunity for career progression. It is by no means an exhaustive analysis of complex issues, but by better understanding the problems we hope to kick start a discussion about solutions.

Some see the current situation as purely cyclical – brought on by the recession and thus likely to disappear when the economy recovers. Others point to the fact that youth unemployment was already more than double adult unemployment before the recession, making it a long-term and deep-seated problem rather than simply a blip. It is only when looking at both youth and study leaver numbers combined and overtime that the true scale of the labour market shift and its implications becomes clear.

Study leavers[1] – no matter what qualification they have attained and regardless of their age – are entering a highly polarised labour market. In this context it is difficult for study leavers, in particular those without graduate degrees from top universities, to find work and even harder to find well-paid jobs with opportunities to progress. This report considers the implications of the shifts in the labour market for those with no formal qualifications to those with graduate degrees and above. It then uses this data to consider the reality of career options for the 300,000 graduates, 400,000 school leavers and more than one million adult further education participants entering the job market this summer and beyond.

Never has there been an agenda more pressing for each and every single one of our members. Whether a college student in Wales, or a university student in Scotland, an apprentice in Northern Ireland or postgraduate in England – employment opportunities and employment conditions touch each of our seven million members. This agenda adds to NUS' drive to embed a truly tertiary approach to all of NUS' work, an approach that transcends the current artificial barriers we place between different types of learning. We unashamedly focus on qualifications outside the scope of higher education as much as those found on traditional campuses, and all data and analysis is UK-wide, bar the section on the changing educational profile of non-graduates on page 9 that covers England only, for which we have commissioned a separate piece of work to pull out the distinctive challenges and opportunities in the Nations.

Whilst some of the issues outlined in this report appear at first to be challenging, that's because the problems are deep rooted and require more than a quickly worked out response. We'll be using this as the basis of an on-going conversation that will be focused on actions. We'll be giving members and stakeholders alike the opportunity to feed in their thoughts to a commission on employment in the coming months that will capture these discussions and proposals for action. But don't feel like you have to wait to create change. We want students and students' unions to take a judgement on what problems are facing our members and then start thinking about what kind of actions we can take individually, and collectively to solve them.

As the report concludes "our labour market is failing to deliver economic prosperity, social justice and well-being for the majority. A new path for work must be forged". Each generation must choose how it defines itself. From the rubble of a failed labour market, we must seize the opportunity to kick start a transformation into a modern jobs economy, with students' unions as a driving force.

The labour market is changing

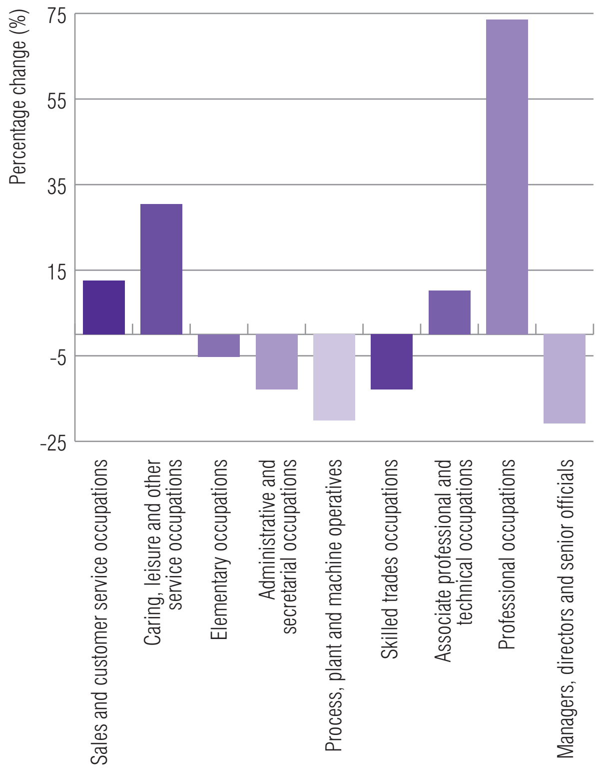
The labour market is changing

The move from a manufacturing to service-based economy has bought with it a number of changes in the labour market. The sectoral, occupational and geographical make-up of the labour market has changed profoundly, so too has the nature of work with increases in part time work and female participation. We briefly review the key shifts to explain the labour market context that study leavers are entering.

Polarisation in occupations and pay

The UK labour market is increasingly characterised by higher wage work requiring advanced qualifications at the top and low wage service sector jobs at the bottom of the earnings distribution, while jobs in the middle have been in decline. In short there has been a polarisation of employment – a trend that shows no real signs of abating (see Figure 1)[2].

Figure 1: Growth in jobs by occupational group 2001-12, UK



Source: Labour Force Survey (LFS) and the Annual Survey for Hours and Earnings (ASHE) 2012

This new hour-glassed shaped labour market is evident in both pay and occupation data. Between 2001 and 2012[3] the only job types which have increased are those at the extreme ends of the earnings distribution. 'Sales and customer service occupations' and 'Caring, leisure and other service occupations', both of which have median earnings around 35 per cent below median earnings for the economy as a whole, have grown by 13 and 30 per cent respectively.

Alongside this, 'Professional occupations' and 'Associate professional and technical occupations', both of which are at the top end with median earnings between 14 and 37 per cent above the economy's median, have grown by 10 to 74 per cent respectively. A change in the definition of the occupation classification[ii] and the generally limited scope for the

Table 1: Median full-time gross weekly earnings by major occupation group, UK, April 2012[4]

	Wages	
	Median wages (£)	% variation from median
Sales and customer service occupations	323.3	-36%
Caring, leisure and other service occupations	332.7	-34%
Elementary occupations	333	-34%
Administrative and secretarial occupations	393.1	-22%
rocess, plant and machine operatives	426.4	-16%
Skilled trades occupations	465.7	-8%
All employees	505.9	0%
Associate professional and technical occupations	575	14%
Professional occupations	694.3	37%
Managers, directors and senior officials	738.4	46%

Source: Labour Force Survey (LFS) and the Annual Survey for Hours and Earnings (ASHE) 2012 number of managers to increase explains the decline in the ‘managers, directors and senior officials.

Meanwhile those jobs which fall into the categories around the median earnings have been in decline with negative growth rates between 5 and 20 per cent.

The polarisation can be seen within job classifications as well as between them. For the retail and wholesale sector, where managerial jobs increased between 2000 and 2008, the proportion of these jobs earning below £400 per week, adjusting for inflation, increased from 37 per cent to 58 per cent in this time period. And even in the financial intermediation sector, such as banks[5], there was also a growth in the proportion of managers in this sector earning less than £400 (from 24 per cent to 30 per cent, between 2000 and 2008)[6].

The effects of an uneven labour market can be seen at both the bottom and the top ends of the wage distribution as inequality rises. At the bottom end of the labour market there has been a consistent rise of low paid employment. 21 per cent of all employees in the UK, or just over five million individuals[7] are currently working for low pay[8]. Meanwhile the average FTSE 100 C.E.O salary in 2011 was £4.8 million, 185 times the salary of the average UK employee.[9]

The problem of low pay is exacerbated by a feature becoming common in the labour market but hidden by the headline employment figures; the problem of underemployment - people who want to work more hours than they do and people who work in professions below their skill level. The TUC estimate that the number of people finding themselves under-employed has risen by around one million since the start of the recession, with 2.3 million people under-employed in early 2008, compared to 3.3 million today (a 42 per cent increase).[10]

A flexible labour market

Successive governments since the late 1970s have committed to increasing the flexibility of the UK labour market. They have done so based on the premise that greater labour market flexibility is essential for higher employment and economic success.[11] While it is not always clear what is meant by the term, discussions usually point to the need for less regulation making it easier to hire and fire workers, shorter term contracts, low unemployment benefits with tight conditions, weak trade unions and low coverage of collective bargaining. As such, UK firms pay one of the lowest non-wage costs per employee than any other EU country.[12]

One associated outcome with the adoption of this approach is the stagnation of median wages[13] and increasing incidence of low pay (see discussion above).

Another contentions issue arising from increase in flexibility in the UK labour market is the use of zero hour contracts. Zero hour contracts mean that employees are asked to be available for work with no commitment on behalf of the employer to provide any. This inevitably puts employees in an insecure financial position.

According the Labour Force Survey (LFS), those on zero hour contracts are more likely to be women, and are more common in the arts and recreation services, accommodation and food as well as the caring and leisure sectors.[14] As will be discussed later in the report, these are also the sectors with low levels of pay and high percentages of those with low or no qualifications.

The flexibility of the UK labour market is often cited as one of the attractive features of the UK economy[15] but for those working on issues of social justice and inequality there is growing resistance to the emphasis policy makers place on its necessity.

