

The East Midlands in 2010: The Labour Market

A report prepared by *emda*

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4.1 Introduction

In standard economic theory, output is determined by the amount and quality of capital and labour that is available. When the supply of labour expands, output can increase without causing strong inflationary pressure. This was the experience of the UK in the decade until recession in 2008. Increased employment in the UK was driven by increased labour demand – a derived demand – and increased labour supply, partly a result of international migration but also of welfare to work policies.

This chapter of The East Midlands in 2010 highlights a range of labour market phenomena related to labour supply and demand, skills supply and demand and the quality of labour. In addition, it discusses earnings of workers and residents in the region and the issue of the low skills low pay equilibrium in the East Midlands.

Section 2 contains a comparison of the performance of the UK labour market with European and international competitors, looking in particular at employment and unemployment trends. In 2008 the employment rate in the UK was substantially higher than the OECD average. However, as a result of the recession the unemployment rate is increasing in the UK but remains below that of the UK's key competitors. This section also assesses the workforce skills levels highlighting that the UK's skills base has deficiencies, despite pockets of excellence.

Section 3 analyses labour supply and demand in the East Midlands. Economic activity and employment in the East Midlands has historically been higher than the UK average. However, there are areas of high unemployment in the region's larger cities, around the former coalfields area and on the Lincolnshire coast.

Section 4 assesses the skills profile of the regional workforce and investigates East Midlands employers' view of skills shortages and training activities. The analysis highlights that, despite the significant improvements in the qualifications of the workforce, the demand for these higher level skills appears to be lagging behind this increasing supply.

Section 5 analyses the demand for skills by the knowledge intensity of employment and the skills gaps among current staff. The section shows that in the East Midlands, just as in the UK as a whole, there has been a reduction in the proportion of the workforce employed in the least knowledge intensive sectors. Skills gaps in the region have been reduced significantly from 2003, while there has been a strong growth in the proportion of establishments providing training in the region.

Section 6 analyses the region's occupational structure and projections for the next decade. The current occupational structure exhibits a greater proportion of regional employment in 'lower tier' occupations than in the UK. At the same time the proportion of 'upper tier' occupations account for a lower share of the regional workforce compared to the national average. Future projections suggest a "hollowing out of the middle" effect as an expansion of 'upper tier' occupations accompanies a decline of 'lower tier' and particularly skilled trades and administrative and secretarial occupations, both in the UK and in the East Midlands.

Section 7 assesses the earnings of workers and residents of the region. Earnings in the East Midlands are below the UK average and the gender pay gap in the region is greater than in the UK. In those areas where residence-based earnings were higher than workplace based earnings, this tends to be because individuals in higher paid jobs commute to work elsewhere.

4.2 International context

The UK entered recession in the second quarter of 2008 and labour market conditions began to deteriorate in the following quarter. The UK labour market faces this challenge from a relatively advantageous position compared to other international competitors. This section provides a short assessment of how the UK compares to its major competitors.

4.2.1 International comparisons of employment, unemployment and economic inactivity

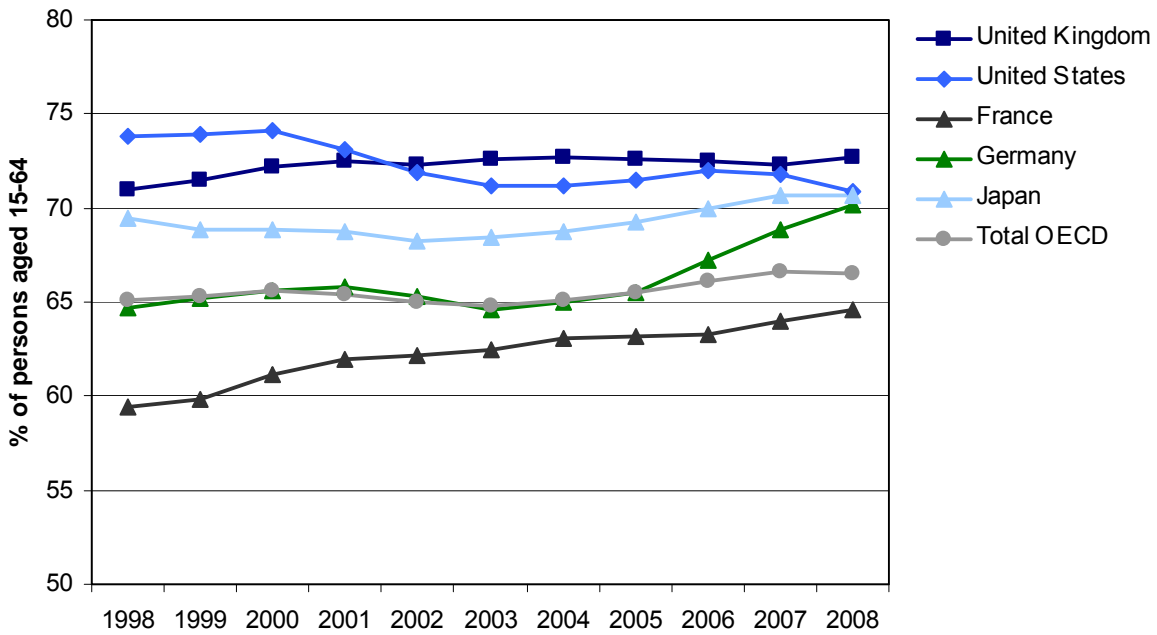
In spite of the recession, the UK managed to maintain its historically strong employment rate in 2008¹. The employment rate was 72.7% in the UK, substantially higher than the OECD² average of 66.5%. The UK has consistently recorded higher rates of employment than France (64.6%) and Germany (70.2%). The UK employment rate exceeded that of the United States of America in 2002 and has remained higher since then. However, it is worth noting that the employment rates of Scandinavian countries are even higher than in the UK, at 78.4% in Denmark, 78.1% in Norway and 75.7% in Sweden³.

¹ Employment rate is generally defined as persons aged 15-64 years who are in employment divided by the working age population. However, in case of the US and UK along with some other countries, the observed population refers to persons aged 16 to 64 (Organisation for Economic Co-Operation and Development, 'Employment Outlook 2009', 2009, Statistical Annex).

² Organisation for Economic Co-Operation and Development (OECD) countries work together to address the economic, social and environmental challenges of globalisation. The OECD member countries are: Australia, Austria, Belgium, Canada, the Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Japan, Korea, Luxembourg, Mexico, the Netherlands, New Zealand, Norway, Poland, Portugal, the Slovak Republic, Spain, Sweden, Switzerland, Turkey, the United Kingdom and the United States.

³ Organisation for Economic Co-Operation and Development, 'Employment Outlook 2009', 2009, Statistical Annex Table B.

Chart 1: Employment rates in selected OECD countries, 1998-2008 (%)



Source: Data between 1997 and 2006 are from Organisation for Economic Co-Operation and Development (OECD) Factbook 2008: Economic, Environmental and Social Statistics, Annual Labour Force Statistics, downloaded from OECD. StatExtracts (11 April 2008). Data from 2004 are from OECD, 'Employment Outlook 2009', 2009.

Due to the recession unemployment rates had increased in much of the OECD countries. Between 2007 and 2008, OECD unemployment rate increased from 5.7% to 6.0%. The unemployment rate in the UK has increased from 5.3% to 5.6% by 2008. However, the unemployment rate in the UK still remains below the OECD average of 6.0%. The UK has consistently recorded lower unemployment rates than Germany and France. In 2008 the unemployment rate in Germany was 7.3% and in France 7.8%. From 2005 the UK unemployment rate exceeded that of the United States of America and Japan. In 2008 the unemployment rate in the United States of America was 5.8% and just 4.0% in Japan.

Latest OECD statistics⁴ show that the unemployment rate for the OECD area was 8.8% in December 2009. This is 1.8 percentage points higher than a year earlier. In the Euro area⁵, the unemployment rate was 10.0% in December 2009. This is 1.8 percentage points higher than in December 2008. For the United States, the unemployment rate for December 2009 was also 10.0%. This is 2.8 percentage points higher than a year

⁴ Organisation for Economic Co-Operation and Development (OECD), Harmonised Unemployment Rates, News Release, for Nov 2009.

<http://www.oecd.org/dataoecd/17/54/44563975.pdf>

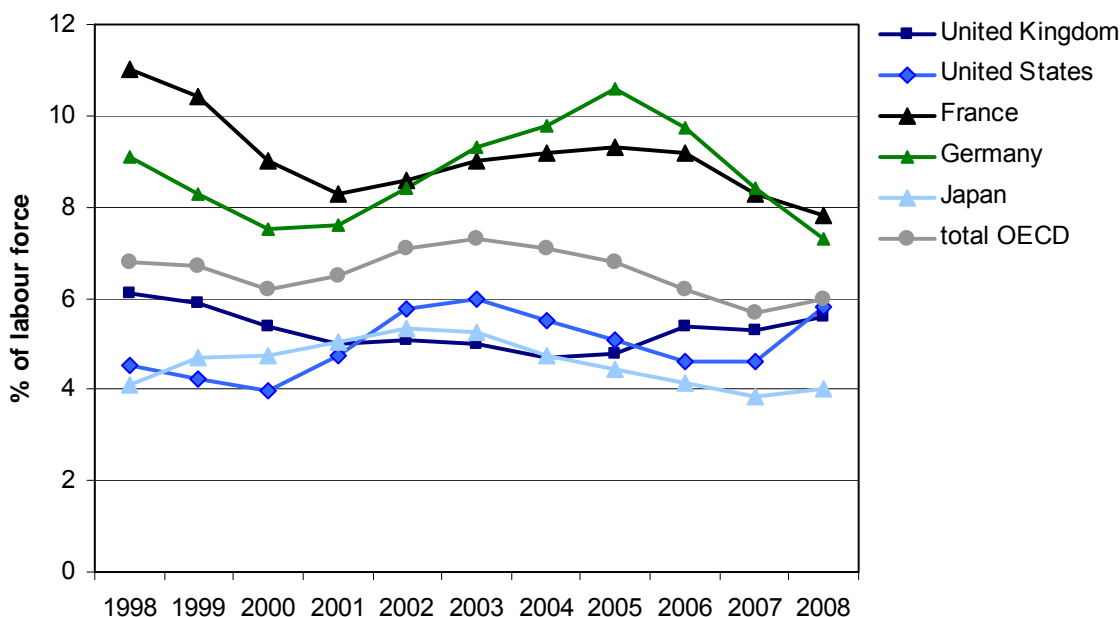
Note: For methodological reasons, harmonised unemployment rates may differ from those published by national statistical institutes. All rates quoted are seasonally adjusted.

Next release: Monday, 8 March 2010.

⁵ The Euro area (EA16) consists of Belgium, Germany, Ireland, Greece, Spain, France, Italy, Cyprus, Luxembourg, Malta, the Netherlands, Austria, Portugal, Slovenia, Slovakia and Finland.

earlier. In December 2009⁶, the rate in the United Kingdom was 8.1%. This is 1.3 percentage points higher than in December 2008.

Chart 2: Unemployment rates in selected OECD countries, 1998-2008 (%)



Source: Organisation for Economic Co-Operation and Development, 'Employment Outlook 2009', Statistical Annex Table A.

Forward-looking indicators suggest the recovery will be gradual in coming years. Latest forecasts published by the OECD⁷ suggests that unemployment rates will increase in most OECD countries in 2010 but some signs of easing will emerge in 2011.

4.2.2 International comparison of workforce qualifications

Some of the benefits of education include increased productivity and higher individual wages as skilled workers are better able to identify market opportunities, drive innovation by adapting new technologies, facilitate investment and improve leadership and management. Skills are one of the five drivers of productivity⁸ identified by the UK Government. In recognition of the importance of skills, the Government commissioned the Leitch⁹ review to develop policies which aim to close the skills gaps between the UK and other major European competitors.

⁶ UK unemployment rate refers to the period November-January 2010, three months rolling average published on a monthly basis by the Office for National Statistics, Labour Market Statistics, Statistical Bulletin, March 2010.

⁷ Organisation for Economic Co-Operation and Development, 'Economic Outlook Volume 2009 Issue 2' Annex Table 13.

⁸ The other four drivers are discussed in the economy chapter: innovation, enterprise, competition, investment.

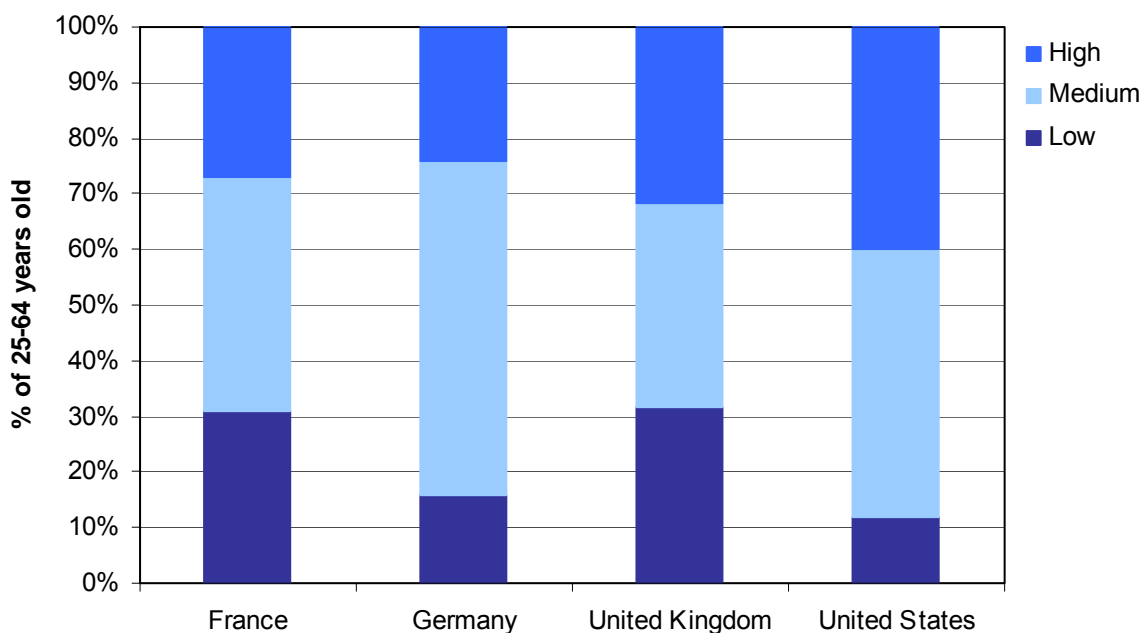
⁹ 'Leitch Review of Skills, Prosperity for all in the global economy – world class skills', 2006.

Gambin Lynn et al., Warwick Institute for Employment Research, University of Warwick, commissioned on behalf of *emda*, 'Exploring the links between skills and Productivity', 2009.

The level of educational attainment of the population is a commonly used proxy for the stock of “human capital”, that is, the skills available in the population and labour force. It must be noted, however, that the skills composition of the population varies substantially between different countries depending on the general level of economic development, the industrial structure of the economy and the occupational structure of the workforce.

The proportion of people with low or no qualifications in the UK is double that in Germany and more than double that in the United States. The proportion of the UK population qualified to intermediate level is lower than France, Germany and the US, confirming that the UK’s skills base has deficiencies despite pockets of excellence. The proportion of people with high skills is average in international terms.

Chart 3: Proportion of 25-64 year old population by highest qualification level, 2007 (%)



Source: Organisation for Economic Co-Operation and Development, ‘Education at Glance: OECD Indicators – 2009 Edition’, OECD, 2009. Table A1.1a.

Note: Low level refers to “ISCED 0-3c Short” based on the International Standard Classification of Education (ISCED) which is equivalent to NVQ 1 (GCSE – below grade C). Medium level refers to “ISCED 3c long programmes/3b, ISCED 3A” which is equivalent to the NVQ 2 (GCSE – 5 or more A*-C) and NVQ 3 (A-level – 2 or more). High level refers to ISCED 4 and above which is equivalent to NVQ 4 (first degree or equivalent) and NVQ 5 (higher degree). The source of this note is HM Treasury and DTI, ‘Productivity in the UK 5: Benchmarking UK productivity performance’ and OECD ‘Education at Glance 2009’.

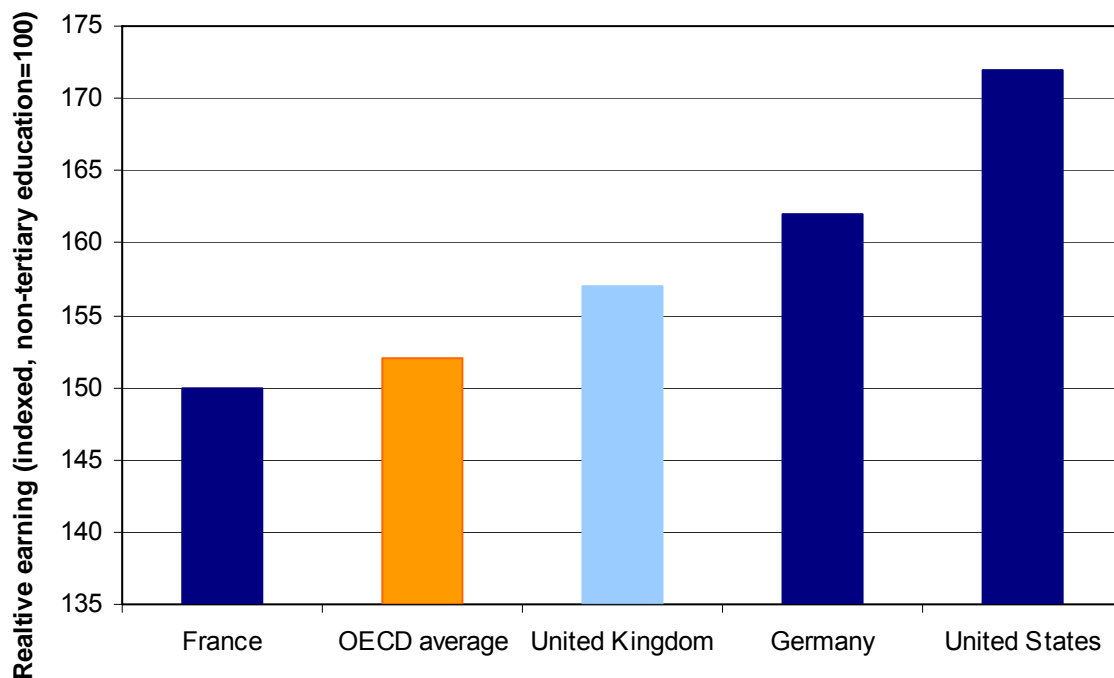
Higher education graduation rates have grown significantly in OECD countries in recent decades, including the UK. The proportion of 25-64 years old with the highest qualification at tertiary level increased in every OECD country. In the UK, 24% of the adult population was qualified at graduate level in 1998. By 2007 this increased to 32%. The OECD average increased from 20% to 27% in the same period¹⁰.

¹⁰ Organisation for Economic Co-Operation and Development, ‘Education at Glance: OECD Indicators – 2009 Edition’, OECD, 2009. Table A1.4.

The expansion of higher education has had a positive impact for individuals and economies. However, concerns have been raised about whether the increasing supply of well educated labour has been matched by the creation of an equivalent number of suitable jobs.

Earnings differentials between the annual earnings of those who graduate from tertiary education and the annual earnings of those with secondary or other non-tertiary qualification is a straightforward indicator of the benefit of completing tertiary education. In 2007, in the UK, those who graduate from tertiary education, earn 57% more than those without tertiary qualifications. The earnings premium of graduates is still slightly greater in the UK than the OECD average of 52%. Earnings premium of graduates from tertiary education is slightly lower in France at 50%. In contrast, the earnings premium of those who graduate from tertiary education is the greatest in the United States of America, where they earn 72% more of those without graduate level qualification.

Chart 4: Relative earnings from employment of 25-64 year olds with tertiary education, 2007 (non-tertiary=100)



Source: Organisation for Economic Co-Operation and Development, 'Education at Glance: OECD Indicators – 2009 Edition', OECD, 2009. Table A7.1a

Note: Upper secondary and post secondary non-tertiary education=100.

Key Points: International context

- In spite of the recession, the UK managed to maintain its historically strong employment rate in 2008 at 72.7%, which was substantially higher than the OECD average of 66.5%.
- Due to the recession, unemployment rates have increased in most of the OECD countries. The unemployment rate in the UK in December 2009 was 8.1%.
- Latest forecasts published by the OECD suggests that unemployment rates will increase in most OECD countries in 2010 but some signs of easing will emerge in 2011.
- The proportion of people with low or no qualifications in the UK is double that in Germany and more than double that in the United States. The proportion of the UK population qualified to intermediate level is the lowest among France, Germany and the US, confirming that UK's skills base has deficiencies, despite pockets of excellence.

