EEA-workers in the UK labour market: Annexes

March 2018
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Dear Professor Manning,

I am attaching to this letter a commission for advice from the Migration Advisory Committee (MAC). It covers both the impacts on the United Kingdom labour market of the UK’s exit from the European Union and also, since the two issues are clearly closely linked, how the UK’s immigration system should be aligned with a modern industrial strategy. I am grateful for the indications that I have been given of the MAC’s willingness to take on this work.

I am sure you do not underestimate the significance of the task which we are asking the MAC to undertake and I thought the Committee might find it helpful if I were to set out some relevant background information.

The Government has been clear that it respects the outcome of the Referendum on the UK’s membership of the European Union, and will make a success of the UK’s exit from the EU. We are working towards the goal of achieving sustainable levels of net migration but we also want to ensure all economic impacts are well understood and prepared for.

The Government also said that after the UK leaves the EU, free movement will end but migration between the UK and the EU will continue. Migration benefits the UK, economically, culturally and socially. Our businesses, agriculture, public services, voluntary organisations and universities rely to a greater or lesser extent on migration for labour, skills and ideas. Britain is a tolerant country, open for business and will stay that way. We will remain a hub for international talent and our departure from the EU must be seen in this context.

But sharply increased levels of net migration since 1997, from both the EU and beyond, have given rise to public concern about pressure on public services and wages. These concerns about the sustainability of unrestricted migration from the EU featured strongly in the debate surrounding the referendum on the United Kingdom’s EU membership on 23 June 2016. The public must have confidence in our ability to control immigration from the EU. Although net migration from the EU has fallen over the last year, we cannot exercise control over the type and volume of EU migration at present, as free movement gives EU citizens extensive rights to reside.
As set out in the Government’s Command Paper Legislating for the United Kingdom’s withdrawal from the European Union, the Repeal Bill will convert EU-derived law into UK law as it stands at the moment at which we leave the EU. Without further change, that would mean that the free movement of EU citizens to the UK would continue, albeit as part of UK law. We have therefore committed to introduce to Parliament an Immigration Bill to repeal the current EU-derived free movement provisions so as to be able, on our exit from the EU, to bring EU citizens fully within the scope of UK law. This will mean that, in future, we will be able to apply different immigration rules and requirements according to the UK’s economic and social needs at the time, and reflecting our future deep and special partnership with the EU, including on any implementation arrangements following the UK’s departure.

We do not envisage moving to that future system in a single step when we leave the EU. It will be in the interests of migrants, employers and the UK authorities, to have a predictable, well understood process which moves gradually from the free movement regime to a new set of arrangements.

Our first priority is to safeguard the position of existing EU residents in the UK and UK nationals in the EU. So, the first phase of our immigration proposals was to publish our fair and serious offer on 26 June\(^1\). This set out our proposals that qualifying EU citizens, arriving and resident before a specified date, would be able to apply for ‘settled status’ in UK law once they have accumulated five years’ continuous residence—meaning that they would be free to reside in any capacity and exercise any lawful activity, and to access public funds and services. Those arriving and resident before the specified date but who had not yet accrued five years’ residence would be able to remain until they accumulate those five years’ residence. They would all have adequate time to apply for their documentation after our exit as there would be a ‘grace period’ of up to two years.

EU citizens arriving after the specified date but before exit (if the specified date we agree with the EU is prior to withdrawal) would be allowed to remain in the UK for at least the temporary ‘grace period’, and, may subsequently become eligible to settle permanently depending on their status and the rules in place at the time.

As part of a smooth and orderly transition as we leave the EU, the second phase of our immigration proposals is based on a temporary implementation period to ensure there is no cliff-edge on the UK’s departure for employers or individuals. This includes the ‘grace period’ during which those EU citizens who arrived before the specified date will have time to obtain their documentation from the Home Office. During this period there will also be a straightforward system for the registration and documentation of new arrivals (as well as for those who arrived after the specified date but before exit, if appropriate). A registration system that enables EU citizens to demonstrate their right to live and work in the UK is the basic requirement to be able to operate any system of immigration control.

After this implementation period, we will move to the third phase which will be our long-term arrangements covering the migration of EU citizens, designed according

\(^1\) Safeguarding the Position of EU Citizens Living the UK and UK Nationals Living in the EU, published on 26 June 2017
to economic and social needs at the time, and reflecting our future deep and special partnership with the EU.

The Government will want to ensure that decisions on the long-term arrangements are based on evidence. The commission that we are now asking the MAC to undertake is very much part of this. I very much hope that in undertaking its work the MAC will want to consult widely and that those affected will take the opportunity to make sure their voices are heard.

Alongside that, the Government will be undertaking its own extensive programme of engagement and evidence gathering with all interested parties including business, industry, trades unions, educational institutions and many others, to ensure we strike a balance on future EU migration arrangements. It is important that those affected contribute to the design of future arrangements and start to consider how they might adapt to a future immigration system.

Only when all of this concluded, and we have the MAC’s advice, will we determine what the future long-term immigration rules for EU citizens should be. The Government will be able to set and adjust the successor arrangements to meet the needs of our wider immigration policy, our economic circumstances and the deep and special partnership we seek to agree with the EU, as well as trade agreements with other countries. I would be grateful if the MAC could report by September 2018, though it would be helpful if you felt able to provide interim reports throughout the period that you are working on this commission.

I look forward to receiving the MAC's advice on these important issues and I shall be publishing this letter.

Rt Hon Amber Rudd MP

COMMISSION FOR THE MIGRATION ADVISORY COMMITTEE

The Government has made clear that part of its immigration policy is to continue to reduce net migration, towards sustainable levels and to end free movement as we leave the European Union. Against that background, and to support future policy development, the Government would welcome advice and evidence from the MAC in respect of current patterns of EU and European Economic Area (EEA) migration and the role of migration in the wider economy and society.

EU and EEA Migration

- Drawing on existing sources where appropriate, the MAC should set out current patterns of EU and EEA migration, looking at:
  - sectors,
  - regional distribution,
  - skill levels,
  - duration of assignments,
  - self-employment, entrepreneurs, part time, agency, temporary and seasonal workers; and
any other characteristics the MAC considers relevant;

The MAC should consider the evolution of EU and EEA migration since 2000 and possible future trends (absent new immigration controls).

- What are the methods of recruitment used by UK employers to employ EU and EEA migrants and how does this impact on UK workers?

- What are the economic and social costs and benefits, including fiscal impacts to the UK economy and impacts on public services and infrastructure of EU and EEA migration?

- Is it possible to estimate the potential impact of any future reductions in EU and EEA migration (whether occurring naturally or through policy), at a range of levels and how may these be felt differently across the economy and society? This may include a consideration of the impacts on the different parts of the UK, within the context of designing a UK-wide immigration system. How could business adjust if EU and EEA net migration was substantially reduced? What mitigating actions could be taken by employers and government and over what timescale?

**Aligning the UK immigration system with a modern industrial strategy**

- What is the current impact of immigration, both EU, EEA and non-EEA, on the competitiveness of UK industry, including on productivity, innovation and labour market flexibility?

- What impact does immigration have on skills and training?

- Is there any evidence that the free availability of unskilled labour has contributed to the UK's relatively low rate of investment in some sectors?

- Are there advantages to focussing migrant labour on highly skilled jobs or across the entire skills spectrum?

- Does the shortage occupation list need to be amended to include skills shortages at lower skills levels than NQF6?

Where relevant to the above, we would welcome detail of what lessons can be drawn from the approach taken by other countries.

The MAC is asked to report by September 2018. The MAC may wish to provide interim reports throughout that period.
Annex B: MAC Call for Evidence

The MAC call for evidence set out the following questions for stakeholders. These provided a general indication of the information the MAC would find most useful, but respondents were informed that they could provide the MAC with other relevant information. The MAC asked that responses be evidence-based and, where possible, provide data and/or examples in support of answers. Stakeholders were encouraged to respond to questions that are relevant to their expertise and were not necessarily expected to answer every single question.

EEA Migration Trends

- Please provide evidence on the characteristics (e.g. types of jobs migrants perform; skill levels, etc.) of EEA migrants in your particular sector/local area/region. How do these differ from UK workers? And from non-EEA workers?

- To what extent are EEA migrants seasonal; part-time; agency-workers; temporary; short-term assignments; intra-company transfers; self-employed? What information do you have on their skill levels? To what extent do these differ from UK workers and non-EEA workers?

- Are there any relevant sources of evidence, beyond the usual range of official statistics, that would allow the MAC to get a more detailed view of the current patterns of EEA migration, especially over the last year?

- Have the patterns of EEA migration changed over time? What evidence do you have showing your employment of EEA migrants since 2000? And after the Brexit referendum? Are these trends different for UK workers and non-EEA workers?

- Have you conducted any analysis on the future trends of EEA migration, in particular in the absence of immigration controls?

- Have you made any assessment of the impact of a possible reduction in the availability of EEA migrants (whether occurring naturally or through policy) as part of your workforce? What impact would a reduction in EEA migration have on your sector/local area/region? How will your business/sector/area/region cope? Would the impacts be different if reductions in migration took place amongst non-EEA migrants? Have you made any contingency plans?

Recruitment Practices, Training & Skills

- Please provide evidence on the methods of recruitment used to employ EEA migrants. Do these methods differ from those used to employ UK and non-EEA workers? What impact does this have on UK workers? Have these methods changed following the Brexit referendum?

- Do recruitment practices differ by skill-type and occupation?
• What are the advantages and disadvantages of employing EEA workers? Have these changed following the Brexit referendum result?

• To what extent has EEA and non-EEA migration affected the skills and training of the UK workers?

• How involved are universities and training providers in ensuring that the UK workforce has the skills needed to fill key roles/roles in high demand in your sector? Do you have plans to increase this involvement in the future?

• How well aware are you of current UK migration policies for non-EEA migrants? If new immigration policies restrict the numbers of low-skilled migrants who can come to work in the UK, which forms of migration into low-skilled work should be prioritised? For example, the current shortage occupation list applies to high skilled occupations; do you think this should be expanded to cover lower skill levels?

**Economic, Social and Fiscal Impacts**

• What are the economic, social and fiscal costs and benefits of EEA migration to the UK economy? What are the impacts of EEA migrants on the labour market, prices, public services, net fiscal impacts (e.g. taxes paid by migrants; benefits they receive), productivity, investment, innovation and general competitiveness of UK industry?

• Do these differ from the impact of non-EEA migrants?

• Do these impacts differ at national, regional or local level?

• Do these impacts vary by sector and occupation?

• Do these impacts vary by skill level (high-skilled, medium-skilled, and low-skilled workers)?
Annex C: Indicative list of bodies the MAC met

Advertising Association
AEG Europe
All Party Parliamentary Group on Migration
Apple
Appleman & Leiden Limited
Arup
ASDA
Association of British Orchestras
Belfast CBI
Belfast Chamber of Commerce
Benoy
Birketts LLP
Birmingham Chamber of Commerce
Bournemouth Tourism Council
British American Business
British Fashion Council
British Film Institute
British Hospitality Association
British Rail Consortium
British Summer Fruits
British Veterinarian Association
Cambridge Research Park
Canadian High Commission
Cavendish Coalition
Confederation of British Industry (CBI)
Centre of Applied Science and Technology
Charity Finance Group
Chartered Association of Business Schools
Cisco
Construction Industry Training Board (CITB)
City of Birmingham Symphony Orchestra
Coade
Convention of Scottish Local Authorities
Coventry and Warwickshire Chamber of Commerce
Cranswick
Creative Industries Federation
DAC Beechcroft
Deloitte
Department for Business, Energy and Industrial Strategy
Department for Digital, Culture, Media and Sport
Department for Education
Department for Environment, Food and Rural Affairs
Department for Exiting the European Union
Department for Work and Pensions
Department of Health
Doncaster Chamber of Commerce
EEF
English National Ballet
English UK
Ensco
Entrepreneurs Network
Ernst & Young
Expats Academy
Facebook
Focus on Labour Exploitation
Food Standards Agency
Fragomen
G’s
G5 Brunswick Group
GMC
Gourmet Burger Kitchen
Greater London Authority
GlaxoSmithKline plc (GSK)
Hall Hunter Farms
Herefordshire and Worcestershire Chamber of Commerce
Heritage Alliance
HM Treasury
Home Office
Honda Motor Europe
Hull City Council
IAG
Immigration Law Practitioners Association
Infosys
ING
Innovate Finance
Japanese Embassy
Kingsley Napley
Level 39
London Chamber of Commerce and Industry
London First
Low Pay Commission
Lush Cosmetics
Medical Research Council
Microsoft
Mills & Reeve
Morgan Sindall
NASSCOM
National Farmers’ Union
Newland Chase
NHS Employers
Nordic-BeNeLux Embassies
North East Chamber of Commerce
Northern Ireland Department of Agriculture, Environment & Rural Affairs
Nottingham University
Ocado
Office of Manpower Economics
One Dance
Penningtons Manches
Permits Foundation
PricewaterhouseCoopers
Publishers Association
Rail Delivery Group
Ralph and Russo
REC
RIBA
Rio Tinto
Royal Academy of the Arts
Royal College of Veterinary Surgeons
Russell Group
Secretary of State for Scotland
Scottish Chamber of Commerce
Scottish Government
Scottish Tourism Industry Skills Group
Seafish
Sheridan
Skills for Logistics
Society of Motor Manufacturers and Traders
Suffolk Chamber of Commerce
Tata Consultancy Services
Tech City
Tech UK
Tourism Industry Council
Transferwise
TUC
Ubisoft
UK Music
UK Screen Alliance
Ukie
Universities Scotland
Universities UK
Viacom
Annex D: List of respondents to MAC call for evidence by sector

**Agriculture, Forestry and Fishing**

AJ and CI Snell  
Angus Growers  
Associated British Foods Plc  
Boxford Suffolk Farms Ltd  
British Poultry Council  
CLA  
Clyde Fishermen Association  
Concordia  
Confor  
Countryside Alliance  
Department for Environment, Food and Rural Affairs  
East of Scotland Growers  
English Apples and Pears Ltd  
Flixton Mushrooms  
Fresh Produce  
G’s Fresh  
Haygrove Ltd  
Hayloft Plants Ltd  
Horticultural Trades Association  
Kettle Produce  
Laurence J Betts Ltd  
McGill and Co  
National Association of Agricultural Contractors  
National Farmers’ Union  
National Farmers’ Union Scotland  
Orchard Lodge Farm  
Place UK  
Roughway Farm  
Seafish  
Southalls of Norchard  
Supply of British Labour to Seasonal Horticulture  
Walsh Mushrooms  
West Sussex Growers Association  
Whitting and Hammond  
Wilkin and Sons  
Wyevale Nurseries

**Mining Activities**

Ground Forum  
Lantoom Ltd  
Mineral Products Association
Manufacturing of Food and Beverages

British Meat Processing Association
Charles Bloor Meat Processing
Cranswick
DAERA
Diageo
Donald Russell Ltd
Fish Processing Case Study
Food and Drink Federation
Forresters Sales Ltd
Fresca
Indo European Foods
Manor Fresh
National Pig Association
Provision Trade Federation
TS Bloor and Sons
Wicks Manor

Other Manufacturing

British Fashion Council
British Furniture Federation
British Generic Manufacturers Association
Cambridge Institu Ltd
Caterpillar
EEF
Johnson & Johnson
Mitsubishi Heavy Industries Group
Polypipe Ltd
Rolls Royce
Society of Motor Manufacturers and Traders
Textile Services Association
Toyota Motor Manufacturing
UK Fashion and Textiles

Utilities

Artemis
Biffa Waste Services
BP
Centrica
EDF Energy
Energy and Utility Skills
Energy Institute
Energy UK
General Electric*
National Grid
Nuclear Decommissioning  
Nuclear Industry Association  
Oil and Gas UK  
Scottish Power  
Total E&P UK Ltd  
UK Atomic Energy Authority

**Construction**

AECOM  
Arup  
Brexit Infrastructure Group  
Build UK  
Chartered Institute of Building  
CITB  
Construction Industry Council  
Federation of Master Builders  
Home Builders Federation  
ISG  
National Rail  
Royal Institute of Chartered Surveyors  
Skanska

**Wholesale and Retail Trade**

Amazon  
Asda  
British Retail Consortium  
Challs International Ltd  
John Lewis Partnership*  
Mitsubishi Electric Europe  
Motor Cycle Industry Association  
Planet Organic Ltd  
Wm Morrison Supermarkets Plc  
Zip Yard

**Transport**

Enterprise Holdings  
Freight Transport Association  
Hertz  
Maritime Skills Alliance  
National Franchised Dealers Association  
Nautilus  
RMT  
Road Haulage Association  
Strategic Transport Apprenticeship Taskforce
Warehousing

British Institute of Facilities Management

Accommodation and Hospitality

ABTA
ALMR
BALPPA
Bournemouth and Poole Tourism
British Beer and Pub Association
British Hospitality Association
British Sandwich and Food To Go Association
British Takeaway Campaign
Carlson Rezidor Hotel Group
Goldstar Chefs
Hotels Sector in Northern Scotland
McDonalds
Northern Ireland Hotels Federation
Seasonal Businesses in Tourism
Tourism Alliance
Wentworth Jones

Media and Communications

British Telecommunications
Broadcom
Commercial Broadcasters Association
Russia Teleradio
Sheridans (on behalf of Arabic TV station)
Vodafone

Information Technology

Canon*
Colt
IBM
Improbable Worlds Ltd
Intel
NASSCOM
SAP
ScotlandIS
Siemens*
Skyscanner
Tata Consultancy Services*
Tech City
techUK
TIGA
Ukie

Finance and Real Estate
American Express
British Property Federation
Chartered Association of Business Schools
Chartered Management Institute
ICAEW
Lloyds
London Market Group
Personal Investment Management and Finance
S&P Global
UK Finance
Virgin Money
Zurich Insurance

Professional Services
ABIO BIA
Academy of Medical Science
ACE
Advertising Association
AIRTO
Association of the British Pharmaceutical Industry
ARM
AstraZenica
BAL Global
Bloomberg
Bright Blue
British Future
British Institute of Facilities Management
Buro Happold
BVA RCVS
Cancer Research
Campaign for Science and Engineering
Centre for Progressive Capitalism
Charles Russell Speechlys
Chartered Institute for Archaeologists
Common Futures Network
Council for Global Immigration
Constantine Law Ltd
Deloitte
Denton
Design 2
Elekta
Employment Lawyers Association
Engineering Council
Engineering the Future
Enviresearch
Non-Professional Administrative and Support Services Activities

**Charities and Voluntary Bodies**

- Apostleship of the Sea
- Charity Finance Group
- Focus on Labour Exploitation
- Independent Age
- National Council for Voluntary Organisations
- Northern Ireland Council for Voluntary Action
- Salvation Army

**Recruitment Services**

- Adecco Group
- Association of Labour Providers
- Mploy Staffing Solutions
- REC
- Smart solutions

**Representative Bodies**

- British Chambers of Commerce
- British Services Association
- BritishAmerican Business
- CBI
- CBI Northern Ireland
- Chartered Institute of Personnel and Development
- City & Guilds
- Federation of Small Businesses
- Institute of Directors
- Migrants’ Rights Network
- Scottish Chambers of Commerce
- The 3million

**Trade Unions**

- NASUWT
- Prospect
- TUC
- Unison
- Unite
- Usdaw

**Public Administration**

- Buckinghamshire County Council
- Department for Business, Energy and Industrial Strategy
- Local Government Association
London Borough of Camden

Education

Higher Education

Aberystwyth University
Association of Colleges
Association of Schools and College Leaders
Bath University
Birmingham University
Cambridge University
Conservatoires UK
Destination for Education
Edinburgh Napier University
Edinburgh University
Education and Training Foundation
Education Institute of Scotland
Exeter University
Glasgow University
GuildHE
Heriot Watt University
Imperial College
Institute of Physics
King’s College London
London Higher
London School of Economics
MillionPlus
Oxford University
Russell Group
St Andrews University
St Mary’s University
Strathclyde University
Surrey University
Universities and Colleges Employers Association
Universities Scotland
Universities UK
University Alliance
University College London
University of the Arts London
Warwick Business School
Warwick University

Non-Higher Education

Department for Education
Education Workforce Council
English UK
Heathfield School, Ascot
Independent Schools Council
London Business School
NAHT
National Education Union
Nottingham College
Princess Helena College

**Health**

Academy of Medical Royal Colleges
Association of Dental Groups
British Dental Association
British Heart Foundation
British Medical Association
BUPA UK
Cavendish Coalition
Chartered Society of Physiotherapy
Department of Health
General Medical Council
HCA Healthcare
HCL Workforce Solutions
HR Leaders in Health Care Network
NHS Grampian
Nuffield Trust
Nursing and Midwifery Council
Royal College of Anaesthetists
Royal College of Emergency Medicine
Royal College of General Practitioners
Royal College of Midwives
Royal College of Nursing
Royal College of Paediatrics and Child Health
Royal College of Pathologists
Royal College of Physicians
Royal College of Physicians and Surgeons of Glasgow
Royal College of Radiologists

**Residential and Social Care**

Care Association Alliance
Care England
Christies Care
Four Seasons Healthcare
Home Counties Carers
Macklin Group
Methodist Homes
National Care Association
Scottish Care
Scottish Social Services Council
Surrey Care Association

Creative Arts and Entertainment

Art Fund
Artists Info Co.
Arts Council England
Association of British Orchestras
BFI
British Academy
British Art Market Federation
British Horseracing Authority
British Library
British Racing School
British Recorded Music Industry*
British Screen Advisory Council
Creative Industries Federation
Department for Digital, Culture, Media and Sport
EFL
Film London
Heritage Alliance
Historic England
Incorporated Society of Musicians
Live Nation
Mojohobo
Museums Association
Natural History Museum
National Museums Scotland
One Dance
Pact
Royal Academy of Music
Rugby Football League
Society of London Theatres
Sport and Recreation Alliance
Storm Management
UK Music
UK Screen Alliance
UKRG
Visual Artists Ireland
Yvonne Courtney

Other Stakeholders

Brexit Advisory Committee for Public Services
Embassy of Japan
Japanese Chamber of Commerce and Industry in the UK

Devolved Administrations
Convention of Scottish Local Authorities
Executive Office, Head of the Northern Ireland Civil Service
Highland and Islands Enterprise
Northern Ireland Strategic Migration Partnership
Royal Society of Edinburgh
Scottish Chamber of Commerce
Scottish Government
Social Support and Migration in Scotland
Welsh Government

**Government Departments**

Department for International Trade
Food Standards Agency

**Local Government Bodies**

City of Bradford Metropolitan District Council
Cornwall Council
East of England Strategic Migration Partnership
Greater Manchester Combined Authority
Hampshire County Council
Herefordshire and Worcestershire Chamber of Commerce
Hull City Council
Local Government Association
London Chamber of Commerce
London First
Mayor of London
North East Brexit Group
Plymouth City Council
School of Social Sciences, Nottingham University
South East Councils and South East Strategic Partnership for Migration
West Sussex County Council
West Midlands Combined Authority
West Yorkshire Combined Authority

*These respondents asked for their evidence to be regarded as confidential and not to be published.*
Annex E: Technical Annex

Defining Migrant Groups

In what follows, and in line with previous MAC reports, we use **country-of-birth** to define **migrants as those not born** in the UK. In contrast, some recent ONS publications have argued it is preferable to use nationality. Neither measure is perfect and the use of one over the other depends on the purpose for which the statistics are being used. Individuals have only one country of birth while they might have multiple nationalities (and our data sources typically record only one) and individuals might also be eligible for nationalities they do not currently hold. However, some foreign-born individuals will be eligible for British citizenship from birth in which case they would not be subject to any migration controls and it may be misleading to categorise them as migrants. In the rest of this note, we exclude Irish-born from our EEA-born migrant definition, as it is assumed that the Common Travel Area will continue between the UK and Ireland. And the group we refer to as EU13+ are those countries who were members of EU before 2004 plus EEA members plus Switzerland.

This leads to migrant groups being classified as follows:

- UK and Ireland
- EU13+: Austria, Belgium, Denmark, Finland, France, Germany, Greece, Italy, Luxembourg, Netherlands, Portugal, Spain, Sweden, Iceland, Liechtenstein, Norway and Switzerland.
- New Member States (NMS): Bulgaria, Croatia, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Romania, Slovakia, Slovenia
- Non-EEA

Source of data is APS/LFS. The coding of country of birth has changed over time and we use 3 different variables; CRY (changed to CRY01 in 2001), CRYO and CRYOX7. CRYOX7 is used after 2007, and a combination of CRY and CRYO is used until 2006.

**Defining Sectors**

Sectors are grouped by SIC07 codes, and the earlier SIC92 and SIC03 classifications are transformed to correspond with SIC07 using a proportional mapping provided by the ONS.

The 88 2 digit SIC07 codes have been grouped into 20 MAC sectors. There is a trade-off between picking and choosing amongst these and not capturing the whole economy, and aggregating these up and potentially missing individual industries that don’t follow the pattern of the aggregated sector. We chose to create a sector taxonomy that allowed for separate analysis of industries with particularly high EEA employment.

**Defining Skill Levels**
Skill levels are determined by occupation and their corresponding NQF level. NQF level 1 and 2 are determined to be ‘low skill’, levels 3 and 4 are ‘medium skill’ and level 6+ is ‘high skill’.

Skill level is determined by occupation (classified using SOC10 coding). Each occupation corresponds to an NQF level and is categorised into the low, medium and high categories discussed above. The mapping from occupations to NQF levels comes from Immigration Rules Appendix J².

Chapter Specific Analysis

Cross Cutting Themes

Figures 1.4., 1.9. and 1.10.: data is from OECD Stat³. Sample is restricted to older OECD countries that are likely to be more like the UK in terms of economic development. Growth rates of employment, labour force, and output per worker are for as long a period as is available and converted to an annualized rate. Period varies slightly from country to country.

Analyses of wages, absenteeism and night/evening work.

These analyses use the LFS and the migrant classification described above. The sample period is 2011-2016 inclusive. Information on LFS and APS variables can be found in the LFS User Guide vol. 3, which is updated annually.⁴

The controls in the regressions are occupation, industry, region, age, gender, job tenure and year.

The dependent variable in Figure 1.1. is usuwrk2 and usuwrk3 – whether it is usual to work evenings or nights.

The dependent variable in Figure 1.2. is the percentage of days scheduled to work that the worker was absent.

The dependent variable in Figure 1.7. is the log of hourly earnings.

For Figure 1.3. the fraction with a degree is computed using the answer to the question on the highest qualification (HIQUL11D and HIQUL15D)

Figure 1.8, which presents wage growth for UK and Ireland born workers by skill level, proportional mappings between SOC1990, SOC2000 and SOC2010 classifications were used to assign NQF levels to individual observations consistently overtime.

³ http://stats.oecd.org/
⁴https://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/employmentandemployeetypes/methodologies/labourforcesurveyuserguidance
Estimating Compliance with the Minimum Wage

The problem with estimating compliance with the minimum wage in the LFS is that the measure of hourly pay that is available for everyone (HOURPAY) is derived by dividing weekly earnings by weekly hours, a procedure that is known to have errors that lead to an over-estimate of the numbers paid below the minimum wage. An alternative measure (HRRATE) is a direct question about the hourly pay rate so is regarded as more accurate (though still not perfect because it is self-reported) but is only asked of those who are paid by the hour who tend to be on lower earnings so are not representative of the workforce as a whole. To deal with this the LPC uses a matching procedure\(^5\) to assign an hourly rate measure to those where it is missing. We cannot use exactly this methodology. Instead we use a simpler re-weighting methodology which assumes that within different 5p bands for HOURPAY (capped at £35 per hour) the fraction reporting an HRRATE is random. This fraction is then used to re-weight the observations on HRRATE to be representative of the whole workforce.

Our methodology provides similar estimates to those reported by the LPC in Figure 2 of their report. The LPC caution against using estimates of the levels of non-compliance derived from the LFS (because the earnings data is self-reported) but argue it can be used to evaluate trends over time. Our assumption is that it can also be used to compare non-compliance rates at a point in time across migrant groups.

We follow the LPC in defining the low-paid as those paid within 5p of the minimum and focus on 2016 and workers aged 25+ so eligible for the National Living Wage. Our estimates suggest that low-paid EU13+ migrants are 2.5 percentage points more likely to comply with the minimum than the UK-born, and NMS migrants are 2 percentage points more likely to comply. But non-EEA migrants are 3.9 percentage points less likely to comply with the minimum wage. There is no evidence here that underpayment is especially serious among EEA migrants.

Regional

Migrant share

The Annual Population Survey (APS) is used to calculate the population shares of the different country of birth groupings at the level of the English regions, Scotland, Wales and Northern Ireland. Figure 2.1, which presents population shares at the local authority level, using published ONS tables which also use the APS.

Historic and projected population changes

At the level of the UK nations the historic population data was provided by the ONS mid-year population estimates. The population projections are also provided by the ONS. The projections used are 2016-based and were published in 2017. These projections also form the basis of the analysis presented in the ageing section of the chapter.

At levels below the nations of the UK a combination of sources were used for the population projections. Publications by the ONS, StatsWales, National Records Scotland and the Northern Ireland Statistics and Research Agency were combined to get a picture of expected population change for each local authority in the UK. These subnational projections are 2014-based and were published in 2016.

Where both national and sub-national geographies are presented, such as in Figure 2.3, 2014-based projections were used at both the subnational (English regions) and national levels for consistency.

**Sectoral Analyses**

**Totals and Shares**

Totals from the ONS dataset Workforce Jobs (WFJ)\(^6\) and shares of migrant groups our own calculations from APS/LFS

Analysis carried out using LFS and APS. LFS pooled quarters are used 1997 to 2003, and APS from 2004-2016.

Weighted shares were found for each of the four migrant groups in each MAC sector and applied to the ONS Workforce jobs datasets for consistency with the productivity analysis.

Total employment in each sector for the period 1997-2016 is plotted with the total number of UK-born workers in the sector. The gap between the two lines is the employment of migrants. The aggregate figure for the entire economy is presented below.