A recent shift from public to private sector job creation

Since 2009 the share of total employment provided by the public sector has fallen from 22.0 per cent to 19.2 per cent. This is the lowest share since records began in 1999. The share of the private sector has risen meanwhile from 78.0 per cent in September 2009 to 80.8 per cent in December 2012.

Politicians and economists often welcome an increasing share of private sector activity believing it is a sign of economic dynamism. However, there is growing concern over an apparent trade-off between the quantity of jobs and the quality. More than four fifth of those on low pay work in the private sector[16] and there is a higher prevalence of zero hour contracts than in the public sector.[17]

Graduates consistently rate the public sector as the most popular employment destination, even since government spending cuts in the public sector began. Graduates are thought to be attracted to the relative security in the public sector and opportunities for further training and development.[18] A recent poll found that the public sector is recruiting a higher proportion of graduates than the private sector.[19]

Increases in the proportion of jobs created by small firms

In an analysis of job creation and destruction between 1998 and 2010 it was found that total employment in the UK expanded by some 8 per cent over the 13 years, with the majority of jobs created by small firms. Of the total 2.61 million jobs created on average each year during this period, 34 per cent were contributed by existing small firms (less than 50 employees), with a further 33 per cent contributed by small new-start-ups. Since the beginning of recession in 2009 the importance of small businesses in generating employment has grown further. 71 per cent of jobs created in 2009 and 2010 were by small firms and new start-ups – the majority of which are small in size (60 per cent of start-ups are accounted for by one employee firms).

This same study notes that 28 per cent of all jobs in the private sector were either created or destroyed every year over the period of study.[20] This represents a high level of turbulence in a period which was for the most part marked by continuing economic growth, although it appears that the rate of churn was declining up to 2008. Finally, it is important to note that the rate of churn for micro-enterprises (less than 10 workers) is found to be around twice that for larger firms of 250+ workers.

Costs of recruitment are relatively high for micro and small businesses, as is the creation of apprenticeship positions.[21] As such this growth in the number of small firms is likely to further squeeze the number of opportunities for study leavers entering the labour market. It is also important to note that business start-up rates are lower for those under the age of 25.[22]

Many students' unions, especially in universities, have already undertaken excellent work in this area through enterprise initiatives to support students to set up their own businesses. This is a key area of opportunity for students' unions to engage in.

Regional disparities

National level unemployment and job creation figures hide considerable regional inequalities. Table 2 summarises the major disparities in economic prosperity and highlights the concentration of economic output in London and the South East. Most regions, bar London and the South East, fall below the national per capita average of Gross Value Added (GVA), an economic measure used to measure of the value of goods and services produced in an area.

The geographical spread of jobs and skills is key to understanding the disparities in economic prosperity. For example, splitting the types of jobs up into four

Table 2: Percentage variation from national average Gross Value Added (GVA) per capita, 2011

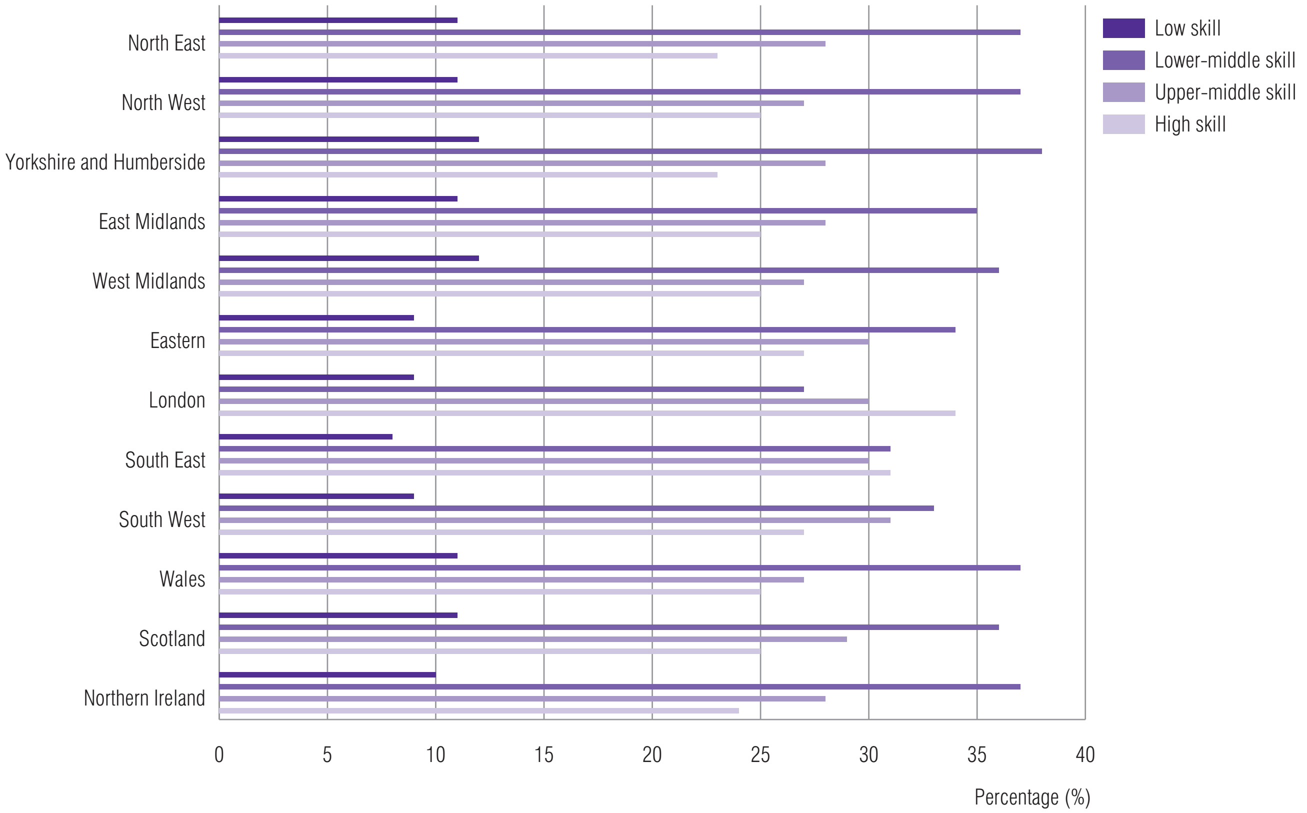
	1989	1999	2009
North East	-18.2	-22.7	-23.5
North West	-10.5	-11.7	-15.6
Yorkshire and Humber	-12.3	-12.1	-17.4
East Midlands	-7.0	-9.2	-12.4
West Midlands	-10.0	-10.0	-17.0
East of England	-6.6	-3.9	-7.3
London	**53.8**	**60.1**	**73.9**
South East	-1.8	6.1	6.3
South West	-9.9	-8.2	-9.1
Wales	-17.2	-23.3	-26.7
Scotland	-5.9	-5.7	-1.2

Source: ONS

different qualification levels, from low to high, 34 per cent of jobs in London were in the high qualifications group (see Figure 2). Yorkshire and The Humber and the North East had the lowest percentage of those jobs requiring high qualifications at 23 per cent.

In the recent decade a new narrative of the UK labour market has emerged – one that depicts a story of winners and losers, both in terms of individuals and regions. This reality is set to get worse. As we will discuss in the following section, forecasts point to increasing polarisation in the labour market[23] coupled with decline in low to middle incomes.[24] The common response to this narrative is that individuals must 'up-skill' to adapt to the new labour market. We consider if this is happening in the next section.

Figure 2: Percentage of jobs by skill level across the UK, 4 quarter average 2011



Source: LFS

The educational profile is changing

The educational profile is changing

Labour supply has witnessed more nuanced changes than labour demand in the past decade. We briefly outline the qualification and study leaver profiles here so that we are able to assess changing labour demand and supply.

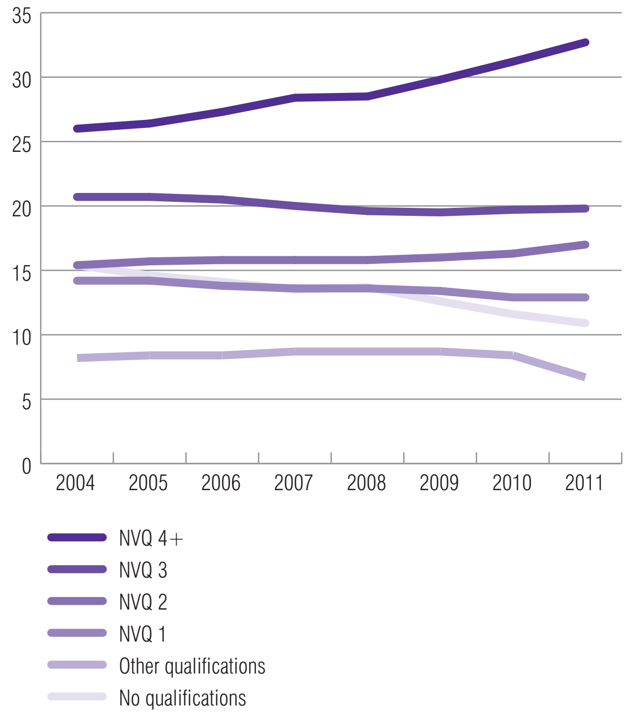
The overall qualification profile

For the working age population overall, almost a third now have graduate degrees and above, a fifth have up to Level 3 NVQ qualifications, 17 per cent up to level 2 qualification, 12.9 per cent have a level 1 qualification and 10.9 per cent have no formal qualifications.