4.3 Supply of and demand for labour

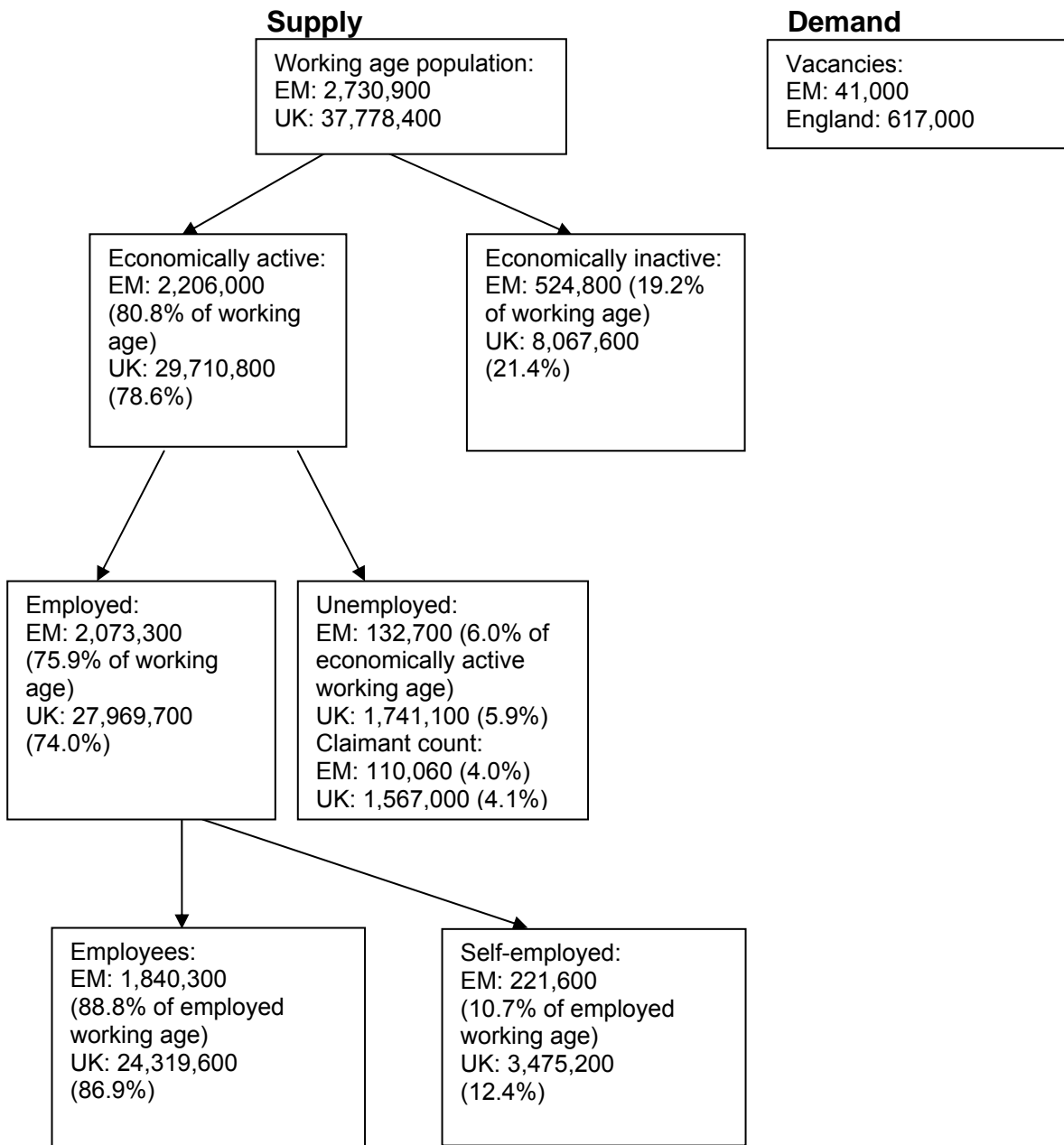
One of the key factors determining how much output can be generated in an economy is the supply of available labour. The Office for National Statistics (ONS)¹¹ has developed a framework for labour market statistics which is based on the concept of labour supply. This approach has wide international acceptance, including by the International Labour Organisation (ILO).

The labour supply consists of people who are employed, as well as those people defined as unemployed or economically inactive. The ONS framework distinguishes between different working arrangements as well, namely between those in employment such as employees and the self-employed and those on Government schemes.

Labour demand is a derived demand from employers who have a need for work to be done, and who offer compensation for this work. In the framework applied by this chapter, a job that has been identified by an employer, but which is not being undertaken by anyone, is a vacancy.

¹¹ Office for National Statistics, 'Labour Market Framework'.
<http://www.ons.gov.uk/about-statistics/user-guidance/lm-guide/lm-framework/index.html>

Chart 5: Supply of and demand for labour, East Midlands (EM) and UK, 2008



Source: ONS Crown Copyright, 'Annual Population Survey', January-December 2008, from NOMIS. Vacancy data are from BMG Research on behalf of The Learning and Skills Council in the East Midlands, 'National Employers Skills Survey 2007: report of results for the East Midlands', Table 13. Note: Self-employed as the proportion of employed is not the same as self employment rate. This latter is the proportion of self-employed in the working age population which was 8.1% in the East Midlands and 9.2% in the UK in 2008.

The definitions of labour market statistics used by the Office for National Statistics are in line with the recommendations of the International Labour Organisation (ILO). They are used throughout the remainder of this section unless specified. They are:

- **Economically active:** are those aged 16 and over who are either in employment or unemployed. The activity rate is the number of economically active people as a percentage of the working age population. There are 2.2 million economically active people in the East Midlands in 2008.

- **Economically inactive:** are those who are neither in employment nor unemployed. This includes those who want a job but have not been seeking work in the last four weeks, those who want a job and are seeking work but not available to start work, and those who do not want a job. The inactivity rate is the number of economically inactive people as a percentage of the working age population. The economically inactive population includes full-time students, those who do not work due to parental or elder-care responsibilities, the retired and those claiming incapacity benefits. Economic inactivity is discussed in more detail in the Deprivation and Economic Inclusion chapter. There are 524,800 economically inactive people in the East Midlands in 2008.
- **Employment and employee jobs:** There are two ways of looking at employment. The number of people with jobs, or the number of jobs. The two concepts are not the same as a person can have more than one job.¹²
 - As one of the labour market supply indicators, the number of people with jobs is defined as people who undertook paid work for at least one hour in the week prior to their Labour Force Survey (LFS) interview (as an employee or self-employed), those who had a job that they were temporarily away from, those on government-supported training and employment programmes, and those doing unpaid work in a family business. There are 2.07 million working age people in employment in the East Midlands in 2008.
 - As a labour market demand indicator, the number of jobs is measured by workforce jobs and is the sum of employee jobs, self-employment jobs from the LFS, those in HM Forces, and government-supported trainees. Vacant jobs are not included. Employee jobs is the biggest share of workforce jobs¹³. There were 1.8 million employee jobs in December 2008 in the East Midlands.
- **Vacancy:** A job that has been identified by an employer, but which is not being undertaken by anyone. There are about 17,000 vacancies in December 2008 in the East Midlands.
- **Unemployment:** The ILO definition of unemployment covers people who are not in employment, who want a job, have actively sought work in the previous four weeks and are available to start work within the next fortnight, or, out of work and have accepted a job which they are waiting to start in the next fortnight¹⁴. The unemployment rate is the number of unemployed as the percentage of the economically active working age population. There are 132,700 unemployed people in 2008 in the East Midlands.

¹² The Review of Employment and Jobs Statistics highlighted differences between statistics on jobs produced from household and business surveys. The review identified many reasons why these differences occur. (First release: Labour Market, East Midlands, ONS).

¹³ Office for National Statistics, 'Labour Market, East Midlands', and 'Guide to Regional and Local Labour Market Statistics', http://www.statistics.gov.uk/downloads/theme_labour/Guide_regional_local_lms.pdf At regional level data for civilian workforce jobs are published, which exclude the figures for the Armed Forces.

¹⁴ Ibid.

- **Claimant count:** is the number of people claiming Jobseeker's Allowance. Claimant count proportion is the number of claimants resident as a percentage of resident working age population in that area¹⁵. There are 110,000 people claiming Jobseeker's Allowance in December 2009 in the East Midlands.

4.3.1 Supply of labour

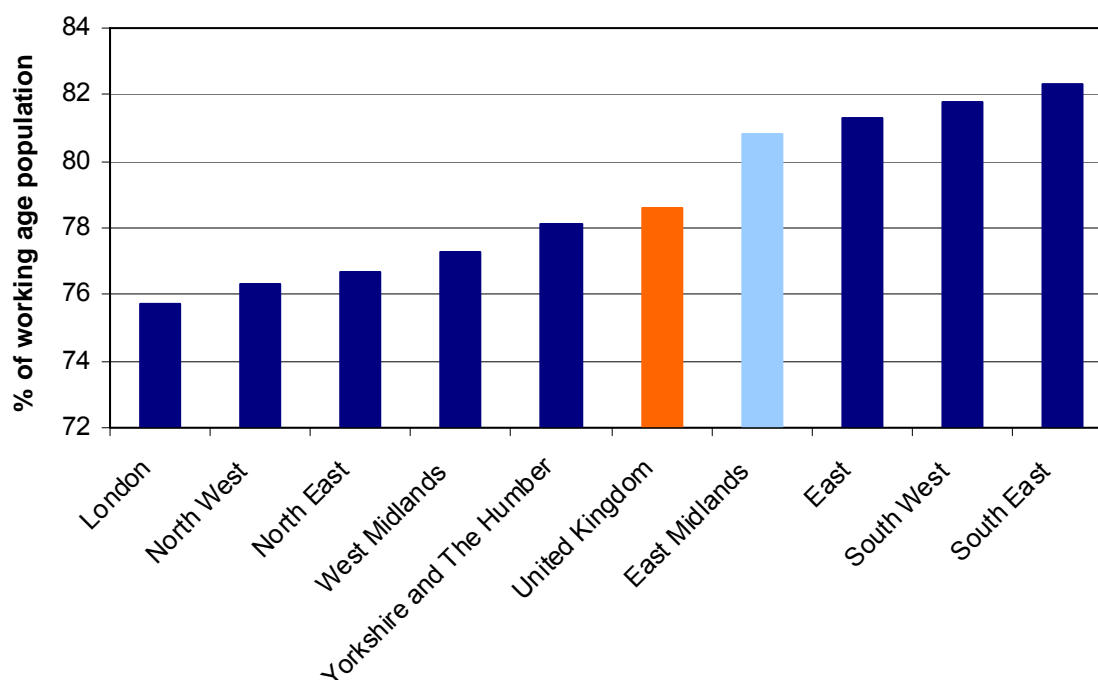
Having set out the framework above, this section discusses economic activity, employment and unemployment in the East Midlands in more detail.

4.3.1.1 Economic activity

Chart 6 shows the economic activity rate by region in 2008. The economic activity rate in the East Midlands exceeds the UK average, at 80.8% compared to 78.6%. Generally, economic activity is lower in the north and higher in the south and the east. London is an exception with the lowest economic activity rate (at 75.7%). This is mainly due to the large number of students resident in the capital.

Economic activity rates are the highest in the South East at 82.3%, which reflects not just the strong economy and labour market of the region but also the fact that a significant number of those working in London commute from the South East.

Chart 6: Economic activity rate by region, 2008 (%)



Source: ONS Crown Copyright, 'Annual Population Survey', January-December 2008, from NOMIS.

¹⁵ Official statistics provide claimant count rates as the number of claimants in an area as a percentage of the sum of claimants and workforce jobs in the area (Office for National Statistics, 'Labour Market, East Midlands').

Due to methodological changes historical comparisons can only be made for 2005 and 2008. Economic activity in the East Midlands has increased from 79.6% to 80.8% between 2005 and 2008. At the same time economic activity in the UK has decreased from 78.3% to 78.6%.

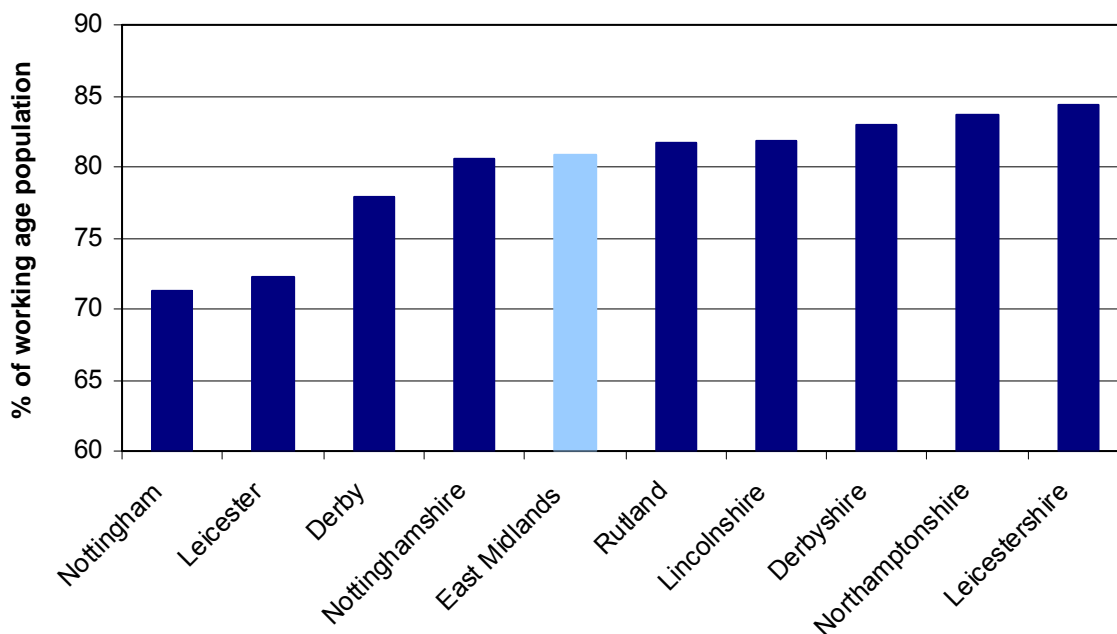
The economic activity rate of the working age population remained high in the East Midlands at 80.3% for November-January 2010. This suggests that people have not been leaving the labour market despite the recession. The economic activity rate was 78.5% in the UK for the three months to January 2010, which was 0.9 percentage points lower than a year earlier¹⁶.

Sub-regional variations in economic activity

The high regional economic activity rate disguises significant sub-regional disparities. These sub-regional differences are much greater than the inter-regional differences noted above.

Variation in the economic activity rate exceeds 13.0 percentage points at county/UA level. Leicestershire has the highest economic activity rate (at 84.4%) and Nottingham City has the lowest (at 71.2%). Relatively low economic activity rates in Nottingham, Leicester and Derby are a function of their large student populations. The highest economic activity rates are found in the south of the region.

Chart 7: Sub-regional economic activity rates, 2008 (%)



Source: ONS Crown Copyright, 'Annual Population Survey', January-December 2008, from NOMIS.

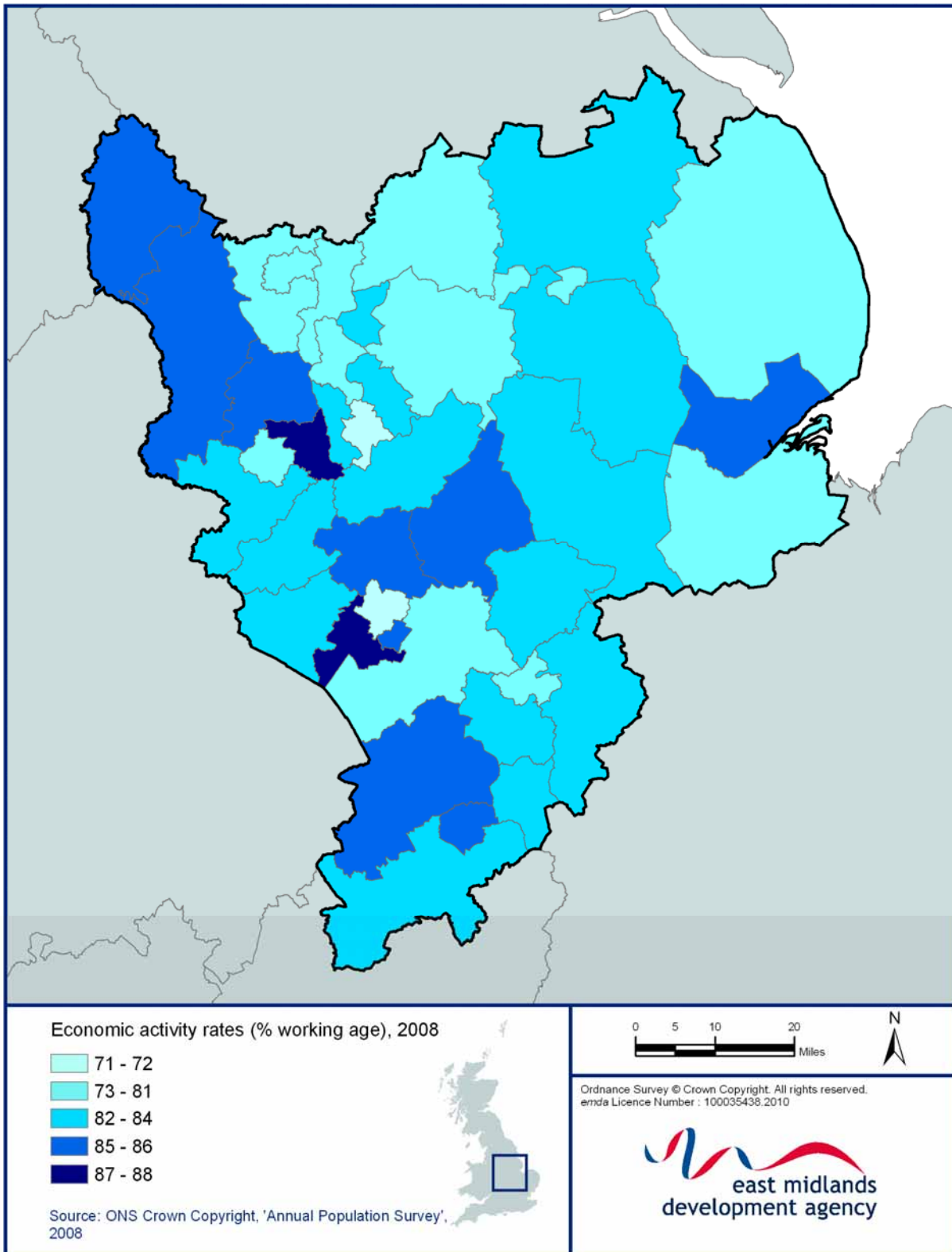
¹⁶ Office for National Statistics, 'Labour Market Statistics, March 2010'. March 2010'. Office for National Statistics, 'Labour Market Statistics, March 2010: East Midlands'. March 2010'.

The economic activity rate increases with rurality. The economic activity rate of residents in the East Midlands Large Urban districts was 77.3% in 2008. This is 3.5 percentage points lower than the regional average and 5.5 percentage points lower than in Rural 80 districts (82.9%), which have the highest activity rates.

Rural areas have experienced greater increase in economic activity. Economic activity has slightly increased the most in Rural 80 districts between 2007 and 2008. In 2008 the economic activity rate was 82.9% in Rural 80 districts, 2.3 percentage points higher than the previous year. The economic activity rate in Rural 50 districts was 81.4%, 0.5 percentage points higher than the previous year. The economic activity rate has remained the same in Other Urban districts over the same period and slightly increased in Large Urban districts from 76.6% to 77.3%.

Map 1 shows that at district level the highest economic activity rates in 2008 were in Blaby and Erewash at 87.9% and 86.4% respectively. In contrast, the lowest economic activity rates were in Nottingham and Leicester at 71.2% and 72.3% respectively. Districts in the coalfields and in parts of Lincolnshire coast have also relatively low economic activity rates.

Map 1: Economic activity rate 2008 (% working age)



4.3.1.2 Employment

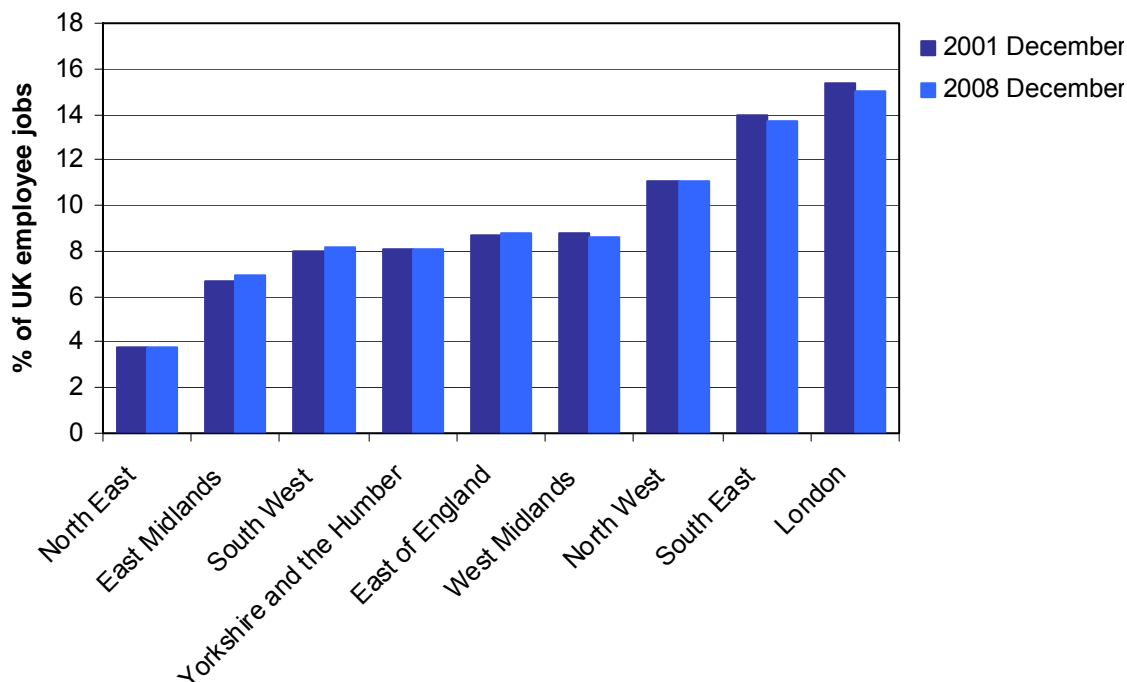
As noted above there are two ways of looking at employment: the number of jobs, or the number of people with jobs. These two concepts are not the same, as a person can have more than one job. The most commonly used measure of employment, the employment rate, is derived from the latter concept.