\(^6\)https://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/employmentandemployeetypes/datasets/workforcejobsbyindustryjobs02
The three non-UK-born migrant groups considered throughout the paper are EU13+, NMS and non-EEA. A figure showing the total employment of migrants in the UK over the 20 year period observed throughout the sectors is presented below. The figures in each sector show the migrant composition of each sector by share of sector employment opposed to absolute numbers.

![Graph showing migrant composition over time]

**Wages**

ASHE data is used over the period 1997-2016 to compare median wages in each sector to the economy average over time. The ASHE dataset has no country of birth identifier, so the data considers all migrant groups.

SIC92-SIC07 mapping was carried out using a proportional mapping within the dataset.

We use the ‘HEXO’ variable to estimate nominal hourly earnings, which excludes overtime. These values were collapsed by MAC sector, and deflated using ONS published CPI data with the base year 2016.

Where earnings by country of birth groups are presented the LFS and APS datasets are used. Common with other analysis described, LFS pooled quarters are used from 1997 to 2003 and APS datasets are used from 2004 onwards. We use the ‘HOURPAY’ variable to estimate nominal gross hourly earnings.

**Productivity**

The productivity series presented in the Sectoral Annex are calculated using published ONS tables. As the MAC sector taxonomy used in this publication does not fully align with standard SIC groupings some aggregation was required. For the labour input data, work force jobs and productivity hours, this causes no issues.
However, the Chain Volume Measure of Gross Value Added (GVA (CVM))\(^7\), the preferred measure of real output which is used as the numerator, is not fully additive across sectors. To limit this issue, we take advantage of division level GVA estimates where possible – instead of aggregating fully from the 2-digit SIC level. This means there are relatively few sectors within the MAC taxonomy that require much aggregation.

**Skills**

This analysis uses the 2014-2016 3-year APS.

No SIC or CoB recoding is required, as SIC07 and CRYOX7 are used for all years considered.

The figure for skills presents proportion of migrants in each skill category for each sector. The ‘Migrant’ bar is an aggregate of EU13+, NMS and non-EEA workers, and provides an overall comparison to the UK-born worker skill composition. Where individual skill categories have fewer than 30 unweighted observations, the categories have been merged together. These composite categories contains at least 30 observations, and may contain any combination of either skill level.

The aggregate skill composition of the entire economy by migrant group is shown below for comparison against individual sectors.

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\(^7\)https://www.ons.gov.uk/economy/grossdomesticproductgdp/datasets/ukgdpolowlevelaggregates
Annex F: Sectoral Analysis
F.1. Agriculture, Forestry & Fishing (SIC 01-03)

Key facts

<table>
<thead>
<tr>
<th>Year</th>
<th>Share of UK Employment</th>
<th>EEA employment share</th>
<th>Median hourly wage (% of UK average)</th>
<th>Output/hour (% of UK average)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1997</td>
<td>1.7%</td>
<td>1.1%</td>
<td>70.9%</td>
<td>32.6%</td>
</tr>
<tr>
<td>2004</td>
<td>1.2%</td>
<td>1.4%</td>
<td>72.3%</td>
<td>42.8%</td>
</tr>
<tr>
<td>2016</td>
<td>1.2%</td>
<td>9.0%</td>
<td>77.1%</td>
<td>37.3%</td>
</tr>
</tbody>
</table>

Agriculture, forestry and fisheries have below-average wages and productivity, with almost a third of occupations classified as low skill (NQF levels 1 and 2) in 2016.

The sector is heterogeneous, with different methods of production and different requirements for labour, but is overall heavily reliant on migrant workers, especially for seasonal work (which is very important in this sector) and in low-skilled occupations. The reliance on migrants is not fully reflected in the LFS/APS figures because of the nature of those samples. Migrants from NMS have become increasingly important since 2004. The number of seasonal workers each year is estimated to be around 80,000, the vast majority of whom are from the NMS. UK and Irish workers are estimated to hold only 1% of the seasonal occupations in the sector.

Most employers in the sector see little alternative to migrant labour. Some respondents cited inability to automate as the key issue, others cited issues with hiring domestic workers due to unwillingness to work unsociable hours, and different work ethics. Low wages are also likely to be a factor but many employers feel low margins offer little scope to raise wages.

The sector has experienced difficulties currently in recruiting and retaining migrant workers since the referendum, most likely because the fall in the pound has made Britain a less attractive destination, especially for seasonal workers. Attitudes to migrants post-Brexit were also mentioned as having played some role.

The sector generally feels it needs to have access to migrants under any new regime, with a widespread view that some version of the Seasonal Agricultural Workers Scheme (closed in 2013) should be re-introduced.
Data

Figure 1.1 Sector Employment

Source: Workforce jobs (WFJ), Labour Force Survey (LFS) and Annual Population Survey (APS)

Figure 1.2 Migrant Share of Employment

Source: WFJ, with weighted LFS/APS shares

Figure 1.3 Median Hourly Real Wages

Source: Annual Survey of Household Earnings (ASHE)

Figure 1.4 Median Hourly Wages by Migrant Groups

Source: 3-Year APS (2014-2016)
Figure 1.5 Sector Productivity

Figure 1.6 Sector Output Growth

Source: WFJ

Figure 1.7 Top Occupations in the Sector by Share

Source: 3-Year APS (2014-2016)

Figure 1.8 Occupation Skill Level by Migrant Groups

Source: 3-Year APS (2014-2016)
Overview of the sector

After a prolonged period of decline (beginning long before the earliest data we present), total employment levels have risen slightly since the early 2000s (Figure 1.1, whilst the sector share of the UK labour force has remained relatively steady around 1.2%.

The share of workers from the New Member States (NMS) rose steadily after 2004 (Figure 1.2), accounting for 8% of the labour force in 2016. This is a significant underestimate due to serious limitations with using the Annual Population Survey (APS) and Labour Force Survey (LFS). By design, these surveys do not cover seasonal workers or those living on farms in communal accommodation.

The ONS recently produced a paper on the available data on labour in agriculture including a discussion of the available data on seasonal workers*. None of the sources are ideal but the longest-running series is a snapshot of the number of seasonal agricultural workers in England on June 1st each year, shown below.

![Graph showing seasonal, casual or gang labour workers](image)

This series is purely to demonstrate how many workers are potentially missed out of the Workforce Jobs (WFJ) figures at any given time, and is by no means representative of the flows of seasonal workers across a full year. The peak period of seasonal employment changes year on year depending on when the season occurs – which is heavily influenced by the weather. It shows fluctuations in the number of seasonal workers but no clear trend over time. Agriculture, forestry and fishing is a low productivity sector, with output per job at 50% and output per hour at 38% of the UK economy’s overall average in 2016, as seen in Figure 1.5. Relative to the average, both measures have declined over time.

*https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/internationalmigration/articles/labourintheagricultureindustry/2018-02-06
Due to low sample sizes, even in the sample of the 3-year APS, we cannot make estimates of the wages earned by EU13+ migrants. The median hourly wages of NMS workers and non-EEA workers do appear to be below that of UK workers (Figure 1.4), though this is likely to be due to the higher proportion of workers in low-skill occupations across these groups (Figure 1.8). Overall wages in the agriculture, forestry and fishing sector are significantly below the economy average (Figure 1.3), at just 77.1% of the economy average in 2016.

Most occupations in this sector by share, comprise of farmers and farm workers, with 32% of occupations being classed as low skill, defined as National Qualification Framework (NQF) levels 1 & 2.

EU13+ workers have been excluded in Figure 1.8 levels due to small sample sizes after the migrant groups in the sector were broken down into skill compositions. These workers are captured in the migrant category, where medium and high skilled workers have been combined. This figure demonstrates the share of workers from outside the UK and Ireland that are in low skilled occupations is higher than that of the UK-born counterparts in the agriculture, forestry and fishing sector.

What we were told - sector responses

Trends and Evolution

Employment

Access to migrant labour was reported as being vital to business development among those employers who have experienced employment and output growth. The NFU said that EU nationals were vital to filling the great diversity of roles and in some cases, make up the vast majority of a particular workforce. Horticulture, mushroom farms and fishing all indicated a reliance on EEA workers. However, it was not the only factor behind growth. For example, English Apples and Pears argue that a growth of 27% in fruit production between 1997 and 2016 is due to “improved production methods and access to a mobile seasonal labour force.”

Access to migrant seasonal labour was reported as particularly important. UK farmers and producers employ approximately 80,000 seasonal workers every year, the clear majority of these people come from countries within the EU. The NFU Supply of Seasonal labour to British Horticultural Farms May 2017 Survey results said that 75% of seasonal workers were recruited from Romania and Bulgaria (A2 countries), with the remainder largely from A8 countries. UK citizens account for less than 1% of the sector’s seasonal workforce. The NFU estimated that the number of seasonal workers required could increase to 95,000 by 2021. Sub-

Where individual skill categories have fewer than 30 unweighted observations, the categories have been merged together. These composite categories contain at least 30 observations, and may contain any combination of either skill level.
sectors which have reported heavy reliance on seasonal workers include horticulture, orchard fruit production, timber transport and game farming.

Wages

Fresca Group Ltd said that rises in the National Minimum Wage and National Living Wage meant that the agricultural industry paid the same minimum wage rates as other, more attractive industries. They said it has eliminated piecework payment models which underpinned efficiency within the farming sector. People simply would sooner work in a coffee shop than work in an agricultural field.

By contrast G Fresh said that with piecework rate, workers can earn £15 per hour leading to an average weekly wage of £365, above that of many retail jobs.

Methods of recruitment

Many farms use a mixture of returnees from previous years, agencies within EU countries, UK agencies such as Concordia and Staffline as well as word of mouth. As an example, Southalls Norchard (a smaller labour employer) recruited via direct contact 58%, Concordia – 36% and Staffline Agriculture – 12%. G Fresh (a large labour employer) said they recruited their own staff (rather than through an agency) in Europe as well as online.

All sub sectors agreed that agriculture, forestry and fishing were no longer viewed as an attractive career for UK workers. A number of enterprises indicated they are in affluent areas with low unemployment and/or rural areas with poor public transport. Fishing has issues of crew shortages that may be linked to depopulation in rural areas.

Skills and training

Most workers in the agriculture, forestry and fishing sector were classified as low-skilled in the NQF framework. Some farms accepted their staff were low skilled but essential, whereas others saw holding a NPTC spraying ticket as skilled (these are two day courses). Seafish said that within fishing the highest qualification of just over half of the workers in their survey sample (53%) was basic safety training.

Other responses questioned the definition of skill. Hayloft Plants said “In your eyes the migrant workers would be low skilled. We have invested in training them in courses such as English lessons, Fork lift truck driving, various Health and Safety/First Aid courses, spraying PA1/PA6 courses etc.” G fresh said their Induction, training and practise takes three weeks.

Some farms indicated that many migrants were well educated and arrived with excellent transferable skills including good English and IT skills. These workers were quickly identified by their employers as having potential and were promoted into more skilled and senior management positions. Historically migrants have often been educated beyond the requirements of the roles that they were undertaking. But, a number of enterprises have indicated that currently there is a drop in skill
levels of the EEA nationals they are employing as a result of the tightening labour market including poorer English and literacy skills.

The responses said that not all jobs within the sector were low-skilled. In horticulture, there was a need for higher skilled workers including skilled operators, engineers and line leaders (particularly where automation has increased). G Fresh has PhD partnerships with 8 universities, supporting 13 PhD students.

Future Prospects

Shortages of seasonal labour

Many submissions reported difficulties in recruiting low skilled workers since early 2017. The NFU seasonal labour survey said there was a shortfall of over 1500 workers in May 2017. In the same month returnee rates fell to a record low of 33%. The proportion of workers failing to arrive to take up seasonal work, or leaving their job early was increasing (17%). The same methods of recruitment were being used since the referendum but fewer workers were applying. Labour providers also reported a smaller pool of labour upon which to draw.

Employers said they were having to take workers who were not of the same high standard as previously, G Fresh and other responses reported language and literacy difficulties. The NFU said that past experience made returnees more technically proficient than new recruits and losing them would be a big concern for the industry. G Fresh indicated that new starters harvested 65% of crop accurately, whereas more experienced staff harvested 95% of the crop effectively.

A number of enterprises said that crops were not being harvested/picked due to shortages in migrant labour.

Several reasons were suggested for this emerging labour shortage. A number of organisations indicated that the EEA migrant workers they employed were in the UK to earn money to send home or to save for a better life in their home country. The fall in the value of the pound after the referendum has meant that a worker interested in spending their income in Romania saw the wages available in the UK fall by up to 15% although increases in the National Living Wage partially compensated for that. Earnings gaps remain large, Hayloft Plants Ltd stated that workers from Romania and Bulgaria earned approximately five times what they would earn in their home country.

The perception that EU workers are no longer welcome in the UK was also mentioned as a reason for labour shortage, as well as stronger economic growth in the rest of the EU and the A2 leading to better opportunities elsewhere. The NFU reported increased numbers of Romanian and Bulgarian workers using seasonal horticultural work as a stepping stone into the wider UK labour market following the end of transitional controls.

In response to these problems, the NFU said that companies were seeking commitments from seasonal workers that they would take up positions further in advance than previously. Some companies reported that they were less thorough in their experience requirements when seeking workers, relying instead on increased levels of training when they were in post.
Some farmers and growers said that they were already raising wages to offset the fall in the pound to attract and retain seasonal workers. Others expected these pressures to continue with some businesses arguing that a lack of available labour will drive an increase in wages as well as a fall in quality of workforce.

**Alternatives to the use of migrant labour**

**Domestic labour**

Few responses saw UK workers as a viable replacement for migrants because the jobs on offer were not considered attractive to them. Many farms indicated that they perceived migrant workers as having a better work ethic, and a willingness to work long hours and be flexible.

The sector said there were attempts to attract UK workers to horticulture through better training and progression opportunities, working with universities and education providers, offering a range of placement, intern, management training schemes and apprenticeship opportunities. An increasing number of agricultural businesses were actively engaging with schools and colleges to raise the profile of agriculture. They indicated they had not so far seen huge amounts of success.

Fresca group said that "Working in the food industry can provide fulfilling careers, consistent work and opportunities for upskilling, but there are issues which restrict how attractive the industry is to potential employees and which are barriers to recruitment. Fewer EU migrant workers are happy to work in food and farming now when more attractive roles in other industries exist with more stable working hours and more hospitable conditions."

Other responses in the sector provided a range of suggestions as to how to adjust to a decreased flow of available labour from the EU. These included schemes to incentivise part time workers – the fresh produce sectors said it had the potential to trial and implement a wide variety of shift models, for example increased flexibility to make shift patterns more attractive to parents.

Visits to farms and some responses said the current tax and benefits system made it difficult for those who were unemployed to enter into short term seasonal work as it impacted on their benefits.

Fresca suggested that safe routes could be established for vulnerable workers (ex-prisoners etc.) – they said that agricultural and horticultural work could often provide a fulfilling way back into the workforce. It was argued that Local Enterprise Partnerships could engage more around the UK to both promote and support the industry through strategic planning for infrastructure and through local economic policy.

**Automation and investment**

Automation has increased but many farms suggest that they are 5 to 10 years away from automated harvesting in some areas, for example strawberry picking.
Increased automation and mechanisation of processes is possible to ease pressure on businesses in the case of any shortage of labour, but there are limitations to this. The high capital investment required is a major barrier, with the investment required typically measured in millions of pounds to reduce the need for labour.

Fresca Group Ltd argued that “Farm businesses struggling for labour and profit in production horticulture are likely to consider long-term switching to more automated forms of agriculture and arable crops. At the very least, usual land rotations would be disrupted, with unpredictability and volatility a feature of production.” The NFU said that “farmer confidence is absolutely critical to the future of a progressive, profitable and productive food and farming sector. Confidence feeds through to investment. Making investment decisions for the long term e.g. in buildings and other farm infrastructure, against a backdrop of increased political uncertainty, is challenging.”

Horticultural responses said the industry is a long-term business (crops can have a 3 to 15-year life span) and uncertainty about labour supply was affecting investment decisions. Angus Growers said that “Some growers have reduced the areas of new crops they will plant in 2018 and more are saying they will not plant in 2019 unless their confidence improves.” West Sussex Growers Association went further saying that “There is no point investing in glass houses, pack houses and ancillary operations if they can’t staff them and satisfy customer needs.”

**Changing Crop Mix and Relocation**

Other businesses also predict that labour intensive crops would be imported rather than grown in the UK if the flow of migrants is restricted. Fresca Group Ltd suggested that “a price increase for services such as packing and distribution in the UK will make supply chain reviews inevitable – with UK operations competing against service providers elsewhere. It is reasonably predictable that consolidation would have to occur, with only the largest companies able to invest in the mechanisation and automation of process required to compete effectively on cost.”

This switch away from production of labour-intensive crops in turn could have a negative effect on those UK businesses currently supplying horticultural inputs to farms and on the innovation and research sector which has seen activity and growth in recent years.

But many businesses said there were no contingency plans for a fall in the supply of migrant labour.

**Suggested Future Migration Regimes**

There was widespread support for a new SAWs scheme for the rural economy including game farming and forestry with requests for an immigration policy to reflect the importance of workers from the EU to the food and farming industry and the broader rural economy.
F.2. Mining and Quarrying Activities (SIC 05-09)

Key statistics

<table>
<thead>
<tr>
<th>Year</th>
<th>Share of UK Employment (%)</th>
<th>EEA employment share (%)</th>
<th>Median hourly wage (% of UK average)</th>
<th>Output/hour (% of UK average)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1997</td>
<td>0.3%</td>
<td>0.8%</td>
<td>120.9%</td>
<td>745.3%</td>
</tr>
<tr>
<td>2004</td>
<td>0.2%</td>
<td>2.3%</td>
<td>112.9%</td>
<td>627.3%</td>
</tr>
<tr>
<td>2016</td>
<td>0.2%</td>
<td>4.0%</td>
<td>135.7%</td>
<td>303.9%</td>
</tr>
</tbody>
</table>

This sector represents a tiny share of total UK employment but generally has high productivity, high wage and high skill, largely because it includes the North Sea Oil and Gas industry.

Across the sector most migrants are from non-EEA countries so the sector is not heavily reliant on EEA workers.

But it is very heterogeneous and some parts of the sector e.g. quarrying may be much more dependent on EEA workers. The sector ranges from oil and gas production to quarrying activities. Some respondents highlighted the interdependency with other sectors, such as logistics and the construction industry as well as catering, cleaning and facilities management. Recruitment methods were said to be uniform across both UK and non-UK nationals.

Respondents said that the skill level of EEA employees was comparable with those of UK workers, although one respondent from the quarrying industry said that they had concerns about the attitude to work of local recruits.
Data

Figure 2.1 Sector Employment

Share

Employment (000s)

0%
10%
20%
30%
40%
50%
60%
70%
80%
90%


Source: Workforce jobs (WFJ), Labour Force Survey (LFS) and Annual Population Survey (APS)

Figure 2.2 Migrant Share of Employment

Share of sector workforce


EU13+ Workers
NMS Workers
Non-EEA Workers

Source: WFJ, with weighted LFS/APS shares

Figure 2.3 Median Hourly Real Wages

Wages

£0 £2 £4 £6 £8 £10 £12 £14 £16 £18 £20 £22 £24 £26 £28 £30


Median hourly wages in sector
Median hourly wages over whole economy

Source: Annual Survey of Household Earnings (ASHE)

Figure 2.4 Median Hourly Wages by Migrant Groups

Wages

£0 £2 £4 £6 £8 £10 £12 £14 £16 £18 £20 £22 £24 £26 £28 £30

UK + Ireland EU13+ NMS Non-EEA

Source: 3-year APS (2014-2016)
Figure 2.5 Sector Productivity

Source: WFJ

Figure 2.6 Sector Output Growth

Source: WFJ

Figure 2.7 Top Occupations in the Sector by Share

Source: 3-year APS (2014-2016)

Figure 2.8 Occupation Skill level by Migrant Groups

Source: 3-year APS (2014-2016)
Overview of the sector

The mining and quarrying activities sector which includes the North Sea oil and gas industry has seen large fluctuations in total employment over the twenty years observed, with an overall downward trend. The sector share of employment in the UK economy is extremely small, just 0.2% in 2016, down from 0.3% in 1997 (Figure 2.1.).

The share of UK and Irish workers in the sector has fallen over time, with non-EEA workers taking the largest share at around 12% of the sector workforce (Figure 2.2). The EU enlargement in 2004 appears to have increased the NMS share of employment, though workers from both NMS and EU13+ countries still only account for a very small share of employment in the sector.

In Figure 2.4, both EU13+ workers and NMS workers have been omitted due to small sample sizes. The figure shows that the median hourly wages of non-EEA migrants are significantly higher than that of UK born workers, though these figures do not control for skill level and are likely to be reflective of the higher skill composition of non-EEA migrants.

At the beginning of the period observed, the mining and quarrying activities sector had extraordinary productivity, at 745.3% of the economy average. This number had more than halved by 2016, but remains at over 300% of the economy average (Figure 2.5). Despite the sector share of the employment being just 0.2%, the sector accounts for 1.5% of total UK GVA, though GVA growth in the sector has fallen behind that of the economy average. Mining and quarrying activities saw a growth rate of just 18% in GVA from 1997-2016, compared to the overall average of 54.9%.

Despite small sample sizes leading to the exclusion of both EEA groups from Figure 2.8, it’s evident from the aggregated ‘migrant’ grouping that this is predominantly a high skill sector\(^{10}\). The larger proportion of high skill occupations in the migrant group echoes the higher wages for migrants in the sector, presented in Figure 2.4.

What we were told - sector responses

We received responses under this sector from BP, Total E&P and Oil and Gas UK from oil and gas production, the Mineral Products Association (the trade association for the aggregates, asphalt, cement, concrete etc. industries), Ground Forum (a representative body which included members who are involved in this sector as well as others involved in delivering infrastructure projects so some of their evidence may refer more to the construction sector), and Lantoom (a Cornish quarrying firm).

Trends and Evolution

\(^{10}\) Where individual skill categories have fewer than 30 unweighted observations, the categories have been merged together. These composite categories contain at least 30 observations, and may contain any combination of either skill level.
**Employment**

Oil and Gas UK told us that there was what they described as an extensive range of jobs which EEA migrants performed, none of which differed from UK or non-EEA workers. The jobs ranged from high-skill to low-skill but essential roles, for example in catering, cleaning and facilities management. These roles were said to be particularly important on offshore facilities. EEA migrants employed by Oil and Gas UK members spanned all business functions and disciplines, from engineering and earth sciences to professional and administrative functions such as information technology, finance and supply chain. Almost 10% of the workforce in the oil and gas sector were said to be EEA nationals.

BP told us that the skill level of EEA employees was comparable with those of UK born workers and non-EEA workers. Within the organisation, EEA nationals accounted for 5.8% of the overall FTE population, including the 0.69% on expatriate assignments, all of whom would be considered highly skilled. The assignment roles performed by EEA nationals included: economists, business development managers, engineers, traders, human resource professionals, geologists among others.

Total E&P (an energy producer and provider) said that they employed highly skilled individuals in a variety of technical disciplines. They said they employed primarily UK nationals (81%), however, it was essential to them that they retained the ability to employ, or assign to their UK business from overseas, highly-skilled individuals both from within and outside the EEA. Migrant workers who came to the UK to work for Total E&P were said to bring a diverse range of skills and competencies, international experience and global best practices which were not available from the resident labour market. Total said that, in their view, migration to the UK did not just fill skills shortages; it also addressed skills deficits by training UK workers.

The Mineral Products Association carried out a survey of their members which found that 75% of companies participating in the survey employed EU-born workers, either directly or indirectly (as contactors), and EU-born workers accounted for 5% of the workforce. EU-born workers were employed in a wide variety of roles. Survey respondents indicated that production supervisors and operatives were the most common on-site roles. 52% of EU-born workers were reported as working in haulage and logistics, largely as HGV drivers. 15% of respondents replied that replacing EU-born workers (if they left the UK) would be very difficult and 46% of respondents replied that replacing EU-born workers would be challenging. If companies were unable to freely recruit from abroad post-Brexit, 12% of respondents said their business would be significantly affected and 65% said their business would be moderately affected. When asked to identify the most significant risk for business growth following Brexit, 35% of respondents identified a more restrictive migration policy.

Lantoom told us that EEA nationals made up 42% of their staff and that this figure was 100% for their stone cutting staff. They said that the pattern of EEA migration had changed since the referendum with increased difficulty in hiring good quality workers from the EEA. They suggested that the more competent EEA nationals were less likely to want to work in the UK since the referendum. Ground Forum
reported that current uncertainties with Brexit were not helping them attract the best candidates in competition with other countries.

**Methods of recruitment**

BP said that their global headquarters were in the UK and they required what they described as a multitude of disciplines to be based here. To sustain their core businesses in the UK, BP told us they were continually competing globally for the best candidates, regardless of nationality, with their major competitors, who were also global multinationals. In doing this, BP said that they did not differentiate recruitment practices by skill type and occupation. They made use of specialist recruitment vehicles and head hunters and agencies across the world. They targeted good engineering universities for graduate engineers and operated a graduate Challenger programme and an apprenticeship scheme into which they brought talent on an annual basis.

Ground Forum reported that its members had the same recruitment methods for staff irrespective of their nationality, while Lantoom reported that EEA nationals were recruited through a specialist agency. 80% of these were on permanent contracts. UK nationals were recruited from the local labour pool and they were generally on permanent contracts.

**Skills and training**

BP said that experts brought into the UK were able to share knowledge with UK employees, particularly for areas such as refining where there were fewer opportunities for learning in the UK and more across Europe. The firm also said it valued the ability to send UK employees out on assignment or as business visitors to countries within the EEA and beyond, which enabled BP to train their global employees consistently and enabled upskilling of employees both in the UK and across the globe. They said they were concerned that the UK would not be as attractive as a training hub in the future if the immigration rules made travel less agile and other locations in the EEA were better able to host.

Ground Forum reported that universities were closely involved in providing the training that their industry required and had strong links with them. Lantoom reported that they did not cooperate with universities who they saw as uninterested in their work. Lantoom reported further that although EEA workers in general had lower skill levels than their UK counterparts, their attitude levels were considerably higher. They said that since they had started to employ EEA workers, their labour cost had fallen substantially and that their production per day had grown. They also said that the number of management hours spent on disciplinary or performance-related employee issues had fallen from significantly disruptive to almost zero.

**Impact**

Both Ground Forum and Lantoom agreed that, in their view, the benefits of EEA migrant labour outweighed the costs. They suggested that the increased productivity and profitability provided by EEA migrant labour allowed them to invest more resources in UK workers’ training and development as well as investment in the
growth of their business. Lantoom said that the sector was experiencing skills shortages that were predicted to increase as older skilled workers retired. In their view, EEA migrants contributed positively to productivity, kept consumer prices lower and improved the levels of services.

Future Prospects

Adjustment

Lantoom reported that they had been taking a more restrictive view on investment to ensure they have sufficient liquidity to deal with an uncertain future. They said that they were considering training recruits from within the local labour force but had concerns about what they described as the attitude to work of local recruits.
The sector currently has a very large percentage of migrant workers, particularly NMS migrants, the share of which has risen from 2.6% in 2004 to 24.3% in 2016. EU migrant labour is primarily employed in lower-skilled factory based roles. Access to flexible migrant labour has been critical to growth of this sector.

Recruitment methods varied from word of mouth to use of recruitment agencies and labour providers. Respondents said that NMS migrants were from societies that were more rural than the UK and had a higher number of people familiar with this kind of work. Current turnover of staff was described as around 20% and respondents reported that they could not recruit sufficient staff. The sector has argued that UK workers no longer want to work in factories and undertake the roles offered by the food and drinks sector. Some felt this was due to an image problem, others felt it was due to the willingness of EEA workers to undertake less attractive roles. The fall in sterling had resulted in higher turnover of staff as it is less financially attractive to come to the UK. Respondents said that they needed to make plans to offset future shortages and identified some aspects of these including upskilling staff and building links with schools and colleges. Increased use of automation was viewed as problematic. There was concern that businesses would be unviable if they did not have access to EU migrants. Others suggested higher wages would lead to increased costs of production.

Submissions wanted either low-skilled workers added to the shortage occupation list or a sector-based scheme to allow access to migrant workers.
Data

Figure 3.1 Sector Employment

Source: Workforce jobs (WFJ), Labour Force Survey (LFS) and Annual Population Survey (APS)

Figure 3.2 Migrant Share of Employment

Source: WFJ, with weighted LFS/APS shares

Figure 3.3 Median Hourly Real Wages

Source: Annual Survey of Household Earnings (ASHE)

Figure 3.4 Median Hourly Wages by Migrant Groups

Source: 3-year APS (2014-2016)
Figure 3.5 Sector Productivity

Source: WFJ

Figure 3.6 Sector Output Growth

Source: WFJ

Figure 3.7 Top 10 Occupations in the Sector by Share

Source: 3-year APS (2014-2016)

Figure 3.8 Occupation Skill Level by Migrant Groups

Source: 3-year APS (2014-2016)
Overview of the sector

A long-running decline in employment within the sector has reversed in the past 10 years, to see modest recent employment growth (Figure 3.1). Employment in sector makes up just 1.3% of total employment in the UK, but is one of the largest employers of EEA workers.

The recent employment growth has been driven almost exclusively by migrant labour, as the employment of UK and Irish nationals has remained constant in recent years (Figure 3.1). The sector has had an extraordinary increase of migrant workers over the data presented; in 1997, the migrant share of sector employment was just 5.42%, compared with 35.65% in 2016, the highest in any of the MAC sectors. NMS workers make up the largest share of migrants within the sector.

The manufacture of food and beverage sector is a low wage sector (Figure 3.3), in which the median wages of non-UK-born workers are significantly less than the UK born workers (Figure 3.4). The wage disparity may be partially explained through the varying skill levels of migrant workers and UK-born workers (Figure 3.8.).

Productivity at an hourly level is very similar to the UK average, whilst it is much higher at the per job basis (Figure 3.5), suggesting that workers in this sector work more hours in their job than in other sectors. Productivity growth in the sector has been much smaller than the economy average (Figure 3.6).