Figure 3 shows the change in the qualification profile overtime. The percentage with Level 4 qualifications and above has increased significantly and those with ‘other’ or ‘no’ qualifications have decreased both in nominal and percentage terms. The proportion of those with Level 1 and 2 qualifications have fallen in percentage terms but numbers have stagnated.

The increase of those with Level 4 qualifications is in line with the growth in the need for highly skilled individuals described on page 4. However, the effect upon the education profile of the decline in middle-level jobs and growth in low-end occupations is less clear. We will return to this point in later sections.

Figure 3: The qualification profile in the UK 2004-2011



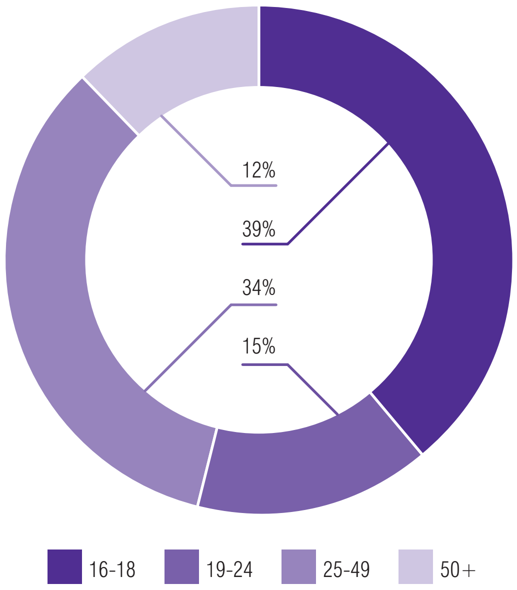
Source: ASHE, 2004-2011, NOMIS

Below we consider the numbers currently participating in education to decipher the flow of non-graduates (those with Level 3 qualifications and below) and graduates.

Non-graduates

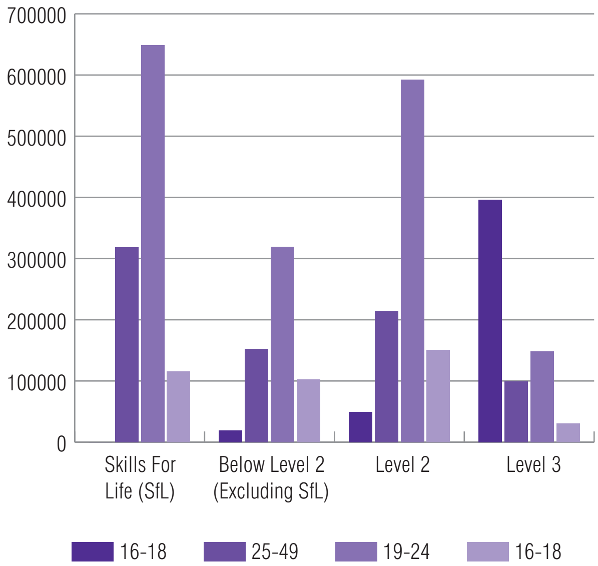
A total of 5 million people are in government-funded education including full-time education and work based learning – 14.5 per cent of the working age population in England. Of these 1.98 million are 16 to 18 years old. Perhaps surprising to some, those aged 25 years and older make up 46 per cent of the population still in government-funded education (see Figure 4). This can be partly explained by government employment programmes that offer opportunities for those out of work to take basic skill courses such as Skills for Life (see Figure 5).

Figure 4: Participation by age group in FE in England (excluding apprenticeships)[25]



Source: BIS, 2013

Figure 5: Participation by qualification in England (excluding apprenticeships)[26]



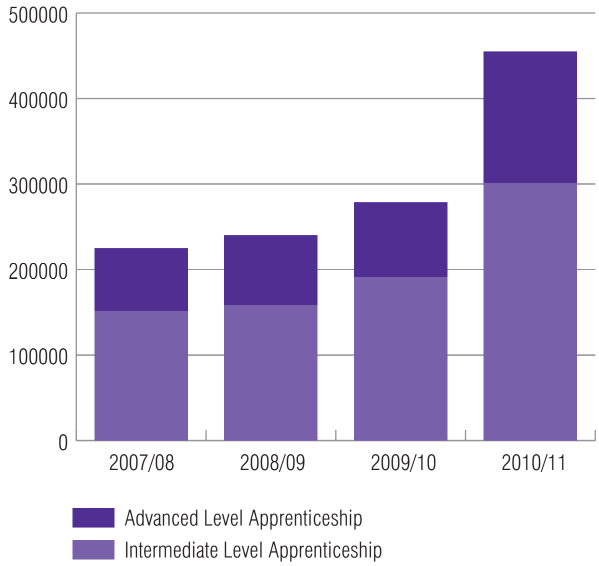
Source: BIS, 2013

Apprenticeships

Data published by the Department for Business Innovation and Skills (BIS) this year show that in the 2011/12 academic year there were 520,600 apprenticeship starts in England alone, 63,400 more than the number of starts in the 2010/11 academic year, and 240,900 more than in the 2009/10 academic year (see Figure 6). Much of this increase is due to many more people aged 25 and over starting apprenticeships (44 per cent in 2011/12) compared with 2009/10 (18 per cent) and years previous to this.[27]

Table 3 provides a breakdown of the 20 most popular apprenticeships. The majority of people starting apprenticeships choose those in the service sectors, such as business administration and retail. It is also worth noting that a majority of apprenticeship starters are now female. There have also been declines in those sectors traditionally associated with apprenticeships such as those in construction, engineering and electrotechnical.

Figure 6: Starts in intermediate and advanced apprenticeships 2008/08 – 2010/2011[28]



Source: BIS, 2013

Table 3: 20 most popular apprenticeships by number of starts in England 2011/12

Framework	Starts in 2011/12	Change since 2010/11	% change since 2010/11
Health and Social Care	67,020	13,300	25%
Customer Service	57,920	3,950	7%
Management	43,330	13,540	45%
Business Administration	42,700	3,800	10%
Hospitality and Catering	34,840	5,030	17%
Retail	30,990	-10,420	-25%
Children's Care Learning and Development	25,060	-2,350	-9%
Industrial Applications	17,700	14,070	388%
Hairdressing	15,810	-540	-4%
Active Leisure and Learning	15,520	-2,130	-12%
Engineering	12,890	-5,440	-30%
Construction	12,850	-2,740	-18%
IT and Telecoms Professionals	11,430	-600	-5%
Accountancy	8,080	1,300	19%
Vehicle Maintenance and Repair	7,960	-1,100	-12%
Driving Goods Vehicles	7,360	3230	78%
IT User	6,760	-730	-10%
Warehousing and Storage	6,590	640	11%
Teaching Assistants	5,870	1,860	46%
Electrotechnical	4,820	-720	-13%

Source: BIS, 2013

While the increase in apprenticeships is often highlighted by the Coalition government and generally seen as a positive development there are considerable questions being raised about the quality of apprenticeships and their currency in the current labour market. We will return to this discussion in the following section.

Graduates

As discussed earlier the number of graduates as a proportion of the working population is increasing. There are now over 2 million home students studying full and part time for undergraduate degrees across the UK – an increase of 5 per cent since 2007.[29] Table 4 provides information on the subject areas where qualifications are being obtained. Almost half are in science subjects with the boost coming from students enrolled in subjects allied to medicine such as nursing.