Employee jobs

Employee jobs is the biggest share of civilian workforce jobs¹⁷. The number of employee jobs slightly increased in the UK from 26.2 million to 27.0 million between December 2001 and December 2008¹⁸, a 3.0% increase. In the East Midlands, the number of employee jobs increased considerably between December 2001 and December 2008 from 1.7 million to 1.8 million. This is a 6.8% increase, the highest among the English regions.

Chart 8 shows the proportion of total UK employee jobs by region in December 2001 and 2008. The share of UK jobs in the East Midlands increased from 6.7% to 6.9%. However, there has been a decrease in the share of UK jobs in London and in the South East from 15.4% to 15.0% and from 14.0% to 13.7% respectively.

Chart 8: Proportion of total UK employee jobs by region (%)



Source: Department for Business Innovation & Skills, 'The Regional Economic Performance Indicators', (formerly known as Regional Competitiveness and State of the Regions), May 2009.

Table 6c. sourced Short Term Employment & Turnover Survey, Employment, Earnings & Productivity Division, Office for National Statistics. Numbers refer to December of each year. Regions may not sum to UK or England totals.

¹⁷ Civilian workforce jobs is the sum of employee jobs, self-employment jobs and government-supported trainees.

¹⁸ Ibid.

Note: One of the input sources of employee job estimates is the Annual Business Inquiry (ABI). Although there is a discontinuity of ABI data between up to and including 2005 and data from 2006, this does not affect on employee job estimates at regional level. Therefore, historical comparison is possible.

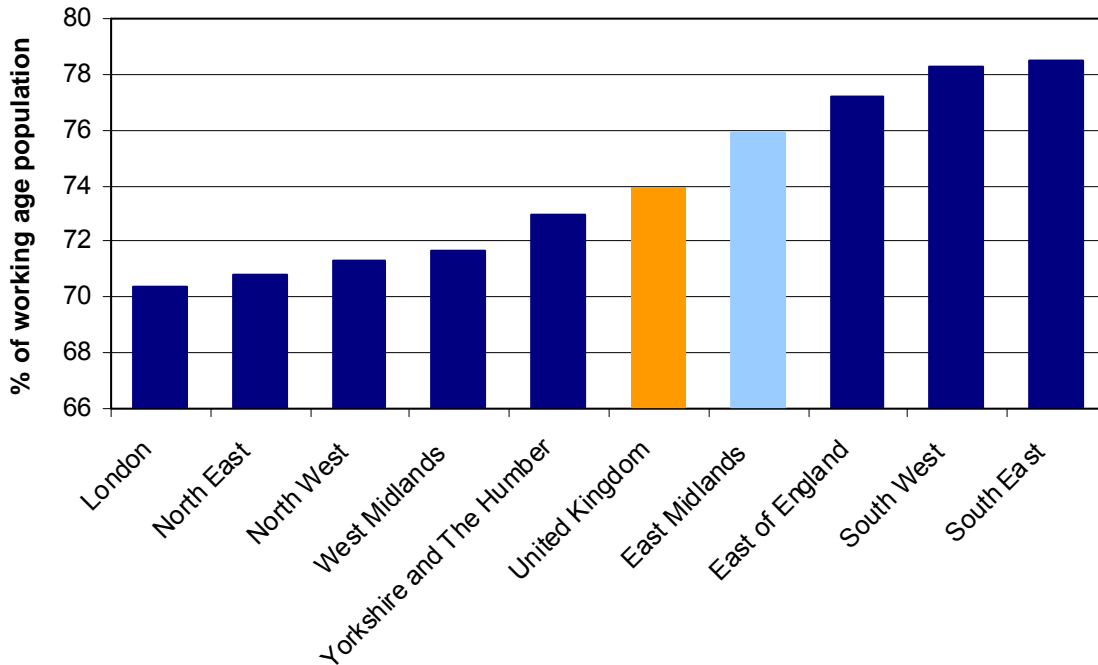
Latest statistics¹⁹ on employee jobs show that there were about 26.3 million jobs in the UK and 1.8 million jobs in the East Midlands in December 2009. The number of employee jobs in the East Midlands has fallen by 43,000 on the same period a year earlier, a decrease of 2.3%. In the UK, the number of employee jobs has decreased by 578,000 on a year to December 2009, a decrease of 2.2%. Employee job losses in the East Midlands have been concentrated in manufacturing, construction, distribution and finance & business services, in line with national trends.

Employment rate

The employment rate is the most common measure of employment and is based on the number of people with jobs and not the number of jobs, as discussed above.

The East Midlands is the only region out of the five northern and midlands regions to exceed the national average employment rate. The East Midlands employment rate was the fourth highest of the English regions at 75.9% in 2008, compared to 74.0%²⁰ in the UK. The employment rate was highest in the South East, at 78.5%, followed by the South West, at 78.3%. The employment rate was the lowest in London, at 70.4%, followed by the North East at 70.8%.

Chart 9: Employment rate by region, 2008 (%)



Source: ONS Crown Copyright, 'Annual Population Survey', January-December 2008, from NOMIS.

¹⁹ Office for National Statistics, 'Labour Market Statistics, March 2010'. March 2010', Table 5(1). 'Labour Market Statistics, March 2010': East Midlands'. March 2010', Table 5.

²⁰ Because of different source used here, please note that this figure is slightly different than the previous figure used in the international comparison section.

Between 2005 and 2008²¹ the employment rate has remained quite stable in the East Midlands at around 76.0%. The employment rate in the West Midlands decreased from 73.3% to 71.7%, in the North West it decreased from 72.6% to 71.3% and in Yorkshire and the Humber it decreased from 74.1% to 73.0%. The employment rate in the UK fell from 74.3% to 74.0%.

The latest data show that for November-January 2010, the employment rate in the East Midlands was 74.1%, 1.9 percentage points below the same period of the previous year. Despite the impact of the recession, the employment rate in the region remains above the UK average. The employment rate in the UK was 72.2% in November-January 2010, 1.8 percentage points below the same period of the previous year²².

Sub-regional variations in employment

The overall relatively high level of regional employment masks substantial local differences. The variation in employment rates at County/Unitary Authority level within the region is even greater than the disparity in economic activity. Leicestershire has the highest employment rate at 80.3%. On the other hand, Leicester has the lowest employment rate at 62.7% followed by Nottingham at 64.8%. In both cases this is related to the high proportion of students in the population. Apart from Leicestershire, the second highest employment rate is in Northamptonshire having an employment rate of 79.5%. The high employment rates in Leicestershire and Northamptonshire are related to commuting flows to London and its surrounding areas²³.

High Peak and South Northamptonshire in particular stand out as areas people choose to live in whilst being employed outside the region. In the case of South Northamptonshire this is motivated by the employment opportunities in Milton Keynes or Cherwell which are just a short distance away²⁴. The Spatial Economy chapter provides further information on commuting patterns.

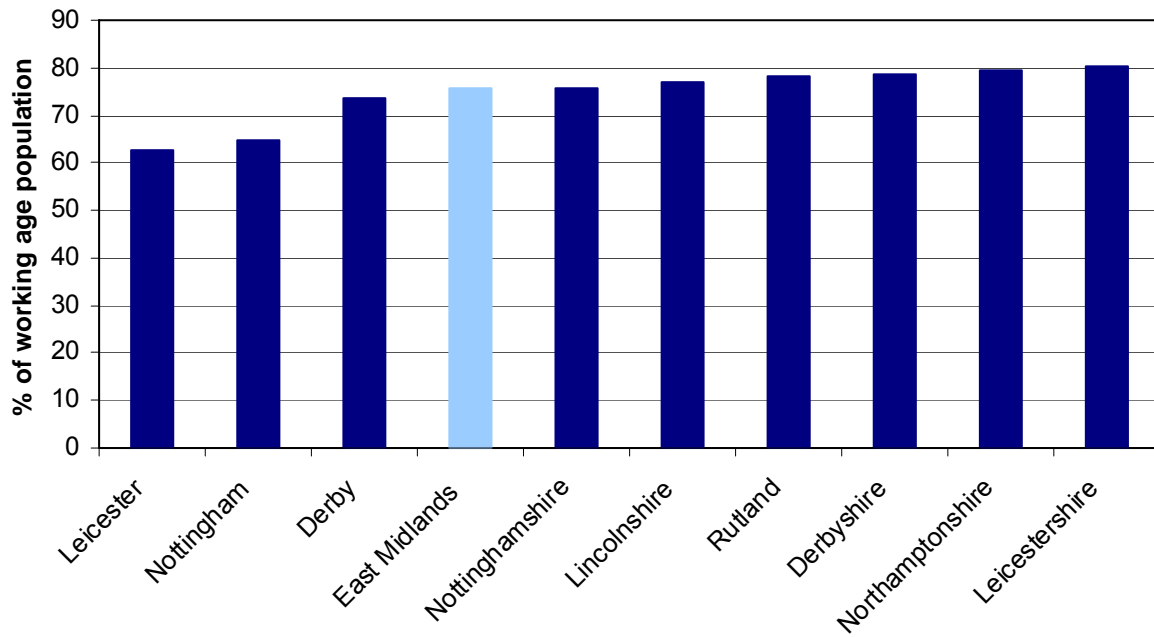
²¹ At the time of the writing Annual Population Survey data were gradually reweighted in line with the latest ONS estimates covering the period of 2005 to 2008. ONS Crown Copyright, 'Annual Population Survey', January-December 2008, from NOMIS.

²² Office for National Statistics, 'Labour Market Statistics, March 2010'. March 2010', 'Labour Market Statistics, March 2010': East Midlands'. March 2010'.

²³ Centre for Labour Market Studies (CLMS), University of Leicester, on behalf of *emda*, 'Baseline Labour Market Information for the East Midlands', 2002, October 2002.

²⁴ Experian, on behalf of *emda*, 'Commuting flows in the East Midlands' 2007.

Chart 10: Sub-regional employment rates, East Midlands, 2008 (%)

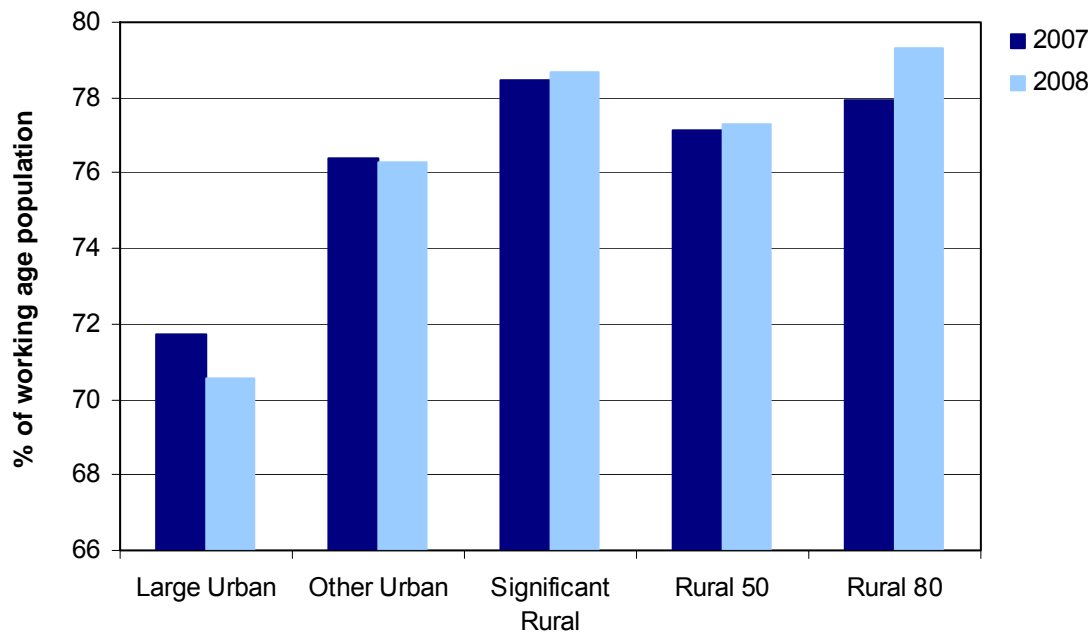


Source: ONS Crown Copyright, 'Annual Population Survey', January-December 2008, from NOMIS.

The employment rate is generally higher in rural districts and lower in urban districts. The employment rate in 2008 for the East Midlands' Rural 80 districts is 79.3%, 3.4 percentage points above the regional average. However, the employment rate for Large Urban districts is 70.6%, 5.3 percentage points below the regional average.

There have been differences how employment has changed. Between 2007 and 2008 the employment rate increased in Rural 80 districts, by 1.4 percentage points. At the same time, the employment rate decreased in Large Urban districts, by 1.2 percentage points.

Chart 11: Urban-Rural employment rates in the East Midlands (%)

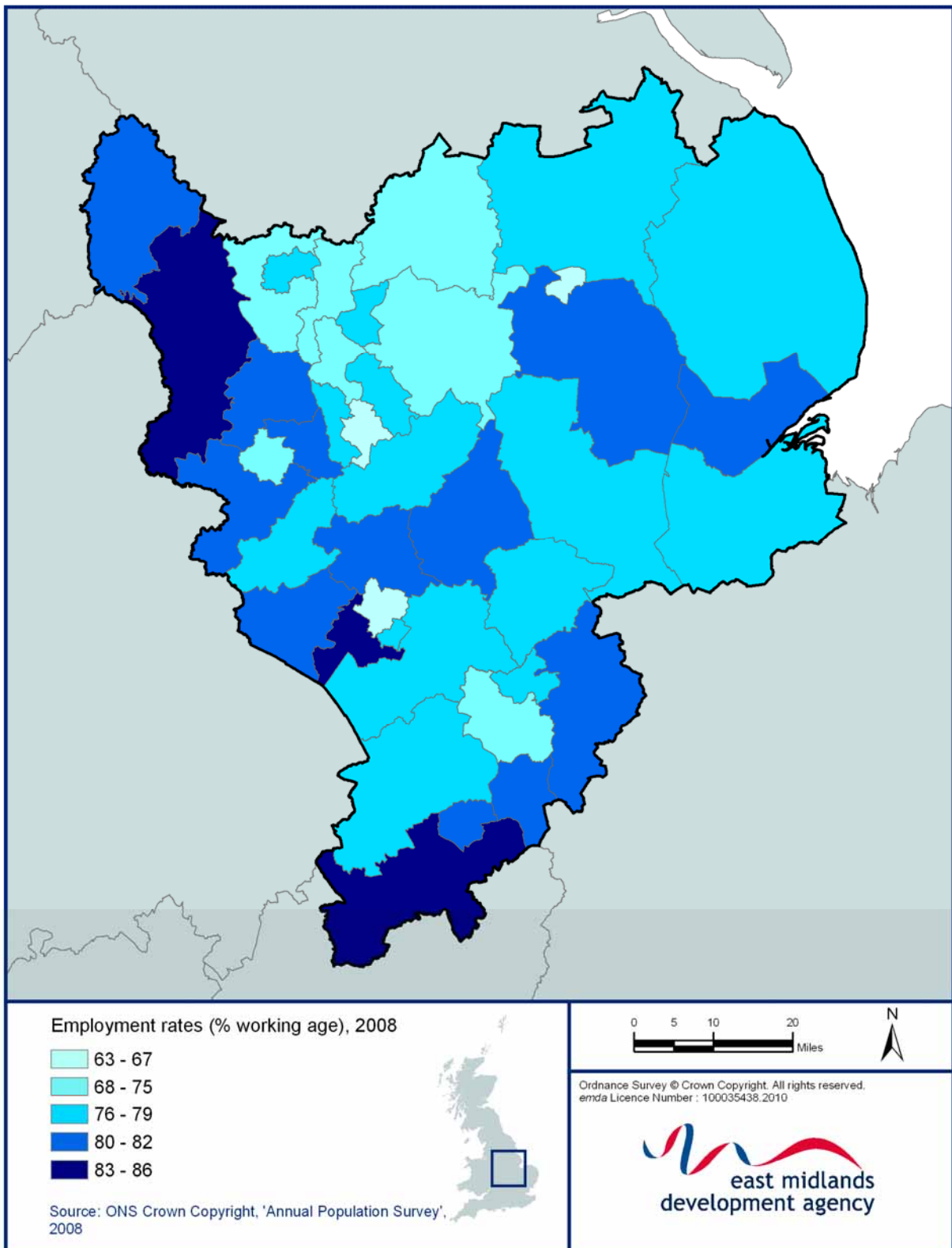


Source: ONS Crown Copyright, 'Annual Population Survey', January-December 2008, from NOMIS.

Although the employment rate is generally higher in rural districts than urban districts, there are urban districts with high employment rates and rural districts with low rates of employment. For example, among urban districts the highest employment rate is in Blaby at 86.02%. Among rural districts, the lowest employment rates are around the former coalfields, in districts such as Bolsover (74.0%), Bassetlaw (74.7%) and North East Derbyshire (75.3%).

The employment rate in 2008 was the lowest in Nottingham (64.8%), Leicester (62.7%) and Lincoln (67.3%). In contrast, it was the highest in Derbyshire Dales (82.7%), Blaby (86.2%) and South Northamptonshire (83.1%).

Map 2: Employment rates 2008 (% working age)



4.3.1.3 Type of employment in the East Midlands

This sub-section describes the structure of employment in the UK and the East Midlands in terms of gender and employment status. To examine at developments over time, and likely developments in the future, the following commentary is based on the latest Working Futures 2007-2017²⁵ projections of employment.

Employment by gender

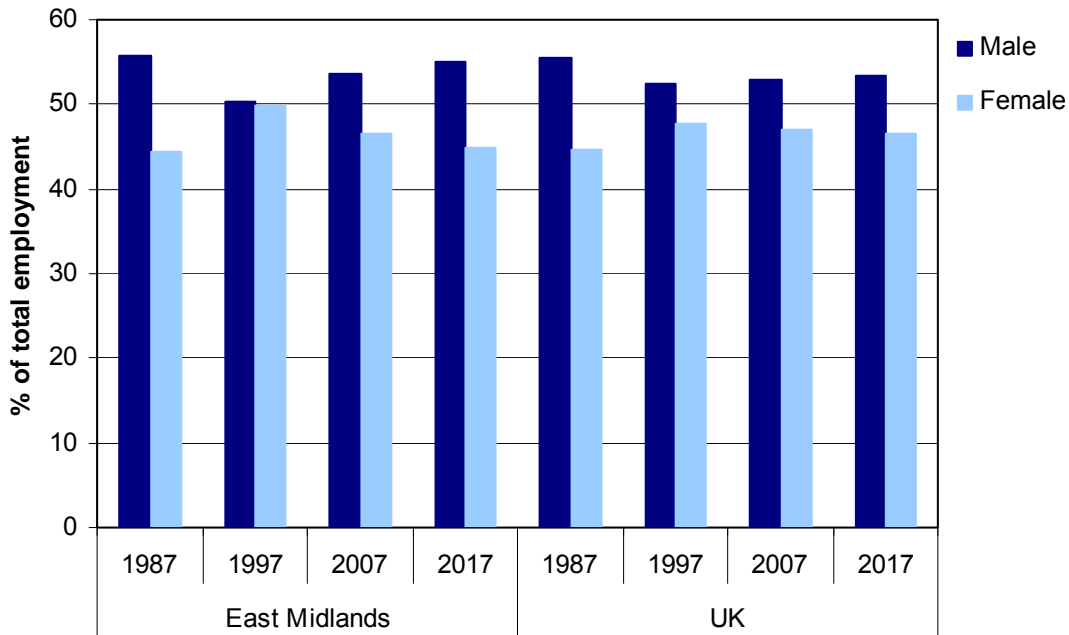
Much of the growth in employment across the UK in the 1990s can be attributed to a dramatic increase in the number of women joining the labour market. In 1987, women accounted for 44.5% of those in employment in the UK. By 1997 this had risen to 47.6%. This shift in employment towards women was partly driven by changes in industrial structure. The contraction of the primary, utilities and manufacturing sectors has led to the loss of many full-time jobs traditionally held by men. In contrast, the number of jobs traditionally occupied by women has increased with the growth of services. Another factor is the gradual increase of part-time jobs which has made employment more accessible to many women. These changes have been accompanied by the increasing tendency of women to combine both work and family duties.

However, after the 1990s the proportion of women in the regional and national workforce has exhibited a different pattern. In the East Midlands the share of women in the regional workforce decreased from 49.8% to 46.4% between 1997 and 2007²⁶. In contrast, the proportion of women in employment more or less stayed the same between 1997 and 2007 in the UK. In 2007 women accounted for a slightly lower proportion of jobs in the East Midlands than in the UK. This is expected to remain the case during the next decade.