Most occupations in the sector are lower-skilled (Figure 3.7). The composition of skill levels varies significantly across migrant groups (Figure 3.8): 53% of UK-born workers work in low-skill occupations, compared with 81% of migrants. Workers from NMS have the highest proportion of low skill occupations, at 88%, whilst EU13+ workers have the lowest, at 46%.

What we were told - sector responses

Trends and Evolution

Employment

The sector reported a heavy reliance on migrant labour in both low-skilled and high-skilled roles, arguing that access to migrant labour has enabled businesses to grow.

The Food and Drinks Federation (FDF) stated that the non-UK permanent workforce is 34% with non-EU migrant labour representing 6% of this figure. The FDF also

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11 The Workforce Jobs dataset for this sector also includes the manufacture of tobacco.

12 Where individual skill categories have fewer than 30 unweighted observations, the categories have been merged together. These composite categories contain at least 30 observations, and may contain any combination of either skill level.
argue that EU migrant labour made up 38% of roles that required no qualifications and 19% of high-skilled roles.

There is variation within the sector in the reliance on EU labour. According to the Provision Trade Federation EEA workers accounted for 35% of workers in the dairy sector and 55% in bacon and pig meat sectors. The British Meat Processing Association said that within meat processing 69% of sector workers are EU27 nationals, with many plants having EU migrant shares of 70-80%. The variation in reliance is noted by the British Poultry Council who said the figures “must be qualified on a site by site basis. In some slaughterhouses and processing plants the proportion of EU labour can be 90%, whereas across the farming estate it would average 25%.”

Companies told us that most of the roles within food and drink processing are permanent however seasonal workers are required at peak times e.g. poultry meat and salmon processing over the Christmas period.

A number of companies suggested that the heavy reliance on migrant labour was because they operate in areas of low unemployment and/or rural areas with limited public transport. Manor Fresh reported that there were only 419 people in an area covering 290 square miles looking for work. The British Poultry Council indicated “Our industry has grown beyond the labour availability in the areas we operate – which is why nearly three-fifths of our workforce are EU nationals.”

The Food and Drinks Federation argued that a key reason for the increase in EU workers is the aging workforce. They said that by 2024 a third of the workforce will retire and that the sector needs 140,000 new staff just to stay level.

Image Problem

The Food and Drinks Federation said that the food and drink manufacturing industry has a long-standing image problem, with potential applicants, young people and their influencers viewing the sector as a low skilled, low-tech, low pay industry without opportunity for progression. Companies indicated that factory roles are no longer appealing to UK workers. A number of companies indicated they had particular difficulty in recruiting candidates with the necessary STEM (science, technology, engineering, maths) skills.

Many submissions indicated that EU workers are more willing to work in uncomfortable (hot, cold, damp) environments or that require protective clothing or shift work. Many companies viewed EEA nationals as having a mindset/lifestyle that complements their business model. One fish processing company in Grimsby argued that the advantages of employing non-UK workers included a willingness to work longer hours, and actively seek overtime, flexibility on shift patterns, a consistently strong work ethic and listening to instruction and working efficiently.

Definition of low-skilled

There was some frustration about the current definition of low-skilled and high-skilled in the non-EEA migration system. The British Meat Processing Association
said “Good knife and butchery skills are not an academic subject, but they are nevertheless a skill. About 40% of workers need some level of knife skills. It is important that industry has access to skilled labour and we regret that the current Government view seems to be that ‘skilled workers’ mean only those with high level academic qualifications. We would like to see the definition of ‘skilled’ to mean an ability that has to be learnt through study and/or practice, something that someone could not walk in off the street and more or less immediately do to the necessary level.”

Others were willing to accept the term low-skilled. The National Pig Association said, “Due to the nature of the work involved, the pig sector is largely reliant on ‘unskilled’, permanent labour. As the MAC will already be aware, unskilled does not mean ‘not skilled’; animal husbandry clearly requires a high degree of technical skill, but many roles do not require graduate level training. We require a regular supply of reliable dedicated staff, be they domestic or migrant workers, with good animal husbandry skills in order for the sector to function properly.”

**Methods of recruitment**

Similar to recruitment for agriculture, forestry and fishing, recruitment for low skilled roles in manufacturing of food and drinks varied from being via word of mouth, to the use of recruitment agencies and labour providers. Higher skilled roles are recruited through different channels (e.g. company websites, trade magazines and recruitment agencies).

**Skills and training**

A number of responses observed that NMS migrants are from societies that are more rural than the UK so are more familiar with the type of work in this sector. The National Pig Association said “Many people living in these countries have grown up with or are connected to agriculture, don’t have an issue with the type of work, and are keen to come and work here where opportunities at home have been lacking. They have provided a welcome solution to the historic issue, predominantly in stockman roles, or on the line in abattoirs.” Farming and Countryside Education (FACE) reported in 2013 that the British consumer is, on average, more than six generations removed from farming.

**Future Prospects**

**Shortages of labour**

A Survey of The Association of Labour Providers said they couldn’t source sufficient labour supply to meet demand with current turnover at around 20%. This has led to an increase in overtime for workers. The majority of submissions indicated that companies were struggling to get the staff they required and there was higher turnover in staff. A key reason given was the devaluation of sterling leading to migrant workers choosing to work in other EU countries for higher wages.
A Food and Drinks Federation survey indicated that a third of respondents said that if they did not have access to EU migrants then their business would become unviable. A range of businesses indicated that their business will be severely impacted without access to EU migrant workers.

Several companies argued that a reduction in labour supply would lead to greater competition for staff leading to higher wages and an increased cost of production. This could potentially lead to products being unviable to produce in the UK and a rise in imports. Associated British Foods said, “In the regions where EEA nationals form a higher proportion of our workforce, we would expect any rapid reduction in the availability of EEA migrants to materially reduce labour supply resulting in higher wages, higher recruitment costs and potentially some reduction in our production capacity.”

**Alternatives to the use of migrant labour**

**Domestic labour**

The Food and Drinks Federation said that they need to make further plans to offset future labour and skills shortages. This involves upskilling current staff, building closer links with local schools and other third parties. They also intend to work with Skills Development Scotland to extend their current apprentice scheme to build a talent pipeline for the future.

The Manufacturing of Food and Drinks sector suggested it must do more to recruit local talent in the area they operated in. Companies said there was no cluster for industries to provide apprenticeships, so there were often company specific training schemes. It was argued that engineering and technical and quality control roles were among the hardest to recruit for. Currently each sub-sector trains its staff to the relevant requirements of the industry.

With regard to the dairy industry, The Provision Trade Federation said, “Members report that attracting non-skilled UK labour to re-locate to an area where they would lose their network of family support without a compensating increase in income is very difficult. Companies are aware that they will need to be more creative and resourceful in their future recruitment, but this is not a quick fix.”

**Automation and investment**

A number of submissions and site visits suggested that the unique relationship with supermarkets in the UK meant that automation was not an easy solution. The British Meat Processing Association said, “Meat processors in the UK need to be able to adapt quickly and economically to retailers’ frequent changing specifications, such a new/different pack sizes, cuts, formats. Add in short promotions of one-off products, frequent new product launches and the cost and investment of mechanisation is quickly too risky or has too long a return on investment.”

This experience was echoed by other sub-sectors. Companies felt they needed to retain flexibility to stay profitable, and access to migrant labour allowed them to
remain flexible. Those working in animal husbandry said there was a limit to how far automation could be put in place when it came to breeding, rearing and caring for animals.

A fish processing factory in Grimsby said that they were increasing automation where the proven technology exists but that, “This will not reduce our labour requirement significantly and, in some cases, it will increase our unit costs. Most of our labour is employed in the processing and packing of variable (weight and shape) fish that requires skilled people handle the fish. As an example, they need to select and pack similar shaped products to maximize pack fill and meet product specifications.”

In addition, the uncertainty of Brexit and the future migration system meant that companies were unwilling to invest in automation or new training programmes which bore additional costs. Companies wanted greater certainty on the future migration regime with the EU before making substantive contingency plans.

Associated British Food said, “In the longer term we would respond to a material increase in labour costs (or a shortfall in labour availability) by further increasing the level of automation in our operations. However, our ability to deliver this is constrained by a shortage of suitably qualified and experienced engineers of any nationality.”

**Suggested Future Migration Regimes**

All respondents wanted to retain access to migrant labour. Some felt the Shortage Occupation List (SOL) would be acceptable or wanted specific roles added to the SOL (for example butchers), whereas other respondents wanted a different system to allow them access to low skilled workers referring to the sector based scheme that was closed in 2013.

The Food and Drinks Federation want a system in place to direct people to the areas and/or the sectors where they are needed, rather than a shortage occupation list. “Low skilled workers can move between occupations easily due to the low skilled nature of each role, therefore restricting people by occupations could hamper the process”. Similarly, others wanted a sector based scheme similar to the Seasonal Agricultural Workers scheme abolished in 2013.

In addition, the Food and Drinks Federation makes a number of suggestions including creating an industry STEM pledge, building on the existing Food and Drinks Manufacturing apprenticeship ambition. They also suggest building a network of training centres across the UK to enable FDM business to access the sector specific training they need.
F.4. Other Manufacturing (SIC 12-33)

Key statistics

<table>
<thead>
<tr>
<th>Year</th>
<th>Share of UK Employment</th>
<th>EEA employment share (%)</th>
<th>Median hourly wage (% of UK average)</th>
<th>Output/hour (% of UK average)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1997</td>
<td>13.2%</td>
<td>1.1%</td>
<td>106.2%</td>
<td>83.1%</td>
</tr>
<tr>
<td>2004</td>
<td>9.1%</td>
<td>1.4%</td>
<td>107.8%</td>
<td>98.0%</td>
</tr>
<tr>
<td>2016</td>
<td>6.4%</td>
<td>9.0%</td>
<td>111.8%</td>
<td>110.8%</td>
</tr>
</tbody>
</table>

The manufacturing sector is heterogeneous with a wide range of jobs within it. Employment has been falling for many decades but at a much slower rate in the past decade. There has been an increasing use of EEA migrants, attractive because of skills shortages and work ethic. The NMS migrants are much more likely to be in lower- or medium-skilled jobs.

Manufacturers reported a need for staff in high-skilled and low-skilled roles depending on the nature of the business. EEA nationals were employed in plant, process and machine operative roles as well as skilled trades and roles such as engineer. They said that they did not get enough UK applicants applying for jobs while others said that the skills required were not available in the UK labour market. STEM skills were mentioned as being in short supply.

Respondents said that they were investing in their workforce and many were offering apprenticeships. It was indicated that employers had plans to increase investment in apprenticeships and working with schools, colleges and universities.

Respondents said that any future migration system should be simple, transparent and low cost but not mirror the current non-EEA system. Restriction on EEA worker access to the UK may affect the sector’s ability to transfer skilled labour across Europe and would reduce UK industry’s competitiveness.
Figure 4.1 Sector Employment

Share employment as share of total UK employment (LHS)
- Total workers in sector (RHS)
- UK and Irish workers in sector (RHS)

Source: Workforce jobs (WFJ), Labour Force Survey (LFS) and Annual Population Survey (APS)

Figure 4.2 Migrant Share of Employment

Share of sector workforce
- EU13+ Workers
- NMS Workers
- Non-EEA Workers

Source: WFJ, with weighted LFS/APS shares

Figure 4.3 Median Hourly Real Wages

Wages
- Median hourly wages in sector
- Median hourly wages over whole economy

Source: Annual Survey of Household Earnings (ASHE)

Figure 4.4 Median Hourly Wages by Migrant Groups

Wages
- UK + Ireland
- EU13+
- NMS
- Non-EEA

Excluded due to sample size

Source: 3-year APS (2014-2016)
Figure 4.5 Sector Productivity

![Graph showing sector productivity over time]

Source: WFJ

Figure 4.6 Sector Output Growth

![Graph showing sector output growth over time]

Source: WFJ

Figure 4.7 Top 10 Occupations in the Sector by Share

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Share</th>
</tr>
</thead>
<tbody>
<tr>
<td>Production managers and directors in manufacturing</td>
<td>40%</td>
</tr>
<tr>
<td>Metal working production and maintenance fitters</td>
<td>30%</td>
</tr>
<tr>
<td>Sales accounts and business development managers</td>
<td>20%</td>
</tr>
<tr>
<td>Elementary storage occupations</td>
<td>10%</td>
</tr>
<tr>
<td>Other administrative occupations n.e.c.</td>
<td>10%</td>
</tr>
<tr>
<td>Welding trades</td>
<td>5%</td>
</tr>
<tr>
<td>Elementary process plant occupations n.e.c.</td>
<td>5%</td>
</tr>
<tr>
<td>Metal machining setters and setter-operators</td>
<td>5%</td>
</tr>
<tr>
<td>Electricians and electrical fitters</td>
<td>5%</td>
</tr>
<tr>
<td>Book-keepers, payroll managers and wages clerks</td>
<td>5%</td>
</tr>
</tbody>
</table>

Source: 3-year APS (2014-2016)

Figure 4.8 Occupation Skill level by Migrant Groups

![Bar chart showing occupation skill levels by migrant groups]

Source: 3-year APS (2014-2016)
Overview of the sector

In 1997, the other manufacturing sector employed over 3.7 million workers, accounted for 13.1% of the UK labour force and consisted of 97.1% UK and Irish workers (Figure 4.1). The sector has steadily declined, and in 2016 the number of workers stood at 58.7% of the 1997 number, whilst the share of the UK labour force had more than halved to just 48.6% of its 1997 share. The UK and Irish share of workers in the sector has remained high, at 89% in 2016, whilst the share of NMS workers increased from almost 0% in 2004 to 7.7% in 2016 (Figure 4.2).

The sector has higher median wages than the economy average (Figure 4.3), though when the median wages are broken down into migrant groups, significant variation in earnings by migrant groups was found (Figure 4.4). The median hourly wages of migrants seem to reflect the skill composition of each migrant groups (shown in Figure 4.8), in that groups with a higher proportion of low skill occupations average a lower wage.

Productivity in the sector has risen significantly, particularly in output per job, which increased by over 65% from 1997-2016 (Figure 4.5). The sector share of GVA in the economy has declined, partially due to lower productivity growth than the remainder of the economy, but still makes up a significant portion at 8.6% (Figure 4.6).

The types of occupations across the sector vary significantly by skill (Figure 4.7). The skill level of the sector once broken down into migrant groups (Figure 4.8) is almost evenly distributed for UK-born workers, with EU13+ workers appearing to be more focused in medium and high-skill occupations, and NMS workers more concentrated in low-skill occupations.

What we were told - sector responses

This is a very heterogeneous sector varying from relatively low-skill manufacturing such as textiles to much higher-skill manufacturing such as the aerospace industry. Consequently, not all responses summarised here should be taken as representative of the whole sector.

Employment

EEF, the manufacturers’ organisation, said that they had conducted a survey of their members. They found that, on average, EU nationals made up 11% of the manufacturing workforce. They were typically recruited in plant, process and machines operative roles as well as skilled trades and associate and professional roles e.g. engineers. Two-thirds of manufacturers said that there were an insufficient number of UK nationals applying for jobs within the industry. A third of manufacturers said the skills they needed could not be found within the UK labour market.
The EEF survey indicated that over three-quarters (76%) of manufacturers had at least one EU national working within their business. Of the manufacturing workforce, the majority (87%) were UK nationals and a small number (2%) were non-EU nationals. Mid-sized and larger firms were more likely to have a stronger presence of EU nationals than small companies. Just under half (48%) of manufacturers with less than 50 employees employ no EU nationals. Of those small businesses that do recruit EU nationals, they made up a smaller proportion of the workplace - a third of small businesses saying EU nationals made up between 1-10% of their workforce. In comparison, only 12% of larger companies (those with more than 250 employees) had no EU nationals in their business. Almost four in ten (39%) of larger firms said that between 1% and 10% of their workforce was composed of EU nationals and 27% said that between 11% and 25% of their workforce was made up of EU nationals.

The EEF survey also indicated a sub-sectoral variation in the employment of EEA nationals. For example, EU nationals made up 14% of the workforce in the metals and metal products sector and 11% of the vehicles and transport sector. This falls to 8% for mechanical equipment. There was also variation by region. Manufacturers in the East Midlands, South East and Greater London reported they were more likely to have a higher percentage of EU nationals in their business than in other regions. EU nationals were in higher volumes in companies in the South East and Greater London, with one in five manufacturers saying that between 25% and 100% of their workforce were EU nationals. This was compared to the North West where one in five manufacturers said they had no EU nationals and half said EU nationals made up between 1% and 10% of their workforce.

The Society of Motor Manufacturers and Traders (SMMT) told us that the UK automotive sector employed 814,000 people with 169,000 directly in manufacturing. SMMT estimated automotive manufacturing to have 10-11% EEA migrants in the workforce. Rolls Royce said that over 95% of their 25,000-strong workforce were British citizens. Two-thirds of the rest were EEA nationals and the remainder non-EEA nationals. The company said that whilst the percentage of migrant workers was small, these employees were vital to the continued success of their business with some in key engineering and executive roles. The average annual salary for UK hired EEA nationals paid by the company was more than £43,000.

Caterpillar said that the make-up of their workforce varied significantly. Some of their facilities were located in areas significantly dominated by EEA nationals. For example, in Peterborough they said they employed over 3,000 people of which at least 600 were EEA nationals. Additionally, the varied and cyclical nature of their business meant that peaks and troughs in production levels were part of the normal business cycle and the company was dependent on its ability to access temporary hires. Polypipe said that EEA migrant numbers could swell due to seasonal variation by circa 100 individuals when agency worker numbers were added to the employed numbers. Agency workers were described as carrying out largely unskilled roles.

Johnson & Johnson told us that 12% of their hires were migrants, the main sources being Poland, France, Italy and Ireland. Most were hired into finance, marketing and research and development roles. They said that it had not been harder to recruit migrants since the Brexit referendum and that anecdotal evidence suggested people wanted to come to the UK before the rules were clarified in the hope that they would then be able to stay.
The British Generic Manufacturers Association said that the UK generics industry primarily employed UK citizens, but must occasionally recruit long term employees with specialised skills and qualifications from outside of the UK. An average of 12% of UK Generics industry employees were said to be from non-UK EEA origins.

The British Fashion Council said that they had carried out a survey and found that 87.5% of respondents employed EEA nationals. The UK Fashion and Textile Association said that employment in London across the fashion and textile sector was estimated at 13,500 workers and it was estimated that EEA workers made up as much as 70% of that workforce. The UK Fashion and Textile Association said that their industry suffered from an image problem and that it was very challenging to recruit UK nationals into it.

The British Furniture Confederation told us that while levels of employment of EEA workers had increased since 2000, there was a lack of conclusive data. The Confederation cited the large pool of immediately-available and adequately skilled migrant workers as being a positive, but that poor levels of English proficiency were a negative that had to be managed.

**Skills and training**

EEF said that manufacturers were investing heavily in their workforce. Over two-thirds of EEF members were currently offering apprenticeships, only 5% had never done so. They said that members continued to recruit engineering graduates, had increased training investment within their existing workforce and engaged in the next generation of workers by working with schools, colleges and universities. They indicated that employers had plans to accelerate such activity in the light of a reduction in job applications from EU nationals and an increase in EU nationals leaving their companies.

STEM skilled talent was described as at critical shortage levels across the aerospace industry and beyond. Rolls-Royce told us that they had invested in the education, development and attraction of individuals into engineering through an outreach programme and they gave us several examples of this, but skilled and available talent remained in very short supply in the UK.

The British Generic Manufacturers Association told us that 53% of employers were enhancing their internal skills development programmes; 20% were developing specialised internship and graduate recruitment programmes; while 20% were exploring options for dedicated apprenticeship schemes. However, 33% were said to be not planning any action or asserted that they did not perceive any future recruitment challenges.

Polypipe told us that 85% of their EEA migrant workers were considered unskilled and largely worked within manufacturing, undertaking basic operative and assembly type roles. The remaining 15% were considered skilled, sitting in either development, technical, clerical and supervisory type roles. Around 6% of this number had been promoted to more senior positions or supervisory/team leader type roles. All roles had had some form of training and/or development.
The British Fashion Council said that EEA and non-EEA migration had not affected the skills and training of UK workers. The Council said that some manufacturers invested in skills and training, others had tried the existing apprenticeship framework, but found it challenging with no guarantee the training would result in a worker staying within the factory. The British Furniture Confederation told us that they were working with UK Fashion and Textiles to support the co-ordination of skills activities.

Future Prospects

Johnson & Johnson told us that a possible reduction in the availability of EEA migrants would affect all of their work areas. They said that their preference would be for less strict requirements for the recruitment of EEA nationals, including access to lower skilled workers, as they said that many of their third-party contractors would not meet the current immigration criteria for non-EEA nationals. The firm said that if the Government stopped EEA migration or put in place more onerous requirements, including impact on cost and timescales to enter the UK, there would be an increase in off-shoring work to other EEA countries.

Automation and investment

Polypipe told us that they had taken the view that investment into automation and robotics was of paramount importance and several projects were already underway, with considerable investment earmarked for these initiatives. To remain competitive in the UK industry they said it was essential for them to work towards production processes at less cost with better quality whilst at the same time tackling the long-term labour challenge by reducing their future needs on unskilled labour.

Suggested Future Migration Regimes

EEF told us that any future migration system must be simple, transparent and low cost. It must not mirror the non-EEA system, which should be reviewed. Rolls Royce said that, in their view, the shortage occupation list (SOL) was relevant for longer-term migration needs in respect of the recruitment of highly skilled and specialised talent, but that it was not appropriate to support the day to day operational mobility needs of businesses to support project work (or work peaks) under extended business travel or short-term assignment arrangements. Businesses were said to need autonomy to operate their talent mobility programmes as they best understand and see fit. The SOL was said to be unable to keep pace with the granular operational needs of global businesses.

The Society of Motor Manufacturers and Traders said that moving staff between sites, across Europe or even globally, was part of how their businesses were structured. The industry had need of immediate or urgent travel of staff to and from sites, perhaps to support production line issues or other unplanned requirements. Any restriction on EEA worker access may affect the sector’s ability to efficiently transfer skilled labour between European entities to support projects. Additional administrative and cost burdens for moving skills, even for short periods, and a reduction in the ease of access to skills would, we were told, reduce UK industry competitiveness. They said that their experience of the current Tier 2 route was that
it was complex, burdensome, lengthy and costly, even prohibitively expensive, requiring a huge resource, even for just a few employees. Therefore, this made the current free movement for EEA staff an even more attractive talent pool. The industry said it would not want to see the current non-EEA immigration system or approach replicated for any new EEA migration system.
F.5. Utilities (SIC 35-39)

Key statistics

<table>
<thead>
<tr>
<th>Year</th>
<th>Share of UK Employment</th>
<th>EEA employment share</th>
<th>Median hourly wage (% of UK average)</th>
<th>Output/hour (% of UK average)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1997</td>
<td>0.9%</td>
<td>0.7%</td>
<td>126.8%</td>
<td>315.2%</td>
</tr>
<tr>
<td>2004</td>
<td>0.8%</td>
<td>1.2%</td>
<td>120.8%</td>
<td>385.7%</td>
</tr>
<tr>
<td>2016</td>
<td>1.0%</td>
<td>5.1%</td>
<td>130.1%</td>
<td>242.6%</td>
</tr>
</tbody>
</table>

Employment in utilities has been rising over the last 15 years. It is high productivity though with very weak growth in recent years. Relatively low share of migrants though much higher in waste management.

Respondents said that companies did not use different recruitment methods for UK and non-UK staff. The waste management industry made greater use of recruitment agencies who tended to deliver mostly EEA nationals.

A number of employers highlighted that they had invested in training for staff but also said that for areas such as engineering skills these could take time to acquire.

Respondents said that any measures to reduce the pool of talented personnel available to them would lead to further labour shortages, increased labour costs and increased time to hire staff.

Respondents said that the definition of high-skilled was too limiting and precluded what were described as vital middle-level skills from being brought to the UK; access to such skills needed to be taken account of in any new UK migration system.
Data

**Figure 5.1 Sector Employment**

![Graph showing sector employment as share of total UK employment (LHS), total workers in sector (RHS), and UK and Irish workers in sector (RHS). Source: Workforce Jobs (WFJ), Labour Force Survey (LFS) and Annual Population Survey (APS).]

**Figure 5.2 Migrant Share of Employment**

![Graph showing share of sector workforce. Source: WFJ, with weighted LFS/APS shares.]

**Figure 5.3 Median Hourly Real Wages**

![Graph showing median hourly wages in sector and median hourly wages over whole economy. Source: Annual Survey of Household Earnings (ASHE).]

**Figure 5.4 Median Hourly Wages by Migrant Groups**

![Bar chart showing median hourly wages for UK + Ireland, EU13+, NMS, and Non-EEA. Source: 3-Year APS 2014-2016 snapshot. Excluded due to sample size.]

Figure 5.5 Sector Productivity

Source: WFJ

Figure 5.6 Sector Output Growth

Source: WFJ

Figure 5.7 Top 10 Occupations in the Sector by Share

Source: 3-Year APS 2014-2016 snapshot

Figure 5.8 Occupation Skill level by Migrant Groups

Source: 3-Year APS 2014-2016 snapshot
Overview of the sector

Total employment in the utilities sector has increased over the period observed. The UK and Irish worker share reduced slightly from 96% to 90%, but employment of UK and Irish workers increased in absolute terms by 20.7% (Figure 5.1). The migrant share of the sector rose from 3.8% in 1997, to 10.8 in 2016, with non-EEA workers making up the largest share.

Median hourly wages in the sector are significantly higher than the economy average, but have seen large fluctuations – ranging from 117% of the economy average in 2001 to 134% in 2008. When wages are broken down into migrant groups, NMS workers have much lower wages, and EU13+ and non-EEA workers have higher wages (Figure 5.4). Discrepancies in wages across migrant groups are often reflective of the skill composition, though due to small sample sizes, the skill composition of NMS workers is unclear.

This is a highly productive sector. Output per job peaked at £200,500 in 2005 and output per hour peaked at £116.90 in 2004. Sector GVA growth followed the economy trend until the same 2004-2005 period before decreasing relative to the trend.

The sample size for EEA migrants in the utilities sector is small, so both EEA groups have been excluded from Figure 5.8, but are captured in the ‘Migrant’ column, grouped with non-EEA migrants\(^\text{13}\). Both UK-born and migrant groups have the full range of skill levels, with the migrant group being more polarised.

What we were told - sector responses

Trends and Evolution

Employment

Energy and Utility Skills told us that an estimated 9% of the sector’s workforce was of a non-UK nationality (7% from the EEA and 2% from outside the EEA). National Grid told us that 2.0% of their employees were EEA migrants with a larger proportion (6%) being nationals of countries outside the EEA. They pointed out that although a large number of non-UK nationals were not employed by the National Grid, the majority of non-UK nationals employed were said to be working in highly skilled roles which were currently difficult to recruit from the UK resident workforce.

Energy UK said that EEA employees could be found at all levels of skills. However, the majority of non-UK nationals employed within the energy industry were employed in skilled roles which were difficult to fill from the UK resident workforce due to an engineering skills shortage which also made it a highly competitive labour market. The UK was said to be dependent on mobile talent from within the EU with

\(^{13}\) Where individual skill categories have fewer than 30 unweighted observations, the categories have been merged together. These composite categories contain at least 30 observations, and may contain any combination of either skill level.
some of the international energy companies deploying their skilled staff flexibly across national borders, maximising the use of their pool of talent where and when it was needed.

In the Power and Gas industries, there tended to be a comparatively low proportion of workers from outside the UK. However, these were at a higher skill level and recruited into a small number of key roles, where there were serious skill shortages. In the regulated water industry, for example, 3% of the workforce were reported to be foreign nationals, with 2% being EEA nationals and 1% comprised of non-EEA nationals. The UK Atomic Energy Authority said that their current workforce comprised approximately 10% EEA nationals but this rose to around 30% in key research areas.

The greatest number of EEA workers in the energy and utilities sector appeared to work in the waste management industry. In some companies, a significant proportion of these workers were sourced via an agency on a temporary or interim basis. The demand for these workers was said to be continuous. For example, for one company in the waste management sector, there was said to be an ongoing need for approximately 1,100 temporary agency staff in lower-skilled roles, such as recycling operative and picker.

**Methods of recruitment**

Energy and Utility Skills said that, in the vast majority of cases, companies did not report using different methods of recruitment for UK, non-EEA and EEA workers. However, some companies in the waste management sector reported that, while different recruitment methods were not consciously used to target applicants of different nationalities, staff employed via an agency were often predominantly EEA nationals. There was said to be some anecdotal evidence of deliberate targeting of Eastern European recruits, via specialist recruitment agencies and also via word of mouth within these communities. There was no evidence that recruitment methods had changed following the referendum but there were reports that recruitment into lower skilled, front line roles had become more challenging.

**Skills and training**

National Grid reported that boosting engineering skills within the domestic labour market was a priority but said that this takes time. They said that some of their critical roles had been on the shortage occupation list for 10 years and were still in shortage. EDF Energy said that they did not believe that migration had negatively affected the skills and training of UK workers. They described how they had committed to investing over £5million in new facilities at Bridgwater College to create a one-stop shop to meet the training and requirements for nuclear and civil construction. They felt that having a diverse workforce enhanced the skills and development of UK workers.

Energy UK said that in 2015, £0.7bn was spent by the energy and water industries on training, equivalent to £2,300 per employee, which they said was the highest of all sectors. There were several schemes and programmes in place to promote training and skills, such as University Technical College and apprenticeships, but
Energy UK said that more should be done to encourage retraining, up-skilling and developing transferable cross-sector skills for the existing workforce.

**Future Prospects**

EDF told us that any system that put barriers in the way of attracting, recruiting or retaining talent would be detrimental, not only to EDF Energy, but the UK workforce as a whole. Any measures that would reduce the pool of talented personnel or make it difficult to retain such talent could lead to labour shortages, an increased cost of labour and increased time to hire staff. Such measures could also deter talent from coming to the UK to work.

