

JOBS AUDIT

The UK's fastest expanding and contracting occupations, 2011-2013

The JOBS
ECONOMIST

September 2013

Introduction

Earlier this month the Office for National Statistics released data on its website providing the latest annual snapshot of the employment structure of the UK by occupation. This Jobs Audit compares these data with earlier data in the annual series in order to identify the currently fastest growing occupations and the fastest contracting occupations.

Measuring occupational change

Within official statistics people in employment are classified into occupational groupings according to the skill content needed to perform the employment they undertake. The groupings comprise the Standard Occupational Classification (SOC) which consists of 9 broad categories, known as major groups, which are further subdivided to capture the finer detail of 369 specific occupations (unit groups). Individuals are placed in these groups according to their responses to the Labour Force Survey.

Table 1 shows the major groups in the second quarter of 2013 (the period covered by the ONS's annual release of employment data by occupation), the number of people in employment in each group and the share of total employment in each group.

Table 1 Employment by occupation Q2 2013 (UK, 000s)

<i>Occupation</i>	<i>Q2 2012</i>	<i>Share of total</i>
SOC12 Major Group		
	000s	%
1		
Managers, Directors and Senior Officials	3113	10.5
2		
Professional occupations	5860	19.8
3		
Associate professional and technical occupations	4134	14.0
4		
Administrative and secretarial occupations	3254	10.9
5		
Skilled trades	3137	10.6
6		
Caring, leisure and other service occupations	2698	9.2
7		
Sales and customer services	2313	7.9
8		
Process, plant and machinery	1846	6.3
9		
Elementary occupations	3186	10.8

The table illustrates that we are well into the era of the so-called 'knowledge economy' with a high proportion of the workforce doing professional and managerial jobs requiring a high level of technical expertise plus the ability to problem solve. The single largest major groups are Professional Occupations and Associate Professional and Technical Occupations. These account for 1 in 3 people in employment and comprise the bulk of the higher skill end of the knowledge economy. Managers, Directors and Senior Officials, and to a lesser extent, Administrators and Secretarial Occupations can also be considered knowledge jobs. However, there are still large proportions of people employed in each of the remaining groups, including Skilled Trades, involving mostly skilled manual occupations, and Elementary Occupations requiring few formal skills.

The SOC classifications are periodically revised to ensure that the SOC reflects change in the occupational structure of the economy, change in occupational roles and skill requirements, and can be better aligned to similar international classifications to assist cross country comparisons. This can involve changes in what occupations are called, the removal or addition of occupational groups, and/or the reclassification of specific occupations from one group to another.

For example, the latest SOC, SOC2010, which revises the previous SOC2000, includes far fewer jobs in the major group Managers, Directors and Senior Officials than were included in the broadly equivalent SOC2000 group. This was mainly because the SOC2000 classification of 'managers' covered jobs that in most other countries would be considered support or administrative jobs with limited specialist content. When the SOC2010 started to be applied in 2011 it therefore looked as though the UK had suddenly lost a third (1.5 million) of its management jobs. It hadn't of course; most of these 'managers' had simply been reclassified to other occupational groups which correspondingly expanded in size.

However, the most significant consequence of such revisions is that although necessary they create a discontinuity in the time series of occupational statistics that complicates long run comparison. We can tell on the basis of SOC2010 which occupations have expanded or contracted in terms of numbers employed between 2011, 2012 and 2013. But we can't directly compare these years with previous years because any underlying change due to what's happening in the economy

will have been blurred by statistical reclassification. This is especially problematic given that the change from SOC2000 to SOC2010 creates a discontinuity in the statistical series that includes the start of the recession in 2008-9. The following analysis is thus confined to a comparison of 2011 and 2013, though this includes the period of surprisingly strong employment growth that began in 2012.

Occupational change 2011-13

Table 2 compares employment in the major occupational groups in both Q2 2011 and Q2 2013. Five groups register an increase in employment, the vast majority of this increase in the managerial, professional, and technical occupations. In each of these major occupational groups employment grew much faster in percentage terms than the average increase in employment across the economy in that period of around 2%. The largest absolute and percentage increase is in the Managers, Directors and Senior Officials group (up 224,000 or 7.8%).