²⁵ Source: Warwick Institute for Employment Research and Cambridge Econometrics, on behalf of the UK Commission for Employment and Skills and Learning and Skills Council, 'Working Futures 2007-2017' 2008.

²⁶ This can be partly explained by the fact that the number of male employees is projected to increase more than the number of female employees and this is the case in the East Midlands. This does have an impact of the gender composition of the regional employment for the benefit of male. The activity rate projections of the Working Futures 2007-2017 are based on ONS regional and sub-regional 2004-based population projections (Working Futures 2007-2017, Technical Report page 23).

Chart 12: Employment by gender, 1987-2017 (% total employment)



Source: Warwick Institute for Employment Research and Cambridge Econometrics, on behalf of the UK Commission for Employment and Skills and Learning and Skills Council, 'Working Futures 2007-2017' 2008.

Employment status

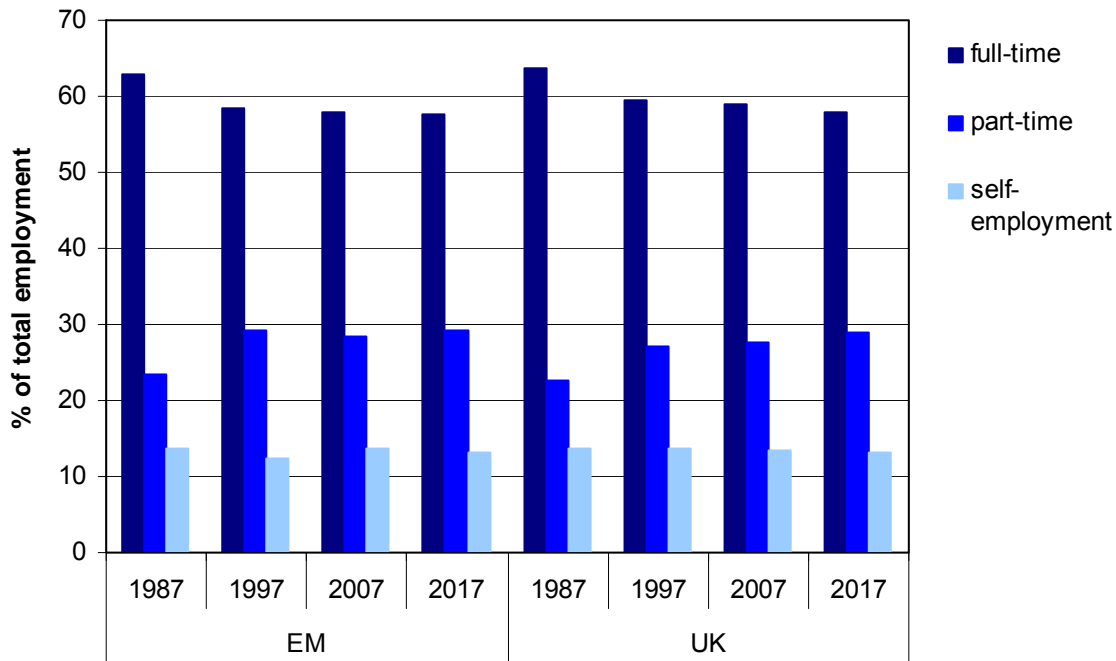
People can be classified according to whether they are working for someone else (employee) or themselves (self-employed). Additionally, employees are classified on the basis of whether they work full-time or part-time.

Working Futures 2007-2017 projections provided by the UK Commission for Employment and Skills and the Learning and Skills Council, forecast changing employment by employment status. It is important to note that the Working Futures 2007-2017 was developed in the first half of 2008, before the extent of the recession and therefore there is a significant degree of uncertainty relating to these projections.

Chart 13 shows that the breakdown by employment status in the East Midlands is quite similar to the national average and is expected to remain so in the future. In 2007 the self-employed accounted for a similar proportion of jobs in the region, at 13.7% compared to 13.5% in the UK. This is projected to decrease both regionally and nationally by 2017, to 13.3%. This should not be regarded as an indication of entrepreneurial activity as self-employment does not necessarily denote business ownership, and is sometimes pursued when other employment opportunities are limited.

In addition, the proportion of employees working part-time was slightly greater in the East Midlands than in the UK. In 2007, 28.5% of jobs in the East Midlands were accounted for by employees working part-time, compared to 27.6% in the UK. However, this difference is expected to disappear by 2017.

Chart 13: Employment status 1987-2017 (% total employment)



Source: Warwick Institute for Employment Research and Cambridge Econometrics, on behalf of the UK Commission for Employment and Skills and Learning and Skills Council, 'Working Futures 2007-2017' 2008.

Due to the recession in the UK, there has been a rise in part-time employment²⁷ as companies have sought to control costs through decreased hours worked and wages, rather than reducing headcount. The proportion of those in part-time employment has risen and reached 26.7% of employment in November-January 2010 in the UK. The proportion of those in part-time employment is still greater in the East Midlands than in the UK as based on the latest statistics available at regional level, the proportion of part-time working for July 2008-June 2009 was 25.1% in the East Midlands and 23.9% in the UK²⁸. In July 2008-June 2009 the proportion of those in part-time employment increased by 1.1 percentage points in the East Midlands compared to 0.4 percentage points in the UK on the same period a year earlier.

In addition, it is likely that some sectors will be more vulnerable in the period to 2017 than the 'Working Futures 2007-2017' forecast suggests above. For example, the likely future cuts in public services, which is biased towards female and part-time employment, could lead to a greater decrease of female and part-time employment than that forecasted by Working Futures.

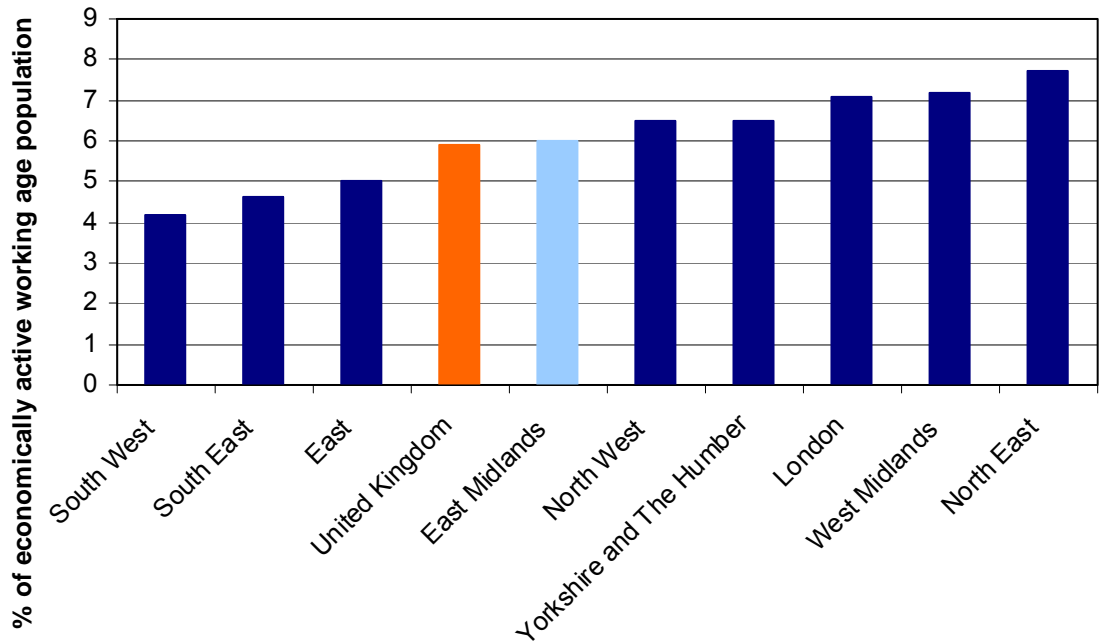
4.3.2 Unemployment

Unemployed people are the second category of the economically active population. Chart 14 shows the unemployment rate for the English regions and the UK average in 2008.

²⁷ Office for National Statistics, 'Labour Market Statistics, March 2010'. March 2010', Table 3.

²⁸ Source: ONS Crown Copyright, 'Annual Population Survey', July 2008 – June 2009, from NOMIS. Percentage in employment working part-time (working age).

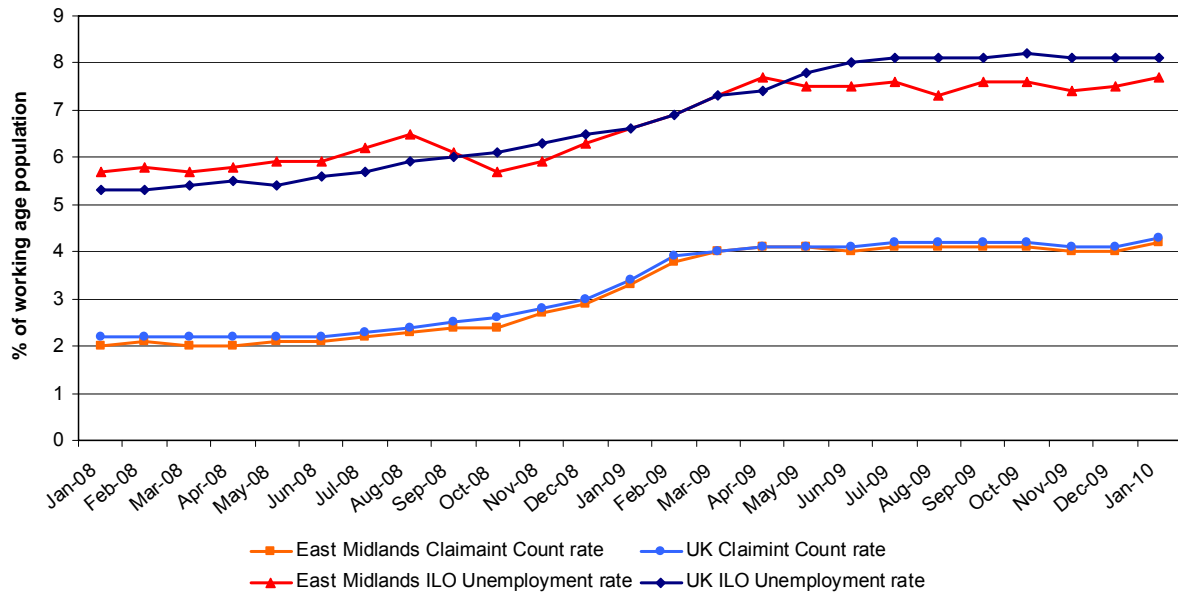
Chart 14: Unemployment rate by region, 2008 (%)



Source: ONS Crown Copyright, 'Annual Population Survey', January-December 2008, from NOMIS.

The East Midlands unemployment rate was slightly above the national average at 6.0% compared to 5.9% in the UK in 2008, although the 0.1 percentage point difference is not significant. The unemployment rate in the East Midlands is lower than in the North West, Yorkshire and the Humber, London, the West Midlands and the North East. The unemployment rate in the East Midlands has increased by 0.9 percentage points between 2007 and 2008. This is 0.3 percentage points higher than the UK average. Between 2007 and 2008 the unemployment increased the most in the West Midlands and the North East at 1.1 and 1.4 percentage points respectively. The North East and the West Midlands have been the hardest hit by the recession.

Chart 15: Employment rate and claimant count rate in the East Midlands and in the UK



Source: Office for National Statistics, 'Labour Market Statistics, March 2010'. March 2010; 'Labour Market Statistics, March 2010'. March 2010.

Note: The ILO unemployment rate shown for January 2010 refers to November-January 2010. For definition please see the 'Supply of and demand for labour' section.

Chart 15 shows that both the unemployment rate and the claimant count rate increased during the summer of 2008. However, both measures have levelled off during the last 11 months.

The latest quarterly data for November-January 2010²⁹ shows that the unemployment rate in the East Midlands was 7.7%, 0.4 percentage points lower than the UK figure of 8.1%. Redundancy rates per 1,000 employees³⁰ covering the period October-December 2009 show some signs of decreasing. The redundancy rate in the East Midlands was 9.4 per 1,000 employees, down from 12.0 on the previous quarter. The redundancy rate was 6.7 in the UK, which has decreased from 8.2 on the previous quarter.

Sub-regional unemployment

The unemployment rate increased in most sub-regions between 2007 and 2008 but it decreased slightly in Derby and in Derbyshire from 6.1% to 5.6% and from 5.3% to 5.0 respectively. The unemployment³¹ is lowest in Rutland and Leicestershire, at 4.0% and

²⁹ Office for National Statistics, 'Labour Market Statistics, March 2010: East Midlands'. March 2010. Table 1.

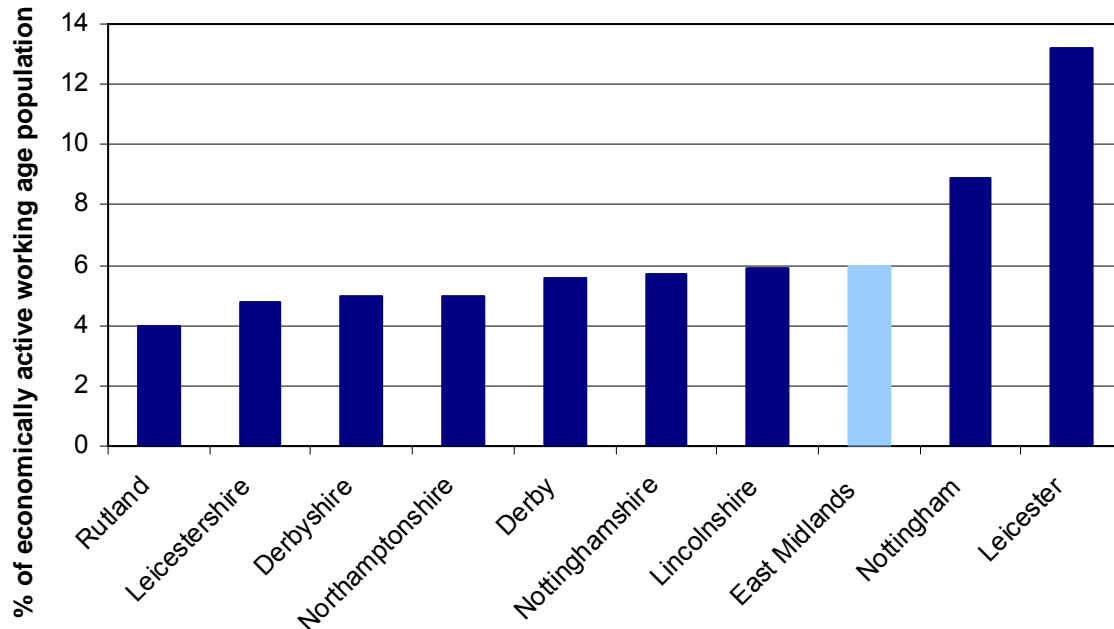
³⁰ Source: Labour Force Survey, Redundancy Tables, Calendar Quarter October-December 2009. http://www.statistics.gov.uk/downloads/theme_labour/RedundancyCQ.xls

Note: The redundancy figures correspond to the number of people, whether working or not working, who reported that they had been made redundant or had taken voluntary redundancy in the month of the reference week or in the two calendar months prior to this. The data is not seasonally adjusted.

³¹ Local authority analysis is based on the model-based estimates of unemployment for local authorities. Local authority data refers to January-December 2008. Please note that the model-based estimate of the unemployment rate refers to the percentage of resident population aged 16+, while sub-regional and

4.8% respectively. Unemployment is concentrated in the region's larger cities such as Leicester (13.2%) and Nottingham (8.9%). Apart from the larger cities, unemployment hotspots can be identified around the former coalfields and parts of Northamptonshire, Lincoln at 8.3%, Corby at 6.6%, Ashfield at 6.6%, Mansfield, Bolsover and Wellingborough at 6.2% each.

Chart 16: Sub-regional unemployment rates, East Midlands, 2008 (%)



Source: ONS Crown Copyright, 'Annual Population Survey', January-December 2008, from NOMIS.

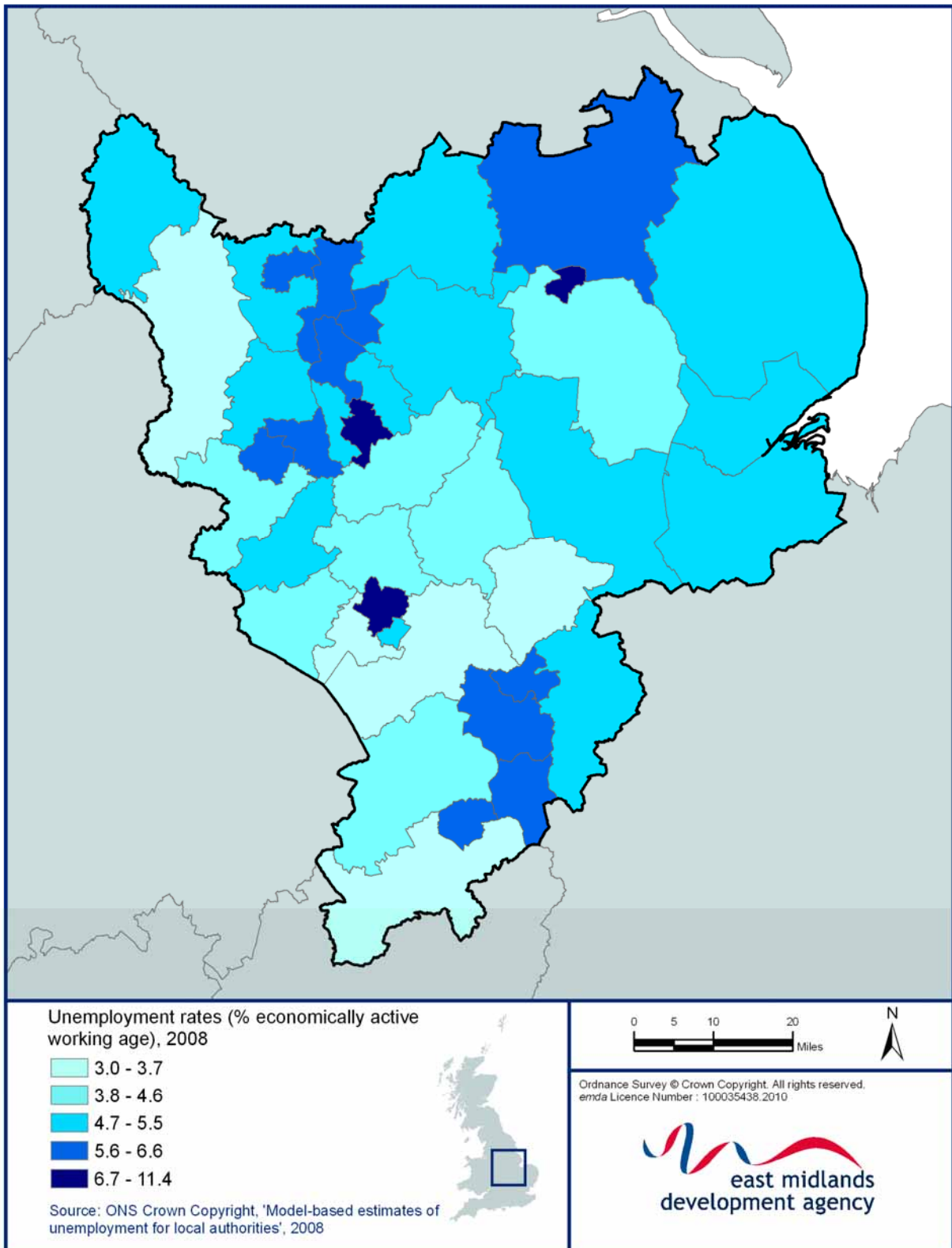
The latest Labour Force Survey data for November-January 2010 are not available at sub-regional level. Therefore, to provide an up to date picture of the local variation in unemployment the claimant count rate for February 2010 is analysed.

As context, in February 2010, the claimant count rate in the East Midlands was 4.2%, which is 115,400 people. The claimant count rate in the UK was 4.4% in February 2010.

In February 2010, Leicester and Nottingham had the highest claimant count rates at 6.8% and 6.3% respectively. At local authority level – apart from Leicester and Nottingham – the claimant count rate was the highest in Corby (5.9%), Lincoln (5.7%), Derby (5.3%) and Northampton (5.2%).

regional unemployment data (APS) refers to the economically active working age population (Office for National Statistics, 'Labour Market Statistics, East Midlands' footnote of Table 12.).