Energy and Utility Skills said that several employers expressed the general view that they expected to see rising demand for labour in the UK. The introduction of further migration constraints, particularly in relation to EEA workers, would place what was described as an additional strain on the labour market, pushing adjacent sectors into competition with one another. The consequence of this would be rising labour costs. In the energy and utilities sector, the waste management industry was described as likely to be impacted most acutely.

**Suggested Future Migration Regimes**

EDF said that the points based system was a very blunt instrument to deal with a very complex problem. For instance, the primary measures used to determine whether an individual was highly skilled and therefore a valuable asset were salary and education. For instance, graduate as the definition of highly skilled was inappropriate (i.e. there are skilled trades in construction and manufacturing). EDF said there was a clear level of middle-skills that were vital to UK infrastructure projects and the economy that need to be accounted for in any new system. Energy and Utility Skills said that if migration restrictions were put in place, particularly in relation to EEA workers, the shortage occupation list should be revised and further roles should be considered for inclusion and these should be considered in terms of importance to the UK economy, rather than strictly in terms of skill level.
F.6. Construction (SIC 41-43)

Key statistics

<table>
<thead>
<tr>
<th>Year</th>
<th>Share of UK Employment</th>
<th>EEA employment share</th>
<th>Median hourly wage (% of UK average)</th>
<th>Output/hour (% of UK average)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1997</td>
<td>6.4%</td>
<td>0.7%</td>
<td>99.6%</td>
<td>88.5%</td>
</tr>
<tr>
<td>2004</td>
<td>6.9%</td>
<td>1.8%</td>
<td>107.0%</td>
<td>83.8%</td>
</tr>
<tr>
<td>2016</td>
<td>6.5%</td>
<td>8.1%</td>
<td>109.0%</td>
<td>78.6%</td>
</tr>
</tbody>
</table>

The evidence from the sector focussed on what they described as the large numbers of EEA workers employed in construction, as well as the high proportions of self-employed workers and number of small and micro-businesses. The impact of not having access to EEA workers was said to be likely most keenly felt in London and the South East. There was described a 4% increase in the proportion of non-UK workers from 2007 to 2015. Wages were said to have grown more slowly across the sector than in the rest of the economy and that the sector saw no evidence that migrant workers represented a cheaper source of labour.

The construction sector was said to have made greater use of recruitment agencies to recruit migrant workers than UK workers. Employers said that they targeted workers with the right skills rather than specifically migrant workers, although there was evidence that, on occasion, employers expressed a preference for migrant workers.

The cyclical nature of work in the sector was said to make it difficult for employers to invest in skills training and therefore the sector used migrant workers to address skills pinch points. A significant proportion of migrant workers in the sector, however, were said to have no relevant qualifications and did not have significantly different skill levels to their UK counterparts. The sector said that it did not believe that access to migrant labour had a major impact on reducing the amount of training being undertaken.

The sector said that the current Tier 2 system would not work for construction where self-employment and small and micro-businesses predominated. Some said they would like to see construction students given an automatic post-study path into employment in the sector.
Data

Figure 6.1 Sector Employment

Source: Workforce Jobs (WFJ), Labour Force Survey (LFS) and Annual Population Survey (APS).

Figure 6.2 Migrant Share of Employment

Source: WFJ, with weighted LFS/APS shares

Figure 6.3 Median Hourly Real Wages

Source: Annual Survey of Household Earnings (ASHE)

Figure 6.4 Median Hourly Wages by Migrant Groups

Source: 3-Year APS 2014-2016 snapshot
Figure 6.5 Sector Productivity

Source: WFJ

Figure 6.6 Sector Output Growth

Source: WFJ

Figure 6.7 Top 10 Occupations in the Sector by Share

Source: 3-Year APS 2014-2016 snapshot

Figure 6.8 Occupation Skill level by Migrant Groups

Source: 3-Year APS 2014-2016 snapshot
Overview of the sector

The overall employment within the construction sector suffered significantly in the period following the financial crisis, with numbers dropping by 246,000 between 2007 and 2010 (Figure 6.1). Despite this dip, total employment numbers increased between 1997 and 2016 by 4.1m, though there has been a notable change in the composition of this workforce, with UK and Irish employment in the sector rising by just 1.7m (Figure 6.1).

The migrant share of the construction sector totalled just 2.7% in 1997, which grew to 13.3% in 2016. The NMS share increased rapidly following the EU enlargement in 2004, contributing most significantly to the rise in migrant labour in the sector (Figure 6.2).

The construction sector, since around the year 2000, has had higher wages than the economy average (Figure 6.3.), which when broken down shows there to be no significant difference between the earnings of UK-born workers and non-EEA workers (Figure 6.4). The variances in EU13+ migrants and NMS migrants is largely reflective of the skill compositions presented in Figure 6.8.

The sector has lower than average productivity, which troughed at the per job level in the low employment period of the financial crisis (Figure 6.5), alongside the sharp decline in GVA growth (Figure 6.6).

Occupations within the sector cover all three NQF skill levels, covering a range of careers beyond those expected on a building site (Figure 6.7). The skill composition of each migrant group varies slightly, with EU13+ countries forming the largest proportion of high-skill occupations, and NMS countries forming the lowest. When the migrant groups are aggregated, there is a very minor difference between the UK-born workforce skill composition and that of migrants (Figure 6.8).

What we were told - sector responses

Trends and Evolution

Employment

Most of the respondents reported that there has been a consistent increase in non-UK workers. We were told that the proportion of non-UK workers had increased from 8% in 2007 to 12.6% in 2015, apart from a dip in 2010, which may be related to the recession. In 2015, there were 2.1 million people working in construction from age 16-64. Most of this workforce were UK-born, although these tended to be older than migrant workers.

AECOM told us that the patterns of EEA migration they discerned coincided with patterns of economic downturn in other countries. For example, in recent years, they had seen a higher rate of employees from Greece and Spain.
London and the South East were reported to have a higher EU national workforce than anywhere else in the UK, where it was said to comprise around half of the workforce.

A census by the Home Builders Federation stated that 17.7% of the home building workforce was from an EU country, with Romania, Poland, Lithuania and Ireland the most common countries of origin. For example, 14.3% of all brick workers surveyed identified as EEA nationals with the greatest proportion Romanian (35.8%) and Polish and Lithuanian nationals at 9.6% and 8.6% respectively. The greatest proportion of the EEA nationals surveyed, at 22.8%, identified as working in Demolition/Groundwork and Frames. This was made up of 43.9% Romanian, with the next biggest nationality at 11% being Irish.

The Federation of Master Builders (FMB) told us that they believed that a high proportion of EEA workers working in UK construction were self-employed. CITB said that their research highlighted that, according to the Labour Force Survey, migrant workers in construction were far more likely to be self-employed than UK-born workers (57% to 38%). Additionally, CITB said their research found that the higher prevalence of self-employment among migrant workers may be due to informal entry routes to the UK labour market.

**Wages**

CITB told us that, since the recession, wages in the construction sector had grown slower than the rest of the economy with the sector experiencing a second decline in average salaries between 2012 and 2013. However, since then the gap in salary growth between the industry and the rest of the economy was said to have narrowed slightly. CITB said that some of the difference in the relative rates of wage growth between construction and the wider economy could be due to the construction sector experiencing a much greater fall in employment after the recession, and taking longer to return to growth.

We were told that, in the event of a possible reduction in the availability of EEA migrants, London and the South East would likely be the first to be impacted, and the higher wages typically offered in those regions could see a knock-on effect in regions where fewer EEA migrants were employed.

The FMB said they saw no evidence that migrant workers represented a cheaper source of labour. CITB said their research found that 92% of employers of non-UK workers stated that lower wages were not a factor in the recruitment of non-UK workers.

**Methods of recruitment**

CITB research found that migrant workers in construction were more likely to be employed through recruitment agencies than UK-born workers. Employers said they did not specifically seek to recruit non-UK workers, but looked to employ workers with the required skills irrespective of nationality. Only 1% of employers said that they had specifically sought to recruit non-UK workers, although 24% of recruitment
agencies said they had encountered employers who sometimes expressed a preference for non-UK workers.

**Skills and training**

We were told that most employers in the construction only offer training to employees to satisfy their own immediate and short-term needs. Due to the cyclical nature of work in the sector, we were told that it was difficult for employers to confidently invest significant enough sums in skills over the long term and that the sector had increasingly relied upon non-UK, flexible labour to address skills pinch points and increases in workload over the past decades. Nearly a third of migrant workers in the construction industry were said to have no relevant qualifications and EEA migrants did not have significantly different skills levels to their UK counterparts.

The FMB said that they did not believe that access to migrant labour had had a major impact on reducing the amount of training being undertaken by the UK construction industry. They said that migration had helped bridge skills shortages. These shortages were said to be a result of structural failures in the construction trade cycle in recent decades, the failure to retain workers across this cycle, and the difficulties for small and micro employers (who were said to account for most employment in the industry) in taking on apprenticeships. The problems with the labour model in the construction sector have recently been discussed by the Farmer Review.

The FMB’s quarterly State of Trade Survey tracked the difficulties that they said their members faced in recruiting trades. In the most recent survey for Q3 2017, 61% of FMS members reported difficulties recruiting carpenters and joiners and 59% difficulties recruiting bricklayers. These figures were 17% and 13% respectively in Q1 2013. Q3 2017 figures also indicated members reporting shortages of site managers (49%) and site supervisors (46%).

**Future Prospects**

**Suggested Future Migration Regimes**

FMB said they were concerned that the current Tier 2 system, which relied on employer sponsorship, would not work for the construction sector where self-employment, small and micro employers were dominant. Skanska said that they would like to see construction students given an automatic right to remain for a set post-study period with a new pathway for post-graduate level professionals who wished to transition into the sector.

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F.7. Wholesale and Retail Trade (SIC 45-47)

Key statistics

<table>
<thead>
<tr>
<th>Year</th>
<th>Share of UK Employment</th>
<th>EEA employment share</th>
<th>Median hourly wage (% of UK average)</th>
<th>Output/hour (% of UK average)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1997</td>
<td>16.9%</td>
<td>1.3%</td>
<td>74.9%</td>
<td>72.0%</td>
</tr>
<tr>
<td>2004</td>
<td>16.3%</td>
<td>1.7%</td>
<td>69.5%</td>
<td>68.7%</td>
</tr>
<tr>
<td>2016</td>
<td>14.5%</td>
<td>6.4%</td>
<td>75.6%</td>
<td>78.7%</td>
</tr>
</tbody>
</table>

The sector said that there were 17,000 EEA nationals working across the retail industry, accounting for 6% of the workforce. London was estimated as having the highest proportion of EEA staff, followed by the South East of England and Northern Ireland. Significant numbers of migrant workers were said to be employed in areas like manufacturing, logistics, warehousing and distribution. The evidence from the wholesale and retail trade indicated that there were a wide range of jobs across this sector at a variety of skill levels, from packaging and driving to data scientists and pharmacists.

Employers said that they recruited locally by word of mouth, job centres, direct advertising and through recruitment agencies. They said that low numbers of UK workers applied for these roles and did not remain long if successful.

Retailers reported having a number of what were described as skilled roles such as HGV drivers, store supervisors and store managers but that these were below the current skill level for Tier 2 migration. Other occupations at a higher skill level were also identified as being difficult to recruit for. The sector said that it was offering apprenticeship programmes with plans to further extend these.

The sector said that the UK food supply chain was exposed to seasonal demand for labour. Some reported requiring an additional 75,000 temporary staff at peak times with almost all of these coming from the EU.

The sector recognised the need to invest and innovate and said that there was little to suggest that migration trends had had a direct impact on overall investment levels in retail. The sector also said that there was little correlation between migration trends and productivity growth. Productivity in retail was reported as having been better than the UK average for some time. It was said that technological and management changes had driven this and been passed on to workers in higher than average wage increases.

Respondents said that Tier 2 was a top-up system for when businesses had failed to fill enough roles from within the UK and EU. When there was only one immigration route, it would not be appropriate to use salary as a measure and instead then UK would need an analysis of every industry and every sector to assess the UK’s needs. This should be followed by a new system that was simple and demand-led, and gave access to non-graduate labour from the EU.
**Data**

**Figure 7.1 Sector Employment**

<table>
<thead>
<tr>
<th>Share</th>
<th>Employment (000s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>25%</td>
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</tr>
<tr>
<td>20%</td>
<td>5,000</td>
</tr>
<tr>
<td>15%</td>
<td>4,000</td>
</tr>
<tr>
<td>10%</td>
<td>3,000</td>
</tr>
<tr>
<td>5%</td>
<td>2,000</td>
</tr>
<tr>
<td>0%</td>
<td>1,000</td>
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</table>

- Sector employment as share of total UK employment (LHS)
- Total workers in sector (RHS)
- UK and Irish workers in sector (RHS)

*Source: Workforce jobs (WFJ), Labour Force Survey (LFS) and Annual Population Survey (APS)*

**Figure 7.2 Migrant Share of Employment**

- EU13+ Workers
- NMS Workers
- Non-EEA Workers

*Source: WFJ, with weighted LFS/APS shares*

**Figure 7.3 Median Hourly Real Wages**

<table>
<thead>
<tr>
<th>Wages</th>
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<tbody>
<tr>
<td>£20</td>
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<tr>
<td>£4</td>
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<tr>
<td>£2</td>
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<td>£0</td>
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</table>

- Median hourly wages in sector
- Median hourly wages over whole economy

*Source: Annual Survey of Household Earnings (ASHE)*

**Figure 7.4 Median Hourly Wages by Migrant Groups**

<table>
<thead>
<tr>
<th>Wages</th>
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<tr>
<td>£20</td>
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<tr>
<td>£4</td>
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<tr>
<td>£2</td>
</tr>
<tr>
<td>£0</td>
</tr>
</tbody>
</table>

- UK + Ireland
- EU13+
- NMS
- Non-EEA

*Source: 3-year APS (2014-2016)*
Figure 7.5 Sector Productivity

Source: WFJ

Figure 7.6 Sector Output Growth

Source: WFJ

Figure 7.7 Top 10 Occupations in the Sector by Share

Source: 3-year APS (2014-2016)

Figure 7.8 Occupation Skill level by Migrant Groups

Source: 3-year APS (2014-2016)
Overview of the sector

Total employment numbers in the wholesale and retail trade sector have changed very little over the twenty-year period observed, whilst the sector share of the overall economy employment has reduced from 16.9% to 14.5% (Figure 7.1). Non-EEA workers form the main migrant group, and have seen a steadily increasing share in the sector, whilst EU13+ workers have held an almost constant share, NMS workers had almost a 0% share in 1997, which began to increase in 2004, post EU enlargement (Figure 7.2).

Wages in the sector are low, as shown in Figure 7.3, and range between 70% of the economy average of real median wages in 2004, to 75.7% in 2016. There appears to be very little difference in the wages across migrant groups, with only EU13+ workers experiencing higher wages. This is likely to be a reflection of the skill composition of EU13+ workers being more skewed towards high skill occupations (Figure 7.8), though the lower skewed skill composition of NMS workers appear not to have been reflected in the wages.

The sector has low productivity, by both per hour and per job measures, but comprises a large portion of total UK GVA (10.9% in 2016). The sector GVA has slower growth rates than the economy average in earlier years, but began converging to the economy trend from 2012 onwards.

This is a predominantly low skill sector with very few high skill occupations. Once split into migrant groupings, the skill-level distribution of UK-born workers and migrant workers are very similar (Figure 7.8). When the migrant column is broken down into different groupings, the NMS workers in the sector are have the largest low-skill share, whilst the EU13+ workers have the largest high-skill share.

What we were told - sector responses

Trends and Evolution

Employment

The British Retail Consortium said that their data were drawn from the Labour Force Survey and indicated there were 170,000 EEA nationals working across the retail industry, accounting for 6% of the direct retail workforce. They asked their members to provide a best estimate of the proportion of EEA colleagues in different regions and different functions. The data collected from members indicated that the role of EEA workers varied across retail functions and geographies. Estimates indicated that retail stores in London had the largest population of EEA staff (11%) followed by the South East (7%) and Northern Ireland (6%).

Asda Stores Ltd. said that they employed 160,000 staff and estimated that EEA workers constituted 4% of their workforce. They estimated around 20% of their permanent pharmacists were EU nationals (around 110). Asda said the impact of future migration arrangements would be felt most keenly their subsidiary companies International Procurement and Logistics (IPL), Forza A W, and Kober. EEA citizens
accounted for over 70% of total employment in these companies. Morrisons told us that EEA workers made up 32% of their total manufacturing and logistics workforce of 13,000.

Methods of recruitment

Asda said that they recruited for all roles locally and did not advertise jobs abroad. Many roles in their subsidiary companies were filled by word of mouth or through the use of dedicated labour agencies. These companies did not specifically target EEA workers, but found that the vast majority of applicants tended to be EEA nationals. Asda said that low numbers of UK nationals applied for these roles and those that did often did not remain with the business very long. They said that they were starting to experience recruitment problems which they have not experienced in the past.

Morrison’s said they advertised all of their roles in the UK. The methods used were through agency providers, job centres and direct advertising. These methods did not differ from the recruitment of UK nationals. For certain skilled roles in specific locations, they said they had advertised through the job centre and received no applications.

Skills and training

The British Retail Consortium said that retailers reported that EEA staff worked across the retail industry in roles that required different levels of skill. As such, retailers said there must be access to non-graduate labour from the EEA. There were a number of what were described as skilled roles within retail, such as HGV drivers, store supervisors and store managers, that would not meet the current definition of skilled under Tier 2. Retailers also reported difficulties recruiting data scientists and software engineers as well as food engineers and scientists. Technicians and technologists, cutters, graders, weavers, and sewers were said to be in shortage in the fashion sector.

The Consortium said that the introduction of the Apprenticeship Levy was regarded as an opportunity for the retail industry to drive forward the training agenda and ensure the workforce and future workforce were well equipped with the skills needed. 50% of retailers reported they were currently offering apprenticeship programmes and a further 29% indicated they had plans for future apprenticeship programmes. In the food and drink supply sector, nearly 6 in 10 of companies were said to offer apprenticeship programmes.

Asda told us that recruits to their subsidiary companies were trained in the skills needed to do their work and the health and safety procedures in place at each location. At one company, training and instruction was conducted in both English and Polish due to the make-up of their workforce. The ability to communicate effectively with colleagues was described as paramount, and the growing diversity of nationalities and languages present in the business made this a challenge.

Future Prospects
Shortages of seasonal labour

Morrisons said they experienced seasonal fluctuations in their labour requirements and used agency labour to manage peaks in demand. For example, around Valentine’s Day and Mother’s Day they said that their production of bouquets increased from approximately 400,000 per week to approximately one million per week and the workforce would grow by around 1,000 to deliver this uplift in volumes and that EEA migrants made up the majority of their agency workforce in manufacturing and logistics, approximately 2,880 colleagues out of 4,000.

Alternatives to the use of migrant labour

Automation and investment

The British Retail Consortium said that changes in consumer behaviour, competition and rising cost pressures meant that more than ever retailers needed to invest and innovate to grow. Looking at the industry investment trends over the last 20 years, the Consortium said there was little to suggest that EEA migration trends had had a direct impact on overall investment levels in retail. The Consortium said that more detailed investment data did indicate a shift in what retailers invested in during that period, with retailers investing more in technology and less in physical assets over time. Between 1997 and 2015, retailers more than doubled their investment in intellectual property products and the share invested in information technology quadrupled. The Consortium said that investment decisions in retail appeared to be driven by the changing environment in which retailers operated rather than there being a clear correlation to immigration.

The Consortium also said that there appeared to be little correlation between EEA migration trends and productivity growth. Productivity in retail had fared better than the UK average for some time and in recent years, according to the Consortium, retail appeared to be pulling further away from the UK average. The Consortium said that a technology revolution and a shift in the way retailers engaged and managed their workforce had driven productivity growth. This was said to have translated to wage increases with retail employees experiencing increases of 3.4% on average in the year to March 2017.

Suggested Future Migration Regimes

Asda said they had used Tier 2 to recruit skilled workers where there had been a shortage; in particular, for pharmacists and optometrists. Post-Brexit, they said, the Tier 2 system would no longer be suitable. It was, they felt, a top-up system for immigrants from the rest of the world after businesses had filled enough roles from the UK and EEA. As a top-up system, it was appropriate to use salary thresholds as a proxy for economic value to the country; however, post Brexit when there would be just one immigration system, it would be inappropriate only to look at salary. Instead, they said the UK needed a proper analysis of every industry and every sector to assess the country’s needs. This was probably similar to the shortage occupation list, but would be far more widespread.
The British Retail Consortium said, looking ahead to a new immigration system, they would like to see a simple, demand-led system that did not require employer sponsorship, access to non-graduate labour from the EU; effective integration between the new system and UK employment law; and cross-border mobility throughout Europe for intra-company business travel.
F.8. Transport (SIC 49-51, 53)

Key statistics

<table>
<thead>
<tr>
<th>Year</th>
<th>Share of UK Employment</th>
<th>EEA employment share</th>
<th>Median hourly wage (% of UK average)</th>
<th>Output/hour (% of UK average)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1997</td>
<td>3.7%</td>
<td>1.3%</td>
<td>96.7%</td>
<td>85.5%</td>
</tr>
<tr>
<td>2004</td>
<td>3.6%</td>
<td>1.8%</td>
<td>99.3%</td>
<td>88.9%</td>
</tr>
<tr>
<td>2016</td>
<td>3.5%</td>
<td>6.8%</td>
<td>100.1%</td>
<td>85.3%</td>
</tr>
</tbody>
</table>

The sector said that it predominantly recruited EEA workers to fill low-skill roles, with 1 in 4 warehouse workers from the EEA and 60,000 HGV drivers being from Europe, as well as 15% of deckhands coming from the EU. In the rail construction sector, it was indicated that, above graduate level, 40% of roles were filled by EEA workers. Significant proportions of migrant workers in the sector were said to be based in the Midlands, East of England and the South East.

The sector said that there was a fully-subscribed scheme for apprentices but that there remained a skills shortage to be filled by workers from outside the UK. Additionally, it was claimed that there were seasonal fluctuations in demand with peak times being from September to January, especially in low-skill roles.

The sector said that it recruited direct from Europe to fill vacancies because there were insufficient UK workers to take roles. They said there was a continued recruitment of HGV drivers from the EU, especially Poland. UK apprentices preferred work that did not require unsociable hours working and overall the sector did not present an attractive to option to UK workers.

The restrictions of the Tier 2 system meant that employers could not recruit non-EEA workers and that he sector was short of 45,000 HGV drivers and 52,000 LGV drivers. An additional 20,000 people were said to be needed by the rail industry and 21,000 by the highways industry. They were working to recruit more UK staff but there were not the numbers available to fill all the vacancies. The decline in the value of the pound was said to have affected wages in the sector with EEA workers seeking work elsewhere than in the UK as a result.

The sector wished to retain access to EEA workers as they said they could not recruit sufficient workers within the UK. A lot of the evidence looked at projected requirements, based on potential expansion and the ageing of the existing workforce.
Data

Figure 8.1 Sector Employment

Figure 8.2 Migrant Share of Employment

Figure 8.3 Median Hourly Real Wages

Figure 8.4 Median Hourly Wages by Migrant Groups

Source: Workforce jobs (WFJ), Labour Force Survey (LFS) and Annual Population Survey (APS)

Source: WFJ, with weighted LFS/APS shares

Source: Annual Survey of Household Earnings (ASHE)

Source: 3-year APS (2014-2016)
Figure 8.5 Sector Productivity

Source: WFJ

Figure 8.6 Sector Output Growth

Source: WFJ

Figure 8.7 Top 10 Occupations in the Sector by Share

Source: 3-year APS (2014-2016)

Figure 8.8 Occupation Skill level by Migrant Groups

Source: 3-year APS (2014-2016)
Overview of the sector

The transport sector has maintained an almost constant level of total employment and share of overall UK employment (Figure 8.1). The EU13+ share of workers in this sector has changed very little, with only a slight increase in workers from the NMS post 2004, but still remains small compared to the share of non-EEA workers (16.8% in 2016).

Median hourly wages in the sector have remained relatively close to the UK economy average, at 97% in 1997 and 100.1% in 2016 (Figure 8.3). The wages of non-EEA migrants in the sector are roughly equal to those of UK-born workers, but NMS workers earn slightly less, and EU13+ workers earn slightly more. Workers in higher skill occupations tend to receive a higher pay, so this difference in pay may be representative of the skill compositions shown in Figure 8.8.

The sector productivity has largely followed the average for the UK economy using output per job as the measure, but when output per hour is used, the sector underperforms compared to the average (Figure 8.5). GVA growth in the sector increased in line with the economy average until around 2005, at which point the growth levelled off, before plummeting around the time of the financial crisis. The sector recovered with growth rates at a relative level to similar to the economy average (Figure 8.6).

The transport sector is a low skill sector, with well over 70% of occupations by each migrant grouping other than EU13+ classified as low skill by the National Qualification Framework (NQF levels 1 & 2)\(^\text{15}\).

What we were told - sector responses

Trends and Evolution

Employment

The sector predominantly recruited EEA migrant workers to fill low skilled roles. The Road Haulage Association said that the logistics sector was primarily made up of low-skilled workers and estimated that one in four workers in warehousing were from the EEA, with around 60,000 employed as HGV Drivers. The National Franchised Dealers Association told us that EU HGV technicians accounted for around 6\(\%\) of the workforce, an increase of 12.5\(\%\) on June 2016. The Freight Transport Association (FTA) told us that 14\(\%\) (43,000) of Long Goods Vehicle (LGV) drivers were from the EU.

The Maritime Skills Alliance and Nautilus told us that they estimated 15\(\%\) of employees at low-skill levels (e.g. deckhands) were EU nationals, with a further 5\(\%

\(^{15}\text{Where individual skill categories have fewer than 30 unweighted observations, the categories have been merged together. These composite categories contain at least 30 observations, and may contain any combination of either skill level.\text{)\)\]
from outside the EU. For high-skill roles, the proportions reversed with higher numbers of non-EU nationals and fewer from the EU. For the workboat sector, 10% of deckhands and 15% of employees at a higher level were from the EU.

We were told that despite the UK having a robust and fully subscribed apprentice scheme for HGV technicians, there remained a skills shortage which needed to be filled from outside of the UK. Network Rail indicated that, at graduate level or above, 40% of roles were filled by EEA migrant workers and 42% by non-EEA migrant workers.

There were seasonal fluctuations in the numbers of people employed, with what was described as a significant rise in personnel from September to January, especially amongst driver, postal and warehouse roles. Many of these additional personnel were from the EU and came to the UK for a short-term period.

There was a regional element to the employment of EEA migrant workers. The FTA said that a significant proportion of EU workers were based in the Midlands, East of England and South East but that it was difficult to access statistical regional information for EU workers within logistics.

Skills and training

The sector indicated that it recruited directly from Europe to fill vacancies because there were insufficient UK workers to undertake the roles. Network Rail said "Resourcing teams have confirmed that in-house succession planning and local advertising does not always work hence the need to engage with EEA and non-EEA nationals who bring the skills and experience needed, as well as a culturally diverse and inclusive workforce."

The National Franchised Dealers Association told us that there was continued recruitment of skilled HGV technicians from the EU, with larger truck retailers recruiting directly in Poland, where there were said to be many skilled HGV technicians. We were told that there was a skills shortage across the UK’s automotive sector and that UK apprentices training to be technicians preferred working with cars and light commercial vans as this did not require unsociable hours, leading to a shortage of technicians to work on larger commercial vehicles. It was suggested the sector had an image problem and was not seen as an attractive sector to work in for UK workers.

Respondents from the sector told us that they were unable to recruit non-EEA workers, due to the restrictions of Tier 2 visa and the requirements of UK Driving legislation, as only EU/EEA driver licences were recognised by the DVLA for unrestricted commercial driving. We were told that operators were struggling to cover the cost of training new LGV drivers where licence acquisition could cost over £3,000.

Future Prospects

Shortages of labour
The Road Haulage Association told us that the sector was short of 45,000 HGV drivers. They said there was also an LGV driver shortage of 52,000. Employers said that they were working to recruit more UK staff but that there were not the numbers available to cover the loss of current EU workers. It was also suggested that the sector was not seen as an attractive one by UK workers.

National Franchised Dealers Association said that within the commercial vehicle sector there was a high level of turnover of qualified vehicle technicians and an overall skills shortage within the UK of skilled vehicle technicians. NFDA said “Due to the decline in the Pound compared to the Euro, wage levels are not as significant as they previously were. Employees are thus reporting that they are returning home for work as the wage disparities are much smaller but living costs remain significantly lower across Eastern Europe.”

The RMT told us that the rail industry had shortages, mainly in core rail engineering disciplines and train drivers. These shortages were currently weighted toward the southern half of the UK. They said that by 2021, an additional 7150 people in signalling, 10,000 in track and 3750 in electrification would be needed, with the West Midlands the region of highest need at that point.

The Highways sector estimated that it will require 21,000 new workers to replace staff retiring over the next 10 years. They said there would be an increased need to recruit workers with digital and civil engineering skills.

The shipping industry said that there would be a potential shortfall of 3,800 deck and engine officers by 2026. While the Department for Transport estimated that the Heathrow expansion could create 77,000 jobs by 2030.

The sector wanted to retain access to EEA migrant workers as they felt they would not be able to recruit enough staff from within the UK. Evidence was not given as to how to make the sector more appealing to UK workers or how to ensure UK workers had the skills to work in the sector.
F.9. Warehousing (SIC 52)

Key statistics

<table>
<thead>
<tr>
<th>Year</th>
<th>Share of UK Employment</th>
<th>EEA employment share</th>
<th>Median hourly wage (% of UK average)</th>
<th>Output/hour (% of UK average)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1997</td>
<td>0.9%</td>
<td>1.7%</td>
<td>111.1%</td>
<td>95.0%</td>
</tr>
<tr>
<td>2004</td>
<td>1.1%</td>
<td>2.6%</td>
<td>108.9%</td>
<td>97.0%</td>
</tr>
<tr>
<td>2016</td>
<td>1.6%</td>
<td>18.5%</td>
<td>111.3%</td>
<td>75.9%</td>
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</table>

The evidence submitted suggested that this sector employed significant proportions of migrant workers predominantly in establishments operated by large retailers. 22% of forklift truck drivers and 23% of warehouse workers came from the EU. Half of Amazon’s distribution workforce came from the EU. That proportion was a third for Morrisons. The sector reported a significant increase in labour turnover among the EEA workforce with many returning to their home country.