Table 4: Qualifications obtained by subject areas at UK Higher Education Institutions (HEIs) (00s)

All students by subject area of study		
Subject Area	**2010/11**	**2011/12**
Medicine and dentistry	66,840	67,955
Subjects allied to medicine	299,800	299,940
Biological sciences	190,035	199,275
Veterinary science	5,540	5,575
Agriculture and related subjects	20,790	21,165
Physical sciences	93,580	94,955
Mathematical sciences	41,110	43,170
Computer science	99,025	95,670
Engineering and technology	160,885	162,015
Architecture, building and planning	62,780	58,355
Total Science	**1,040,375**	**1,048,070**
Social studies	218,135	222,375
Law	92,950	93,575
Business and administrative studies	358,295	363,860
Mass communications & documentation	53,680	54,860
Languages	134,720	135,985
Historical and philosophical studies	96,760	99,165
Creative arts and design	176,700	182,085
Education	223,730	201,720
Combined	105,955	94,945
All subjects	**2,501,295**	**2,496,645**

Source: Higher Education Statistical Agency (HESA)

It is worth considering the age breakdown for undergraduates. Mature students are defined as aged 21 or over at the point at which they commence their undergraduate studies. A study in 2012 found that there were 429,000 mature students in higher education, nearly one in three of undergraduates studying first degrees across the UK. Most mature students (39.9 per cent) were aged between 21-24, and a further fifth aged between 25-29. This leaves 170,840 mature students over the age of 30. While mature students study a variety of subjects, they are more likely to study vocational subjects and subjects allied to medicine than younger students.[30]

There have been recent increases in Level 4 qualifications through higher apprenticeships, but at only 3,700 starts in 2011/12,[31] the number remains small in comparison to degree qualifications.

Looking at changes in the qualification profile and course enrollment as a whole it can be concluded that the labour supply has not polarised in the way that the labour demand has. While there has been an increase in those taking up undergraduate degrees there have also been some gains in people with lower and mid-level qualifications in particular the number on apprenticeship schemes. This disparity may reflect demand by employers at the bottom half of the labour market asking for particular qualifications and or significant underemployment and under-utilisation of skills for those employed in these roles.

The gap evident here has clear consequences for those who have studied and gained low and middle level qualifications only to find themselves on low levels of pay. Rather than a 'skills deficit' there appears to be an emerging 'job quality deficit.'

The reality of the labour for study leavers

The reality of the labour market for study leavers

Figure 7 brings together the findings of the previous two sections to present the position and prospects of study leavers with different qualifications.

It is well known that there are disparities in employment outcomes between graduates and non-graduates. Non-graduates in the UK have unemployment levels

Figure 7: Career prospects for UK study leavers with different qualifications [34]

No or below Level 2 qualifications

Unemployment:
33% (no qualifications) 23% (Level 1)

Job prospects:
More opportunities in distribution, business support services, retail, wholesale and hospitality

Pay prospects:
Only jobs in the distribution sector offer a starting rate of above £15k, hospitality is only £10k

Career and pay progression:
Little room for progression, especially in hospitality where the maximum pay for those with no or low level qualifications is £18k

Further learning prospects:
Without GCSE Maths and English qualifications there are very few learning opportunities open, apart from going back into education to gain these basic competencies

Level 2 qualifications 5 GCSEs (including Maths and English) or in an intermediate trade apprenticeship

Unemployment:
12% (Level 2) 15% (trade apprenticeships)

Job opportunities:
Social care, hospitality, retail, construction and manufacturing

Pay prospects:
Similar to those with no qualifications, but marginally better especially if can find employment in business support services, distribution, construction and manufacturing

Career and pay progression:
Poor within certain sectors such as hospitality. In social care chance to progress in position but little change in pay. Better prospects for pay progress in distribution sector

Further learning opportunities:
A-levels and vocational courses including advanced apprenticeships (eg: construction or manufacturing)

more than double that for graduates and degree holders earned an average of £12,000 a year more than non-graduates over the past decade. Graduates aged 22 to 64 had median salaries of £29,900 compared with £17,800 for non-degree holders. [32]

In terms of pay and career progression, for those without a degree, earnings increased for each year of age, leveling off at the age of 30 and peaking at the age of 34 at £19,400. For those with a degree, earnings increased faster for each year of age. They also increased for longer, leveling off at the age of 35 and peaking at £34,500 at the age of 51. After this point average wages decreased as it is more likely that the high earners were able to retire and leave the labour market.[33]

While these overall contrasts can be a useful starting point, they hide disparities within the non-graduate and graduates groups. Below we look in more detail at the story behind the statistics provided in Figure 7.

Level 3 qualifications A-levels, GNVQ Level 3s and advance apprenticeships

Unemployment: 12%

Job opportunities:
Social care, sport and personal services construction, construction, hospitality, retail

Pay prospects:
Decent pay prospects for those working in wholesale, distribution, manufacturing sectors, or banking and law enforcement

Career progression:
Again, depends on sector and subjects. If in construction or manufacturing good prospects

Further learning opportunities:
Advanced apprenticeship, undergraduate degree

Level 4+ Graduates

Unemployment:
8% (20% for those graduated in past two years)

Job opportunities:
High and across sectors, but particularly for those with medical and medical related degrees, those who have completed degrees from Russell Group universities and those in London

Pay prospects:
Large variation, for the graduates joining top graduate employers to those taking up unpaid internships

Career progression:
If a graduate job then very good prospects

Further learning opportunities:
Post graduate degrees, which do further enhance pay levels and career opportunities

Opportunities and prospects for non-graduates

The unemployment rates for different segments of the non-graduate population vary from a third to 12 per cent. The explanation for this difference relies not just on understanding the qualification profile but also the sector in which different non-graduates work.

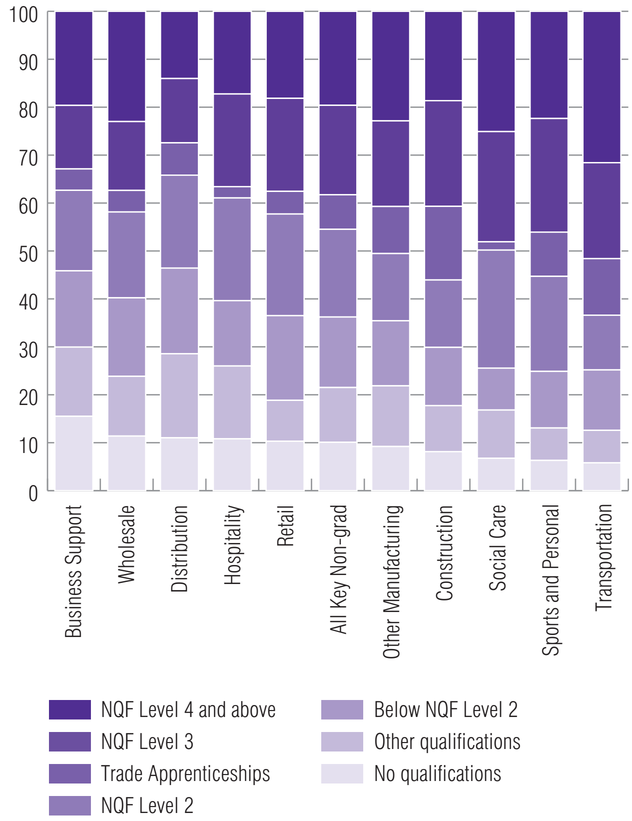
Key sectors employing non-graduates

Analysis carried out by **nef**[35] found that the majority of the non-graduate workforce is employed within ten super-sectors described in Figure 8.[36] These are not the only parts of the economy that are or will be important for non-graduate employment – but because of their size, they are the most significant in understanding current non-graduate employment trends.

Retail is by far the biggest employer, accounting for 15 per cent of all non-graduate employees in the UK. Construction, hospitality, manufacturing and domestic distribution are other important employers.

Figure 8 provides a breakdown of the workforce by qualification within these sectors. Nearly all the super-sectors have at least half of their workforce with no or low-level qualifications. Distribution, business support services and retail are the three super-sectors with the greatest proportions of low-qualified employees. In contrast, social care and transport manufacturing have proportions similar to the UK average of 42 per cent.

Figure 8: Qualification profile in key non-graduate employment sectors, UK



Source: ASHE, 2010

Ladders of opportunities

The same **nef** study used the ratio of employees with a low-level to middle-level qualifications as an approximation of the prospects for individuals to progress from no or low skill positions to medium skill positions over the course of their careers. It found that the average ratio across all sectors of the economy is 2.3:1, meaning that for every 2.3 low skill jobs there is only one job for those with middle-level qualifications.

This makes sense given our hour-glass shaped labour market. Some super-sectors such as social care have a lower ratio of around 1.8:1, suggesting reasonable prospects for progression. Business support services, by contrast, has a ratio of over 4:1 – this sector includes sub-contractors with unskilled labour, where the employees enjoy very poor progression prospects.