Map 3: Unemployment rates 2008 (% economically active working age)



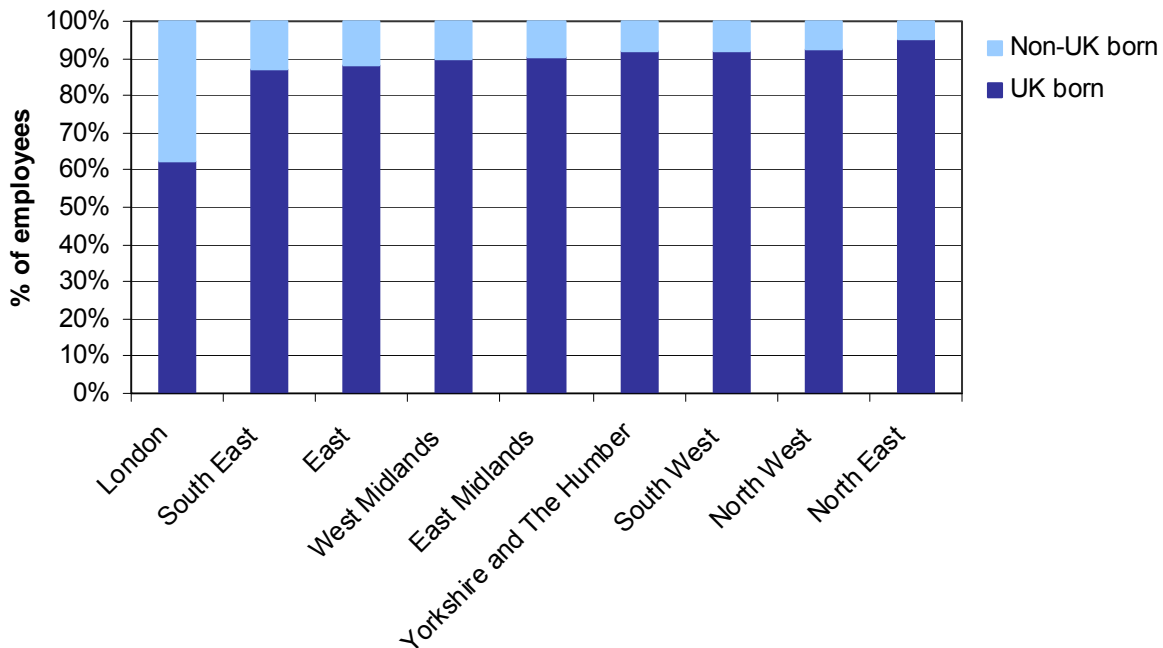
4.3.3 Migrant workers in the East Midlands

Migrant workers provide an addition to the labour supply in the UK and the East Midlands. However, there is no single data source on the employment of migrant workers. Therefore, data from the Annual Population Survey (APS), Workers' Registration Scheme (WRS) and National Insurance Recording System (NINO) are used to estimate the number of migrant workers at regional and local level.

The Annual Population Survey identifies migrant workers as those whose country of birth is outside the UK and who have done at least one hour's paid work during the week before the survey interview or have been temporarily away from a job (e.g. on holiday). Those are also counted in employment who have been on government-supported training schemes and those who have done unpaid work for their family's business³².

In 2008, 202,700 non-UK born working age employees worked in the East Midlands³³. This is 9.8% of regional employment. In London, 1,348,800 non-UK born residents were in employment, which accounts for 37.7% of total employment, the highest by far among the English regions. In the North East only 55,800 non-UK born residents were in employment which accounts for 5.0% of total employment, the lowest proportion among the English regions.

Chart 17: Proportion of UK and non-UK born employees by region 2008 (%)



Source: ONS Crown Copyright, 'Annual Population Survey', January-December 2008, from NOMIS.

The Annual Population Survey can provide robust data at unitary and local authority level about the number of UK and non-UK born workers³⁴.

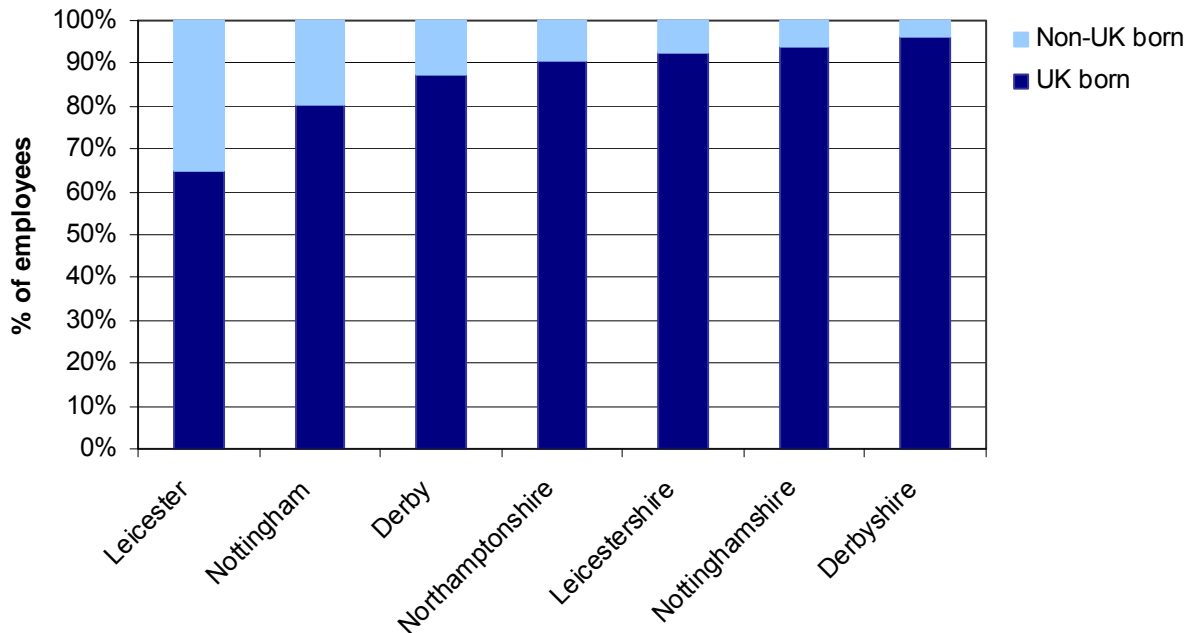
³² Office for National Statistics, 'How exactly is unemployment measured?', 2008.

³³ Office for National Statistics, 'Population and migration statistics released', New Release, 21 August 2008. http://www.statistics.gov.uk/downloads/theme_labour/MigrantLAEmpAPSJanDec07.xls

³⁴ Office for National Statistics, 'Population and migration statistics', New Release, 21 August 2008.

As Chart 18 shows, in Leicester the number of non-UK born working age employees exceeded 42,000 in 2008 (35.2% of Leicester’s total employment). The proportion of non-UK born employees was the lowest in Derbyshire at 3.9% in 2008.

Chart 18: Proportion of UK and non-UK born employees by sub-region 2008 (%)



Source: ONS Crown Copyright, ‘Annual Population Survey’, January-December 2008, from NOMIS.
 Note: Some of the input data for this calculation for Rutland and Lincolnshire were not available at MOMIS.

4.3.3.1 National Insurance Numbers and Worker Registration Scheme

The latest national statistics on National Insurance Number Allocations to Adult Overseas Nationals (NINO) entering the UK produced by the Department for Work and Pensions were released on 26th November 2009³⁵.

A NINO is generally required by any overseas national looking to work or claim benefits³⁶/ Tax Credits in the UK, including the self employed or students working part time. The Worker Registration Scheme (WRS) covers those workers from A8 countries³⁷ that joined the EU in May 2004 who intend to take up employment for a period of at least a month. Workers who are self-employed do not need to register and are therefore not included in these figures.

³⁵ Department for Work and Pensions, National Insurance Number Allocations to Adult Overseas Nationals entering the UK, http://research.dwp.gov.uk/asd/asd1/niall/nino_allocation.asp
 Next release date is 25th February 2010.

³⁶ Those who are registered for NINO can claim Jobseekers Allowance, Incapacity Benefit/Severe Disablement Allowance and Income Support and after October 2008, Employment and Support Allowance.

³⁷ The A8 are the eight Central and Eastern European countries that joined the EU on 1st May 2004: Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Slovakia and Slovenia. The A8 does not include the two other countries that joined on that date: Cyprus and Malta. Office for National Statistics, ‘Migration Statistics Quarterly Report: May 2009’.
<http://www.statistics.gov.uk/pdfdir/ppmg0509.pdf>

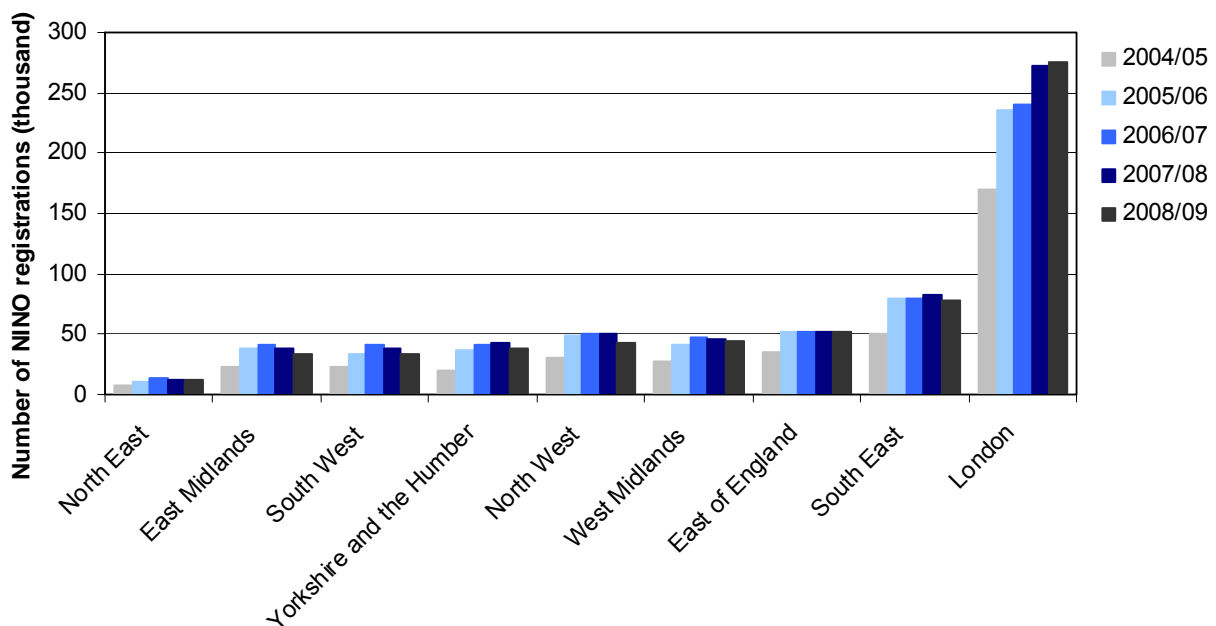
Both the NINO and WRS data are based on administrative sources and they are not direct measures of immigration and do not measure the UN definition of an international migrant which makes a distinction between short-term and long-term migrants. Both the NINO and the WRS include some short-term migrants (moves made for less than 12 months)³⁸ and long-term migrants as well. Both NINO and WRS give data at a point in time and they show where people registered but not if people have moved to a different region or if they have left the country.

National Insurance Number registrations

In the financial year 2008-2009, 686,110 new NINOs were allocated to adult overseas nationals entering the UK. This number is 47,000 (6.4 %) lower than a year earlier. This is the first year since 2004-2005 when the number of NINO registrations in the UK decreased compared to the previous year.

Chart 19 shows that NINO registrations decreased in most of the regions between 2007-2008 and 2008-2009 except in London and the East of England. Here the number of NINO registrations slightly increased by 1.1% and 0.8% respectively. In the East Midlands there were 33,000 new NINO registrations in 2008-2009, 5,500 (14.2%) less than the previous year.

Chart 19: NINO registrations to adult overseas nationals entering the UK by year of registration and by region (thousand)



Source: Department for Work and Pensions, National Insurance Number Allocations to Adult Overseas Nationals entering the UK, http://research.dwp.gov.uk/asd/asd1/niall/nino_allocation.asp

In the East Midlands most Local Authorities experienced a decrease in the number of new NINO registrations in 2008-2009 compared to the previous year – in line with the national and regional trends. In 2008-2009 the number of new adult NINO registrations

³⁸ Office for National Statistics, '2007 Mid-Year Population Estimates Frequently Asked Questions', August 2008.

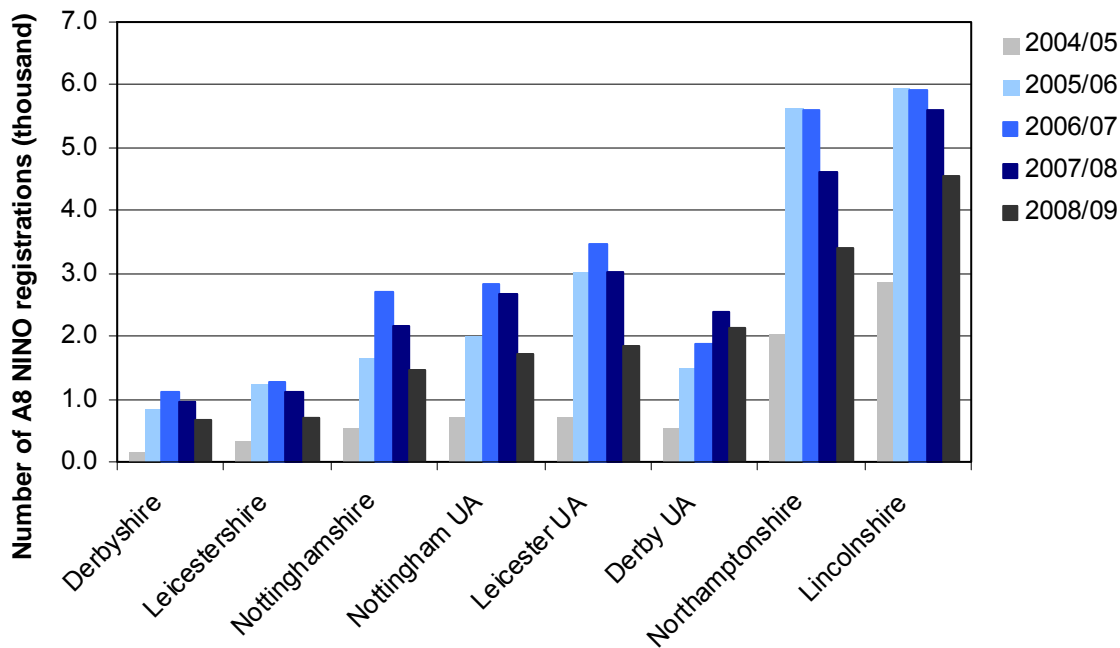
decreased the most in Ashfield and Erewash by 42.1% and 35.7% respectively. In contrast, the only local authority where the number of registrations increased was North East Derbyshire (18.2%).

Migrant workers from the A8 countries have been the most significant source of migrant labour during recent years. However, the influx of migrant workers to the UK started to decrease in 2007-2008. Between 2007-2008 and 2008-2009 the fall in NINO registrations from A8 countries was more significant than the fall in the number of overall NINO registrations. Between 2007-2008 and 2008-2009, the number of NINO registrations to adults from A8 countries decreased by 78,700 (from 293,800 to 215,200), a 26.8% fall. This is compared to a 6.4% fall in the total number of NINO registrations.

In the East Midlands, there were 16,500 new NINO registrations from A8 countries in 2008-2009, which is about 6,000 (around 26.7%) less than the previous year. Between 2007-2008 and 2008-2009 the fall in NINO registrations from Poland in particular was the most significant. The number of new NINO registrations from Poland has decreased by 37.6% in the East Midlands between 2007-2008 and 2008-2009.

NINO registrations show that the greatest number of new A8 migrants in 2008-2009 was in Lincolnshire at 4,600 individuals. This is 18.6% less than the previous year. The number of new A8 migrants decreased the most in Leicester from 3,000 to 1,900, a 38.6% decrease between 2007-2008 and 2008-2009.

Chart 20: Number of A8 NINO registrations in the East Midlands' sub-regions by year



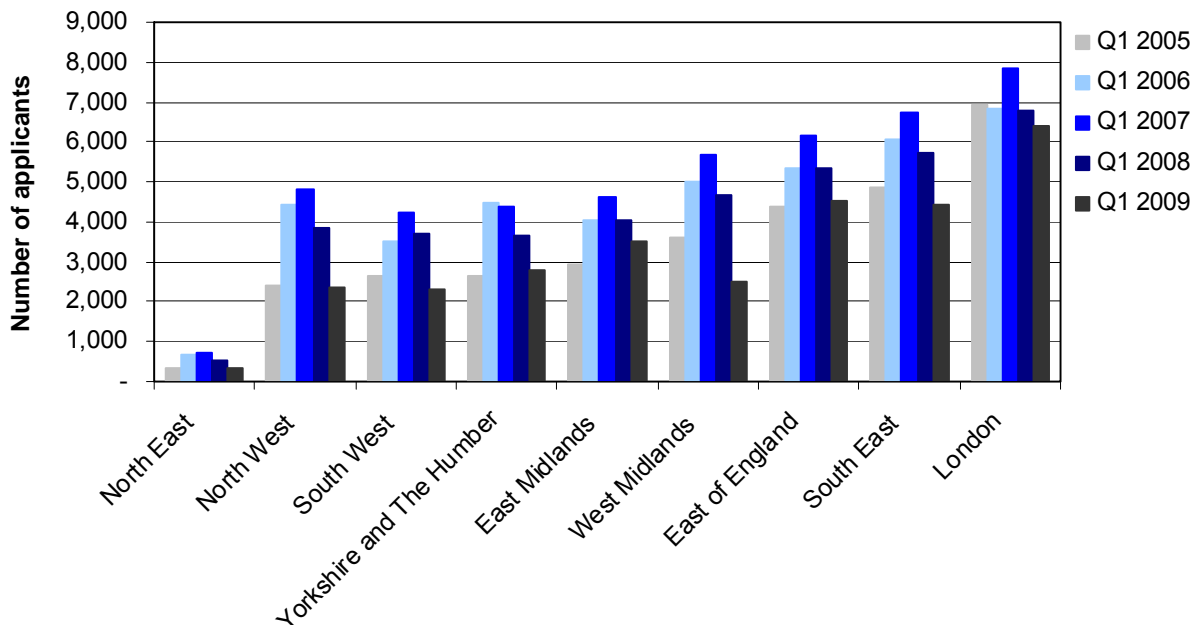
Source: Department for Work and Pensions, 'National Insurance Recording System', Tabtool.
 Note: Rutland is left out due to small numbers.

Worker Registration Scheme

Chart 21 shows the change in the number of approved Worker Registrations between quarter one of 2005 and quarter one of 2009. This trend confirms the main point highlighted above about the decreasing number of newly registered migrant workers both nationally and regionally:

- In the first quarter of 2009 there were 3,525 approved WRS applications in the East Midlands, 12.5% less than the first quarter of 2008; and
- Approved WRS applications decreased the most in the West Midlands (46.9%) and the North West (39.1%) between the first quarter of 2008 and the first quarter of 2009. These regions are the hardest hit by the recession and less attractive destinations for migrant workers.

Chart 21: Approved WRS Applications by regions (Q1 2005 - Q1 2009)



Source: Worker Registration Scheme provided by Office for National Statistics.

Note: This data is based on Management Information, is provisional and may be subject to change. The data is not National Statistics. This table shows registered workers rather than the number of applications made. The figures are for initial applications only (not multiple applications, where an individual is doing more than one job simultaneously, nor re-registrations, where an individual has changed employers).

Key Points: Supply of labour

- Economic activity and employment rates in the East Midlands have historically exceeded the UK average. Economic activity and employment rates tend to be higher in rural districts. These rates are the highest in Northamptonshire and Leicestershire and are lowest in the cities and coalfields area.
- The economic activity rate of the working age population remained high in the East Midlands at 80.3% for November-January 2010. This suggests that people have not been leaving the labour market despite rising unemployment and falling employment due to the recession.
- Latest statistics on employee jobs show that there were 43,000 less jobs in the East Midlands in December 2009 than a year earlier. Employee job losses in the East Midlands were concentrated in manufacturing, construction, distribution and finance & business services, in line with the national trend.
- The East Midlands is the only region of the five northern and midlands regions to exceed the national average employment rate.
- The latest data show that for November-January 2010, the employment rate in the East Midlands was 74.1%, 1.9 percentage points below the same period of the previous year. Despite the impact of the recession, the employment rate in the region remains above the UK average of 72.2%.
- Between 1997 and 2007 the share of women in the regional workforce decreased in the East Midlands, unlike the UK. This pattern could be more significant as future cuts in public services will be more likely to have an impact on female employment.
- Self-employment accounted for a similar proportion of jobs in the region than the UK average in 2007. In addition, the proportion of employment working part-time was slightly greater in the East Midlands than in the UK.
- Latest quarterly data for November-January 2010 shows that the unemployment rate in the East Midlands was 7.7%, 0.4 percentage points lower than the UK figure of 8.1%. Redundancy rates per 1,000 employees covering the period October-December 2009 show some signs of decreasing.
- In February 2010, the claimant count rate in the East Midlands was 4.2%, which is 115,400 people. The claimant count rate in the UK was 4.4% in February 2010. The claimant count rate in the East Midlands has levelled off in the last 11 months.
- Unemployment is concentrated in the region's larger cities and around the former coalfields.
- In 2008, 202,700 non-UK born working age employees worked in the East Midlands. This is 9.8% of regional employment. However, in most East Midlands Local Authorities the number of newly arrived migrants has decreased compared to the previous year – in line with the national trend.

4.3.4 Demand for labour

This section provides an analysis of labour demand, as measured by vacancies in the UK and in the East Midlands. Vacancies are those positions which need to be filled and therefore can give an early indication of what is happening in the labour market.