Recruitment into the sector was both seasonal and permanent, with employers holding on-site hiring events and online advertising campaigns. The same recruitments procedures were followed for both EEA and UK staff.

The sector said it would like to see a seasonal scheme extended to the sector as well as an expansion of the Tier 5 (Youth Mobility) scheme, and the reintroduction of the post-study work visa.
Figure 9.1 Sector Employment

Share

Employment (000s)

0% 5% 10% 15% 20% 25%


- Sector employment as share of total UK employment (LHS)
- Total workers in sector (RHS)
- UK and Irish workers in sector (RHS)

Source: Workforce jobs (WFJ), Labour Force Survey (LFS) and Annual Population Survey (APS)

Figure 9.2 Migrant Share of Employment

Share of sector workforce

0% 5% 10% 15% 20% 25%


- EU13+ Workers
- NMS Workers
- Non-EEA Workers

Source: WFJ, with weighted LFS/APS shares

Figure 9.3 Median Hourly Real Wages

Wages

£0 £2 £4 £6 £8 £10 £12 £14 £16 £18 £20


- Median hourly wages in sector
- Median hourly wages over whole economy

Source: Annual Survey of Household Earnings (ASHE)

Figure 9.4 Median Hourly Wages by Migrant Groups

Wages

£0 £2 £4 £6 £8 £10 £12 £14 £16 £18 £20

UK + Ireland EU13+ NMS Non-EEA

Excluded due to sample size

Source: 3-year APS (2014-2016)
**Figure 9.5 Sector Productivity**

<table>
<thead>
<tr>
<th>Year</th>
<th>Whole Economy output/job (£k)</th>
<th>Whole Economy output/hour</th>
<th>Warehousing output/job (£k)</th>
<th>Warehousing output/hour</th>
</tr>
</thead>
<tbody>
<tr>
<td>1997</td>
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<td>2015</td>
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</table>

Source: WFJ

**Figure 9.6 Sector Output Growth**

<table>
<thead>
<tr>
<th>Year</th>
<th>Sector Output (CP share)</th>
<th>Sector Output (CVM) 1995=100</th>
<th>Whole Economy Output (CVM) 1995=100</th>
</tr>
</thead>
<tbody>
<tr>
<td>1997</td>
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<td>2000</td>
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<td>2012</td>
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<tr>
<td>2015</td>
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</tbody>
</table>

Source: WFJ

**Figure 9.7 Top 10 Occupations in the Sector by Share**

- Elementary storage occupations
- Large goods vehicle drivers
- Packers, bottlers, canners and fillers
- Air travel assistants
- Managers and directors in transport and distribution
- Transport and distribution clerks and assistants
- Fork-lift truck drivers
- Managers and directors in storage and warehousing
- Air transport operatives
- Security guards and related occupations

Source: 3-year APS (2014-2016)

**Figure 9.8 Occupation Skill level by Migrant Groups**

- UK + Ireland
- All Migrants
- EU13+
- NMS
- Non-EEA

Source: 3-year APS (2014-2016)
Overview of the sector

Warehousing is a growing sector by both total employment and share of the total UK workforce. UK and Irish employment in the sector has seen lower growth in the 1997-2016 period (Figure 9.1) as sector employment has diversified, particularly after 2004 (Figure 9.2).

Employment of workers from NMS rapidly increased following the 2004 EU enlargement to overtake the previously largest migrant share of non-EEA workers, whilst employment of workers from EU13+ countries has remained low and stable.

The warehousing sector has wages above the economy average, at 111.3% of the average in 2016 (Figure 9.3), though the comparison of UK-born workers and migrant workers shows that the wages of migrants are significantly less than UK-born workers (Figure 9.4).

Wages tend to vary depending on skill levels, so using Figure 9.8, it’s clear that migrant workers have a higher proportion of low skill occupations, which will usually result in lower pay. The wages of EU13+ and non-EEA workers are slightly below those of UK-born workers (Figure 9.4)\(^\text{16}\). NMS workers have the highest proportion of low skill workers, which partially explains the lower earnings received.

Labour productivity in the sector has reduced markedly over time, on both per job and per hour measures (Figure 9.5). Output growth, however, has increased broadly in line with the whole economy average (Figure 9.6). Production in the sector may have responded to relatively abundant or cheap labour, expanding employment to raise output rather than investing in capital or labour-enhancing technology.

What we were told - sector responses

Trends and Evolution

Employment

The Freight Transport Association (FTA) told us that 22% (19,000) of forklift truck drivers and 23% (94,000) of warehouse workers came from the EU.

Amazon said the largest section of their workforce in the UK was in what they described as fulfilment and distribution operations. These roles were both seasonal and permanent positions. Over 14,000 employees of Amazon were employed in what they described as ‘fulfilment associate roles’, with half of the workforce being UK citizens and half from the EU.

\(^{16}\) Where individual skill categories have fewer than 30 unweighted observations, the categories have been merged together. These composite categories contain at least 30 observations, and may contain any combination of either skill level.
Morrisons told us that EEA migrants made up 32% of their total workforce of 13,000 across their sites and depots. Most of the agency workforce in manufacturing and logistics were from the EU, around 2,880 employees out of 4,000, with 79% working in logistics and 71% in manufacturing. There was a significant increase in labour turnover among the EEA workforce, immediately after the referendum, with many returning to their home country.

**Methods of recruitment**

Amazon said they recruited seasonal and permanent hourly paid roles sourced locally to each site in the UK through two main channels: on site hiring events and through online advertising campaigns, and the hiring practices for UK workers and EU nationals are the same.

**Future Prospects**

**Suggested Future Migration Regimes**

Amazon told us they would like to see a Seasonal Agricultural Workers Scheme extended to the retail and logistics industry; an expansion of the Tier 5 (Youth Mobility Scheme) to nationals from EEA countries; a reintroduction of the Tier 1 (Post Study Work) visa.
**F.10. Accommodation and Hospitality (SIC 55-56)**

**Key statistics**

<table>
<thead>
<tr>
<th>Year</th>
<th>Share of UK Employment</th>
<th>EEA employment share</th>
<th>Median hourly wage (% of UK average)</th>
<th>Output/hour (% of UK average)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1997</td>
<td>6.1%</td>
<td>4.0%</td>
<td>54.3%</td>
<td>56.3%</td>
</tr>
<tr>
<td>2004</td>
<td>6.5%</td>
<td>5.4%</td>
<td>59.5%</td>
<td>54.3%</td>
</tr>
<tr>
<td>2016</td>
<td>6.9%</td>
<td>13.2%</td>
<td>63.5%</td>
<td>51.2%</td>
</tr>
</tbody>
</table>

Respondents told us that there were 150,000 EEA workers employed in the eating and drinking out sector and that, on average, half of the workers in the UK sandwich industry were EEA nationals. Shortages of workers were mostly experienced in London and the South East. In London, respondents said that up to 75% of staff working in food and drink service were from outside the UK.

Migrant workers mostly worked as chefs, kitchen and catering staff and waiting staff, along with restaurant managers. Recent growth developments in the sector had seen 41,000 new jobs created since 2009 and proportions of EEA workers increasing from 10.5 to 12% of the workforce.

The sector said that recruitment took place in the UK and did not vary for UK and EEA nationals. Respondents said that the sector offered comprehensive training and had invested in growing its workforce and running schemes to support people entering the sector. Firms did not cluster together, so there was limited opportunity for shared apprenticeship schemes. Employers were said to be looking at alternative sources of labour but that the job requirements were such that the jobs available did not lend themselves to all prospective employees. A lot of the work was described as involving low-skill tasks worked in shifts in difficult environments.

The sector said that EEA migrants had contributed significantly to growth in the sector and there was little evidence to say that EEA migrants had hampered wage growth. Further, respondents said that they did not believe that falls in immigration would impact on wage levels but, rather, in stalled growth, declining investment and reduced levels of employment. The sector did say that wage rates had grown in the sector by 50% more than the wider economy.

Respondents said they were committed to developing skills within the sector and were keen to work with the education sector to deliver this. Without free movement, the sector felt that it would require an additional 62,000 UK workers each year to maintain current activities and to grow. But that UK recruits needed a change in perception to view hospitality as a good career.

Manual labour was said to be a necessary component of much of the work in this sector with limited scope for automation and innovation.

The sector sought a bespoke immigration system for non-graduate EEA workers which focussed on sectors with staff shortages. The Tier 5 (Youth Mobility) visa should be extended.
Data

**Figure 10.1 Sector Employment**

<table>
<thead>
<tr>
<th>Year</th>
<th>Employment (000s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1997</td>
<td>500</td>
</tr>
<tr>
<td>2000</td>
<td>1,000</td>
</tr>
<tr>
<td>2005</td>
<td>2,000</td>
</tr>
<tr>
<td>2010</td>
<td>2,500</td>
</tr>
</tbody>
</table>

- **Share**: Employment as share of total UK employment (LHS)
- **Total workers in sector (RHS)**
- **UK and Irish workers in sector (RHS)**

Source: Workforce jobs (WFJ), Labour Force Survey (LFS) and Annual Population Survey (APS)

**Figure 10.2 Migrant Share of Employment**

<table>
<thead>
<tr>
<th>Year</th>
<th>Share of sector workforce</th>
</tr>
</thead>
<tbody>
<tr>
<td>1997</td>
<td>5%</td>
</tr>
<tr>
<td>2000</td>
<td>10%</td>
</tr>
<tr>
<td>2005</td>
<td>15%</td>
</tr>
<tr>
<td>2010</td>
<td>20%</td>
</tr>
</tbody>
</table>

- **EU13+ Workers**
- **NMS Workers**
- **Non-EEA Workers**

Source: WFJ, with weighted LFS/APS shares

**Figure 10.3 Median Hourly Real Wages**

<table>
<thead>
<tr>
<th>Year</th>
<th>Real Wages (£)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1997</td>
<td>5</td>
</tr>
<tr>
<td>2000</td>
<td>10</td>
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<tr>
<td>2005</td>
<td>15</td>
</tr>
<tr>
<td>2010</td>
<td>20</td>
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</tbody>
</table>

- Median hourly wages in sector
- Median hourly wages over whole economy

Source: Annual Survey of Household Earnings (ASHE)

**Figure 10.4 Median Hourly Wages by Migrant Groups**

- **UK + Ireland**
- **EU13+**
- **NMS**
- **Non-EEA**

Source: 3-year APS (2014-2016)
Figure 10.5 Sector Productivity

Figure 10.6 Sector Output Growth

Figure 10.7 Top 10 Occupations in the Sector by Share

Figure 10.8 Occupation Skill level by Migrant Groups

Source: WFJ

Source: 3-year APS (2014-2016)
Overview of the sector

The accommodation and hospitality sector has boomed in recent years and, aside from a small fall between 2008-2010 post-financial crisis, total employment has risen quickly (Figure 10.1). The sector accounts for 6.8% of total UK employment in 2016, (Figure 10.1), and is one of the largest employers of migrant labour, with the migrant share accounting for 28.4% of total employment in the sector in 2016 compared with just 12.9% in 1997.

Following the 2004 EU enlargement, the share of NMS workers in the sector soared from around 2% to almost 10% (Figure 10.2), which has been one of the key drivers of growth in the sector.

Wages in the accommodation and hospitality sector are low. The sector has the lowest wages out of all the twenty MAC sectors presented, with the median wage at just 54.3% of the economy average in 1997, improving to 63.5% in 2016 (Figure 10.3).

This is a sector with low productivity relative to the economy average (Figure 10.5) by both per hour and per job measures. The sector accounts for 6.8% of total UK employment in 2016, but just 3% of UK GVA (Figure 10.6), though the sector GVA growth has remained either in line with, or above the economy average.

Occupations in the accommodation and hospitality sector are split almost equally between low and medium skill, with almost no high skill occupations in the sector, and only a minor difference between the migrant and UK-born skill composition (Figure 10.8).

What we were told - sector responses

Trends and Evolution

Overall workforce

In terms of the overall numbers working within various parts of this sector, we were told by the Association of Licensed Multiple Retailers (ALMR) that there were approximately 150,000 EEA workers in the eating and drinking out sector. The British Beer and Pub Association told us that 17% of pub workers were migrants with 14% being from the EU (71,000 people). The British Sandwich Association (who sent combined evidence with The Café Society and The Pizza Pasta & Italian Food Association) said that they estimated that more than 330,000 people worked in the UK sandwich industry and said that the takeaway industry employed over 231,000 people, and the average non-UK workforce in this sector was said to be 54%. McDonalds told us that their staff were over 80% UK-born, 12% from the EEA, and 5.3% from non-EEA countries. Carlton Rezidor Hotel Group said that 49%

Where individual skill categories have fewer than 30 unweighted observations, the categories have been merged together. These composite categories contain at least 30 observations, and may contain any combination of either skill level.
their workforce were non-UK nationals and the Northern Ireland Hotels Federation said that the non-UK nationals figure for their workforce was 23%.

In terms of whether there was a regional distribution element to these data, we were told by ALMR that shortages were felt mainly in London and the South East. McDonalds said that some restaurants were said to have a higher proportion of EEA workers particularly in the South East, with London restaurants having 35.8% EEA staff. The British Beer and Pub Association told us that in London and the South East, 40% of staff were described as migrants, and this proportion was described as smaller in rural or suburban pubs.

We did get some information about the types of jobs that migrant workers were doing in this sector. ALMR said that three occupations dominated the overall number of migrant workers across the sector, namely chefs, kitchen and catering staff and waiting staff. Restaurant managers also made up a significant proportion. The British Beer and Pub Association told us that most migrant workers in their part of the sector were employed in kitchen and back of house roles. Carlton Rezidor Hotel Group said that the most acute positions to fill were in food and drink service, housekeeping, front office and chefs. The British Sandwich Association evidence said that between 70% and 75% of staff working in food service outlets in London were from outside the UK, most of them from within the EU. Outside London, this proportion was said to be around 40%.

In terms of changes to the proportion of non-UK workers in the workforce, the British Sandwich Association said that, according to a survey by Just Eat restaurants, the takeaway industry was said to have created 41,000 new jobs since 2009. Since January 2016, McDonalds said the proportion of EEA nationals in their workforce had increased from 10.5% to 12%

**Recruitment and skills**

The ALMR said that the recruitment of staff took place in the UK and did not vary for UK and EEA nationals. Across the sector, we received evidence saying that EEA employees did not differ from UK or non-EEA employees in their roles. All employees were described as on contracts, the majority flexible in the hours they worked.

Operators were described as investing in their workforce, and the ALMR told us that the sector currently offered the most comprehensive training it ever had and with intentions to expand this further. Respondents said they had invested in growing their UK workforce and were running schemes to support people entering the labour market. The British Hospitality Association (BHA) told us that they will be leading a ten-year campaign by employers to recruit more UK workers into the sector building upon a partnership they said they had developed with Job-Centres. The BHA said that they wanted to see a greater focus in schools on work experience, communication and activity. Respondents told us that training in the sector was delivered to the same level regardless of the recipient’s nationality. Several businesses said they had considered alternative sources of people to work in their operations, including the employment of part-time workers (e.g. mothers seeking to return to work for part of the day) and disabled people. However, they told us that many of the job requirements in the sector did not lend themselves to these groups
because of the unsocial hours (e.g. pizza delivery) and work conditions, such as in factories. This type of work was said to involve low-skilled tasks with workers who generally operated in shifts in difficult environments. This work was described to us as not usually suitable for those that were not fit and well, particularly since food hygiene was described as a paramount concern to the sector. Training was generally provided on site and workers were required to have had food hygiene training in addition to the on-site equipment and procedure training. Training increased with the responsibilities taken on by individuals. Respondents told us that businesses in the sector would usually employ a hierarchy of skills, from low to high.

Employers said that firms tended not to cluster together and so there was not the opportunity for shared apprenticeship schemes but that there were company specific training schemes.

**Industrial Strategy**

Respondents said that the Industrial Strategy gave industry the opportunity to transform and upgrade their sector through sector deals and the BHA said they had contributed to the industry’s blueprint for a more productive and competitive sector.

**Impacts**

EEA migrants were said to have contributed significantly to the growth in the sector, particularly since the financial crisis of the late 2000’s. There had been a dramatic increase in business activity supported by growth in employment, for both UK and EEA nationals. In terms of wage levels, respondents said there was little evidence to suggest that EEA migration had hampered growth in this sector.

Respondents said that they did not believe that substantial falls in immigration would have a positive effect on wage levels. In the event of acute labour shortages, the sector said that the results would be stalled growth, a decline in investment and reduced levels of employment which would affect UK workers. Shortages of workers in the food service sector were already said to be impacting on wages which would seem to contradict what was said about falls in immigration not impacting wages. ALMR told us that wage rates in the sector had grown 50% more than the wider economy.

**Future adjustments**

Businesses said they were committed to developing the skills and careers of all those entering their operations, and were eager to work with the Government to ensure that the education system provided a smooth transition from schools and colleges into work in hospitality and catering.

Respondents said that in a scenario of free movement ending and no new immigration into the sector being allowed, the industry would need to recruit an additional 62,000 UK workers each year to maintain current activities and to grow. They said that a career in hospitality was viewed differently in many continental European countries compared to the UK and a change in perception was, in their view, required to encourage people to take up hospitality as a career.
Other – including SOL

Some of the evidence we received sought a bespoke immigration system for non-graduate EU workers, outside of existing arrangements, that offered preferential status to EU citizens, linked to a broader trade deal, and which focused on sectors and occupations with staff shortages. Additionally, some said that the Youth Mobility Scheme should be extended both in terms of length of time and in terms of age.

Other respondents said that the shortage occupation list should include specialist chef positions and provide for languages specialists. Concern was expressed that any new immigration system could reproduce the difficulties said to be experienced by employers using the current Tier 2 system.
F.11. Media and Communications (SIC 58-61)

Key statistics

<table>
<thead>
<tr>
<th>Year</th>
<th>Share of UK Employment</th>
<th>EEA employment share</th>
<th>Median hourly wage (% of UK average)</th>
<th>Output/hour (% of UK average)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1997</td>
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<td>1.3%</td>
<td>138.7%</td>
<td>106.5%</td>
</tr>
<tr>
<td>2004</td>
<td>1.9%</td>
<td>1.9%</td>
<td>142.2%</td>
<td>149.5%</td>
</tr>
<tr>
<td>2016</td>
<td>1.7%</td>
<td>5.7%</td>
<td>140.6%</td>
<td>180.1%</td>
</tr>
</tbody>
</table>

The MAC had a small number of submissions for Media and Communications. BT argued that access to a skilled workforce was necessary to carry out large infrastructure projects within the UK and that the major projects could be jeopardised without access to EEA workers.

Commercial Broadcasting Association said that EEA migrants represented 15% of their workforce, and the large number of broadcasters that were based in the UK but broadcast abroad required a workforce with cultural and linguistic knowledge of the countries they were broadcasting to. They argued that these skills were not readily in supply within the UK. Other respondents said that EEA migrants represented 13% of their workforce.

Respondents said that they recruited high-skill migrants with postgraduate qualifications and language skills. They said that some specialisms were only available from EU countries. BT said they were having difficulty recruiting trainee engineers, especially in London and the South East and argued that these shortages could have serious implications for maintaining the UK infrastructure.

The sector said that there were a range of graduate roles and apprenticeships covering a wide range of areas and that there were programmes to reach disadvantaged people as well as job seekers and members of the armed forces. Other respondents said they were working to support women in technology.

Respondents said the UK would struggle to maintain growth in the number on non-domestic channels without access to EEA skills and that there would be a risk to UK infrastructure build. Employers said they intended to mitigate this risk through recruitment and stimulating interest in technological skills, including by investment in research and development and in apprentice and graduate schemes.

In future, the sector felt that the immigration system should distinguish between EEA and non-EEA migrants, and indeed maintain the current system for EEA migrants. They argued that employers delivering large infrastructure projects required continued access to skills available from within the EEA to deliver the Government’s industrial strategy. Any future system should take account of the fact that low-skill did not accurately reflect some roles and that training and experience should be take account of as well as whether these was a degree qualification as well as whether the activities being undertaken were of vital importance to the UK economy.
Data

Figure 11.1 Sector Employment

Share

25%
20%
15%
10%
5%
0%

Employment (000s)


Sector employment as share of total UK employment (LHS)
Total workers in sector (RHS)
UK and Irish workers in sector (RHS)

Source: Workforce jobs (WFJ), Labour Force Survey (LFS) and Annual Population Survey (APS)

Figure 11.2 Migrant Share of Employment

Share of sector workforce

25%
20%
15%
10%
5%
0%

Source: WFJ, with weighted LFS/APS shares

Figure 11.3 Median Hourly Real Wages

Wages

£20
£18
£16
£14
£12
£10
£8
£6
£4
£2
£0


Median hourly wages in sector
Median hourly wages over whole economy

Source: Annual Survey of Household Earnings (ASHE)

Figure 11.4 Median Hourly Wages by Migrant Groups

Wages

£20
£18
£16
£14
£12
£10
£8
£6
£4
£2
£0

UK + Ireland EU13+ NMS Non-EEA

Excluded due to sample size

Source: 3-year APS (2014-2016)
Figure 11.5 Sector Productivity

Output


Whole Economy output/job (£k)
Whole Economy output/hour
Media and Communications output/job (£k)
Media and Communications output/hour

Source: WFJ

Figure 11.6 Sector Output Growth

Output growth


Sector Output (CP) share (LHS)
Sector Output (CVM) 1995=100 (RHS)
Whole Economy Output (CVM) 1995=100 (RHS)

Source: WFJ

Figure 11.7 Top 10 Occupations in the Sector by Share

0% 10% 20% 30% 40%

- Journalists, newspaper and periodical editors
- Arts officers, producers and directors
- Sales accounts and business development managers
- Photographers, audio-visual and broadcasting equipment operators
- Programmers and software development professionals
- Authors, writers and translators
- Telecommunications engineers
- Managers and proprietors in other services n.e.c.
- IT specialist managers
- Information technology and telecommunications professionals n.e.c.

Low Skill
Medium Skill
High Skill

Source: 3-year APS (2014-2016)

Figure 11.8 Occupation Skill level by Migrant Groups

100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%

UK + Ireland
All Migrants
EU13+
NMS
Non-EEA

Low Skill
Medium/Low
High/Medium
High Skill
Excluded

Source: 3-year APS (2014-2016)
Overview of the sector

The media and communications sector experienced rapid growth in the late 90s and early 00s, until around 2003, where sector employment actually declined in the years until 2009. Employment in the sector has stabilised since 2009, and has experienced steady growth (Figure 11.1). The steady growth since 2009 corresponds with the boost in the non-EEA share of migrants in the sector (Figure 11.2). Given that UK and Irish employment in the sector has remained almost constant since 2009 (Figure 11.1), this suggests that migrants have been the driving force behind the sector’s recent growth.

The media and communications sector has higher than average wages, with the median sector wage at 140.6% of the UK average in 2016 (Figure 11.3). EU13+ and non-EEA workers in the sector have a higher median wage than UK-born workers (Figure 11.4). Higher skill occupations are usually compensated at a higher rate than low skill jobs, so the wages by migrant group appear to reflect the skill compositions presented in Figure 11.8.

Productivity in the sector has soared, with both output per job and output per hour ranking at 201% and 180% of the economy average in 2016 respectively (Figure 11.5). GVA growth on its own has risen significantly; demonstrating growing output in the sector irrespective of hours worked or numbers of jobs (Figure 11.6).

This is a predominantly high skill sector, with most of the most common occupations in the sector requiring training to degree level (Figure 11.7). When broken down into UK-born and migrant workers (Figure 11.8), there appears to be very little difference in skill composition, with migrants having a slightly higher portion of high skill workers.  

What we were told - sector responses

Trends and Evolution

Employment

British Telecommunications (BT) indicated that they employed and recruited nationals from the UK, EU27 and globally throughout all levels of the company. The Commercial Broadcasters Association (COBA) said that EU migrant workers represented 15% of the workforce, with non-EU migrant workers accounting for 7%. Broadcom said 13% of their workforce were EEA nationals employed in a variety of roles within research and development and electronics engineering.

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18 Where individual skill categories have fewer than 30 unweighted observations, the categories have been merged together. These composite categories contain at least 30 observations, and may contain any combination of either skill level.
BT said that they were already experiencing difficulties in recruiting trainee engineers, especially in London and the South East. They argue that these shortages could potentially have serious implications for their ability to build and maintain the UK’s digital infrastructure whilst continuing to service customer requirements. They said dependency on EU labour is particularly high in London and the South East.

COBA said they thought EU recruitment was due to requirement for specialist expertise and knowledge of markets to which channels are being broadcast rather than because of training and skills gaps within the UK workforce.

Vodafone said they typically recruited high-skilled migrant workers with postgraduate degrees and additional business qualifications. They said that the ability to speak multiple languages in addition to the skills and qualifications made EEA migrant workers ideal for management roles at a global company.

Russia TeleRadio Worldwide Ltd said that their international migrant recruitment came from outside the EU, mainly Russia. They argued that they had to “fight and wait for Tier 2 visas” which impacted on their business. “We sincerely hope that after March 2019 a level playing field for all required immigrant Labour will stop non-EU visas being made so difficult.”

**Skills**

BT pointed to specialisms being available in some EU countries, for example copper skills from Portugal, fibre skills from Latvia and Romania and general construction skills from Poland. They said that they were currently in the midst of a very large network expansion through their Openreach and EE businesses. This would require significant additional resource, both directly and through contractors, a proportion of which has to date been sourced from outside the UK.

COBA said “International channels that are based here need access to people with a deep knowledge of local markets and culture that cannot be readily acquired through training. Along with languages, this will range from understanding local compliance, legal and regulatory regimes, to knowledge of the local advertising sector, reversioning facilities and broadcasting platforms, amongst other areas. Crucially, UK productions may need to appoint such people quickly, as production schedules are highly difficult to predict and can require “crewing up” at short notice.”

**Training**

BT pointed to a range of graduate roles and apprenticeships covering a wide range of areas from cyber security and software development to research. They also said they undertake programmes to reach disadvantaged young people, including skills development and hands on experience of technology jobs. Other initiatives included supporting job seekers and members of the armed forces transitioning into civilian employment alongside extensive work with primary school children and teachers to gain confidence with digital skills.
“While BT is very active in recruiting, training and upskilling its workforce from within the UK (as described above), delivering on our ambitions – which drive substantial value to the UK economy – will also require us to call on resources from across the EU27 and worldwide. This is especially true of skills in specialised areas such as mobility, 5G services and security, where there is a global scarcity of suitably qualified candidates, and also in areas which require substantial resource such as construction and other civil works.”

Similarly, Vodafone said it was building partnerships with universities that had expertise in key areas relevant to the business. In addition, Vodafone said it was working with institutions to support women in technology.

COBA said its members were committed to training the domestic workforce giving an example of Sky’s training initiative the Sky Academy, which aimed to reach one million young people by 2020.

It was argued that a range of skills were required by the media and communications industry for the future, including engineering, IT and cyber security.

**Future Prospects**

**Impacts**

BT said that if there was a material reduction in the number of EEA workers and they could not be replaced by UK workers quickly, if at all, then this could present a risk to customer services and network infrastructure build, which underpins the UK economy.

COBA expressed concern about how the UK could maintain growth in the number of non-domestic channels based in the UK without access to EU skills arguing that broadcasters would potentially be forced to consider restructuring their European operations, including relocating jobs overseas, in order to maintain access to the necessary international expertise.

Broadcom said “Any reduction in that variety of workers from the EEA countries will impact Broadcom given the lack of resident candidates with adequate skills and experience for our specialist roles.”

**Alternatives to migrant labour**

BT said it intended to mitigate risk through recruitment and stimulating interest in technology skills more generally. This included sustained investment in research and development and in apprentice and graduate schemes as well as technical literacy education.

Vodafone said they were aiming to increase the pool of available UK candidates through talent programmes including internships and graduate placements.
Suggested Future Migration Regimes

Russia Teleradio Worldwide Ltd said “automation has greatly helped us moving from Hardware to Software in many of our processes and made up for shortages and cost of scarce highly skilled roles and labour.”

Vodafone said “The system should continue to distinguish between EU/EEA nationals (as part of a future arrangement, possibly on reciprocal basis) and non-EU/EEA nationals. Our preference would be to maintain the current system for non-UK EEA citizens when hiring them – or as close to it as possible.”

BT argued that other companies delivering large infrastructure projects will require continued access to skills available from within the EU to deliver the ambitions of the Industrial Strategy. They point to a large number of other complex and resource intensive projects currently underway or planned for the next 5 to 10 years across transport, housing and energy sectors, all of which are likely to compete to some extent for some of the same skills.

BT recommended that the Government seek to establish an efficient and business-oriented immigration system post-Brexit. “This will enable investing businesses in the UK such as BT to access the talent and skills required in order to fuel the sector’s innovation. In particular, the Government should ensure that BT and other investors in vital communications, transport and energy infrastructure projects continue to be able to access the skills and resources required in the construction sector in order to support the Government’s industrial strategy.”

It was said that the term low-skilled did not accurately represent roles and was unhelpful when discussing the future skills requirements of the sector. It was suggested that language should recognise the importance of training and experience (regardless of degree qualification) as well as activities of vital importance to the UK economy, including in providing communications services and infrastructure.
F.12. IT (SIC 62-63)

Key statistics

<table>
<thead>
<tr>
<th>Year</th>
<th>Share of UK Employment</th>
<th>EEA employment share</th>
<th>Median hourly wage (% of UK average)</th>
<th>Output/hour (% of UK average)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1997</td>
<td>1.4%</td>
<td>1.4%</td>
<td>141.7%</td>
<td>66.8%</td>
</tr>
<tr>
<td>2004</td>
<td>2.0%</td>
<td>2.9%</td>
<td>184.2%</td>
<td>90.0%</td>
</tr>
<tr>
<td>2016</td>
<td>2.4%</td>
<td>7.6%</td>
<td>159.9%</td>
<td>98.1%</td>
</tr>
</tbody>
</table>

The sector said that migrants from non-EEA countries accounted for a higher share of employment in the sector than EEA nationals. The games industry, however, said that they employed a higher proportion of EEA nationals.