Pay for non-graduates

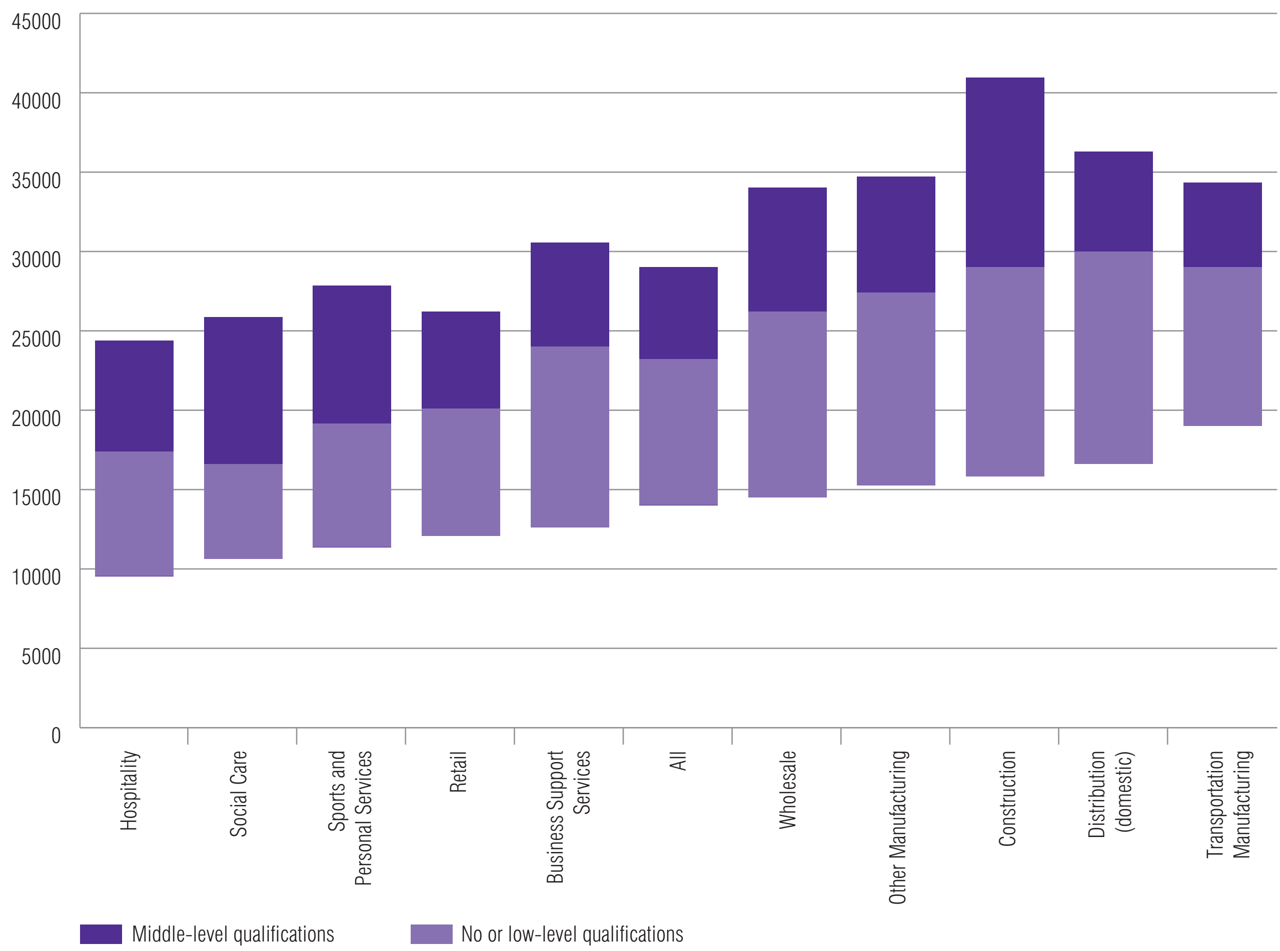
Figure 9 ranks the super-sectors according to average pay in the bottom decile. The top of the bar, coloured in blue, is the estimate of typical pay band for a middle-level qualified employee. The bottom of the bar, coloured in orange, is the estimate of the typical pay band for those with no or low-level qualifications.

The lowest paid jobs are in hospitality, with bottom decile pay of less than £10,000 a year, which is approximately the national minimum wage. Only five of the ten super-sectors pay their lowest paid workers the non-London Living Wage of £7.45 per hour, or £13,689 annually.[37] The prevalence of low wages is directly linked to in-work poverty, and the resulting pressure for tax credits to make up the shortfall in wage packets.[38]

The length of the bar in Figure 9 illustrates how wage ranges vary between super-sectors. Several sectors, such as hospitality, social care and retail, have relatively short wage bands for non-graduates. This suggests that even with greater qualifications, skills or experience, pay does not significantly increase.

Construction, the two manufacturing super-sectors, distribution and wholesale have much wider wage bands for non-graduates. This is perhaps unsurprising given that there are significant numbers of skilled trade positions within these sectors.

Figure 9: Annual incomes for non-graduates in super-sectors, UK



Source: ASHE, 2010, LFS 2010.

The top of the pay bands fall into two groups: Wholesale, distribution, construction and the two manufacturing related super-sectors offer the best wages for those with middle-level qualifications. The typical top wages for non-graduates in hospitality, social care, sports and personal services, and retail are less than this, and few non-graduates in these sectors achieve the national average wage of £26,500.[39]

Low pay varies considerably between super-sectors, with the bottom pay level for those in transport manufacturing set at around £18,000 as compared with the £10,000 or less in hospitality. These differences cannot be explained by the difference in occupational profiles, as transport manufacturing also has elementary roles. It seems fair to conclude that someone with no or low-level qualifications is much better off working in transport manufacturing or construction than in hospitality or social care.

Pay for those with middle-level qualifications also varies widely across sectors. The top of the pay ranges vary from under £25,000 in hospitality to over £40,000 in construction. Middle-level qualified workers in social care are worse paid than low qualified workers in transport manufacturing.

The variations in sector pay levels do not correspond to the variations in qualification profiles. Social care has the highest proportion of middle-level qualified employees but one of the lowest and narrowest pay ranges. Distribution and wholesale have a very low proportion of middle-level qualified employees but relatively high and broad pay ranges. Middle-level qualified workers in social care tend to be worse paid than low qualified workers in transport manufacturing.

Non-graduate job growth in the future

Around half of these ten super sectors are forecast to grow.[40] Unfortunately, these tend to be the ones that pay the lowest wages. Manufacturing employment is forecast to decline – partly because of efficiency gains through automation. Thus, while output is expected to grow, less people-power will be required. A report commissioned by the UK Council for Employment and Skills (UKCES) predicts "continuing sharp declines in employment" for skilled and semi-skilled manufacturing workers. This is likely to take the middle out of the occupational and skills profiles of even relatively good sectors such as transport manufacturing. Other sectors seen to offer decent work opportunities for non-graduates, such as retail banks and the police force, are also experiencing decline and cutbacks.

The scope for increasing productivity through automation is less in services than in manufacturing. So it is not surprising that the same report forecasts employment growth in social care, hospitality, retail and sport and personal services.[41] The forecasted growth in social care is partly accounted for by our ageing population.[42]

Opportunities for those without graduate degrees to get good jobs with decent pay and opportunities to progress seem few and far between. Perhaps more worrying is the forecast that those sectors that do provide good jobs such as manufacturing are likely to decline while those providing low pay and little security will be employing more workers.

Apprenticeships

Finally, it is worth considering the career opportunities for those on apprenticeship schemes. There has been considerable discussion regarding the quality of new apprenticeships. Some argue that they too often offer very little pay, poor quality training and little chance of a job at the end.[43]

An Ofsted report on quality of apprenticeships published in 2012[44] found that:

- That apprenticeships are not always a stepping stone into work and there are incidences of displacement: *'Too many apprentices did not have real and sustained employment during and after their apprenticeship…There were examples of apprentices, particularly younger ones, being used as inexpensive labour during their training and then being discarded as employees to be replaced by new apprentices.'* [45]

- A significant proportion of apprenticeship training is too short to embed properly the employment and technical skills being developed by apprentices. This was particularly the case for apprenticeships in information technology (IT), retail, leisure, customer service and business administration. Areas such as construction, engineering and hairdressing were delivered over longer periods and were more likely to include traditional and better quality training, often delivered off-the-job.
- The increased level of subcontracting is affecting quality. Too many lead contractors do not have a history of high success rates in their own apprenticeship provision let alone the ability to lead others on monitoring and improving subcontracted provision.

While increases in the number of apprenticeships as a form of work-based learning should be welcomed there is clearly a problem with the training some apprentices are receiving. Again, it seems as if those in construction and manufacturing are better placed to find employment with decent pay and training. However, it has been noted that these sectors and accompanying apprenticeships are declining. At the other end, even if those apprentices in hospitality and business administration do receive good training with a job at the end, as discussed earlier pay and longer-term prospects in these sectors are poor.

Opportunities and prospects for graduates (Level 4+)

While unemployment rates are relatively low for those with Level 4 qualifications and above it would be a mistake to assume that graduates have not been adversely affected by the shifts in the labour market described in the first section or from the recession.