There are three sources of data on vacancies – two of them are official statistics, namely, the ONS Vacancy Survey and the Statistics of Jobcentre vacancies³⁹. The third widely used source is the National Employer Skills Survey (NESS).

- The ONS Vacancy Survey is an enterprise-based survey based on a sample of 6,000 businesses and provides estimates of job vacancies in the UK. This monthly survey asks employers how many vacancies they have in total for which they are actively seeking recruits from outside their organisation. Monthly estimates began in April 2001 and are available by industry and by size of enterprise⁴⁰.
- The Statistics of Jobcentre vacancies identify those vacancies in the economy which were notified to Jobcentres. The Jobcentre Plus vacancies series do not provide comprehensive measures relating to all vacancies in the economy, as it is estimated that only around a third of vacancies in the economy are notified to Jobcentres⁴¹.
- The latest available National Employer Skills Survey 2007 (NESS 2007) was commissioned by the Learning and Skills Council (LSC), the Department for Innovation, Universities and Skills (DIUS) and Sector Skills Development Agency (SSDA). The survey asks detailed questions of employers about their recruitment practices. Comparable data are available back to 2003. In 2007 the NESS covered 79,000 employers across England, including 7,612 employers in the East Midlands.

For the purpose of drawing a general picture of the number vacancies at regional and sub-regional level and supplementing this with information regarding recruitment problems such as hard to fill vacancies and skills shortage vacancies, the NESS is the most comprehensive data source. The NESS covers issues around general recruitment – and the levels and types of difficulty which employers may experience; the skill levels of their existing workforce; how the organisation approaches the training and development of their staff; issues around the graduate labour market and employer views on the Government's contribution and support to workforce development.

Recruitment problems refer to vacancies that the employer describes as hard-to-fill. Hard to fill vacancies (HtFVs) can be divided into two groups. Skills shortage vacancies

³⁹ Office for National Statistics, <http://www.ons.gov.uk/about-statistics/user-guidance/lm-guide/concepts/employers/vacancies/index.html>

⁴⁰ Office for National Statistics, <http://www.ons.gov.uk/about-statistics/user-guidance/lm-guide/concepts/employers/vacancies/index.html>

⁴¹ Office for National Statistics, 'Vacancy Survey: a new series of National Statistics', July 2003, http://www.statistics.gov.uk/downloads/theme_labour/Vacancies_survey.pdf

(SSVs) are those HtFVs which result from applicants not having the required skills, experience, or qualifications that the employer demands. There are also other HtFVs which are attributed to other causes such as a simple lack of applicants.

This section is based on the National Employers Skills Survey 2007: report of results for the East Midlands and the National Employers Skills Survey 2007: Main Report published by the Learning and Skills Council (LSC). Data are available at regional and local LSC area level.

4.3.4.1 Vacancies

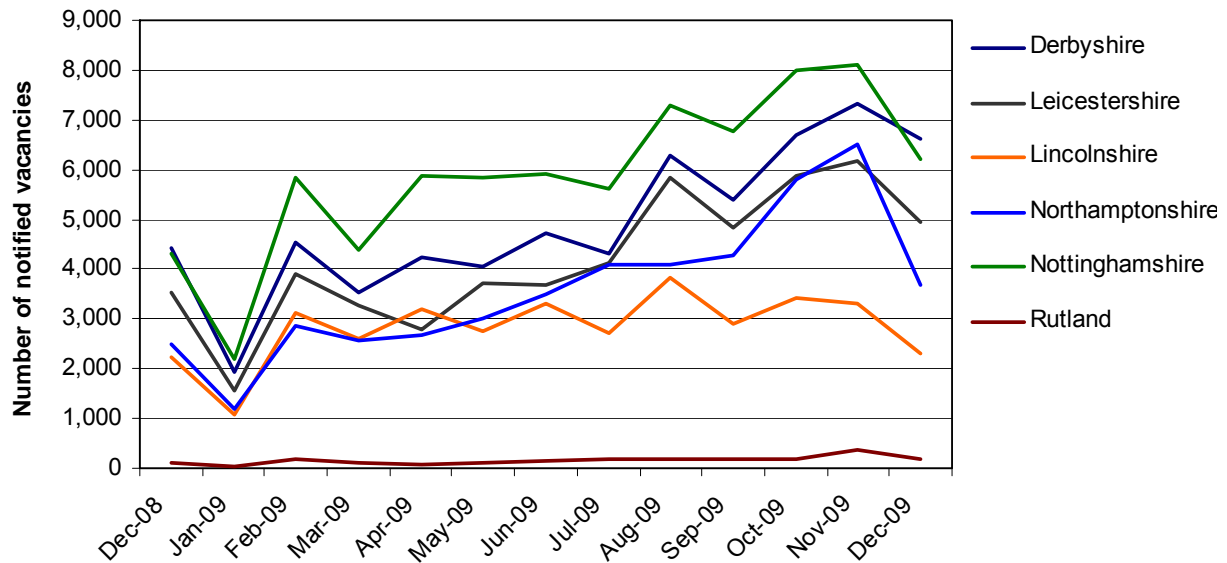
Jobcentre Plus vacancy statistics are the most up to date data on vacancies. It should be noted that it has been estimated that JCP handles about one third of the available vacancies in the economy.

In December 2009 there were 262,500 vacancies in Great Britain and 23,900 vacancies in the East Midlands. Between December 2008 and December 2009 the number of vacancies has increased by 40% in the East Midlands and by 11% in Great Britain. The gradual improvement in vacancy volumes reflects the fact that employers are tightly controlling their costs and there is demand for staff as the economy has begun to recover⁴².

Chart 22 shows that the number of vacancies increased across most of the region during 2009. Usually there is a seasonal dip in the number of vacancies around December and January before a recovery from February, and this is apparent in the data. The number of vacancies was highest in Derbyshire (6,630) and Nottinghamshire (6,210) in December 2009.

⁴² Jobcentre Plus, 'East Midlands Labour Market Review', January 2010. JCP vacancy statistics are available via NOMIS.

Chart 22: Vacancies in the East Midlands



Source: Jobcentre Plus Vacancies – summary analysis, notified vacancies accessed from NOMIS.
 Note: Lincolnshire data excludes armed forces vacancies. Derbyshire includes Derby; Leicestershire includes Leicester; Nottinghamshire includes Nottingham.
 Data are rounded.

There are some significant sectoral differences in the concentration of vacancies. In December 2009 in the East Midlands, the sectors with most vacancies were banking, finance & insurance (54.8% of all vacancies), distribution, hotels & restaurants (22.1%) and public administration, education and health (13.3%).

In terms of occupations, the East Midlands has a lower share of vacancies in the three upper tier occupations (managers & senior officials, professional occupations, and associate professionals & technical occupations) than England at 18.1% compared to 23.5% in December 2009. On the other hand, there are more vacancies in operatives and elementary jobs at 44.3% compared to 32.6% in England⁴³. This reflects the industrial structure of the region.

Hard to fill vacancies

Hard to fill vacancies (HtFVs) are an indicator of recruitment problems among businesses. They indicate possible mismatches between the supply of labour and the demands of the business. The reasons for HtFVs are diverse: from ‘not enough interest in the job’ to ‘applicants have not got the required attitude’; from ‘low number of applicants’ to ‘poor terms and conditions, such as pay’.

Hard to fill vacancies for the East Midlands are only available from the National Employers Skills Survey 2007, which is dated to prior the recession. The Key Findings from the National Employer Skills Survey for England 2009 (NESS 2009) were

⁴³ ONS Crown Copyright Reserved, vacancies – notified by occupation via NOMIS.

published on 10 March 2010⁴⁴. Headline figures for England show that the proportion of HtFVs has continued to fall from 30% (of all vacancies) in 2007 to 22% in 2009, as has the number of vacancies.

The East Midlands had 12,126 HtFVs in 2007, which is equivalent to 30% of all vacancies. This is the same as the English average. HtFVs in the East Midlands have the following characteristics:

- HtFVs are concentrated in small establishments. The proportion of HtFVs in the East Midlands businesses employing 2-4 employees was 41% compared to the regional average of 30% in 2007. There are a number of reasons for this. For example, the proportion of vacancies that are hard to fill was particularly high in hospitality (9.8%), land-based industries (7.0%), engineering (8%) and construction (6.6%), which have a particularly large number of very small businesses⁴⁵.
- In terms of occupational distribution of HtFVs, the share of operatives and elementary jobs was proportionately higher in the East Midlands than in England at 25%, compared to the national average of 20%⁴⁶. In addition, the distribution of hard to fill vacancies in skilled trades occupations is higher in the region than in England at 23% compared to 16%.
- Within the region, vacancies are hardest to fill in Lincolnshire and Rutland (40.5% of all vacancies)⁴⁷. The reason could be the industrial structure of this part of the region: land-based industries and hospitality are more important in the industrial composition of Lincolnshire than the regional average. These recruitment difficulties partly explain some of the migrant worker movements identified above.

Table 2: Hard to fill vacancies in the East Midlands, 2007

	Number of HtF vacancies	HtF vacancies as % of all vacancies
Derbyshire	2,120	25.2
Leicestershire	2,610	28.3
Lincolnshire and Rutland	3,130	40.5
Northamptonshire	1,960	29.2
Nottinghamshire	2,350	26.3
East Midlands	12,130	30.0
England	183,470	30.0

Source: BMG Research on behalf of The Learning and Skills Council in the East Midlands, 'National Employers Skills Survey 2007: report of results for the East Midlands', Table 17.

Note: Data is weighted. Data are rounded in this table.

⁴⁴ UK Commission for Employment and Skills, 'National Employer Skills Survey for England 2009: Key findings report' http://www.ukces.org.uk/upload/pdf/NESS%20Key%20findings%202009_2.pdf

⁴⁵ BMG Research on behalf of The Learning and Skills Council in the East Midlands, 'National Employers Skills Survey 2007: report of results for the East Midlands', Page 29-30, Table 19-20.

⁴⁶ BMG Research on behalf of The Learning and Skills Council in the East Midlands, 'National Employers Skills Survey 2007: report of results for the East Midlands', page 44, Table 29.

⁴⁷ BMG Research on behalf of The Learning and Skills Council in the East Midlands, 'National Employers Skills Survey 2007: report of results for the East Midlands', page 27, Table 17.

Skill shortage vacancies

The NESS 2007 investigates the employers' perception of causes of recruitment difficulties by asking a series of questions from those who indicated they had HtFVs.

- At aggregate level the most reported reason for HtFVs was the “low number of applicants with required skills”, at 34% in the East Midlands and 36% in England in 2007.
- The “lack of work experience the company demands” was the second most often mentioned recruitment difficulty by employers. In the East Midlands 20% of employers reported this reason compared to the English average of 19% in 2007.
- Generally, employers were significantly less likely to mention “lack of qualification” as a recruitment problem. However, the East Midlands appears to have proportionately greater recruitment problems because of “lack of qualification”. The percentage of establishments reporting lack of qualification as one of the recruitment problems was 14% in the East Midlands and 12% in England in 2007.

The overall indicator that captures these three reasons for HtFVs is Skill Shortage Vacancies (SSVs).

The national findings from NESS 2009⁴⁸, show that in England, the number of SSVs in 2009 is far lower than that found for 2007 as it has decreased from 130,000 to 63,100. The SSVs as the proportion of vacancies has fallen from 21% in 2007 to 16% in 2009. This drop is due to the overall fall of vacancies and the larger pool of potential employees with the required skills as unemployment increased.

In the East Midlands there were 8,450 SSVs in 2007. This is equivalent to 20.6% of all vacancies in the East Midlands and compares to 21.1% for England⁴⁹. The proportion of SSVs was the highest in London (25.9%), in the South East (22.2%) and in the South West (21.8%). There are significant sub-regional differences. Derbyshire has the lowest proportion of SSVs, at 16.8%, whilst Lincolnshire and Rutland has the highest at 27.2%.

However, it is worth noting that here is a debate, about how recruitment difficulties should be interpreted in a wider labour market context. Regions with dynamic labour markets tend to have a greater proportion of HtFVs and SSVs (South East, London, South West). High proportion of HtFVs and SSVs may suggest increasing demand for skills by employers and more dynamic recruitment practices. At the same time a high percentage on these indicators may also show a genuine gap between employees characteristics and employers requirements.

⁴⁸ UK Commission for Employment and Skills, 'National Employer Skills Survey for England 2009: Key findings report' http://www.ukces.org.uk/upload/pdf/NESS%20Key%20findings%202009_2.pdf

⁴⁹ BMG Research on behalf of The Learning and Skills Council in the East Midlands, 'National Employers Skills Survey 2007: report of results for the East Midlands', Table 21.

Table 3: Skills shortage vacancies in the East Midlands, 2007

	Number of skills shortage vacancies	Skills shortage vacancies as % of all vacancies
Derbyshire	1,420	16.8
Leicestershire	1,970	21.3
Lincolnshire and Rutland	2,100	27.2
Northamptonshire	1,330	19.9
Nottinghamshire	1,640	18.3
East Midlands	8,450	20.6
England	130,000	21.1

Source: BMG Research on behalf of The Learning and Skills Council in the East Midlands, 'National Employers Skills Survey 2007: report of results for the East Midlands', Table 21.

Note: Data is weighted. Data are rounded in this table.

SSVs are most common in the manufacturing (33% as a proportion of all vacancies) engineering (33%) and construction (32%)⁵⁰ sectors.

In terms of occupations, the East Midlands has a proportionately higher share of SSVs in operatives and elementary jobs than England, at 23% compared to the national average of 17%⁵¹. In addition, in the East Midlands 26% of all SSVs are concentrated in skilled trades occupations. This can be partly explained by the significant replacement demand of skilled trades which is associated with the high share of employment in manufacturing in the region and the ageing workforce.

Key Points: Demand for labour

- There were 23,900 vacancies in the East Midlands in December 2009. Between December 2008 and December 2009 the number of vacancies increased by 40% in the East Midlands and by 11% in Great Britain. The gradual improvement in vacancy volumes reflects that employers are tightly controlling their costs, there is demand for staff as the economy has begun to recover.
- The East Midlands has a lower share of vacancies in managerial and professional jobs and a higher share in operatives and elementary jobs than England.
- Hard to fill vacancies are concentrated in small businesses and are more prevalent in sectors such as construction, passenger transport and land-based activities. Within the region, there are more hard to fill vacancies in Lincolnshire and Rutland than in other areas.
- Skills shortage vacancies are most common in manufacturing, engineering and construction. The region has a proportionately higher share of skill shortage vacancies in operatives and elementary jobs and skilled trade occupations.

⁵⁰ BMG Research on behalf of The Learning and Skills Council in the East Midlands, 'National Employers Skills Survey 2007: report of results for the East Midlands', page 36, Table 23.

⁵¹ BMG Research on behalf of The Learning and Skills Council in the East Midlands, 'National Employers Skills Survey 2007: report of results for the East Midlands', page 44, Table 29.

4.4 Supply of skills

The 2004 Pre-Budget Report: “Skills in the global economy” emphasised first, the comparatively high stock of adults in the UK without basic skills (literacy and numeracy); second, evidence of the UK’s relatively poor position in intermediate level skills; and third, the need for a highly skilled workforce to compete successfully in an international market. The Government commissioned Sandy Leitch to undertake an independent review of the UK’s long-term skills needs. The final report “Leitch Review of Skills, Prosperity for all in the global economy – world class skills” shows that the UK must urgently raise achievements at all levels of skills.

The Leitch review emphasises that skills and capacities are the main differentiating factor of competitiveness among developed countries. As competitive pressure increases in the global economy, the utilisation of skills through a better match of skills supply and skills demand has become a policy priority.

In the Leitch review the term ‘working age’ is defined as 19 to state pension age. To be consistent with this the qualification and skills issues in the region will be discussed using this definition. The indicators are based on datasets obtained from the Department for Children, Schools and Families with data from 2001-2002 until 2008.

Qualification level is an imperfect but the most widely used ‘proxy’ for skills. The National Qualifications Framework (NQF)/National Vocational Qualifications (NVQ) level equivalences defines Level 2, 3, and 4 qualifications as follows⁵²:

- **Level 4 and above:** People are counted as being qualified to Level 4 and above if they have achieved a first or higher degree, an NVQ Level 4 or 5, a recognised degree-level professional qualification, an HNC/HND or other higher-level vocational or management qualification, a teaching or nursing qualification, or a diploma in higher education.
- **Level 3:** People are counted as being qualified to Level 3 and above if they have achieved at least two A Level passes, four AS Levels, an Advanced GNVQ, an Access to HE qualification or an NVQ Level 3 or equivalent vocational qualification.
- **Level 2:** People are counted as being qualified to Level 2 and above if they have achieved at least five GCSEs at grades A*-C, an Intermediate GNVQ, two or three AS Levels or an NVQ Level 2 or equivalent vocational qualification.

Apprenticeships are allocated to their equivalent NQF/NVQ level and those apprenticeship reported without a specific level are split evenly between Level 2 and Level 3 qualification.

⁵² Department for Children, Schools and Families, ‘Qualifications and Participation in Learning at a local level: England 2007, Population aged 19-59/64’.

<http://www.dcsf.gov.uk/rsgateway/DB/STA/t000809/Table1.xls>

As with all DCSF analyses, other qualifications have been apportioned in the proportions 10% to Level 3, 35% to Level 2 (i.e. 45% Level 2+) and 55% below Level 2.

In November 2009 the Government published Skills for Growth⁵³, the national skills strategy. The strategy's commitments include:

- Creating a modern technician class through more advanced apprenticeships;
- Investing in skills in the sectors on which future growth and jobs depend as skills are recognised as key part of the economic recovery;
- Empowering individuals through skills accounts giving people 'consumer choice' and better information about courses; and
- Simplifying the skills landscape by reducing the number of separately publicly funded agencies by over 30 in the next three years.

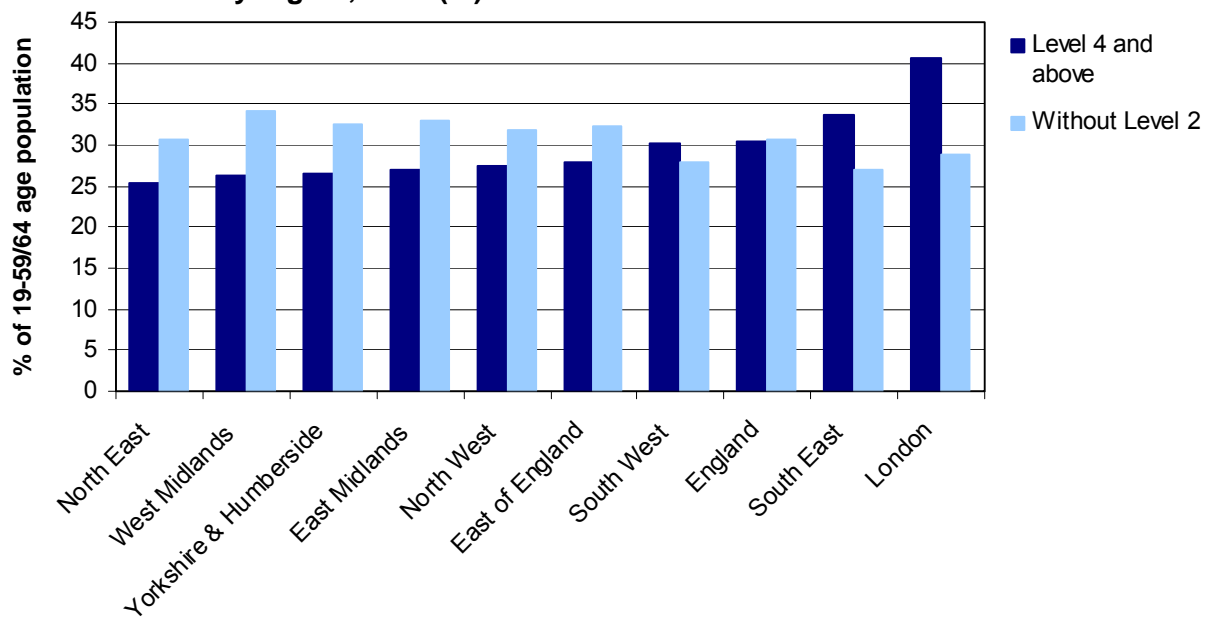
4.4.1 Qualifications of the workforce

People with higher qualifications have access to a wider range of options in the labour market and higher earnings. Higher qualifications also increase the chances of working in positions which have better working conditions for example in terms of working environment, working hours and employment contracts.

This sub-section provides an assessment of the skills levels of the current workforce of the East Midlands in 2008. Chart 23 presents the proportion of adults qualified to Level 4 and above and without Level 2 in 2008.

⁵³ Department for Business, Innovation & Skills, 'Skills for Growth – the national skills strategy', November 2009. <http://www.bis.gov.uk/policies/skills-for-growth>

Chart 23: Proportion of working age population qualified to Level 4 and above and without Level 2 by region, 2008 (%)



Source: Annual Population Survey 2001-2008.