The sector said that the UK had been unable to meet the sector’s needs for digital talent and that there were not enough STEM graduates to fill the demand. They also said that they needed to recruit the brightest and best to compete in a global market. They also said that some of the roles they were trying to fill were highly technical and specialist which were difficult to source locally as there was a worldwide shortage.

Employers used a variety of methods to recruit staff, including employee referral, websites, recruitment agencies and head hunters. They tended to hire EEA migrants who were already present in the UK rather than source them from abroad, assuming they were the best candidate for the job, although there was some evidence of companies recruiting direct from European universities.

Workers in this sector were said to be highly qualified and the sector also said that migrants were more highly qualified in general and that such migrants were more likely to work in the technological sector. Employers, especially larger employers, said that they worked with universities to inform the education system about business needs. Companies also provided training in-house and offered apprenticeships and internships but they did not think that this was enough to deliver the workforce they say they need. EEA migrants were said, by some, to have better technical skills. Employers said that recruiting high-skill migrant labour created skills transfers supporting the development of UK skills.

A reduction in the availability of EEA migrants would restrict the pool of talent to recruit form. Larger companies said that they would move the work to where the talent was while smaller enterprises said they would lose business.

The sector made suggestions about changes to the shortage occupation list and said that a more restrictive immigration system raised concerns about increased cost, limiting access for smaller firms, and increased length of time to recruit staff.
Data

**Figure 12.1 Sector Employment**

- Share employment as share of total UK employment (LHS)
- Total workers in sector (RHS)
- UK and Irish workers in sector (RHS)

Source: Workforce jobs (WFJ), Labour Force Survey (LFS) and Annual Population Survey (APS)

**Figure 12.2 Migrant Share of Employment**

- EU13+ Workers
- NMS Workers
- Non-EEA Workers

Source: WFJ, with weighted LFS/APS shares

**Figure 12.3 Median Hourly Real Wages**

- Median hourly wages in sector
- Median hourly wages over whole economy

Source: Annual Survey of Household Earnings (ASHE)

**Figure 12.4 Median Hourly Wages by Migrant Groups**

- UK + Ireland
- EU13+
- NMS
- Non-EEA

Source: 3-year APS (2014-2016)
Figure 12.5 Sector Productivity

Figure 12.6 Sector Output Growth

Source: WFJ

Figure 12.7 Top 10 Occupations in the Sector by Share

Figure 12.8 Occupation Skill level by Migrant Groups

Source: 3-year APS (2014-2016)
Overview of the sector

The IT sector has, unsurprisingly - considering the technological advancements that have occurred in the last twenty years, seen enormous employment growth over the period of data presented. The sector share of employment in the total UK economy has increased by 1 percentage point, as the total employment figures have more than doubled from 400,000 to 831,250 (12.1). Workers from outside of the EEA form the majority share of migrants in the sector, though the share of all migrant groups have increased almost proportionally (Figure 12.2).

Median wages in the IT sector are much higher than the economy average, which rapidly increased in line with the .com boom of the late 90s. Wages peaked at around 184% of the economy average in 2004 before falling to 160% of the average in 2016. When earnings are broken down into various migrant groupings, the EU13+ grouping have the highest median wages, and the NMS group the lowest (Figure 12.4). When compared to Figure 12.8, these figures don’t seem to be in line with the skill level of the groups, as the NMS migrant group has the largest proportion of high skill workers, and the EU13+ group has the smallest.

GVA growth in the sector has soared above the economy average (Figure 12.6), though output per hour has remained below the average, and output per job only overtook the average in 2008 – this is likely due to the number of jobs and hours worked expanding at a higher rate than GVA, common in a growing sector.

The sector is highly skilled, with almost no low and medium skill occupations featuring in the most frequent occupations by share (Figure 12.7)\(^9\). When broken down, there are almost no differences in the skill distribution aside from the significantly higher skilled NMS group.

What we were told - sector responses

Trends and Evolution

Employment

The technology sector said that access to migrant labour was vital to fill shortages in a sector that was growing rapidly as the UK was unable to keep up with the demand for high-skilled labour. Tech City UK indicated that the technology sector employed 1.6m people, creating jobs two times faster than the non-digital sectors. They said that one of the key reasons why the sector had seen such growth was due to its access to the best talent from all over the world. TechUK estimated that the UK could create between 2.7 and 3.5 million new jobs by 2030 within the existing digital sectors.

\(^9\) Where individual skill categories have fewer than 30 unweighted observations, the categories have been merged together. These composite categories contain at least 30 observations, and may contain any combination of either skill level.
Tech City UK indicated that in 2015 workers from non-EU nations accounted for a higher share of employment than EU workers (7% vs 6%). Responses said that they made use of Tier 2 to access high-skilled labour from outside the EU. There are variations within the sector, TIGA research indicated the games industry had a higher rate of EU employees, 15% EU, and 5% non-EU.

Tech City UK said that “Many of the UK’s most successful tech start-ups in the UK have been founded by non-UK migrants who have specifically chosen to either start or scale their companies in the UK. The likes of Transferwise, Farfetch, Just Eat, Mimecast and Deliveroo have all been founded by foreign born workers.” They suggested that the numbers of migrant workers in the technology sector was likely to increase.

**Labour shortages**

TechUK said that “The UK suffers from a chronic digital skills shortage which is hampering the growth of the tech sector - last year, high-skilled vacancies in tech companies made up the largest proportion of the professional vacancy market.”

All technology sector submissions said that the UK had been unable to meet the sector’s needs for digital talent, suggesting that the current education system is not performing as well or adapting as quickly as the sector needed it to. Technology companies indicated that there were simply not enough STEM graduates within the UK to fill the demand and that they often need the brightest and the best to compete in a highly competitive world market. TIGA research on the gaming industry published in January 2016 suggested that for 23% of studios surveyed, skill shortages was the biggest obstacle holding back their businesses.

In addition, companies reported they had requirements for highly technical and specialist skills that are difficult to source locally because there was often a world-wide shortage, this included emerging fields such as machine learning and artificial intelligence. UKIE pointed to new roles where there were few candidates globally with the skills required, adding that companies wanted candidates with proven and replicable success working in a particular genre or category of game. TIGA state “In specialised technology fields it is not foreign nationals competing against UK citizens for jobs or driving down salaries; it is UK enterprises competing against businesses from around the world for the best and brightest talent.”

Some companies indicated they used migrant labour to fill strategic gaps including senior management roles, the senior roles were often filled from non-EU sources.

**Wages**

The sector reported that technology migrant labour was high-skilled and highly paid. TechUK indicated that the average salary of EU migrants in technology was £45,000 - £80,000 per annum. However, the sector was heterogenous. Start-up companies and the games industry competed with fintech and the wider technology industry. The latter were often able to provide higher salaries to secure top candidates with
highly sought-after skills, while the former often offered shares in the company in lieu of a high salary.

The gaming industry indicated that salary and relocation packages had been increased to mitigate the uncertainty EEA migrants may have over their future in the UK.

**Methods of recruitment**

Companies relied on a wide variety of methods to attract candidates, for example; employee referral; jobs pages on company website; engaging specialist recruitment agencies and specialist head hunters; external online vacancy posting and LinkedIn call-outs; attending recruitment fairs; attending conferences and technology sector events; and attending university milk-round sessions.

We were told that often when a role was filled by an EEA migrant it was because they were already in the UK when they applied and were the best candidate for the job role. Many companies said they had a diverse workforce influenced by EEA migrant labour and also intra-company transfers. Companies often hired EU nationals who were living in the UK, many having studied here and entering the workforce post-graduation. There was also evidence of companies actively recruiting from eastern Europe universities.

**Skills and training**

Responses said that migrant labour working in the technology sector was highly qualified. TechUK pointed to analysis by LinkedIn of its platform data that indicated that migrants had higher levels of qualifications than domestic workers. The analysis of LinkedIn data suggested that in the last three years 60% of professional EU migrants into the UK have a Masters or Doctoral degree in comparison to 34% of UK LinkedIn members. It was also suggested that highly qualified professional migrants were 1.3 times more likely to work in the technology sector.

Many submissions, particularly larger enterprises said they worked with universities, and engaged with academic leaders to stay connected on education and training standards and ensure the education system could adapt to changing business need. Intel UK Ltd indicated they constantly reviewed UK Universities against their hiring needs, for example, by partnering with Universities. In addition, companies provided training in house and offered internships and apprenticeship schemes to ensure a talent pipeline. Submissions were keen to indicate that this was not enough to provide a full supply of skilled workers into the sector.

One company said while they felt UK graduates had very good soft skills, EU graduates had better technical skills, while another said it was the other way around. Skyscanner indicated that of its 30 summer interns per year the majority of the interns were non-UK nationals and 50% were from EEA countries. "The fact that the successful candidates based in UK Universities are non-UK nationalities indicates that the UK may have a fundamental issue in earlier education provision (Primary and High School) because the highest calibre candidates are predominantly educated in other countries."
In addition to the requirements for technical skills many responses talked about the need for multiple languages and cultural knowledge of other countries, often recruiting native speakers from the countries they were dealing with.

Many responses argued that the recruitment of high-skilled migrant labour created skills transfer helping to support the development of UK skill sets through knowledge exchange. Although it was suggested that this knowledge exchange was most notable in the context of non-EEA employees who were recruited into the UK to fill senior management and leadership roles, and therefore had the opportunity to mentor more junior employees.

TIGA suggested "Migrants can also help to improve the skills of indigenous workers. For example, a UK video games studio might seek to recruit someone with online/multi-player programming skills from outside of the EU because such skills are in short supply in the domestic labour market. With this key individual, the studio could then build a team around him/her."

**Future Prospects**

**Impacts**

All submissions from the technology sector argued that if there were a reduction in the availability of EEA migrants due to Brexit, this would restrict the pool of talent they could recruit from and would reduce the attractiveness of London as a place to study and start or continue a career. Canon said that “A reduction in EEA migration would restrict our options for recruiting the best candidate from within the EEA territory and immigration controls would further restrict us moving talented employees to and from the Headquarters in the UK."

A number of large and international companies suggested that if access to the talent they required were restricted it would lead to the work being either transferred elsewhere, potentially in Europe, where access to the EU wide talent pool would not be a problem. Smaller businesses said contracts could be lost to other businesses with the necessary talent to undertake the work.

TechUK stated that “If the UK’s immigration policy post-Brexit makes it challenging for European founders (and limit the supply of specialist tech skills) to come and start their business in the UK, these companies will inevitably look to set up elsewhere, most notably Berlin, where the cost of living is cheaper, English is already the de facto primary language for startups and visa status will not be an issue.”

The result of the EU referendum is perceived by games businesses as weakening the UK’s attractiveness as a destination for EEA and international candidates. When surveyed for the UKIE State of Play report in February 2017, respondents reported seeing a negative impact on their ability to attract and retain talent. By contrast a number of companies indicated that the number of new hires in technology job roles in the UK who are nationals of EEA countries has increased since the referendum to leave the EU.
Alternatives to the use of migrant labour

Domestic labour

TechUK said “The key to addressing the UK digital skills gap is to cultivating a domestic digital skills pipeline and improving STEM skills through the education system. This can only be achieved through collaboration between Government, industry, academia and third-sector.”

Outsourcing

A number of responses from international technology companies indicated that their European headquarters were based in the UK and reduced access to EU talent was a concern for them. A number indicated they remained committed to the UK.

The technology sector overall stated that outsourcing would be a possibility as would moving their department/business to overseas locations to keep access to the high-skilled pipeline. The games sector also said that higher costs to accessing EEA workers could lead to outsourcing more projects to workers in other territories. Within UKIE’s Membership Survey, 63% of respondent games businesses outsource work and an average of 22.5% of their work is outsourced, predominantly to workers based in India, Poland, China and Bulgaria.

Suggested Future Migration Regimes

Shortage Occupation List

Some submissions raised concerns that the current Shortage Occupation List didn’t reflect specialist job roles or allow for the evolution in technology and expertise. It was also suggested that the technology sector developed more rapidly than the Shortage Occupation List was currently reviewed.

There are requests to add the following roles to the Shortage Occupation List (SOL) where there was a specific skills shortage to ensure that employers can recruit without undue delay; Game Analyst, Senior Game Artist, Senior Game Designer, Senior Producer, Engine Programmer and Machine Vision and Software Tools Engineers.

There was also the suggestion of introducing broader categories onto the SOL e.g. ‘Games Production’. It could then cover roles in programming, art and animation, games design, digital marketing, specialised markets, etc. Responses said this would ensure that the SOL stayed relevant and it would provide the industry with the agility that they required.

Another suggestion was that the SOL could have a fast track process of 14 days.
Concerns over restrictive system

Concerns with regards to a more restrictive system were expressed through a comparison to the Tier system for non-EU migration where many (not all) had negative views. There were a number of concerns expressed including the cost imposed on companies if they had to pay the same fees applicable to Tier 2 migrant labour on EEA migrant labour. It was argued that smaller companies e.g. the gaming industry did not have the necessary resources to be able to afford these fees or the staff to manage the administrative process. An additional concern was over the length of time it could take to recruit migrant labour under a new system. Companies indicated that they needed to be responsive if they won a contract and access to the necessary talent to start a project quickly was essential.
F.13. Finance and Insurance (SIC 64-66)

Key statistics

<table>
<thead>
<tr>
<th>Year</th>
<th>Share of UK Employment</th>
<th>EEA employment share</th>
<th>Median hourly wage (% of UK average)</th>
<th>Output/hour (% of UK average)</th>
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</thead>
<tbody>
<tr>
<td>1997</td>
<td>3.9%</td>
<td>1.5%</td>
<td>136.4%</td>
<td>165.9%</td>
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<tr>
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<td>3.8%</td>
<td>2.7%</td>
<td>135.4%</td>
<td>186.0%</td>
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<tr>
<td>2016</td>
<td>3.3%</td>
<td>5.6%</td>
<td>152.3%</td>
<td>178.3%</td>
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</table>

Respondents said that they employed a significant number of both EEA and non-EEA nationals and the proportions varied from 1.7 to 27.6%. They said they made no distinction in recruitment processes and that candidates were appointed on merit.

Employers said that they required workers with a range of specialist skills, not all of which were readily available in the UK and that EEA nationals helped fill skills gaps. Language skills were cited as one example of this.

The ability to move across borders was cited as a primary concern along with increased bureaucracy and disruption of normal business activities as well as increased costs. EEA nationals were said to work in niche roles and that they made a significant contribution to service provision.

The sector was concerned that any changes to the immigration system would make it difficult for their members to attract the required talent to fill management and technical positions. Any restrictions would also undermine the sector’s ability to grow and that, in particular, public service spending levels could be affected, regional institutions would have more difficulty attracting talent as compared to those in bigger cities, and that costs would be passed on to consumers.

Respondents suggested they would invest in increased training to address any future skills gap including through apprenticeship schemes with a focus on management, digital, infrastructure and capital projects. Any new immigration system should be light touch and less bureaucratic to make it easy for the financial sector to recruit and retain talent. The sector said that the current system should be reformed to reflect the differing needs of different sectors and that salary levels may not always be a sufficient measure of value added.
Figure 13.1 Sector Employment

Share

Sector employment as share of total UK employment (LHS)
Total workers in sector (RHS)
UK and Irish workers in sector (RHS)

Source: Workforce jobs (WFJ), Labour Force Survey (LFS) and Annual Population Survey (APS)

Figure 13.2 Migrant Share of Employment

Share of sector workforce

Source: WFJ, with weighted LFS/APS shares

Figure 13.3 Median Hourly Real Wages

Source: Annual Survey of Household Earnings (ASHE)

Figure 13.4 Median Hourly Wages by Migrant Groups

Source: 3-year APS (2014-2016)
Figure 13.5 Sector Productivity

Source: WFJ

Figure 13.6 Sector Output Growth

Source: WFJ

Figure 13.7 Top 10 Occupations in the Sector by Share

Source: 3-year APS (2014-2016)

Figure 13.8 Occupation Skill level by Migrant Groups

Source: 3-year APS (2014-2016)
Overview of the sector

There has been an almost constant level of total employment in the finance and insurance sector across the previous twenty years – fluctuating around 1.1 million workers. There has, however, been a decreasing number of UK and Irish workers in the sector (Figure 13.1), giving way to the growing number of non-EEA workers. The share of these non-EEA workers has risen from 3.8% to 11.4% in the sector, whilst there has been little growth in the EEA worker share (Figure 13.2).

With output per hour of 173% of the economy average in 2016, and output per job of 199% (Figure 13.5), finance and insurance is a highly productive sector. GVA growth followed the economy average until around 2002 (Figure 13.6), where sector growth exceeded the trend until the onset of the financial crisis. For their high productivity, workers are compensated with wages of well above the economy average, at around 152% of the economy average in 2016.

Median wages vary significantly across migrant groupings (Figure 13.4). EU13+ and Non-EEA workers in the sector have a much higher wage than UK-born workers, with the EU13+ category of workers accounting for the highest wages.

Most occupations in this sector are classified as high skill (Figure 13.8), requiring at least an undergraduate degree. Due to the wide ranging and heterogenous nature of the sector, these high skill workers are spread across many occupations, so many of the most common occupations in the sector are classified as low skill under the NQF framework.

Migrant workers in the sector are comprised of a higher proportion of high skill workers than UK-born workers (Figure 13.8), with EU13+ workers having the largest share of high skill workers, and NMS workers the lowest.20

What we were told - sector responses

Trends and Evolution

Employment

Many respondents from the finance and insurance sector said that they employed a significant number of both EEA and non-EEA nationals in the UK. The proportions varied, from 1.7% at Virgin Money to 27.6% at Standard and Poor (S&P).

UK Finance, a trade association for finance and banking, reported that EEA nationals made up a significant proportion of the workforce of their members but did not provide any figures. Lloyds reported that they attract what they described as talented and experienced professionals of all nationalities including EEA nationals.

20 Where individual skill categories have fewer than 30 unweighted observations, the categories have been merged together. These composite categories contain at least 30 observations, and may contain any combination of either skill level.
They said that their EEA workers were highly skilled people, employed full-time on long-term contracts.

**Methods of recruitment**

All the respondents reported that they made no distinction in their recruitment processes between EEA and non-EEA nationals and that the same recruitment standards were applied irrespective of the nationalities of the candidates. However, they expressed concerns that any restriction placed on EEA nationals would impact negatively on their sector.

UK Finance said that EEA nationals were not hired to the detriment of the resident population. They claimed that for every banking apprenticeship in London, three more were created outside the capital.

**Skills and training**

Respondents focussed on what they saw as the skills and talent gap in the UK workforce. Employers said that they required workers with a wide range of specialist skills, not all of which were described as readily available in the UK. They said that, therefore, they had recruited EEA nationals to fill what they said were gaps in skills and knowledge. For example, they cited language skills which were not readily available in the UK labour force but were said to be essential to operate in the international market.

**Impact**

Many respondents said that the ability to move across borders was a main concern for them. The Institute of Chartered Accountants in England & Wales expressed concerns about the potential impact of any reduction of migration on mobility, graduate recruitment, and uncertainties over the status of UK qualifications in other member states. Other concerns were increased bureaucracy and disruption of normal business activities because of visa requirements, and increased compliance costs from additional reporting and monitoring requirements.

Some employers said that EEA nationals in the financial sector worked in highly specialised and niche roles on investment projects that were aimed at improving/innovating service delivery. UK Finance said that that EEA employees whether at leadership or senior executive level or in specialist roles made a significant contribution to the ability of their members to provide services.

In terms of the future impact of any changes to the immigration system for EEA nationals, employers said that this would make it difficult for their members to attract the required talent to fill their management and technical positions. They also said that any restrictions on the ability of their members to recruit the best and brightest would undermine their ability to grow their business. They further suggested that any future reduction in EEA migration may impact in the following areas:

- public service spending levels as budgets are dependent on economic performance which can be influenced by the number of people entering the labour market;
• regional institutions as they have more difficulty in attracting talent as compared to those in bigger cities;

• costs to businesses that they may have to be passed on to consumers.

Future Prospects

Adjustment

Many of the respondents did not say very much about their future adjustment plans, and those that did suggested increased investment on training to fill the skills gap along with continued access to top talent from the EU. A number of firms suggested training of new workers (including those from the EEA) to fill the gap in skills through apprenticeship schemes. They suggested that the apprenticeship should be available to both UK and EEA nationals and that the training should be on management, digital, infrastructure and capital projects.

UK Finance suggested that any new immigration system for EEA nationals should be light touch and less bureaucratic to make it easy for the financial sector to recruit and retain high-skilled talent. Virgin Money continued the same theme stating that they wanted to see a transition towards a migration system that continued to allow UK financial services firms to recruit and retain highly-skilled staff without undue administrative burdens. S&P said that any future restriction on EEA nationals could toughen the competition for well qualified talent and make it difficult to recruit more senior and skilled workers.

Suggested Future Migration Regimes

S&P reported that they currently had 62 employees on Tier 2 general visas and said that they found the current sponsorship system very bureaucratic and cumbersome with a difficult, expensive and a long drawn out application process and not consistently managed. They called for the system to be made with fewer documentary requirements, allowing quicker processing of visas.

UK Finance called for reforms to the sponsorship system as what they described as the current one size fits all approach that treats all companies and all sectors as the same did not work. They said that there was a need for the Government to appreciate that salary levels may not always be a sufficient measure of value added.
Respondents said that a key reason they recruited EEA workers was to fill skill shortages. Some said that access to a wider pool of talent across the EU was a key reason for the expansion of their business.

Legal and professional service companies said that non-UK workers made up a significant proportion of their workforce, as much as 25% in some cases. Some had seen a growth in employment of EEA workers in recent years which had been higher than that of other non-UK and UK nationals. Sectors employing architects and veterinarians were said to be significantly reliant on EEA nationals at 25 and 30% respectively.

There was concern that restricted access to EEA workers would cause wages to rise.

Employers identified STEM skills as being in particular shortage and that this was reflected in the occupations on the shortage occupation list. They also said that they needed staff who had experience and were work ready. The scientific research sector said that movement to and from the UK was an integral component of research and collaboration. Companies were said to be global enterprises and needed staff with skills and cultural awareness to be able to work with global clients.

Respondents said that they encouraged school leavers into their firms and had outreach programmes. They recruited through online and social media. Opportunities were described as being available to all. Some respondents said that they recruited EEA nationals because they were already in the UK while others said that they recruited from EEA countries to fill vacancies. A number said that the ability to begin a project immediately was a competitive advantage and an integral part of their business.

Several respondents said that lack of access to EEA workers would result in their company being less competitive with those outside the UK, with relocating their business outside of the UK a potential option. Training time was an issue for some occupations, such as architects and veterinarians. Submissions suggested increased links with universities and colleges to increase UK workers in STEM occupations. Expanding the shortage occupation list and having continued access to EEA migrant workers was considered essential to businesses while the UK workforce was upskilled. Retaining access to the brightest and the best talent for sub sectors was argued to be essential to remain competitive on the world stage.
Data

Figure 14.1 Sector Employment

Source: Workforce jobs, Labour Force Survey (LFS) and Annual Population Survey (APS)

Figure 14.2 Migrant Share of Employment

Source: Workforce jobs, with weighted LFS/APS shares

Figure 14.3 Median Hourly Real Wages

Source: Annual Survey of Household Earnings (ASHE)

Figure 14.4 Median Hourly Wages by Migrant Groups

Source: 3-year APS (2014-2016)
Figure 14.5 Sector Productivity

Figure 14.6 Sector Output Growth

Figure 14.7 Top 10 Occupations in the Sector by Share

Figure 14.8 Occupation Skill level by Migrant Groups

Source: WFJ

Source: 3-year APS (2014-2016)
Overview of the sector

The professional services sector is a large sector consisting of 10 different SIC codes, and is very wide ranging. As demonstrated in Figure 1.7, the most common occupations in the sector only make up less than 5% each of the sector, and range from accountants to graphic designers.

Total employment in the sector has risen from 2.1m to 3.9m in the period observed, whilst the sector share of employment has grown from 7.6% to 11.3%. The number of UK and Irish workers in the sector has grown at a slightly slower rate, though still form the clear majority of workers (Figure 14.1). The number of workers across all migrant groups has increased, with the relative percentage increase much larger for migrant groups than UK-born workers (Figure 14.2).

Professional services is a high wage sector, with the median wage of workers standing at 125% of the economy average in 2016 (Figure 14.3). EU13+ and non-EEA workers in the sector have median hourly wages higher than those of UK-born workers, whilst NMS workers receive the lowest pay. These figures are not adjusted for skill level, so will likely be reflective of the skill composition of each migrant group, shown in Figure 14.8.

GVA growth across the sector has accelerated ahead of the economy average (Figure 14.6), though the overall productivity level has remained steady. This echoes the total employment figures presented in Figure 14.1, suggesting proportional growth between GVA and total jobs and hours worked. This confirms the professional service sector to be highly productive.

Due to the many SIC codes the professional service sector covers, the occupations within the sector are made up of a diverse combination of all skill levels (Figure 14.7 and Figure 14.8). The distribution of skill levels across migrant groupings shows EU13+ countries to have the highest skilled workers in the sector, and NMS the lowest. When combined into UK-born workers and migrant workers, the migrant group has a slightly larger proportion of high skilled workers.

What we've been told - sector responses

Trends and Evolution

Employment

The sector is extremely heterogeneous in character, there are a wide range of sub sectors that provide professional services, ranging from consultancy and legal services through to architecture and veterinarians.

Despite the diversity in sub sectors and occupations there were trends across the sub sectors. All sub sectors were concerned predominately with high-skilled workers and argued that a key reason they recruited EEA migrant workers was to fill skills that were either not available or were in short supply in the UK. Some companies
said that access to a wider pool of talent across the EEA was a key reason for the expansion of their business.

Within the legal sub sector the majority of the submissions reported that EEA migrant workers make up a significant number of their workforce. Professional services companies also reported that they employed significant numbers of EEA migrants. Deloitte, for example, reported that around 25% of their workforce were non-UK nationals with EEA nationals making up 10% and non-EEA nationals the other 15%. The submission from Fragomen was based on a survey of their clients and showed that the most important roles performed by EEA nationals were in sales, engineering and research. The same roles were identified also as the most difficult to fill without EEA nationals.

A number of sub sectors indicated that they had seen a growth in employment of EEA migrant workers in recent years in their workforce which had been higher than that of UK and non-EEA nationals. PwC’s submission said they had an increase in the EU share of its workforce over time, rising from 7.1% in 2010 to 9.9% in 2017.

Submissions from Consultancy and Research and Development (R and D) argued that EEA migrant workers were recruited to fill vacancies where there were skill shortages within the UK. Engineering, software developers and bioinformaticians were among the many roles that submissions indicated were in severe shortage. Buro Happold said that 44 percent of its acoustic engineering consultants, computational analysts and software developers were EEA migrants. The Royal Society conducted a survey of UK research infrastructures which reported that 23% of their staff were from other EEA countries and 9% were from the rest of the world. Architecture and Veterinarians have a significant reliance on EEA nationals (25% and 30% respectively). The Federation of Archaeological Managers and Employers said research showed a significant increase in EEA migrant workers increasing from 2% in 2012/2013 to 15% in 2016/2017.

There was concern that restricted access to EEA migrant workers would cause wages to rise which companies said would have an impact on their businesses.

**Shortages**

A wide range of sub sectors argued they suffered from a shortage of Science, Technology, Engineering and Maths (STEM) skills, and it was pointed out that a large number of the occupations being recruited for were already on the Shortage Occupation List. All submissions relating to Research and Development and Consultancy argued they had a severe shortage of suitably qualified science and engineering graduates and senior staff across a range of occupations.

Another related theme was around having access to staff who had experience and were industry ready immediately. Engineering for the Future quoted an IET skills survey “among those that feel the content of engineering and technology degrees does not suit the needs of their organisation, the main reasons are because they don’t develop practical skills (59%) or provide opportunities for students to obtain practical work experience (43%)”.


Round tables with companies indicated they recruited EEA migrant workers who already had these skills sometimes because they had developed them through working in industry rather than being recent graduates.

Sub sectors pointed to expertise and specialisms that were developed in different universities within the EU which was then sought after within the UK, for example within architecture styles of teaching differed between Eastern Europe and Spain. Similarly, R and D argued that different countries have areas of expertise in different specialisms for example colloid science in France and metallurgy in Germany.

A wide range of science research submissions argued that the sector is global in nature and international mobility is an essential feature of researchers’ careers. The Academy of Medical Sciences said that the movement of researchers to and from the UK was an integral component of scientific research and collaboration. It was also said that scientists brought new international contacts on which new collaborations could be built.

Many submissions argued that their companies were global enterprises and having access to migrant workers who had the necessary skills, cultural awareness and language skills was seen as essential to handling global clients.

**Skills and training**

Many submissions pointed to work they already did to encourage school leavers into their profession through outreach with local schools and colleges, apprenticeships programmes that were already in place and others being developed and lecturing at universities to name a few examples.

The Research Councils UK indicated it has “set out a statement of expectation on technology and skills specialists, which include an obligation for research organisations to establish clear career structures, access to specialist training and travel budgets for the development of cutting edge skills”.

**Methods of recruitment**

Professional Services recruited for high-skilled roles through a range of means including Linked in, own website, Facebook and head hunters to name a few. Many submissions said that both recruitment and training opportunities were offered regardless of nationality.

A number of responses indicated they recruited EEA nationals because they were already in the UK at the time of application, drawing on the best international talent without having to recruit directly from other countries. Others indicated they did recruit specifically from the EEA to fill particular shortages. MWH said “Due to the niche skill set recruitment for a chartered engineer with water experience, MWH also uses international recruitment agencies with European databases to search for candidates.”