Graduate unemployment

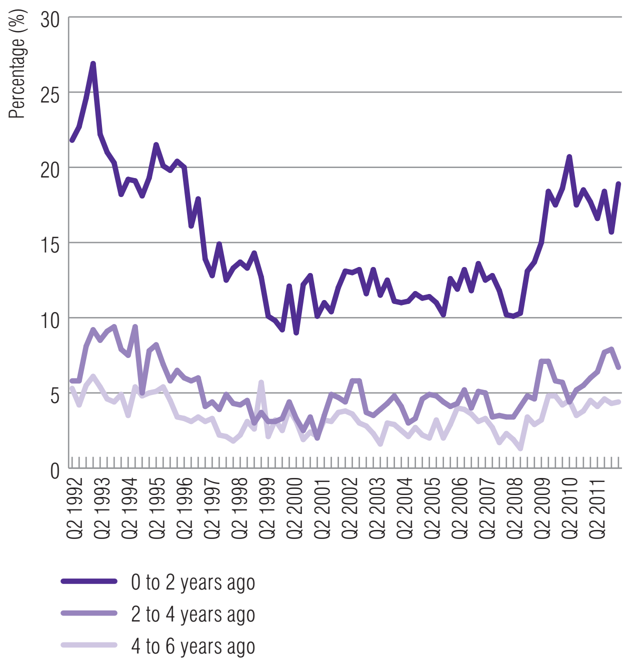
Around one new graduate in every five available to work is unemployed. The unemployment rate for new graduates, those who graduated within the last two years, tends to be higher than for those people who graduated 2 to 4 and 4 to 6 years ago. One of the reasons is that new graduates are just entering the job market and beginning to look for work while older graduates have had more time to find a job.

Recent graduates are more likely to work in a lower skilled job than ten years ago. The ONS Graduate Labour Market 2012 shows that nearly 35.9 per cent, or more than one in three recent graduates are employed in a lower skilled job compared with 26.7 per cent in 2001.

Graduate underemployment

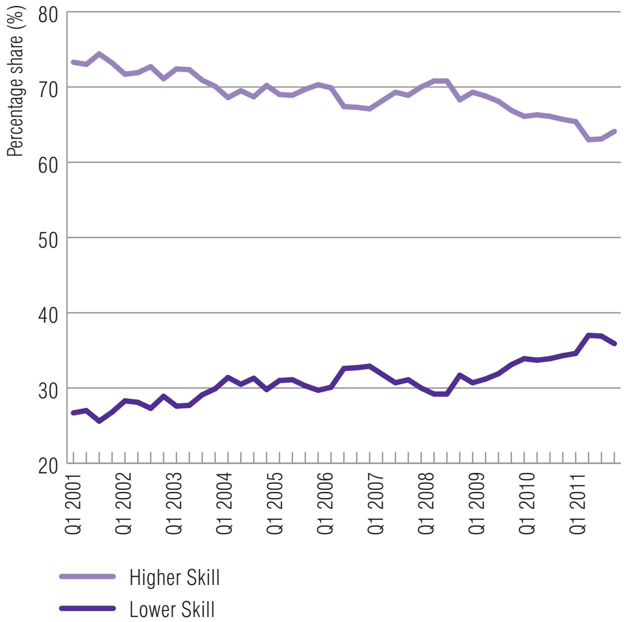
Recent graduates are more likely to work in a lower skilled job than ten years ago. The ONS Graduate Labour Market 2012[47] shows that nearly 35.9 per cent, or more than one in three recent graduates[48] are employed in a lower skilled job[49] compared with 26.7 per cent in 2001.

Figure 10: Unemployment rates for recent graduates, 1992-2011



Source: ONS[46]

Figure 11: Recent graduates by skill level of occupation, aged 21-64, UK



Source: ONS[50]

Table 5 suggests graduates may also be working less than they want to with an increase in part time working as well as increases in voluntary and unpaid work. These are not unsurprising outcomes. In a tight labour market with pent up demand for employment, graduates must either take what they can get or gain experience in unpaid position in an effort to enter the labour market.

It is often assumed that the underemployment described above is a short-term problem, with its persistence becoming much less of a problem as graduates stay in the labour market. However, a recent study has found evidence of underemployment persisting, with one quarter of graduates still employed in non-graduate jobs three and a half years after graduation. A strong positive relationship was observed between the probability of being in a graduate job six and 42 months after graduation. The study concludes that the first job after graduation is important for future labour market success.[51]

Problems of higher unemployment, underemployment and the under utilisation of qualifications for this group is likely to continue. Forecasts are pessimistic predicting a hardening of year-on-year new graduate unemployment and continuing increase in graduate employment in lower skilled jobs.[52]

Table 5: Levels of employment activity among graduates, UK

Activity 2009/10 and 2010/11		
Activity	**2009/10**	**2010/11**
Full-time paid work only	52.5%	51.4%
Part-time paid work only	10.6%	11.0%
Voluntary/unpaid work only	1.7%	1.9%
Work and further study	9.6%	10.1%
Further study only	14.0%	13.7%
Assumed to be unemployed	7.4%	7.6%
Not available for employment	3.1%	3.0%
Other	1.2%	1.1%

Source: HESA

Inequality among graduates

There are some types of graduates that are more protected than others. Table 6 highlights that those involved in more vocational based learning, such as those in medicine and dentistry, subjects allied to medicine, veterinary science and education have very little chance of being unemployed.

Connected to the differences in employment outcomes by subject is the pay polarisation within the Level 4+ qualification category. Between 1987 and 2001 for the bottom 80 per cent of graduates, wage growth associated with having a degree, the graduate premium, was roughly 1 per cent higher than non-graduates' earnings. While for the top 20 per cent of the earnings distribution of graduates the wage growth associated with having a degree has been as much as 3.5 per cent.[53] There thus appears to be two tiers of graduate employment as increasing numbers of graduates chase those better-paid jobs at the top end of the earnings distribution.

Looking at the destination of these top graduates (see Figure 12), those going into investment banking and law earn significantly more to start with than other top graduates.

Table 6: Graduate employment by subject area 2010/11, UK

% employed by subject area 2010/11		
Subject Area	**Employed**	**Unemployed**
Medicine and dentistry	90.8%	1.4%
Subjects allied to medicine	86.1%	4.4%
Biological sciences	67.5%	8.1%
Veterinary science	86.8%	6.4%
Agriculture and related subjects	67.1%	6.7%
Physical sciences	62.0%	9.2%
Mathematical sciences	61.6%	9.0%
Computer science	68.2%	12.7%
Engineering and technology	73.1%	8.8%
Architecture, building and planning	77.5%	7.9%
Social studies	73.8%	8.2%
Law	61.5%	7.1%
Business and administrative studies	76.6%	8.4%
Mass communications & documentation	75.9%	11.0%
Languages	64.7%	8.7%
Historical and philosophical studies	63.2%	8.5%
Creative arts and design	70.5%	10.8%
Education	88.4%	3.8%
Combined	70.8%	5.9%sa