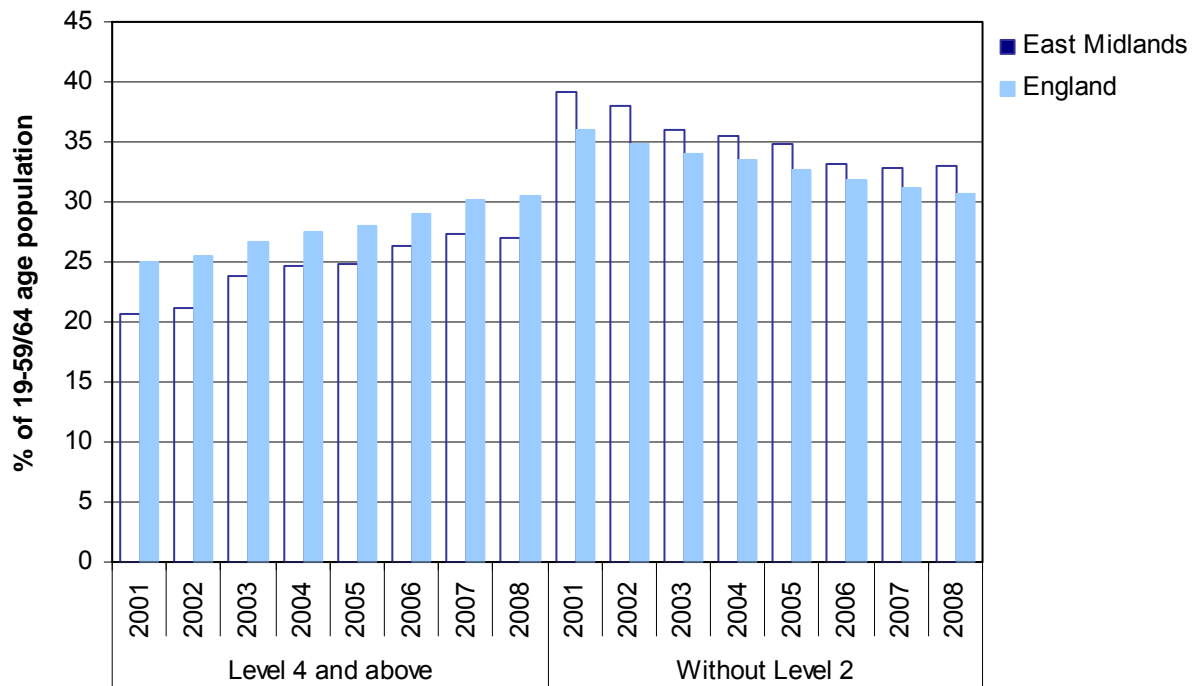
http://www.thedataservice.org.uk/statistics/sfrdec09/sfr_dec09_labour_force_tables.htm

Note: Without Level 2 qualification is the sum of those with lower than Level 2 and those with no qualification.

The East Midlands is ranked the fourth lowest out of the nine English regions in terms of the proportion of the adult population qualified to Level 4 and above, at 27.0%. This compares to the English average of 30.5%. The regions with the highest proportion of the working age population qualified to Level 4 and above are London (40.6%) and the South East (33.6%).

The proportion of the working age population without a Level 2 qualification (including those without any formal qualification) was 33.0% in the East Midlands in 2008, the second highest among the English regions. This compared to 30.6% in England. The percentage of those without a Level 2 qualification was the highest in the West Midlands (34.2%) and lowest in the South East and the South West, at 26.9% and 27.8% respectively.

Chart 24: Proportion of working age population qualified to Level 4 and above and without Level 2, East Midlands and England 2008 (%)



Source: Annual Population Survey 2001-2008.

http://www.thedataservice.org.uk/statistics/sfrdec09/sfr_dec09_labour_force_tables.htm

Note: Without Level 2 qualification is the sum of those with lower than Level 2 and those with no qualification.

However, there have been significant improvements in the region. The percentage of the East Midlands workforce qualified to Level 4 and above was 20.6% in 2001 and increased to 27.0% by 2008, a 6.4 percentage points increase. In England there was a 5.5 percentage points increase. The gap in the proportion of the workforce qualified to Level 4 and above between the East Midlands and England has narrowed between 2001 and 2008 from 4.4 percentage points to 3.5 percentage points.

The proportion of the working age population without a Level 2 qualification has decreased more significantly in the East Midlands than in England. Between 2001 and 2008 the proportion of those without Level 2 has decreased by 6.3 percentage points in the East Midlands compared to 5.5 percentage points in England.

Between 2001 and 2008 the fall in the proportion of those without qualifications has also been more significant in the East Midlands than in England. In the East Midlands there was a fall of 5.2 percentage points compared to 3.8 percentage points for England.

In terms of economically valuable skills, the Government ‘5 drivers framework’⁵⁴ provides a useful framework. In assessing how skills can be used to foster further productivity gains in the East Midlands it needs to be borne in mind that skills are a derived demand stemming from, amongst other things, the entrepreneurial and innovative actions of economic agents in the region (employers, individuals, and governmental agencies).

⁵⁴ HM Treasury, DTI, ‘Productivity in the UK 5: Benchmarking UK productivity performance’, March 2004. The five drivers are: investment, innovation, skills, enterprise and competition.

In addition, the interaction between skills, enterprise and innovation has both direct and indirect implications for regional (and firm) productivity⁵⁵.

- Enterprise requires many skills including 'entrepreneurial skills', business acumen and numerical ability. In addition, entrepreneurs are necessary to exploit business opportunities presented by innovations;
- Innovation is also largely influenced by skills: academic skills, research skills and creativity are examples of skills that enhance innovation activity and knowledge creation. Innovations in turn present business opportunities for entrepreneurs; and
- Management capability at firm level is crucial in order to construct an appropriate product market strategy, being able to identify skill needs to support that strategy, sourcing skills, and ensuring they are effectively deployed. Managerial support and working practices can also promote innovative working and ultimately enhance productivity.

Sub-regional variations in qualifications

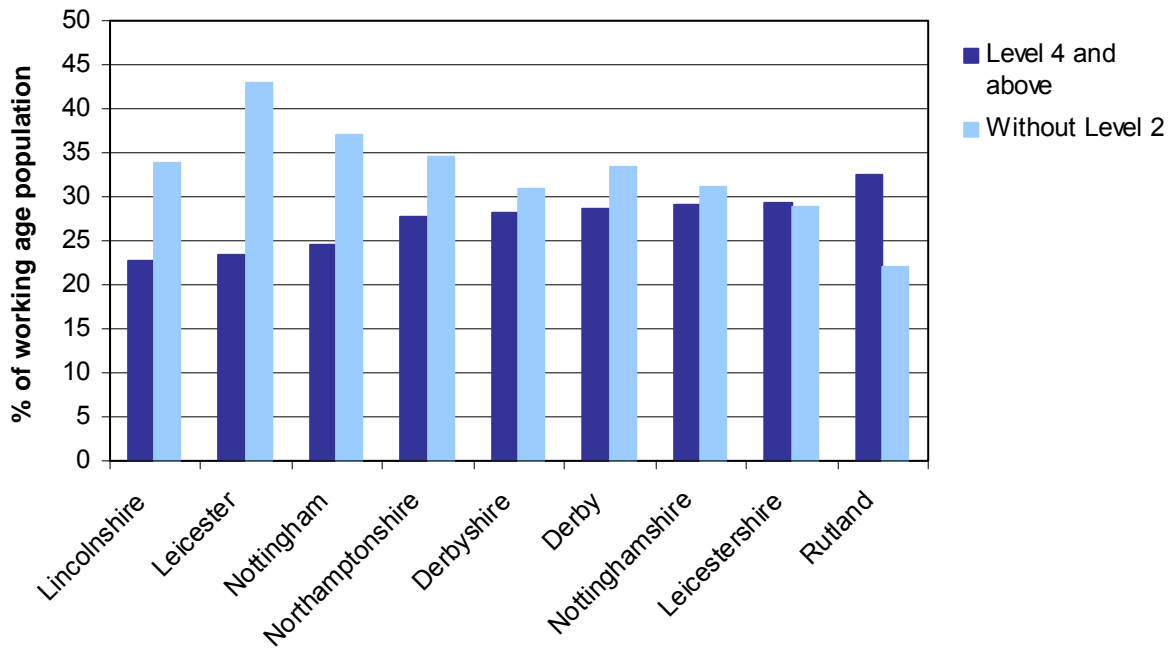
The adult skills profile varies considerably across the East Midlands. Chart 23 shows the proportion of working age adults without a Level 2 qualification and with at least a Level 4 qualification by County and Unitary Authority in the East Midlands.

A combination of the low proportion of the workforce qualified to Level 4 and above and a high proportion of the working age population without a Level 2 qualification is concentrated in Lincolnshire, Leicester and Nottingham.

- In 2008, the percentage of the workforce qualified to Level 4 and above was 22.7% in Lincolnshire, 23.4% in Leicester and 24.6% in Nottingham which are lower than the regional average of 27.0%. The proportion of adults qualified to Level 4 and above was the highest Rutland (32.5%), in Leicestershire (29.2%) and Nottinghamshire (29.0%); and
- In 2008, the percentage of workforce without a Level 2 qualification was the highest in Leicester (43.0%) and Nottingham (37.2%), which compares to the regional average of 33.0%. The proportion of adults without a Level 2 qualification was the lowest in Rutland and Leicestershire at 22.0% and 28.8% respectively.

⁵⁵ Gambin Lynn et al., Warwick Institute for Employment Research, University of Warwick, commissioned on behalf of *emda*, 'Exploring the links between skills and Productivity', 2009.
http://www.intelligenceeastmidlands.org.uk/index.php?option=com_research&task=showReportA&hidemenu=1&id=2239&lead=11&Itemid=29&s=sdate&o=ASC

Chart 25: Sub-regional variation in the qualification level of the workforce, 2008 (%)

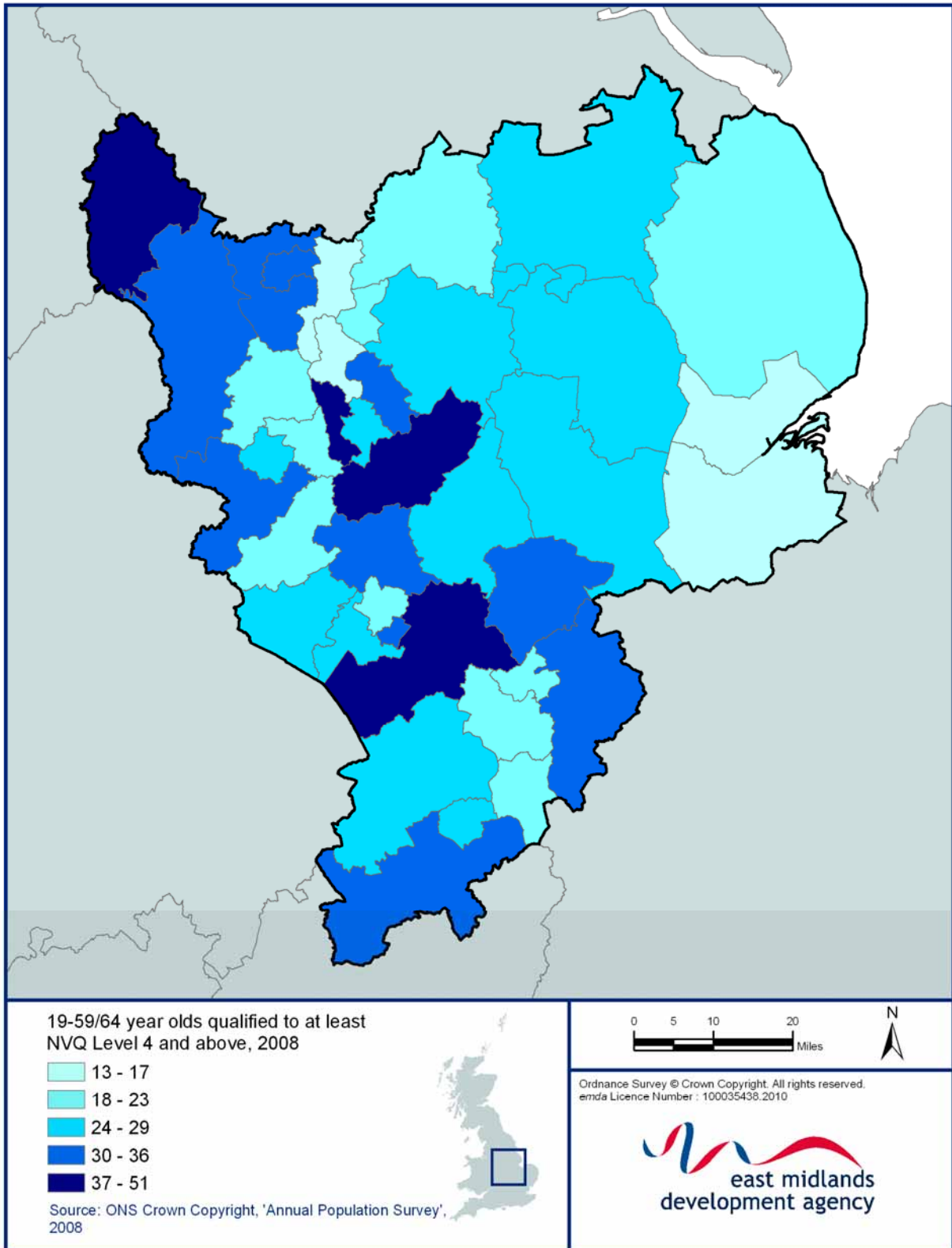


Source: Annual Population Survey 2001-2008.

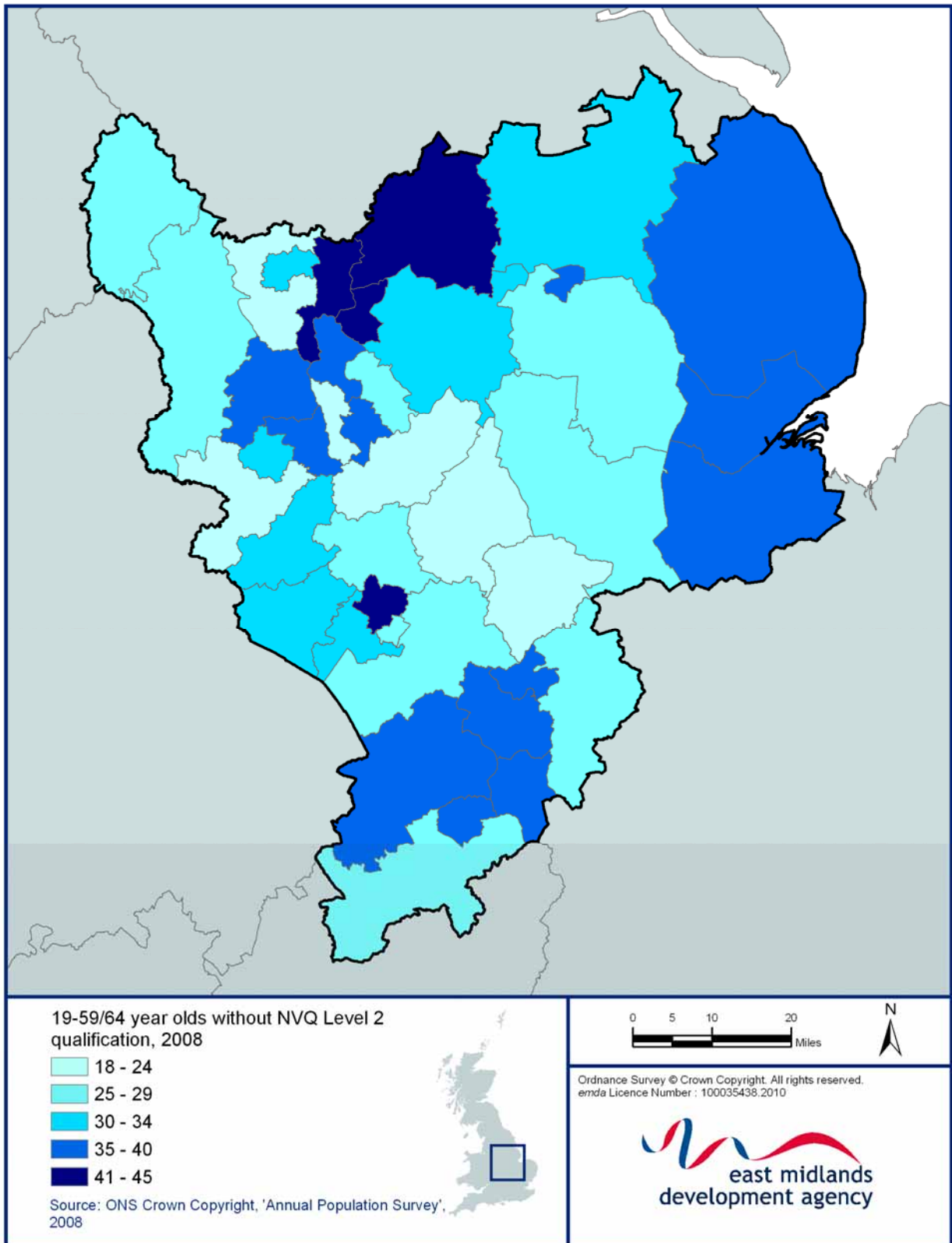
http://www.thedataservice.org.uk/statistics/sfrdec09/sfr_dec09_labour_force_tables.htm

Note: Without Level 2 qualification is the sum of those with lower than Level 2 and those with no qualification.

Map 4: Proportion of 19-59/64 year olds qualified to at least NVQ Level 4 and above, 2008



Map 5: Proportion of 19-59/64 year olds without NVQ Level 2 qualification, 2008

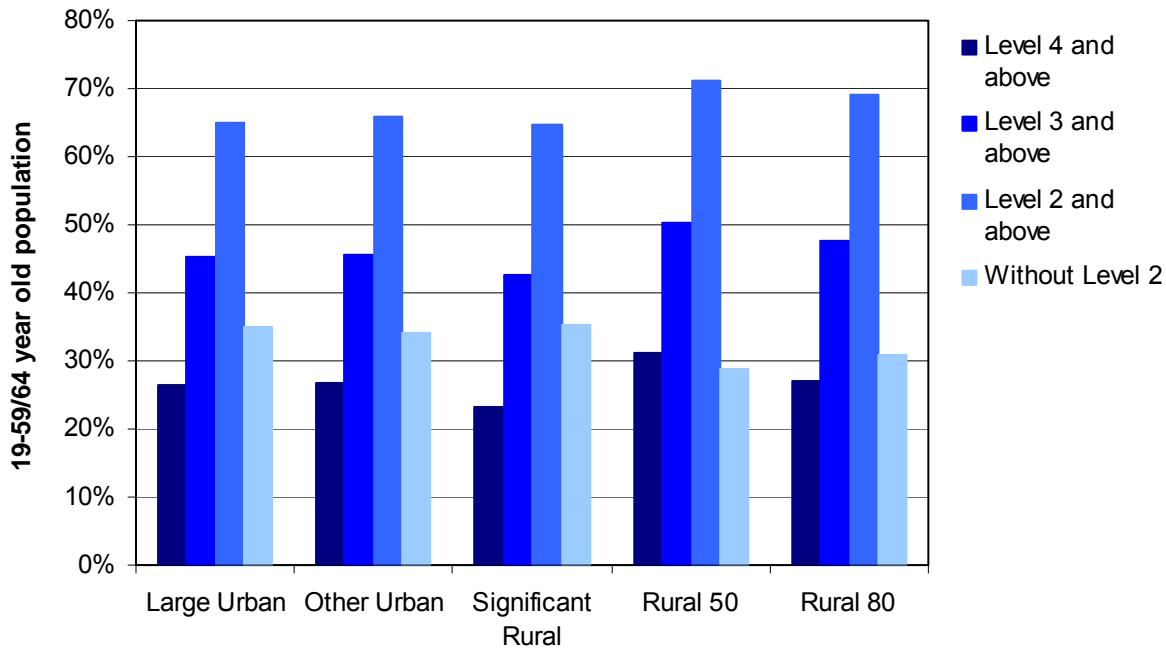


Urban and rural variations in qualifications

Many individuals in higher paid, higher skilled employment live in rural districts and commute to work elsewhere. Chart 24 shows that on average, Rural 50 districts have a the highest proportion of the workforce qualified to Level 4 and above at 31.2%, compared to the regional average of 27.0%. On average urban districts perform slightly less well on this measure than rural districts. The proportion of those with a Level 4 and above qualification in the Large Urban districts was 26.4% and the proportion of adults qualified to Level 4 and above in Other Urban districts was 26.7%. However, only 23.2% of the adult population of Significant Rural districts are qualified to Level 4 and above in 2008, which is 3.8 percentage points lower than the regional average.

Rural 50 and Rural 80 districts have a lower proportion of the workforce with a qualification below Level 2 at 28.7% and 31.0% respectively compared to the regional average of 33.0%. Significant Rural, Other Urban and Large Urban districts perform less well on this measure.

Chart 26: Urban and rural variations of workforce qualification, 2008



Source: Annual Population Survey 2001-2008.

Note: Without Level 2 qualification is the sum of those with lower than Level 2 and those with no qualification.