Consulting, R and D, and Advertising amongst others all argued that the ability to recruit the skill set they needed quickly was an essential feature that ensured they
stayed competitive in the international arena. A diverse range of sub sectors said that the ability to begin a project immediately once funding was sourced or the contract was agreed was a competitive advantage and an integral part of their business.

The ability to move employees around different offices and to visit clients overseas at short-notice and low cost was highlighted as a key benefit of the UK accepting freedom of movement.

**Future Prospects**

**Shortages of labour**

There was a strong concern over the potential loss of international standing and competitiveness if the UK did not have access to the best staff or those able to provide niche skills. Many of the submissions argued that lack of access to the EEA talent pool would result in their company being less competitive with those companies from outside the UK that were able to access the skills they needed. Some submissions said this could lead to them reducing their UK operations and relocate overseas. A number of submissions from the legal sector indicated that Off-shoring/relocation of their business was a real consideration.

It was argued that extending the tier system currently in place for non-EEA migrant workers would represent a significant new cost. PwC said that “any changes to the current system, whether in terms of an administrative requirement or additional costs would significantly disrupt our business model and reduce our ability to compete in the UK and across Europe”.

ELA reported that a substantial number of clients have indicated to them that they were considering whether the future of businesses lay in the UK. However, they suggested this could be mitigated by immigration policy that ensured employers could still access EEA workers in a frictionless way after free movement ends. They understood that there would be immigration controls for Europeans but worried that this would become inflexible.

Concerns were expressed over future access to skills that would not meet the tier 2 criteria for salary or qualifications, for example technicians and archaeologists are essential to scientific research and infrastructure projects respectively but are not necessarily high paid.

**Alternatives to the use of migrant labour**

Some submissions indicated they had made contingency plans for a reduction in EEA migration, however many said they had not. Some cited the lack of clarity over what a new system would look like hindering their ability to make contingency plans as they didn’t know what they were planning for.

Sub sectors pointed to the duration of training time their areas needed, seven years for veterinarians and architects. Of the submissions that said they had plans in place to train UK workers they also said there were long lead times before they would be
realised. Jacobs said “We have a well-developed strategy to train UK workers to fill the skills gaps we face and we are working hard in our STEM activities to support the future growth of our industry sectors. This strategy is in place, but it will be at least 10 years before it is realised and even then, we will need to recruit some numbers of EEA nationals.”

Sub sectors suggested ways to develop the UK pipeline. The Advertising Association said that “closer relationships between the industry and university/college marketing courses should be encouraged so that we foster the right skill-sets and combine practical knowledge with academic knowledge. It is well known that universities feed talent to local businesses (e.g. Cambridge Science Park) and encouraging close ties between local advertising and media businesses will help create talent hot spots in the regions and Nations, as well as in London.”

Johnson Matthey said, “We believe, in the long term, the best way to increase skills is to build greater partnership between business and education institutions at all levels, particularly in relation to technical and manufacturing businesses. We want to collaborate with academia and the UK Government to increase the amount of students taking STEM subjects, and in particular engineering.”

Some submissions argued that access to EEA workers was necessary to increase the diversity in organisations. A few submissions looked at how they could increase their diversity from within the UK workforce. Engineering the Future said that the UK had one of the lowest levels of employer investment in workforce training and upskilling in Europe. “As part of a proactive response to restrictions on EU workers, employers will have to explore moves to upskill their current workforce; offer initiatives that are appealing to British workers (such as career progression schemes); explore using apprenticeships by utilising the apprenticeship levy; and investigate way of retaining or reengaging other underemployed socio-demographic groups such as older workers.”

It was also suggested that reskilling sections of the workforce that carry out low-added value repetitive tasks (whose current roles could be replaced by machines) as well as offering opportunities for those entering STEM careers later in life were opportunities companies could consider.

Many submissions argued that even with training and upskilling of UK staff there would still be a requirement for recruitment from the EEA to find the brightest and the best, as well as niche skills. The Royal Society said “There is a global competition for top talent and the UK must choose an immigration system that can attract these people. To rely solely on the flow of researchers coming through the UK pipeline would have a detrimental effect on the sector’s performance as a whole.”

Suggested Future Migration Regimes

Many submissions argued that the current Tier 2 system was costly, bureaucratic and time consuming. Across all of the sub sectors there was a strong feeling that implementing the tier system for EU nationals would be detrimental to their businesses.
UCB (a global biopharmaceutical company) recommended that the Government design a system “that recognises that for multi-national life science companies with a global footprint it is of vital importance to be able to hire the best talent globally to be competitive, manage succession and international projects in an effective way as well as continue to develop and retain key talent once hired.”

A range of submissions called for any changes to free movement to be managed carefully over time to minimise the potential impacts of the changes. Others wanted to ensure they retained the same level of access to EEA migrant workers as they currently have.

A number of submissions argued that the Shortage Occupation List (SOL) should be expanded to include a range of occupations. There were requests to make the classifications more detailed to fit their occupational requirements. EY argue that the mappings between occupations and skill levels should be updated more frequently. They suggest the MAC conduct “skills audit” on an annual basis to consider the skill levels of occupations, the SOL and minimum salary thresholds. They argued that these two reforms would generate a more dynamic system that responds to the economies needs and thus support a modern industrial strategy. Another suggestion was to review the SOL every six months. A few submissions in this area called for the SOL list to be expanded to included low-skilled workers.
F.15. Non-Professional Administrative and Support Service Activities (SIC 77-82, 95, 96, 97)

Key statistics

<table>
<thead>
<tr>
<th>Year</th>
<th>Share of UK Employment</th>
<th>EEA employment share</th>
<th>Median hourly wage (% of UK average)</th>
<th>Output/hour (% of UK average)</th>
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<tbody>
<tr>
<td>1997</td>
<td>8.8%</td>
<td>2.4%</td>
<td>71.7%</td>
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<td>2004</td>
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<td>2016</td>
<td>10.7%</td>
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<td>78.7%</td>
<td>57.4%</td>
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</table>

We did not receive any evidence about the employment of migrants within this sector.
Figure 15.1 Sector Employment

Source: Workforce jobs (WFJ), Labour Force Survey (LFS) and Annual Population Survey (APS)

Figure 15.2 Migrant Share of Employment

Source: WFJ, with weighted LFS/APS shares

Figure 15.3 Median Hourly Real Wages

Source: Annual Survey of Household Earnings (ASHE)

Figure 15.4 Median Hourly Wages by Migrant Groups

Source: 3-year APS (2014-2016)
Figure 15.5 Sector Productivity

![Graph showing sector productivity]

Source: WFJ

Figure 15.6 Sector Output Growth

![Graph showing sector output growth]

Source: WFJ

Figure 15.7 Top 10 Occupations in the Sector by Share

<table>
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<tr>
<th>Occupation</th>
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<td>Gardeners and landscape gardeners</td>
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<td>Window cleaners</td>
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</tbody>
</table>

Source: 3-year APS (2014-2016)

Figure 15.8 Occupation skill level by Migrant Groups

![Bar chart showing occupation skill levels]

Source: 3-year APS (2014-2016)
Overview of the sector

The non-professional administrative and support service activities sector is a composite sector made up of 9 different SIC codes, and covers many different occupations such as cleaning, hairdressing, landscaping and security guards.

Total employment in the sector has risen steadily over the period observed from employment of 2.5m to 3.7m. The sector experienced a fall in employment numbers in the immediate aftermath of the financial crisis, a pattern that is also reflected in the sector share of total economy employment (15.1).

The composition of the workforce has shifted to a larger share of migrant workers over the twenty years. Non-EEA workers form the largest migrant share, accounting for 11.2% of the sector workforce in 2016. EEA migrants make up 8.8% of the sector employment, with most of this employment consisting of NMS workers, a share that increased immediately after the 2004 EU enlargement (Figure 15.2).

The non-professional administrative and support service activities sector has wages significantly lower than the economy average. Wages have risen relative to the average over the period presented, though remain low, with the median wages amounting to 79% of the UK average in 2016 (Figure 15.7).

When wages are broken down into migrant groups, UK-born workers in this sector receive the highest hourly wages. This is likely to be partially explained by the UK having the highest proportion of workers in high skill occupations, though the heterogenous nature of the occupations within this sector will also contribute to the differences in wages across migrant groups.

The sector has low productivity, with output per hour and per job at just 57.4% and 54.0% of the economy average respectively in 2016 (Figure 15.5). GVA growth in the sector increases by only 12% since the base year of 1997 compared to the economy average of 45%.

Occupations in this sector range from window cleaners to hairdressers, and cover a wide range of skill levels even within occupations. Despite the variance in occupations, the sector is predominantly low skill (Figure 15.8), with 56.0% of UK-born workers in low-skill occupations, and 71.9% of migrant workers (Figure 15.8).
F.16. Public Administration (SIC 84)

Key statistics

<table>
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<th>Year</th>
<th>Share of UK Employment</th>
<th>EEA employment share</th>
<th>Median hourly wage (% of UK average)</th>
<th>Output/hour (% of UK average)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1997</td>
<td>4.9%</td>
<td>1.2%</td>
<td>128.9%</td>
<td>113.8%</td>
</tr>
<tr>
<td>2004</td>
<td>5.0%</td>
<td>1.3%</td>
<td>122.2%</td>
<td>100.3%</td>
</tr>
<tr>
<td>2016</td>
<td>3.8%</td>
<td>2.5%</td>
<td>127.4%</td>
<td>100.9%</td>
</tr>
</tbody>
</table>

Although we did receive a number of responses from local and central government bodies, only a small number of these addressed the issue of migrant workers in the public administration sector. These responses are summarised here.

A sample of local councils provided evidence on the employment of EEA nationals in local government services. The average was 19 per council with a range from 0 to 225.

The Local Government Association identified a Work Local scheme to bring together a joined-up service to support access to work for local individuals and employers.
Figure 16.1 Sector Employment

![Graph showing sector employment as share of total UK employment, total workers in sector, and UK and Irish workers in sector.]

Source: Workforce jobs (WFJ), Labour Force Survey (LFS) and Annual Population Survey (APS)

Figure 16.2 Migrant Share of Employment

![Graph showing share of sector workforce by migrant groups.]

Source: WFJ, with weighted LFS/APS shares

Figure 16.3 Median Hourly Real Wages

![Graph showing median hourly real wages over time.]

Source: Annual Survey of Household Earnings (ASHE)

Figure 16.4 Median Hourly Wages by Migrant Groups

![Bar chart showing median hourly wages by migrant groups.]

Source: 3-year APS (2014-2016)
Figure 16.5 Sector Productivity

Figure 16.6 Sector Output Growth

Figure 16.7 Top 10 Occupations in the Sector by Share

Figure 16.8 Occupation Skill level by Migrant Groups

Source: WFJ

Source: 3-year APS (2014-2016)
Overview of the sector

The public admin sector has observed a decline in total employment numbers, as well as a reduction in the share of total employment (Figure 16.1) across the 20 years of data we have presented. In this period, whilst the overall number have reduced, the migrant share has slightly increased. Non-EEA workers represent the majority of migrants in the sector, at 6.7% of sector employment in 2016 (Figure 16.2).

It’s important to note that whilst the majority of the workers in this sector are employees of public sector organisations, this category does include private-sector employees working for the Government, and LFS data notes that over 1/3 of EU-born workers classified as being under this sector in 2017 were actually private sector workers – likely to be contractors.

This is a higher wage sector, with median wages of 127% of the economy average in 2016. The median hourly wages of both EU13+ and non-EEA workers are above the UK-born value, with only NMS workers earning less. Higher skill levels tend to be compensated at a higher rate, and comparing these wages to the skill levels presented in Figure 16.8 show the wages to be reflective of the skill composition of each migrant group.

In Figure 16.1, the total employment figures begin to substantially decline from 2010 onwards. At this point GVA growth began to decrease, diverging even further below the economy average, (Figure 16.5) to 0.01% less in 2016 than its base year of 1997. Output per hour and per job have remained almost constant across the time observed, suggesting that the hours worked and number of jobs have reduced in line with the decrease in GVA growth (Figure 16.4).

The public admin sector has a combination of all skill levels, with all three represented in the most common occupations in the sector (Figure 16.7)\(^{21}\). The UK-born skill distribution shows medium-skilled to be the largest proportion, whilst the migrant skill distribution is more polarised, and has a larger proportion of both high skill and low skill workers. When the migrant bar is broken down into migrant groupings, the NMS workers have a much larger proportion of low skilled workers, whilst EU13+ workers have the largest share of high skill workers.

What we were told - sector responses

Trends and Evolution

\(^{21}\) Where individual skill categories have fewer than 30 unweighted observations, the categories have been merged together. These composite categories contain at least 30 observations, and may contain any combination of either skill level.
The evidence from the Local Government Association (LGA) said local government was often one of the largest employers in a local area, employing around 1.6 million people in around 800 distinct occupations overall; and commissions services provided by several hundred thousand more people. Many councils and their providers were said to employ non-UK EU nationals in a variety of roles from low-skilled to specialist. Some councils were described as having concerns about future restrictions on their ability to recruit properly qualified professional staff in disciplines such as social work.

The LGA said that few councils had full local data sets because there was no requirement to do so. Most had a nationality marker on personnel records but it was usually voluntary and most employees left it blank. A small sample of councils (around 60) was able to provide some information on numbers of EEA nationals in full, part-time and casual employment. The average across the sample was about 19 per council with a range from 0 to 225. However, the sample was said to be too small to be of use in identifying differences by region and authority type. No data were available in London which was said to be likely to have the greatest number of EEA nationals.

However, the London Borough of Camden told us that of the 4,191 Camden employees (as of 31 July 2017) 79.9% were UK Nationals, 6.7% were EU or EEA Nationals, 5.4% were non-EEA nationals and 8% of nationalities were unknown (either not declared or yet to be captured for new starters).

The Borough said that the proportion of EEA and non-EEA employees had remained constant since 2012, ranging from 6.2% to 6.8% and 5.2% to 5.7% respectively. They said that the 12.1% of EEA and non-EEA nationals working at the Borough was broadly consistent with the 2011 Census which recorded 13% (7.5 million) of the resident population of England and Wales in 2011 being born outside the UK.

Buckinghamshire County Council said workforce data showed that 3% of their employees (114 people) were EEA nationals. The percentage of EEA nationals was higher in Children’s Services and Communities, Health and Social Care, with 7.6% of jobs with social worker in the title being held by EEA nationals.

The Department for Business, Energy and Industrial Strategy told us that they did employ EEA nationals across their organisation and said that the department benefited from those employees’ services and skills and experience e.g. in economic analysis and digital functions.

**Recruitment and skills**

*Local Government*

The LGA said a high performing and well-coordinated employment and skills system which was responsive to the needs of employers and local areas was needed to address skills gaps and shortage by investing adequately in, and targeting retraining and upskilling support of the current workforce and ensuring young people were trained for current and future jobs. The LGA identified a Work Local scheme to plan, commission and have oversight of a joined-up service they said would bring together
advice and guidance, employment, skills, apprenticeship and business support around place for individuals and employers. The LGA expect that this service would each year result in 8,500 more people in work, 6,000 people increasing their skills, additional fiscal benefits of £280 million and a benefit to the economy of £420 million.
F.17. Education (SIC 85)

Key statistics

<table>
<thead>
<tr>
<th>Year</th>
<th>Share of UK Economy</th>
<th>EEA employment share</th>
<th>Median hourly wage (% of UK average)</th>
<th>Output/hour (% of UK average)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1997</td>
<td>7.2%</td>
<td>1.9%</td>
<td>120.6%</td>
<td>140.9%</td>
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<tr>
<td>2004</td>
<td>8.0%</td>
<td>2.3%</td>
<td>114.2%</td>
<td>104.9%</td>
</tr>
<tr>
<td>2016</td>
<td>8.6%</td>
<td>4.0%</td>
<td>119.8%</td>
<td>85.6%</td>
</tr>
</tbody>
</table>

Respondents said that 17% of the academic workforce at higher education institutions (HEI) were EEA nationals, and they comprised 6% of the non-academic workforce. In non-higher education, 4% of teachers were said to be EEA nationals. There was said to be substantial regional and subject variation within HEIs with the largest proportion of EEA staff being in London and the highest proportion in modern languages.

EEA nationals were also said to work in technical and ancillary roles as well as in professional services.

Migrant staff were recruited both from outside and within the UK with the best person for the job being recruited irrespective of nationality. The recruitment of EEA nationals was said not to negatively impact the salary levels of UK workers. International mobility was said to be strongly linked to international collaboration which was linked to greater research impact. Any barriers to international mobility were said to be likely to impact negatively on the UK’s academic competitiveness. Respondents asked that any future migration system enabled universities and schools and colleges to recruit EEA staff.
**Data**

**Figure 17.1 Sector Employment**

- **Source:** Workforce jobs (WFJ), Labour Force Survey (LFS) and Annual Population Survey (APS)

**Figure 17.2 Migrant Share of Employment**

- **Source:** WFJ, with weighted LFS/APS shares

**Figure 17.3 Median Hourly Real Wages**

- **Source:** Annual Survey of Household Earnings (ASHE)

**Figure 17.4 Median Hourly Wages by Migrant Groups**

- **Source:** 3-year APS (2014-2016)
Figure 17.5 Sector Productivity

Figure 17.6 Sector Output Growth

Figure 17.7 Top 10 Occupations in the Sector by Share

Figure 17.8 Occupation Skill level by Migrant Groups

Source: WFJ

Source: 3-year APS (2014-2016)
Overview of the sector

The education sector has expanded over the data presented, growing from 7.2% of total UK employment, to 8.6%, with total employment numbers in the sector rising by 45% (Figure 17.1). In 2016, the migrant share of the sector stood at 12.2%, comprised mainly of non-EEA workers. Though EEA employment in the sector has increased, it still only makes up a less than 5% of total employment in the sector in 2016 (Figure 17.2).

This is a higher wage sector, in which median real hourly wages are around 120% of the overall UK median (Figure 17.3). NMS workers have the lowest wages, whilst EU13+ workers have the highest. The varying wages change in line with the skill compositions of each migrant group presented in Figure 17.8, under the assumption that higher skill occupations are compensated at a higher rate.

GVA growth in the sector has fallen significantly behind the economy average, growing by just 12.2%, compared to the economy average of 45.7% since the base year of 1997 (Figure 17.6). This low GVA growth combined with the growing total employment number has led to low productivity – as demonstrated in the output per job series in Figure 17.5.

Education is mostly a high skill sector, with most occupations requiring an undergraduate degree at minimum (Figure 17.8). The most frequent occupations in the sector are unsurprisingly teaching roles, with the low and medium skill occupations consisting mostly of support roles (Figure 17.7).

When UK born workers and non-UK born workers skill levels are compared, non-UK born workers appear to be higher skilled. Non-UK born workers have a proportion of 59.4% in high skilled occupations, compared to UK born workers proportion of 50.8%.

What we were told - sector responses

This summary divides the sector into two parts, namely higher education and non-higher education with a much higher share of migrants in higher education. The latter includes primary, secondary and further education. First, we look at what each part told us about the overall workforce in the sector and the proportions of EEA and non-EEA migrants working in it.

Overall Workforce

Higher education

The Department for Education (DfE) said that in the academic year 2015-16, there were a total of 33,735 EU national academic staff at UK higher education institutions (HEI), accounting for 17% of the total academic workforce. DfE evidence was that non-EU nationals accounted for 12% of the total academic workforce. In the academic year 2015-16, there were 12,290 EU national non-academic staff at UK HEI’s engaged on non-academic activities, accounting for 6% of the total non-
academic workforce. Non-EU nationals accounted for 4% of the total non-academic workforce. EU (excluding the UK) and non-EU national academic staff were more likely to perform a research-only function at UK HE Institutions than UK nationals, with 37% of EU staff and 39 percent of non-EU staff performing this role compared to 18% of UK academic staff.

The numbers of EU academic staff working in UK HEI’s had been steadily growing over the last 7 years, according to Universities UK. Since the 2009-10 academic year, there had been a 54% increase in the number of EU academic staff working in UK HEI’s, compared to a 24% increase in non-EU national workers and a growth of the total UK academic HEI workforce of 11%.

The evidence we received said that there was substantial regional variation. The largest number of EU academic staff in the UK were said to work in London, where 28% of the total number of EU academic staff were based. However, the region with the largest proportion of EU academic staff relative to its total was identified as Northern Ireland, with 31% of total academic staff in Northern Ireland being EU nationals. The largest proportion of EU non-academic staff in the UK worked in London, where 32% of the total number of EU non-academic staff were based. The region with the largest proportion of EU non-academic staff relative to its total was Northern Ireland, with 18% of total non-academic staff in Northern Ireland being EU nationals.

According to DfE, the EU proportion of the total academic workforce varied significantly across subject areas. The subject area with the highest proportion of academic staff from the EU was modern languages where 36% of academic staff were from the EU. The Russell Group and Universities UK told us that in their member universities there were a greater proportion of EU staff in STEM disciplines and modern foreign languages.

In addition to academic staff, stakeholders provided some evidence relating to technical and ancillary staff. Over 6,000 EU staff at Russell Group universities were said to be in non-academic roles, described as laboratory, IT and medical technicians, assistant researchers and laboratory managers. Some were administrators and in IT support roles. The Russell Group said that there were around 9,000 technicians at Russell Group universities, representing 13% of the total number of Russell Group technicians.

Other stakeholders told us that there were a significant number of EEA nationals working in professional services roles. These roles fell across a range of skill levels and included workers in IT, finance, marketing, HR, catering, security, librarians, administration, alumni development and technical staff.

A 2017 survey by the Universities and Colleges Employers Association was reported as having shown that, in contrast to the academic workforce, the professional services workforce in universities had a lower proportion of EEA staff (6%) than the UK economy as a whole (7.3%). However, we were told that there were still significant numbers of non-UK staff working in professional services roles across the HEI sector and catering, cleaning and security operations were the most internationally diverse.
In terms of the nationalities of person working in the HEI sector, we were told that the EEA nationalities which predominated were relatively similar across the academic and professional services workforce and the top 10 nationalities for both had remained broadly similar.

Non-higher education

The Education and Training Foundation (ETF) supplied analysis on behalf of DfE. The ETF estimated that 4% of the total FE teaching profession were from the EEA. The ETF analysis included trends in the total number of EEA migrants in the FE teaching profession, the subject in which these individuals teach, their working patterns and skills levels. ETF estimated that 42% of the FE workforce were teachers, 17% were administration staff, 6% were technical staff and 26% were service or other support staff. The ETF estimated that approximately 6,600 members of the FE teaching workforce were from the EU. Data from the Foundation’s Staff Individualised Record dataset for the four academic years from 2012-13 to 2015-16 indicated that the proportion of White-Other teachers working in the FE sector had remained fairly constant at around the 5% level.

EEA migrant workers were said to fulfil a wide range of other roles either directly employed by their school, local authority or by contractors working for the school.

Conservatoires UK told us that EEA nationals occupied a number of highly skilled roles in conservatoires that are fundamental to the delivery of performing arts training. For example, the Royal Academy of Music recruited staff to its vocal department who were native speakers in German, French and Italian, who worked as both language and opera coaches.

Recruitment and skills

Higher education

The Department for Education (DfE) evidence was that in 2015-16 there was an inflow of 6,580 EU national academic staff to the UK. DfE said that HESA data showed that around 44% of academic staff were previously working or studying overseas; 33% were already based in the UK; and the previous activity was unknown for 23%. Of the known destinations, the most significant recruitment route was working in an overseas higher education provider (21%), followed by having previously been a student in the UK (16%).

Universities UK told us that UK universities operated transparent recruitment processes which were designed to appoint the best person to the role irrespective of nationality. They said that methods of recruitment did not differ between those used to employ EEA nationals and those used to employ UK nationals, and that UK and EEA nationals were treated equally. Highly specialised roles were usually advertised to meet the resident labour market test requirements.
Impact of migration on the sector

Higher education

Universities UK said that international mobility was strongly linked to international collaboration, which was linked to greater research impact. International collaboration would include staff visiting each other and short-term visiting fellowships of up to one year. Of the top six countries that researchers in the UK most commonly collaborate with, Universities UK said that half were in the EEA. Researcher mobility and the recruitment of staff from these countries helped to facilitate these collaborations. Universities UK said that any barriers to international collaboration, such as restrictions on mobility, were likely to impact negatively on future research and on the global standing of individual UK universities.

We were told that, in higher education, the recruitment of EEA nationals did not negatively impact the salary levels of UK workers. Pay rates for staff below professorial level were determined by the New Joint Negotiating Committee for Higher Education Staff (New JNCHES) which resulted in nationally negotiated pay scales. Under these pay scales, we were told that there can be no different rates paid for particular groups of staff, including between those of different nationalities. DfE told us that the median contract salary for EU academic staff was lower than the median for staff from the UK. DfE cited HESA data which showed the median salary band for EU staff was between £35,001 and £40,000 and the median for UK staff was between £45,001 and £50,000. Salary levels were said to reflect the subject area, region and experience of staff.

Other – including SOL

Universities UK said that a decision to retain the cap on Tier 2 visas and to include EEA migration could significantly restrict the volume of EEA staff employed in research and academia and increase the competition for visas between public sectors and industries. The Russell Group said that the Government should develop a future immigration system for EEA nationals which enabled universities to continue to attract and recruit talented staff from the EEA easily and cost-effectively.

Non-higher education

The Association of College and School Leaders (ASCL) recommended that actions be taken to ensure that the migration of teachers from EEA and non-EEA countries was permitted to help address shortfall in the UK.
## F.18. Health (SIC 86)

### Key statistics

<table>
<thead>
<tr>
<th>Year</th>
<th>Share of UK Employment</th>
<th>EEA employment share</th>
<th>Median hourly wage (% of UK average)</th>
<th>Output/hour (% of UK average)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1997</td>
<td>5.7%</td>
<td>1.2%</td>
<td>111.8%</td>
<td>81.9%</td>
</tr>
<tr>
<td>2004</td>
<td>6.5%</td>
<td>1.6%</td>
<td>121.4%</td>
<td>77.2%</td>
</tr>
<tr>
<td>2016</td>
<td>7.2%</td>
<td>4.1%</td>
<td>123.3%</td>
<td>84.5%</td>
</tr>
</tbody>
</table>

The evidence from the health sector focused on high-skilled roles, almost entirely medical professionals such as consultants and General Practitioners, nurses and dentists. The evidence stressed the overall numbers of EEA and non-EEA workers in the health sector and highlighted potential difficulties in recruiting replacements for these. Chiefly, this focused on the length of time it takes to train qualified staff. Respondents also identified a number of areas where they said there were specific shortages already and said that the non-availability of EEA and non-EEA workers would make these shortages worse.

Some respondents said that there had been a recent reduction in the numbers of EEA staff coming to work in the UK health sector while others said that they had not noticed a reduction.

Broadly speaking, the evidence across England, Scotland, Wales and Northern Ireland was similar. We were told that 10% of doctors in England were EEA nationals with the numbers for Scotland, Wales and Northern Ireland being less than 10%. The figures for nurses were 5% of the workforce being EEA nationals, while the largest proportion were working as dentists at 17%.
**Figure 18.1 Sector Employment**

- Share of sector employment as share of total UK employment (LHS)
- Total workers in sector (RHS)
- UK and Irish workers in sector (RHS)

Source: Workforce jobs (WFJ), Labour Force Survey (LFS) and Annual Population Survey (APS)

**Figure 18.2 Migrant Share of Employment**

Source: WFJ, with weighted LFS/APS shares

**Figure 18.3 Median Hourly Real Wages**

- Median hourly wages in sector
- Median hourly wages over whole economy

Source: Annual Survey of Household Earnings (ASHE)

**Figure 18.4 Median Hourly Wages by Migrant Groups**

Source: 3-year APS (2014-2016)
Figure 18.5 Sector Productivity

Figure 18.6 Sector Output Growth

Source: WFJ

Figure 18.7 Top 10 Occupations in Sector by Share

Source: 3-year APS (2014-2016)

Figure 18.8 Occupation Skill level by Migrant Groups

Source: 3-year APS (2014-2016)
Overview of the sector

The health sector grew steadily between 1997 and 2016, with the share of UK employment rising from 5.7% to 7.2% (Figure 18.1). In this time, changes in the share of EEA workers in the sector have been minor, including slight growth in the share of New Member State (NMS) workers following the 2004 EU expansion. The share of non-EEA workers in the sector grew rapidly between the late 90s and 2010, at which point it levelled out at around 13% of the sector employment (Figure 18.2).

This is a higher wage sector that has seen wages rising relative to the economy average. The real median hourly wage rose from 112% of the UK average in 1997, to 123% in 2016 (Figure 18.3). Hourly wages in the sector are highest amongst non-EEA workers (Figure 18.4).

The health sector accounts for a significant portion of UK GVA, at 5.5% in 2016, although this is significantly smaller than the sector share of total UK employment of 7.2%. Output growth has exceeded the economy average: GVA has doubled since 1997, compared with the UK average growth of around 50% (Figure 18.6). The sector is labour intensive, so labour productivity is below the UK average.

The health sector consists of mainly high-skilled professions, though it also includes many administrative and support roles that are classified as low-skilled (Figure 18.7). All migrants have a higher proportion of workers in high-skilled occupations than UK-born, though when this is broken down into migrant groups, NMS have the largest proportion of low and medium-skill workers.

The health sector is unusual in having other high-quality sources of data on migrant workers which many responses to the call for evidence referred to. In England NHS digital publishes data on “Hospital and community health services staff by nationality and age band of workers”, the latest available data being for September 2017. The use of nationality rather than country of birth underestimates the dependence on non-EEA migrants many of whom have become British citizens. And the most commonly quoted figures on EEA citizens working in NHS England include Irish citizens who would not be affected by future restrictions on migration if the Common Travel Area continues. The proportion of EEA citizens who are Irish is higher in the NHS than in the economy as a whole – about 20%, though higher among ambulance staff and managers. These statistics are particularly useful as giving us accurate monthly data for a wide range of jobs and nationalities.