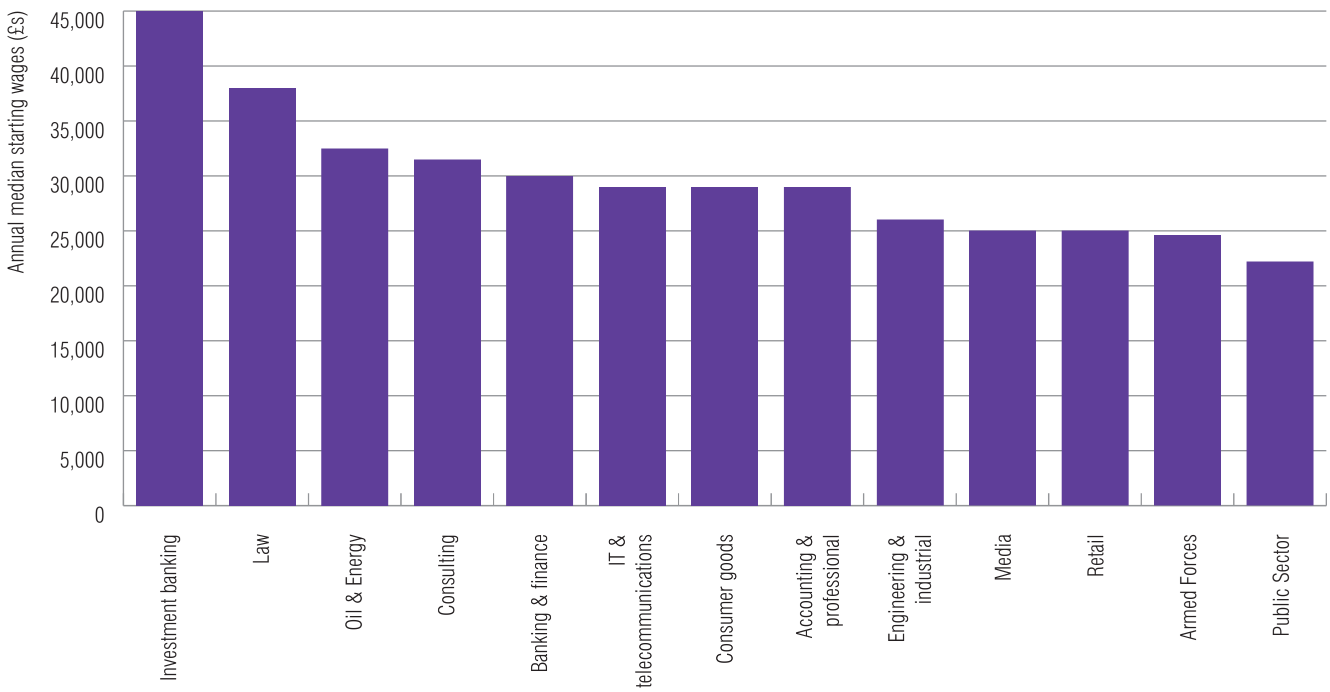
Source: HESA

Competition in the graduate market

Looking across the types of universities top earners go to there again are disparities. Those who have attended the Russell Group universities are far more likely to earn above £30,000 three and half years after graduation than those who have attended other types of universities.

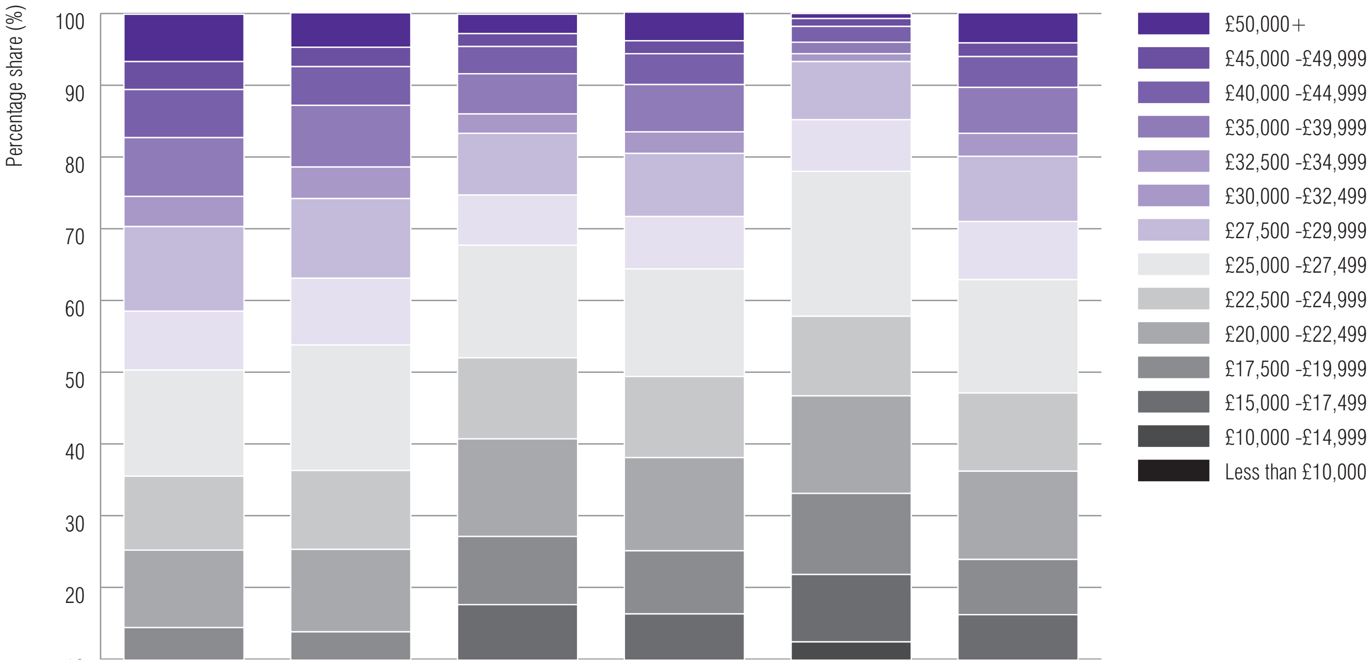
This inequality between graduates is partly due to increasing competitiveness as graduate numbers swell and jobs diminish. Recruiters are increasingly looking for graduates with previous experience. Research on the habits of the 100 largest graduate employers found that these employers fill 36 per cent of their graduate vacancies with applicants who have already worked for that organisation. In some industry sectors the proportion is almost double. Over half of these employers say that graduates with no previous work experience are unlikely to be successful with their applications for this reason.[55]

Figure 12: Median starting wages in 100 top graduate employees



Source: High Fliers (2013) The graduate market 2013.

Figure 13: Pay levels by different UK university groups for graduates 3.5 years after graduation[54]



Source: HESA

Employers are now competing more strongly to reach the best 5 per cent to 10 per cent of each annual graduate crop. Much effective recruitment increasingly takes place during the second year through competed summer internships and work experience. Furthermore, the better candidates for these internships or work experience already have relevant work experience from their first year summer vacations. Expectations about work experience, extra-curricular and voluntary activities for the demonstration of work competencies are much higher than in the past.[56]

Intense competition in the labour market has created a bumping down effect where those with graduate degrees are working in lower skilled jobs and those who would have formerly taken these positions are further squeezed out of the labour market. Furthermore, in this employers market, candidates are having to fulfill growing lists of requirements before they are given access to a paid job. While the situation seems easier for those receiving degrees from Russell Group universities the conditions are not ideal for anyone.

Discussion

Discussion

Study leavers face a perfect storm. Underlying fractures in the labour market –such as pay polarisation – have surfaced. The recession and ongoing poor economic performance has further intensified competition for jobs. Austerity is limiting the opportunities available in the public sector and beyond. Even those with good graduate degrees are facing months of unemployment or free interning in order to gain access to paid work. Those with no or few qualifications are being left out in the cold.

Analysis here has called into question the central promise that if you educate yourself you are rewarded in the labour market. In the new labour market a qualification does not guarantee you a job and even if you find work there are a limited number of sectors that provide decent pay, working conditions and opportunities to build a career. This is especially true for those educated below graduate level. Study leavers face a rude awakening when they enter the labour market. Some will see low returns, at least in the short to medium term, to the personal and financial investment they have made in their education.

All groups have been affected by labour market polarisation. Initial inequalities arising from educational outcomes are being further exaggerated by the labour market and resulting in polarisation in pay and living standards according to qualification levels. Gaps between graduates and non-graduates, Russell Group and other graduate students, construction and hair dressing apprenticeships are further widening.

There are clear costs to not addressing the challenges in the labour market. Research in 2012 estimated that the total cost to the UK of youth unemployment at its current levels, in terms of taxes foregone, is likely to be just over £600 million.[57] Costs of benefits related to unemployment for all those leaving education and unable to find a job run into the billions and tax credits aimed at filling the pay void have placed a heavy burden on the public purse. There are also the costs of underemployment, lost productive capacity and the personal and community social repercussions associated with poor labour market performance to consider.

The labour market is the backbone of both the economy and society. Currently our labour market is failing to deliver economic prosperity, social justice and well-being for the majority. As most of the damaging trends discussed here began before the recession a return to economic growth will not suffice. A new path for work must be forged.

Questions for students' unions to think about

This report outlined some of the key themes in the quantity and quality of employment opportunities for study-leavers in the UK today. With this knowledge now in mind, our thoughts must move to what action the student movement can take in response to the problems faced.

How can we harness our collective ideas and capabilities to make real change for the current and next generation of individuals who are about to leave their studies, or are already making their first steps into the field of work?

Based on the issues identified in this report;

- Which are the most pressing issues for students in your institution and for the student movement as a whole, both in the short term and the long term?
- How can students' unions help address the issue of the number of employment opportunities available for study leavers, both locally and nationally?
- What scope is there for students' unions to influence the creation of new quality employment opportunities, through;

  - Encouraging and supporting entrepreneurialism?
  - Securing jobs through the students' union or institution's procurement channels?
  - Building links with local employers?
  - Employing students and study-leavers in a broader range of roles within students' unions and institutions?

- How can students' unions help address quality employment opportunities available for study leavers (eg: issues around pay, working at an appropriate level of qualifications, skills and experience, opportunities for progression)?
- How can students' unions and NUS link with existing initiatives in this area, for example the campaign for a Living Wage?
- What other stakeholders could your students' union work in partnership with to address any of the issues outlined in the report (eg: local businesses, educational institutions, national and local government, employers, other think tanks and campaigning organisations)?