Table 2 Employment change by occupation, 2011-2012 (UK, 000s)

	Q2 2011	Q2 2013	Change +/-	
	000s	000s	000s	%
Managers, Directors and Senior Officials	2889	3113	+224	+7.8
Professional occupations	5650	5860	+210	+3.7
Associate professional and technical occupations	3926	4134	+208	+5.2
Administrative and secretarial occupations	3253	3254	+1	+0.0
Skilled trades	3207	3137	-70	-2.2
Caring, leisure and other service occupations	2664	2698	+34	+1.6
Sales and customer services	2383	2313	-70	-2.8
Process, plant and machinery	1858	1846	-12	-0.6
Elementary occupations	3239	3186	-53	-1.6

However, change in the major groups doesn't fully capture the extent of occupational change which only becomes apparent by looking at the 369 specific unit groups. Given that the number of people employed in any specific occupational group will be small relative to the major groups, the absolute

change in employment from one year to the next is in most cases relatively small, ranging between zero and 10,000. Moreover, very short-run changes may prove to be temporary, with increases or decreases in a single year reversed in the following year. At the very least therefore it is preferable to observe change over a somewhat longer period.

Overall just under half (45%) of specific occupational unit groups registered at least some net increase in employment between Q2 2011 and Q2 2013, the remainder registering a net reduction or no net change. But in order to get a clearer picture of where recent activity in the labour market has been most significant, tables 3 and 4 list the 10 occupations in which employment expanded or contracted by most between Q2 2011 and Q2 2013. Occupations are ranked by the percentage net change in employment in the period but the number of people employed in each occupation in 2013 is also shown in order to show the relative contribution of the occupation to total employment.

The pattern of occupational contraction and expansion reflects a combination of short and longer-term shifts in the UK's employment structure. Many of the top 10 fastest expanding occupations, such as psychologists (up 52% between Q2 2011 and Q2 2013) and graphic designers (up 42%) require a high level of professional or technical qualifications, with others, notably undertakers (up 40%), clearly also requiring a significant amount of 'softer' personal skill. By contrast, the 10 fastest contracting occupations include skilled manual occupations, for example, plasterers (down 44%, and less skilled occupations, for example traffic wardens (down 43%).

Other noteworthy fast expanding and contracting occupations just outside the top and bottom 10 include midwives (up 31% to 46,000), architects (up 29% to 58,000), fitness instructors (up 25% to 55,000), estate agents and auctioneers (up 22% to 50,000), advertising and public relations directors (down 31% to 18,000), pharmacists (down 27% to 45,000), aircraft pilots and flight engineers (down 27% to 16,000), library clerks and assistants (down 26% to 28,000), and travel agents (down 22% to 31,000).

Some of these occupational changes may be interrelated. For example, while the number of people employed as paramedics has more than doubled to 32,000 since 2011 the number of non-

paramedic ambulance staff has fallen by half to 12,000. Similarly, police community support officers are the fourth fastest expanding occupation, their numbers up 47% to 22,000 in the past two years during which time the number of police officers (sergeants and below) has fallen by 11%. Public spending cuts may also explain a fall of almost 40% in the number of people employed as hospital porters. Other changes (such as the fall in the number of pharmacists and airline pilots) have no obvious straightforward possible explanation and may prove to be temporary shifts or statistical blips.

The currently fastest growing occupations range from those that serve the mind (psychologists and conference organizers) to those that in rather different ways serve the body (paramedics and undertakers). Together the expansion of these occupations highlights the degree to which both knowledge and 'the personal touch' are key skill requirements in today's labour market. But interestingly, our highly debt ridden and traffic congested society at present seems content to employ fewer debt collectors and traffic wardens.

Table 3 10 fastest expanding occupations (UK, Q2 2011- Q2 2013)

<i>Occupation SOC2010 Unit Group</i>	<i>% increase Q2 2011-Q2 2013</i>	<i>Number employed Q2 2013</i>
	%	000s
Paramedics	128	32
Psychologists	52	38
Graphic designers	48	86
Company secretaries	47	50
Police community support officers	47	22
Production managers and directors in mining and quarrying	47	22
Undertakers, mortuary and crematorium associates	40	21
Conference and exhibitions managers and organisers	39	64
Chemicals and related process operatives	39	57
Planning, process and production technicians	37	22

Table 4 10 fastest contracting occupations (UK, 2011-13)

<i>Occupation SOC2010 Unit Group</i>	<i>% decrease Q2 2011-Q2 2013</i>	<i>Number employed Q2 2013</i>
	%	000s
Ambulance staff (excluding paramedics)	-52	12
Pipe fitters	-50	7
Parking and civil enforcement officers	-43	13
Plasterers	-41	34
Debt, rent and other cash collectors	-40	25
Agricultural machinery drivers	-40	6
Hospital porters	-39	11
Precision instrument makers and repairs	-37	20
Typists and related keyboard operators	-36	11
Tailors and dressmakers	-35	9