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One issue that has been raised is how the employment of EEA healthcare staff has changed since the referendum. Figure 18.9 shows there has been a marked fall in the number of Spanish and Portuguese nurses and midwives since the referendum. Numbers of other EU nurses and midwives are higher though not enough to compensate. But employment of EU nurses and midwives remains much higher than in 2013. For doctors, numbers are higher and there is no evidence of any fall since the referendum. Some information on turnover from this source has also been published. One report considers the number of nurses joining and leaving NHS England by nationality 23. The year to September 2017 saw the number of EU nurses joining fall by half compared to the previous year, below the number of leavers for the first time since 2012/13. But there is also a problem with more UK nurses leaving than joining since 2013/14. But a greater number of non-EEA nurses are joining than leaving.

Another source of data comes from the fact that doctors, nurses, midwives and dentists have to be on a register to practice. This register typically records the country in which the necessary qualification was obtained which can be used as an indicator of migrant status.

The numbers of registered EEA doctors have almost doubled since 2000, though they still form the smallest migrant group in the occupation.

Source: NHS Digital, excludes Irish citizens.

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The EU/EEA share of nurses employed in the health sector, as a snapshot at financial year end, has increased almost threefold between 2011 and 2017. The increase in share between year-end 2016 and 2017 was much smaller than previous years.

Source: Nursing and Midwifery Council (NMC)

The NMC also provide data on how many new nurses and midwives have registered each year, as well as how many have deregistered, by country of initial registration. The figure below shows that new EU/EEA nurse and midwife registrations have decreased, whilst deregistration has increased, though this still gives a net increase. The data to March 2018 is not yet available, however, early data for quarter 1 and 2 of the 2017-2018 period suggest that numbers of new registrations from the EU/EEA has decreased significantly compared to the previous period.
Dentistry has also seen a significant reduction in new workers who have qualified in the EEA. This trend, unlike nursing and midwifery, has been a long-term trend that began significantly before the EU referendum. The increase in UK qualified workers has compensated for this reduction.

Despite a reduction in the number of new EEA-qualified registrants, the annual stock of EEA-qualified dental professionals has remained steady, suggesting that there are fewer people deregistering than in the past.
What we were told - sector responses

Trends and Evolution

Overall workforce

Because of centralised data collection, there is a lot of available data on staffing numbers in the NHS and associated professions and stakeholders drew on this data in their evidence to us. In this section, we present the data we received relating to overall EEA and non-EEA staffing levels within the health sector in England, Scotland, Wales and Northern Ireland as well as the data on medical professionals, nurses and dentists. One should note that much of this data is based on nationality. This underestimates the dependence on non-EEA migrants many of whom have become British citizens. And the figures for EEA citizens include Irish citizens which are about 20% of the NHS workforce but would not be affected by future restrictions on migration if the Common Travel Area continues.

In terms of total NHS staff, the British Medical Association, Cavendish Coalition and the Department of Health supplied similar figures indicating that approximately 12% of NHS staff in England (135,000) were nationals of a country other than the UK, including 6% of total NHS staff (60,000) who were EEA nationals. In Scotland, we were told that non-UK workers accounted for approximately 5% of the total NHS workforce. The NHS in Wales was said to have a smaller proportion of EEA nationals, 2% of the overall workforce of 89,307 reporting an EEA nationality.

The Department of Health, the Cavendish Coalition, the General Medical Council and the Royal College of Physicians said that EEA qualified doctors formed around 10% of the total number of doctors. There was variation according to different specialism; for example, 25% of registered ophthalmologists graduated in the EU (according to the Cavendish Coalition and General Medical Council), as did almost one-in-five of all registered surgeons (General Medical Council) whereas the Royal College of Physicians cited 11% of cardiology specialists, 11.6% of infectious disease specialists and 13.2% of neurology specialists being from EU Member States.

In Scotland, the British Medical Association said that EEA nationals comprised around 7% of doctors while this figure was around 9% in Northern Ireland and 6% of doctors in Wales.

The Cavendish Coalition and the British Dental Association said that 17% of dentists in the UK were EEA nationals or were registered on the basis of an EU qualification.

In terms of nursing, the Nursing and Midwifery Council provided a breakdown of entries on their register of 690,773 nurses and midwives. This showed UK trained nurses and midwives were 85%, 10% were overseas (non-EEA) trained nurses and midwives and 5% were EEA trained nurses and midwives.

In dentistry, the Association of Dental Groups said the General Dental Council’s Register showed that some 17% of dentists came from EU countries. The principal
supplier countries were: Poland, Sweden, Spain, Greece, Ireland, and Romania. We were told that in some parts of England and Wales, such as coastal towns and rural areas, dentists from EU countries were delivering in the region of 30% of NHS dentistry.

In the private sector, BUPA told us just under 9% of their UK workforce were EEA nationals and this proportion rose to nearly 17% when non-EEA nationals were included. In the care sector part of their workforce, EEA and non-EEA migrants accounted for over 22% of their total aged care workforce. EEA and non-EEA dentists made up 28% of the total dentist population in their clinics.

Recent changes

Some stakeholders reported recent changes to these figures. The Department of Health said that, in recent years, nurse numbers from the EEA had increased, but that following the introduction of language controls and the referendum, the number of nurses joining from the EEA had reduced significantly. The Nursing and Midwifery Council (NMC) said that the number of EEA trained nurses and midwives joining the register increased from 3,436 in the year 2012-13 to 9,389 in the year 2015-16. However, this declined to 6,382 in 2016-17. Similarly, the Royal College of Nursing said that, in July 2017, the number of new EEA nationals joining the NMC register was less than 6% (71 individuals) of what it was in July 2016 (1,304 individuals). The numbers of EEA nationals leaving the register increased from 1,173 in 2012-13 to 3,081 in 2016-17 (a rise of 162%) whereas the numbers of non-EEA overseas nationals leaving the register increased from 2,095 in 2012-13 to 2,426 in 2016-17 (a rise of 15%). The NMC said the number of EU midwives registering to work as a midwife in the UK had fallen 94% in the 12 months to June 2017.

The General Medical Council said that they had not observed a reduction in the number of EEA graduates on the medical register since the referendum, nor in the number who have joined the medical profession (or an increase in the number leaving) from EEA countries. By contrast, the British Medical Association said that the number of EEA doctors joining the medical register rose steadily from 2011 to a peak of 3,387 in 2014, but fell by nearly half to 1,777 in 2015. The Royal College of Anaesthetists told us that this followed the introduction of English language requirements in June 2014. Some regional variation among the employment of migrant doctors was highlighted. For instance, the Royal College of Physicians pointed to greater numbers of EU nationals working in London than other regions. For example, 1.7% of EU nationals work as doctors in the North East compared to 10.1% in south London.

The British Dental Association told us that applications from EU dentists to work in the UK had decreased by 90 to 95%.

Recruitment and skills

Staff shortages

Shortages of staff and problems in recruiting new staff were themes raised by several stakeholders. The Cavendish Coalition told us that in Scotland there was a
7% vacancy rate for medical consultants, a 10% vacancy rate for paramedics in England, a 11% vacancy rate in jobs for registered social workers and that around 30,000 registered nurse posts were vacant. The Coalition also said that removing EEA physiotherapists from the workforce could double the scale of the recruitment problems and that the current shortage of dentists meant that there was over 400,000 units of dental activity not taking place in the NHS per year. The Chartered Society of Physiotherapy told us that they estimated there was a shortage of around 4,000 chartered physiotherapists across the UK as a whole out of a physiotherapy workforce of around 55,000.

The Royal College of Nursing said that 76% of senior nurse leaders reported they were concerned about ensuring safe staffing levels in NHS services. 90% said they were concerned about recruiting new staff, whilst 84% were concerned about retaining current staff. 82% said that their organisations ran on the goodwill of their staff to keep services operating.

**Recruitment**

Action to address shortages was identified. The Department of Health and the General Medical Council said that the Government was planning to increase nurse training places by up to 5,170 places per year starting in 2018. The first additional trainees would enter the workforce in 2021, and by 2025 around 15,000 additional nurses could be in the workforce. The British Medical Association (BMA) told us that the Government had pledged to increase the number of GPs by 5,000 by 2020, but had faced difficulty filling the posts. In response, according to the BMA, the NHS was seeking to recruit more than 2,000 GPs from overseas.

BUPA said that while the Government’s inclusion of nurses on the shortage occupation list was welcome, any future decisions about recruitment of nurses from overseas should take account of the needs of private providers of public services, in social care, dental care or health care, alongside the needs of the NHS.

The Association of Dental Groups said the intake of trainee dentists had dropped by 14% since 2010/11 (from 1,278 in 2010-11 to 1,105 in 2016). The Association said that Health Education England training budgets for dentistry were now reducing by some 10%.

**Future Prospects**

**Impact of migrant workers**

The majority of respondents from within the health sector said that access to migrant workers was essential to the continued provision of health services in the UK. The British Medical Association said that the ability of UK health services to retain and recruit qualified doctors from overseas was essential, particularly in the short-medium term until domestic supply was increased. The Cavendish Coalition said that the highly-specialised nature of much medical research meant that it could be difficult and unnecessarily restrictive to sustain research projects employing solely UK nationals. The loss of what was described as top medical research and
academic talent would, they said, impact adversely upon UK medical research activity and long-term economic success.

The Department of Health said that if the NHS were no longer able to recruit EEA doctors, nurses and other health professionals it was estimated that, after five years, there would be around 6,000 fewer EEA doctors and 12,000 fewer EEA nurses in the UK. The Department told us that extra training places and reduced attrition rates could help reduce this shortfall, but such interventions were likely to be less effective given the action that is already underway and would be insufficient to fully bridge the gap.

**Suggested Future Migration Regimes**

Health sector stakeholders made a number of comments relating to what they would like to see in any future migration regime and some of these are described here.

The Cavendish Coalition said that the current immigration system for non-EEA nationals made it difficult to recruit individuals from outside of the EEA. Any new system would need to take account of the value and contribution the health and social care sector provided to the UK economy and its population, looking beyond pay as a proxy for skill and value. This point was echoed by the Royal College of Nursing.

The Royal College of General Practitioners called for GPs to be added to the shortage occupation list and the Royal College of Anaesthetists said that arrangements to ensure that EEA citizens could continue to work in the UK’s health and social care sector were needed to mitigate the potential severity of staff shortages. They said that a flexible migration model should be considered so that UK healthcare providers could continue to attract talent from outside the UK.

The General Medical Council pointed out that regulation of doctors from the EEA was determined by the Professional Qualifications Directive (2005/36/EC), and the Council was keen to ease the constraints that the directive placed on the UK. The NMC also raised issues with the directive and the principles of automatic recognition of qualifications enshrined in the directive. They said that while they could test the competence of non-EEA trained nurses and midwives before registering them, they were prevented from doing this for EEA migrants even if they have been out of practice for a significant length of time.

The Royal College of Midwives said that the UK should immediately guarantee the rights of EU midwives and others to remain in the UK post-Brexit. Further, they thought there may be merit in a post-Brexit immigration policy for midwives that centred around the NMC register, i.e. that an EU nurse who met the requirements for inclusion on the NMC register should automatically be allowed to enter and work as a midwife in the UK. HCL Workforce Solutions said that the International English Language Testing System modules the NMC required nurses to pass were not fit-for-purpose and were unsuitably academic in focus, and did not accurately reflect the competencies needed for nurses to fulfil their roles.

The Royal College of Nursing said they considered that a transition period immediately after Brexit of up to four years was needed. During this time, the UK
health and care sectors should be able to continue to recruit internationally educated nurses to maintain service levels.
F.19. Residential and Social Care (SIC 87-88)

Key statistics

<table>
<thead>
<tr>
<th>Year</th>
<th>Share of UK Economy</th>
<th>EEA employment share</th>
<th>Median hourly wage (% of UK average)</th>
<th>Output/hour (% of UK average)</th>
</tr>
</thead>
<tbody>
<tr>
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<td>4.5%</td>
<td>1.2%</td>
<td>75.5%</td>
<td>46.7%</td>
</tr>
<tr>
<td>2004</td>
<td>4.6%</td>
<td>1.6%</td>
<td>77.6%</td>
<td>47.1%</td>
</tr>
<tr>
<td>2016</td>
<td>5.2%</td>
<td>5.1%</td>
<td>74.0%</td>
<td>39.2%</td>
</tr>
</tbody>
</table>

Evidence from respondents focused on 4 care roles with the proportion of EEA workers in each role carrying from 6% to 30%. There were reported to be significant regional variation in these proportions, with the North East and North West of England having the lowest and London and the South East the highest.

Respondents described a number of different ways in which they were trying to attract new recruits and that larger employers had conducted recruitment drives outside of the UK. The recruitment of migrant workers was said not to have affected the training offered to UK staff. Some respondents highlighted that migrant workers tended to work longer hours and offered greater flexibility than UK staff.

Concerns were expressed about the numbers of staff entering the care sector being insufficient to continue to provide care services. Scottish Care said that the impact of reducing the availability of EEA workers would profoundly affect the delivery of social care in Scotland. The International English Language Testing System exam was said to be slowing recruitment of staff.
Data

**Figure 19.1 Sector Employment**

- Share: 25%, 20%, 15%, 10%, 5%
- Employment (000s): 2,000, 1,800, 1,600, 1,400, 1,200

- Sector employment as share of total UK employment (LHS)
- Total workers in sector (RHS)
- UK and Irish workers in sector (RHS)

Source: Workforce jobs (WFJ), Labour Force Survey (LFS) and Annual Population Survey (APS)

**Figure 19.2 Migrant Share of Employment**

- Share of sector workforce: 25%, 20%, 15%, 10%, 5%, 0%

- EU13+ Workers
- NMS Workers
- Non-EEA Workers

Source: WFJ, with weighted LFS/APS shares

**Figure 19.3 Median Hourly Real Wages**

- Wages: £20, £18, £16, £14, £12, £10, £8, £6, £4, £2, £0


- Median hourly wages in sector
- Median hourly wages over whole economy

Source: Annual Survey of Household Earnings (ASHE)

**Figure 19.4 Median Hourly Wages by Migrant Groups**

- £20, £18, £16, £14, £12, £10, £8, £6, £4, £2, £0

- UK + Ireland, EU13+, NMS, Non-EEA

- Excluded due to sample size

Source: 3-Year APS (2014-2016)
Figure 19.5 Sector Productivity

Source: WFJ

Figure 19.6 Sector Output Growth

Source: WFJ

Figure 19.7 Top 10 Occupations in the Sector by Share

Source: 3-Year APS (2014-2016)

Figure 19.8 Occupation Skill level by Migrant Groups

Source: 3-Year APS (2014-2016)
Overview of the sector

The residential and social care sector is a large sector, employing 1.8m workers in 2016, 1.5m of which are UK-born (Figure 19.1). The remaining 300,000 workers are predominantly made up of non-EEA workers – who made up 11.3% of sector employment in 2016, compared with the combined EEA sector share of 5% (Figure 19.2).

The sector has lower than average median hourly wages, that have fluctuated around 75% of the UK economy average (Figure 19.3). Wages amongst migrant workers are lower than UK-born workers when median hourly wages are considered (Figure 19.4). The wages of each migrant group seem to reflect the occupational skill level (Figure 19.8) in the same period, assuming that those in higher skill occupations are paid higher wages.

Though the sector accounts for 5.2% of UK employment in 2016, it only accounted for 1.8% of UK GVA (Figure 19.6), a figure that when combined with the high employment numbers has contributed to extremely low productivity in the sector compared to the economy average, by both measures presented (Figure 19.5). GVA growth in the sector has, however, expanded at a greater rate than the economy average (Figure 19.6).

Care workers and home carers form over a third of occupations in this sector (Figure 19.7). The ninth most common occupation in the sector is nurses – an occupation found predominantly in the health sector, though this demonstrates the notion that SOC codes don’t necessarily correspond to a specific SIC code.

This is a predominantly low skill sector, with 51.1% of UK-born workers in low skill occupations, and 60.4% of migrant workers. The UK has the smallest proportion of workers in low skill occupations, even when the ‘All Migrants’ bar is broken into migrant groupings, followed by EU13+ workers at 54.3%, non-EEA workers at 58.5% and NMS workers at 71.4%.

What we were told - sector responses

Trends

The Care Association Alliance provided evidence on 4 roles: care assistants (NQF2), senior carers (NQF3), nurses (NQF6) and registered managers (NQF5). They said that around 15% of the first 2 groups were non-UK nationals, and over 30% of nurses and 6% of registered managers were non-UK nationals. Christie’s Care said that the vast majority of roles within their business (roughly 87%) were live-in carers, with the remaining positions made up of head office support roles. The live-in carer roles required no previous experience and were classed as low-skilled. Scottish Care told us they had carried out a workforce survey in 2017 which indicated that approximately 6% of the care home workforce originated from the European Union and a further 6% from other countries. In relation to nurses, this EU figure increased to nearly 8%. The Scottish Social Services Council (the regulator
for the social services workforce in Scotland) cited workforce data but these were based on the 2011 Census.

The Care Association Alliance said there were significant variations between different regions in all 4 of the key roles. The North-East and North-West had lower levels of overseas staff in all 4 roles, with almost no overseas staff in care assistant, senior carer or registered manager roles. The two regions most dependent on immigrant labour were the South East and London. In the South East, 25% of care assistants were non-British nationals (12% from the EU), 25% of senior care assistants were non-British nationals (10% from the EU) and 50% of nurses were non-British nationals (25% from the EU). In London, 42% of care assistants were non-British nationals (13% from the EU), 40% of senior care assistants were non-British nationals (8% EU) and 45% of nurses were non-British nationals (21% EU).

In terms of changes to the make-up of the workforce, Christies Care said there had been a slight decrease of EEA applications since July 2017 although the overall application rate had increased. Four Seasons Healthcare told us that there had been an 18% increase in the numbers of care sector staff leaving the UK after the referendum than in the 16 months before. There had been a 40% reduction in new EEA nurse starters since the Brexit vote compared to the 16-month prior period. Since early 2016, Four Seasons said they had seen a decline of approximately 70% in the number of applications for registered nurse positions from EEA countries.

**Recruitment and skills**

Care England outlined a number of ways they attempted to attract individuals to work and stay within the sector including pilots testing out new ways of integrated working, offering new incentives such as reviewing pay structures, introducing “golden hellos”, offering staff benefits such as vouchers, discounts at major stores, discounted health club membership, travel discounts, Childcare vouchers and paid Nursing and Midwifery Council membership. Other measures included developing local schemes to “grow their own” nurses by linking with local colleges and universities to create new career pathways for recruiting and developing nurses within nursing care homes, offering access to clinical specialist training and post-graduate qualifications, as well as creating opportunities for leadership development or stepping onto specialist roles.

The Care Association Alliance said that larger employers had the resources to fund recruitment drives in foreign countries and these had been carried out to attract EEA and non-EEA nurses. The majority of overseas recruitment came either from word of mouth or via the use of an employment agency. Other stakeholders told us that recruitment was predominantly carried out online and some providers used agents based in, for example, Poland or South Africa. All new starters received the same training, regardless of nationality, and therefore stakeholders argued that there was no effect on UK workers’ training due to migrant workers.

In relation to Scotland, Scottish Care told us that a survey they had conducted in 2017 showed that the nurse vacancy level across Scotland among respondents to the survey (comprising 60% of the total sector) was 31% and for some providers was as high as 60%. Scottish Care said the number of organisations experiencing difficulties filling nurse vacancies had increased year on year and there were some
parts of the country where the recruitment of nurses was considered to be particularly challenging, such as Edinburgh and Aberdeenshire.

With regard to Northern Ireland, the Macklin Group said that the care home sector in Northern Ireland had suffered a qualified nurse shortage for the last 25 years and had mitigated against this by recruiting staff nurses from inside and outside the EEA.

The Care Association Alliance said they believed that EEA migration had not affected the training offered to UK staff. University placements were almost solely used to train nurses for the sector. The majority of care assistants and senior care assistants would be put on an NVQ/QCF course in adult social care under the guise of an apprenticeship. The Alliance said that the vast majority of the apprenticeships funded within adult social care were provided to existing staff that were already employed, and brought very few new people into the sector. Four Seasons Healthcare said that they had developed the Care Home Assistant Practitioner role (CHAP) as part of an industry-wide initiative with Care England. The role reflected the changing care needs of residents and provided the most promising carers, including those from the EEA, with the opportunity to take on more responsibility and develop their skills and careers.

The Care Association Alliance said that most employers would try to recruit locally before resorting to overseas staff since growing up with English values, preferably in the local area (so that geographical memories can be shared), ability to speak fluent English and, for many service users, being of the same race were characteristics that would put an English candidate with equal experience and ability above that of a foreign candidate when choosing employees. On the other hand, the Alliance said that that the main advantages of EEA employees was that they work longer hours; therefore, to fill 4 FTE posts may only require 3 EEA employees. Anecdotally, care providers told the Alliance that non-UK staff (either from the EU or outside of the EEA) were much more flexible when working unsociable hours.

**Future Prospects**

**Impacts**

The Care Association Alliance cited the Skills for Care annual report showing the number of UK trained nurses entering the register each year had been below the number of nurses leaving the register for the last 5 years. Other stakeholders said that a stop on EEA nationals working in the care sector would greatly damage the ability of care providers to work in the way that they currently do.

Scottish Care told us that they were of the opinion that allowing employers to recruit from outside the EEA provided an important avenue of support to the sector and therefore ultimately for those people who needed its services. They said that presently, despite initiatives such as the Scottish Living Wage, all other mitigatory measures were not meeting current demand. They said it was routinely possible to get paid more money to stack shelves in a local supermarket than to deliver care and support to vulnerable citizens. Scottish Care said they were concerned that the impact of reducing the availability of workers from the EEA, both nurses and support workers, would have a profound effect on the delivery of social care in Scotland and
that to fail to address the extreme lack of nurses and support workers in the social care sector would severely compromise both social care and NHS services in the very near future.

**Suggested Future Migration Regimes**

Some stakeholders told us that significant numbers of their candidates for employment were studying in order to prepare for the International English Language Testing System (IELTS) exam, and that some had been at this stage for more than 12 months and some as long as 24 months. It was estimated that it was taking, on average, 57 weeks to recruit a new registered nurse from outside the EEA as candidates were taking more than 4 attempts to pass the IELTS.

The Macklin Group told us that what Northern Ireland needed was an immigration system based on economic need and that the potential inability to easily access EEA labour would impede Northern Ireland’s economic recovery. Given the acute shortage of workers in social care, they said that migration to fill vacancies in this sector should be protected by an expansion of the shortage occupation list to cover immediate skills gaps.
F.20. Creative Arts and Entertainment (SIC 90-93)

Key statistics

<table>
<thead>
<tr>
<th>Year</th>
<th>Share of UK Employment</th>
<th>EEA employment share</th>
<th>Median hourly wage (% of UK average)</th>
<th>Output/hour (% of UK average)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1997</td>
<td>2.4%</td>
<td>1.7%</td>
<td>78.8%</td>
<td>94.4%</td>
</tr>
<tr>
<td>2004</td>
<td>2.6%</td>
<td>2.4%</td>
<td>78.6%</td>
<td>81.8%</td>
</tr>
<tr>
<td>2016</td>
<td>2.9%</td>
<td>4.3%</td>
<td>78.6%</td>
<td>65.7%</td>
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</tbody>
</table>

The arts and creative sector employs both low and high-skilled workers from the EEA. Freelancers make up a significant proportion of this sector (35% according to DCMS). Self-employment rates are also very high.

Many submissions stressed the requirements for flexibility within their workforce, as workers were often needed at very short notice to undertake work.

A number of occupations were already on the shortage occupation list. Organisations pointed out that they would always have to seek the best talent worldwide as innate ability was not a skill set that could be taught.

London has a higher density of EEA migrant workers in this sector than other parts of the country.
Data

Figure 20.1 Sector Employment

Figure 20.2 Migrant Share of Employment

Figure 20.3 Median Hourly Real Wages

Figure 20.4 Median Hourly Wages by Migrant Groups

Source: Workforce jobs (WFJ), Labour Force Survey (LFS) and Annual Population Survey (APS)

Source: WFJ, with weighted LFS/APS shares

Source: Annual Survey of Household Earnings (ASHE)

Source: 3-year APS (2014-2016)
Figure 20.5 Sector Productivity

Source: WFJ

Figure 20.6 Sector Output Growth

Source: WFJ

Figure 20.7 Top 10 Occupations in the Sector by Share

Source: 3-year APS (2014-2016)

Figure 20.8 Occupation Skill level by Migrant Groups

Source: 3-year APS (2014-2016)
Overview of the sector

Creative arts and entertainment is a growing sector, which aside from a small fall following the financial crisis, has seen increasing employment numbers between 1997 and 2016. The sector has grown from 2.4% of total UK employment in 1997 to 2.9% in 2016.

The share of migrants in the sector appears to have changed little over time (Figure 20.2), but the migrant share has risen from 6.3% to 11.0% of sector employment, a growth rate of 75.6% - three times the sector’s total growth rate.

Wages in the creative arts and entertainment sector are have remained at around 78% of the UK average across the 20 years of data presented (Figure 20.3), making this a low wage sector. The wages of NMS workers are almost the same as those of UK-born workers (Figure 20.4), but non-EEA and EU13+ workers are compensated with higher wages.

The sector has suffered declining productivity, with output per hour and output per job at 65.7% and 50.1% respectively of the economy average in 2016, compared with 94.4% and 74.8% respectively in 1997 (Figure 20.5).

Occupations in the sector are heterogenous, and inevitably cover a variety of skill levels (Figure 20.7)\(^24\). Migrant workers in the sector have a higher proportion in medium and high skilled occupations than UK-born workers, though when this is broken out into migrant groupings – NMS workers have a significantly higher portion of low skilled workers (Figure 20.8).

What we were told - sector responses

Trends and Evolution

Employment

Within this sector we cover Arts and Creative Industries, the Art Market, Heritage, Horseracing, Museums and Sport. While all sectors are heterogenous, it is even more apparent within the creative, arts and entertainment sector, given the range of skills, activities and low to high-skill requirements for the sub sectors.

This variety is demonstrable through a range of factors. DCMS said that EEA nationals made up 6.7% of the 1.96 million workers in the UK’s Creative Industries, equivalent to 131,000 people and that EU total employment (employed and self-employed) varied from 3% (Sport) to 7% (Creative Industries and the Digital Sector).

\(^{24}\) Where individual skill categories have fewer than 30 unweighted observations, the categories have been merged together. These composite categories contain at least 30 observations, and may contain any combination of either skill level.
A number of sub sectors reported significantly higher than average reliance on EU labour. For example, a 2016 survey by UK Screen Alliance suggested that among leading UK Visual Effects firms, 43% of employees were from outside the UK or the Republic of Ireland, with 30% coming from other EU Member States.

DCMS said that there was a higher proportion of both EEA and non-EEA nationals employed in London than elsewhere in the country, averaging at 12% for EEA nationals and 21% for non-EEA nationals.

**Flexible working**

The Creative Industries Federation said that self-employed and freelance workers played a vital role in the creative industries and that freelancers accounted for half of creative jobs in the sector.

DCMS said that freelancers make up 35% of the creative sector, compared to 16% of the economy as a whole, and 6.4% of those freelancers were non-UK EU nationals, equivalent to 43,000 people. DCMS said self-employment rates were 70% in music and performing arts, 61% in design and designer fashion and 38% in film, TV, video, radio and photography. Some sub sectors pointed to the use of short term contracts of three to six months as a regular feature of the sector.

Freedom of movement allowed companies the flexibility to access migrant labour at short notice. This was seen as integral to the functioning of many sub sectors and there was widespread concern over the potential loss of access to this flexible labour source.

**Methods of recruitment**

Recruitment practices across the sub sectors was varied, often reflecting the length of the particular project that was being worked on. Short term and temporary contracts were frequently used complimenting the flexible workforce that was available. A variety of methods were listed as means of recruitment ranging from advertising on the company’s own website, in national media and in industry publications and websites; approaching partner organisations in the EEA; member’s own networks; recruitment agencies; performers’ agents; social media; and word of mouth.

**Skills and training**

Certain sub sectors indicated that EEA nationals were a vital part of their company through the unique skills that they brought which were not available in the UK, (such as native language speakers and cultural knowledge).

The Heritage Alliance submission quoted the Archaeological Market survey 2017 which said that approximately 15% of the archaeological labour force was drawn from the EU. The Heritage Alliance further said that there were not enough trained archaeologists to do excavations and other investigations required on the over 40 major infrastructure projects planned across the UK over the next 17 years.
A number of sub sectors indicated that greater investment in schools was required to increase the basic skill set for them to recruit from. The Creative Industries Federation said “The creative industries have major skills gaps in the domestic workforce. This is due to a combination of inadequate provision in schools, an underdeveloped technical education system and a lack of awareness about careers that the sector has to offer.” The Incorporated Society of Musicians pointed to recent changes by the Department for Education (DfE) commenting that uptake of GCSEs and A levels in creative industry relevant subjects had declined dramatically in the last two years.

Future Prospects

Alternatives to the use of migrant labour

Domestic Labour

A number of sub sectors indicated that they could do more to increase UK workers with the skill sets they required and that they had recently begun to increase their attempts to recruit and train UK workers (either before the referendum or as a result of it).

Relocation

Creative Industries Federation said that many sub sectors of the creative industries were highly mobile and could deliver work remotely, for example post production on films is frequently done in different countries from a shoot. Similarly, the Association of Model Agents predicted that the fashion industry would simply bypass London if it was more difficult to bring in models. A number of sub sectors expressed concern that a more complex and bureaucratic system of recruitment from the EEA would make it problematic for their companies to compete within the EU and globally against other companies in the EU who did not face the same barriers or additional costs to recruitment.

Suggested Future Migration Regimes

Several sub sectors felt that the Shortage Occupation List should be extended to cover low-skilled workers who were essential to the functioning of their sector, for example casual staff for live music concerts and front of house and cleaning staff for theatres. Other sectors suggested an expansion of the SOL to cover particular high-skilled occupations. Live Nation Entertainment said that all technical roles should be included on the shortage occupation list and that the list needed to be regularly updated in real time to meet business requirements.