We all have our part to play in tackling this crisis head on; as individual students, student officers and students' unions. But our strength here is in numbers. Effective partnership both within the student movement and with other partners will be the key to our collective success.

For this reason, to give feedback on this report ask questions on NUS' work in this area, and to talk about you and your union can get involved please get in touch with employment@nus.org.uk.

Endnotes

Endnotes

1. The term ‘study leavers’ is used here as shorthand for those who are about to or have recently – in the past five years – left formal education. This includes those leaving school with no formal qualifications upwards to those with graduate degrees. We have made a distinction between the stock – i.e. all those in the population – and flow, the study leavers who are just entering the labour market.
2. Goos and Manning, 2007, *Lousy and Lovely Jobs: The Rising Polarization of Work in Britain,* The Review of Economics and Statistics, Vol. 89, No. 1, Pages 118-133.
3. Figures from LFS and ASHE 2012. This analysis neglects the differences between SOC2000 and SOC2010, however the variety of job types which fall under each classification means only a rough picture can be drawn out from this data regardless.
4. Within the Standard Occupation Classifications jobs are classified in terms of their skill level and skill content.
5. Financial intermediaries are typically institutions that facilitate the transferring of funds between lenders and borrows and include banks, investment banks, insurance companies, broker-dealers, mutual funds and pension funds.
6. Holmes, C., Mayhew, K. (2012) *The Changing Shape of the UK Job Market.* Resolution Foundation http://www.livingstandards.org/wp-content/uploads/2012/03/The-Changing-Shape-of-the-UK-Job-Market.pdf
7. Pennycook, M., Whittaker, M. (2012) *Low pay Britain 2012.* London: Resolution Foundation. http://www.resolutionfoundation.org/media/media/downloads/Low_Pay_Britain_1.pdf
8. Low pay is defined as hourly wages below two-thirds gross median hourly pay for all employees.
9. The Centre for High Pay, 2012, *The State of Pay – One year on from the High Pay Commission*, http://highpaycentre.org/pubs/the-state-of-pay-one-year-on-from-the-high-pay-commission
10. TUC, 2012, Under-employment crisis - *A TUC analysis of under-employment across the UK,* http://www.tuc.org.uk/tucfiles/367.pdf
11. See HM Treasury (2003) *EMU and labour market flexibility.* London: The Stationery Office. http://news.bbc.co.uk/1/shared/spl/hi/europe/03/euro/pdf/8.pdf
12. Eurostat, *Labour costs at the regional level* http://epp.eurostat.ec.europa.eu/statistics_explained/index.php/Labour_cost_at_regional_level
13. Plunkett, J. (2011) *Growth without gain? The faltering living standards of people on low-to-middle incomes.* London: Resolution Foundation.
14. Coates, D. (2007) *Who's afraid of labour market flexibility?* London: The Work Foundation. http://www.theworkfoundation.com/downloadpublication/report/152_152_whos%20afraid%20of%20labour%20market%20flexibility.pdf
15. See for example LSE Growth Commission. (2013) *Investing for prosperity.* http://www2.lse.ac.uk/researchAndExpertise/units/growthCommission/documents/pdf/LSEGC-Report.pdf
16. Defined as those below 2/3 median pay.Pennycook, M., Whittaker, M. (2012) op. cit.
17. UNISON. *Zero hour contract factsheet.* http://www.unison.org.uk/file/Zero%20Hours%20Factsheet.pdf
18. *Graduate careers: Public sector a class apart*. Guardian, 20 March 2010 http://www.guardian.co.uk/money/2011/apr/04/graduates-undeterred-public-sector-cuts
19. XpertHR benchmarking survey on graduate recruitment trends available at http://www.xperthr.co.uk/blogs/employment-intelligence/2013/01/graduate-recruitment-trends-20.html [last accessed 2 April 2013]
20. Anyadike-Danes, M., Bonner, K, Hart, M. (2011) *Job Creation and Destruction in the UK: 1998-2010.* London: Department for Business, Innovation and Skills.
21. Federation of Small Businesses Scotland. (2009) Modern apprenticeships: The small business perspective.
22. HECSU and the Education Liason Task Group of (AGCAS). (2012) *What do graduates do?* http://www.hecsu.ac.uk/assets/assets/documents/WDGD_Oct_2012.pdf
23. UKCES (2012) *Working Futures 2012*.

24. Resolution Foundation (2013) *Squeezed Britain*. London: Resolution Foundation. http://www.resolutionfoundation.org/media/media/downloads/Squeezed_Britain.pdf

25. Department for Business, Innovation and Skills (BIS) (2013). *Further education & skills: Leaner participation, outcomes and level of highest qualification held*. Quarterly Statistical First Release. http://www.thedataservice.org.uk/NR/rdonlyres/0040B9E9-3878-4015-A92A-6227FCCED092/0/SFR_commentary_March_2013.pdf

26. Ibid.

27. Ibid.

28. Intermediate apprenticeships are equivalent to 5 GCSE passes; Advanced apprenticeships are equivalent to 2 A level passes and higher apprenticeships lead to NVQ Level 4 or a Foundation Degree.

29. Higher Education Statistical Agency (HESA) http://www.hesa.ac.uk/index.php?option=com_content&task=view&id=1897&Itemid=239

30. Million + (2012) *Never too late to learn Mature Students in education*. Million+ & NUS. http://www.millionplus.ac.uk/documents/reports/Never_Too_Late_To_Learn_-_FINAL_REPORT.pdf

31. Department for Business, Investment & Skills. (2013) *Further Education & Skills: Learner Participation, Outcomes and Level of Highest Qualification Held*. http://www.thedataservice.org.uk/NR/rdonlyres/6DC3ED54-696B-4082-B059- 9509815F9008/0/SFR_commentary_January_2013.pdf

32. ONS (2011). *Graduate Earnings Over the Last Decade*. http://www.ons.gov.uk/ons/dcp171776_233872.pdf

33. Ibid.

34. Unemployment rates are for those aged 16-24 year olds, LFS.

35. Shaheen, F., Seaford, C, and Chapman, J. (2012) *Good jobs for non-graduates.* London: **nef**. http://www.neweconomics.org/sites/neweconomics.org/files/good_jobs_final.pdf

36. These are made up of 26 sectors that combine under the headings.

37. Calculated by authors by taking the current £7.45 rate, multiplying by 35 hours per week and 52.5 weeks.

38. Child Poverty Action Group and GMB. (2009) *Stop in-work poverty, end sub-prime jobs*. CPAG Policy Briefings.

39. Office for National Statistics. (2012). *Annual Survey of Hours and Earnings. Provisional results.*

40. Wilson, R. A. and Homenidou, K. (2011). *Working Futures 2010-2020: Main Report*. London: UKCES.

41. Ibid

42. See discussion in OECD. (2007). *Globalisation, wages and Jobs.* Policy Brief, June 2007. Retrieved from: http://www.oecd.org/dataoecd/27/1/38796126.pdf

43. See discussion in TUC (2012). *TUC Response to the call for evidence for The Richard Review of Apprenticeships.* http://www.tuc.org.uk/tucfiles/369/Richard%20Review%20submission.pdf

44. Ofsted (2012) *Ensuring quality in apprenticeships.* http://www.ofsted.gov.uk/resources/ensuring-quality-apprenticeships.

45. Ibid, pg. 5.

46. ONS. (2013). *Graduates in the Labour Market 2012*. http://www.ons.gov.uk/ons/dcp171776_259049.pdf

47. Ibid

48. Recent graduates are everyone who has graduated within six years of the survey date for those aged 21 to 64 and are no longer in education.

49. Skill levels for 2001 to 2010 based on SOC2000 and skill levels for 2011 based on SOC2010 (Standard Occupational Classifications).

50. Ibid

51. Mosca, I. & Wright, R.E. (2011) *Is graduate under-employment persistent? Evidence from the United Kingdom.* Institute for the Study of Labor (IZA). http://ftp.iza.org/dp6177.pdf

52. Data taken from http://www.careermatters.co.uk/insights-for-parents-grandparents/ [last accessed 2 April 2013]

53. Brown, P, Lauder, H and Ashton, D, (2011), The Global Auction, Oxford: OUP.

54. 'Million+' are 22 UK universities formerly known as the post 1992 group or modern universities. Many were formerly polytechnics or colleges.

55. High Fliers (2013) *The Graduate Market in 2013.*

56. Data taken from http://www.careermatters.co.uk/insights-for-parents-grandparents/ [last accessed 2 April 2013]

57. The ACEVO Commission on Youth Unemployment, (2012) *Youth unemployment: the crisis we cannot afford.*

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