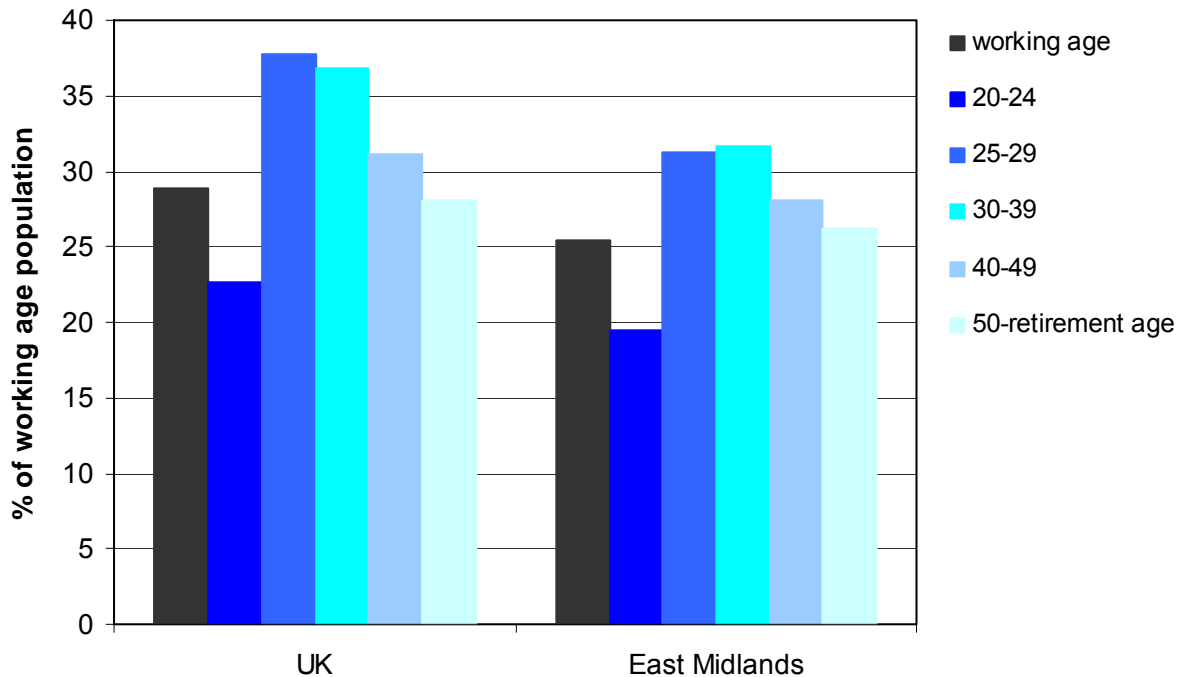
4.4.2 Qualification by age group in the East Midlands

Due to improved access to education over the last decade, the general qualification level of younger people tends to be higher than in older age groups. The level of qualifications by age is illustrated by using the latest annual data from the Annual Population Survey for 2008. The definition of working age population used is 16-59/64 year olds, slightly different than the Leitch definition used before because the data is unavailable for the Leitch definition of working age.

Chart 27 shows that both in the region and in the UK, the 25-29 and the 30-39 year old age groups are more highly qualified compared to the other age bands. In the East Midlands 31.3% of 25-29 year olds were qualified to Level 4 and above and 31.6% of 30-39 year olds. This is compared to 28.1% of the region's 40-49 year old population and 26.2% of 50-retirement aged people.

The proportion of the working age population qualified to Level 4 and above is lower in every age group in the East Midlands than in the UK. The gap is highest among 25-29 year olds, a difference of 6.4 percentage points.

Chart 27: Working age population qualified to Level 4 and above (% by age band), 2008

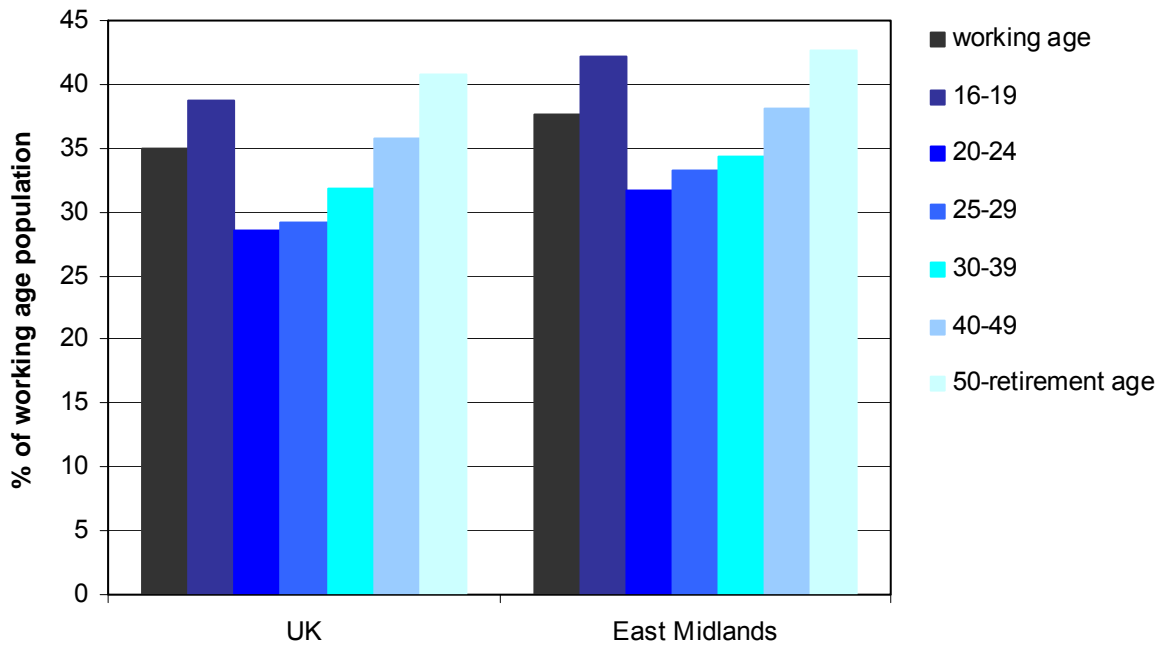


Source: ONS Crown Copyright, 'Annual Population Survey', January-December 2008, from NOMIS.
 Note: this does not include the 16-19 age band, as the number of individuals in this age group qualified to an equivalent of NVQ4 and above is too small to provide sufficient cell sizes for disaggregation by region.

Chart 28 shows the proportion of the working age population with a qualification below Level 2 by age band. This includes those with no qualification, those with other qualification and those with a NVQ1 qualification.

The proportion of people with a qualification below Level 2 is higher in every age group in the East Midlands than in the UK. The gap is the highest among 25-29 year olds. The proportion of 25-29 year olds with a qualification below Level 2 was 33.2% in the East Midlands and 29.2% in the UK, a difference of 4.0 percentage points.

Chart 28: Working age population qualified to below Level 2 (% by age band), 2008



Source: ONS Crown Copyright, 'Annual Population Survey', January-December 2008, from NOMIS.
 Note: Below Level 2 qualification includes those without any formal qualification, those with other qualification and those with Level 1 qualification. Because of the definition of 'other qualification' – see definitions of section 6.4 – some overestimation is possible.

4.4.3 Qualifications and employability in the East Midlands

The higher the qualification level, the more employable an individual becomes. Labour market engagement shows a clear pattern by qualification level. Chart 29 shows the employment rates by highest qualification level in the East Midlands and in the UK in 2008.

In terms of changes in the employment rate between 2007 and 2008, the following points can be made:

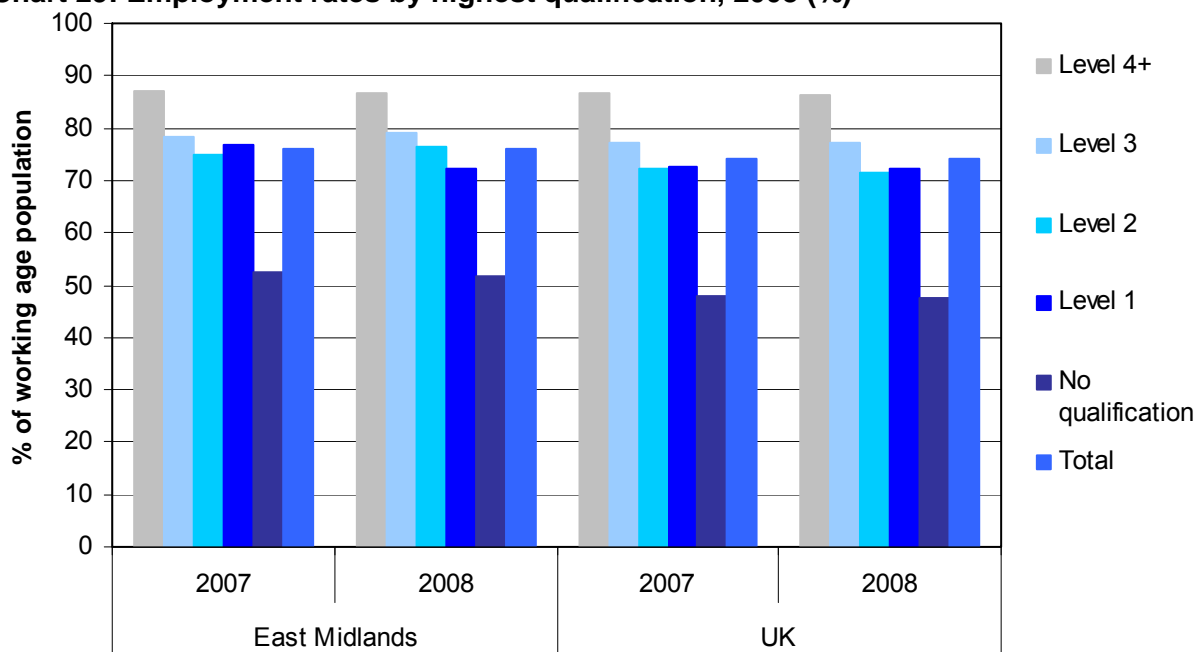
- The employment rate of those with no qualifications is higher in the East Midlands (51.7%) than in the UK (47.4%) confirming that the regional economy has proportionately more jobs in the lower value activities than the national average. The employment rate of the least qualified remained largely the same between 2007 and 2008 both regionally and nationally; and
- Between 2007 and 2008, the employment rate of those with Level 1 as their highest qualification, decreased by 4.7 percentage points in the East Midlands from 77.0% to 72.3%. This is partly related to the job losses concentrated in low skilled occupations and in particular sectors such as manufacturing and construction. These sectors have relatively greater importance in the regional economy as the Economy chapter highlights.

- Between 2007 and 2008, the employment rate of those with Level 2 and Level 3 as their highest qualification increased slightly in the East Midlands, while the employment rate of those with Level 4 and above largely stayed the same.

Chart 29 also shows that although the overall employment rate in 2008 in the East Midlands is slightly higher than in the UK, a Level 4 and above qualification level seems to have less impact on employability in the region than nationally. The employment rate of those with Level 4 and above qualifications was 11 percentage points higher in the East Midlands than the average of all qualification levels. In the UK, the difference was 12.2 percentage points.

Respondents with no qualifications had the lowest employment rates, at 51.7% in the East Midlands and 47.4% in the UK. The employment rate of those with no formal qualification was 24.2 percentage points lower than the average of all qualifications levels in the East Midlands. In the UK, the difference was 26.6 percentage points. Those without any formal qualifications are more likely to be employed in the East Midlands than in the UK.

Chart 29: Employment rates by highest qualification, 2008 (%)



Source: Annual Population Survey January-December 2008 Client File, ONS Regional Statistician.

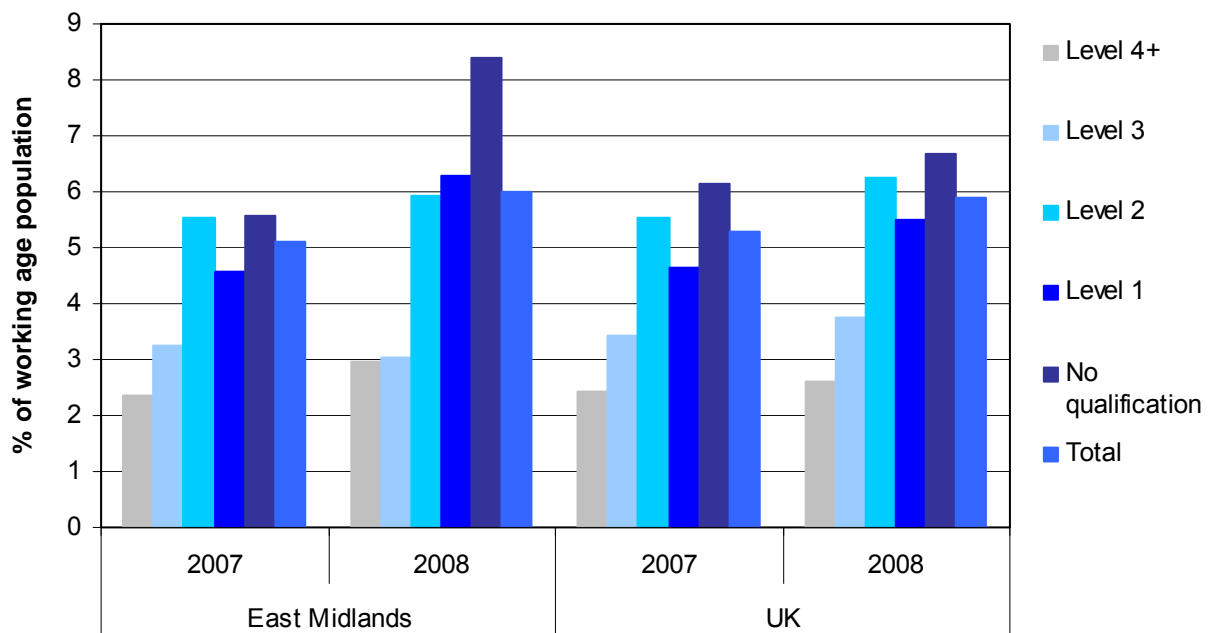
The unemployment rate also shows significant differences by qualification level. As the qualification level of the resident population rises, the proportion of those who are unemployed decreases. In terms of changes in the unemployment rate between 2007 and 2008, the following points can be made:

- Between 2007 and 2008, the unemployment rate increased at every qualification level both in the East Midlands and in the UK, but increased more among those with lower level qualifications. Between 2007 and 2008, the increase in the unemployment rate among those without any qualifications was 2.8 percentage points in the East Midlands, from 5.6% to 8.4%. The unemployment rate for this group increased from 6.1% and 6.7% in the UK, an increase of 0.6 percentage points. Between 2007 and 2008, the unemployment rate for those with Level 1

as their highest qualification increased by 1.7 percentage points in the East Midlands from 4.6% to 6.3%. This is compared to the increase of 0.8 percentage points in the UK.

The unemployment rate of those with a Level 4 and above qualification is the lowest both in the UK and in the East Midlands. This confirms that employees with high qualification are more likely to possess and maintain a position in sustainable employment. In contrast, the risk of those with a Level 4 and above qualification being unemployed is somewhat greater in the East Midlands than the national average. The unemployment rate for those with a Level 4 and above qualification was 3.0% in the East Midlands, compared to 2.6% in the UK in 2008.

Chart 30: Unemployment rate by highest qualification, 2008 (%)



Source: Annual Population Survey January-December 2008 Client File, ONS Regional Statistician.

4.4.4 Educational achievement of pupils

One of the recommendations of the Leitch review is to shift the balance of intermediate skills from Level 2 to Level 3. Level 2 qualifications are generally achieved by the age of 15. This sub section provides an overview of the qualification level of pupils aged 15 in the East Midlands and in England in 2008-2009.

Sixteen years old is the official age when a person can leave compulsory education in the UK. However, when the Education and Skills Bill becomes law all young people in England will be required to continue in education or training until their 18th birthday⁵⁶.

⁵⁶ The increase in the minimum age at which young people can leave school will be introduced in two steps. The minimum age will increase to 17 from 2013 and to 18 from 2015. The first cohort to benefit from these changes began Year 7 (age 13) in September 2009.
<http://www.dcsf.gov.uk/14-19/index.cfm?go=site.home&sid=42&pid=344&ctype=TEXT&ptype=Single>

Generally, between 2007-2008 and 2008-2009 the education attainment of pupils show a significant overall improvement across the UK⁵⁷.

Chart 31 shows that in 2008-2009, the proportion of 15 year old pupils achieving five or more GCSEs graded A*-C was 68.9% in the East Midlands. This was slightly lower, by 1.1 percentage points, than the English average of 70.0%. This overall picture masks significant sub-regional differences:

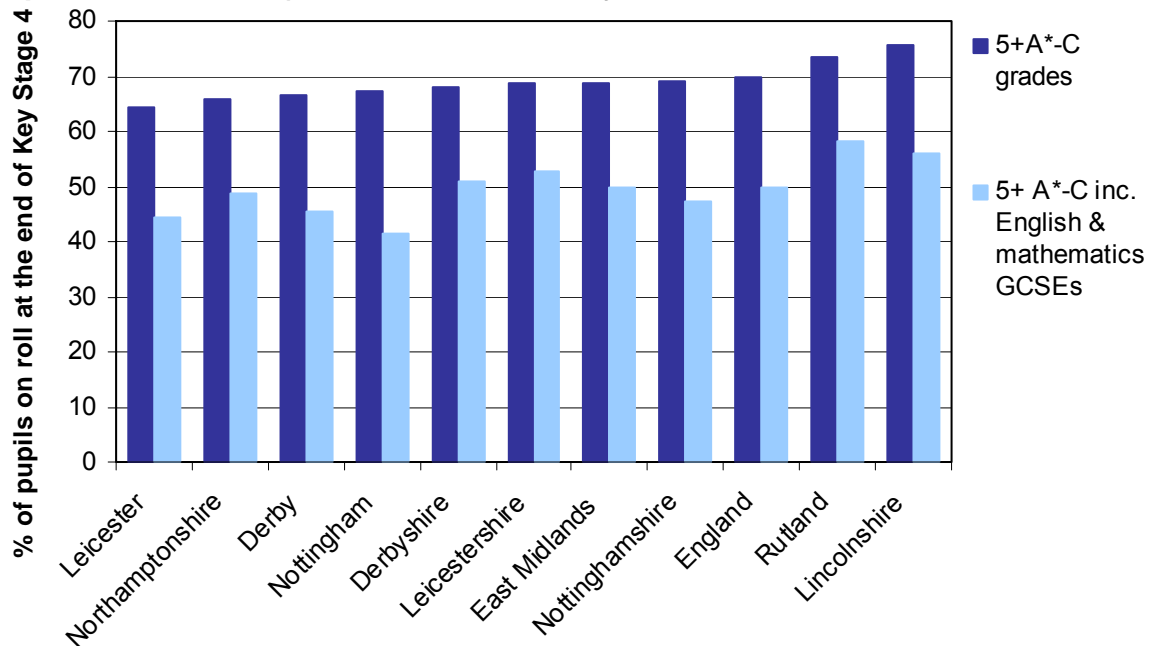
- Achievement is significantly higher in Lincolnshire and in Rutland compared to the regional or national average. In both counties, more than 73% of 14-16 year old pupils enrolled at the end of Key Stage 4 gained 5 or more A*-C GCSEs during the 2008-2009 academic year; and
- The lowest proportion of 14-16 year old pupils enrolled at the end of Key Stage 4 achieving five or more A*-C GCSEs was in Leicester (64.5%), Northamptonshire (66.0%) and Derby (66.6%).

When English and Maths are included, the proportion of pupils achieving five or more A*-C GCSEs drops significantly. In the East Midlands 49.9% of pupils achieved five or more A*-C GCSEs including English and Maths during the 2008-2009 academic year. This is almost the same as the English average of 49.8%. Sub-regionally, the following points should be noted:

- 14-16 year old pupils enrolled at the end of Key Stage 4 attending school in Rutland, Lincolnshire and Leicestershire performed the best in the East Midlands, with 58.2%, 56.1% and 52.6% of them achieving five or more A*-C GCSEs including English and Maths respectively; and
- Only 41.4% of pupils gained five or more A*-C GCSEs including English and Maths in Nottingham, which is 8.5 percentage points lower than the regional average and 8.4 percentage points lower than the national figure.

⁵⁷ Based on Table 17, Department for Children, Schools and Families, 'GCSE and Equivalent Results in England, 2008/09 (Revised)'.

Chart 31: Percentage of pupils enrolled at the end of Key Stage 4 achieving five GCSE (equivalent to Level 2), 2008-2009 academic year



Source: Department for Children, Schools and Families, 'GCSE and Equivalent Results in England, 2008-2009 (Revised)' Table 16.

Note: Denominators is the number of pupils on roll at the end of Key Stage 4 in the 2008-2009 academic year, 14-16 year olds.

4.4.5 Young labour market entrants

The skills level, competence and personal features, such as motivation and work ethic, are essential factors for doing a job well and performing effectively in a working environment. These attributes are also important for later career progression.

The National Employers Skills Survey 2007 interviews employers about their recruitment of young people entering the labour market. Young labour market entrants are 16 year old school leavers, 17-18 year old college leavers and university leavers aged between 21 and 23. These questions cover issues around whether employers recruit anyone from these three groups and whether these young people were seen as unprepared or not⁵⁸.

The pattern of recruitment practices of young labour market entrants seems to be similar both regionally and nationally. In addition, the recruitment level has stayed broadly stable over the two years prior to the survey both in the East Midlands and in England.

In 2007 employers who recruited young people from any of these three groups in the East Midlands were more satisfied with their general preparedness for work⁵⁹. The proportion of those employers who think that the preparedness of young labour market entrants aged 16 was poor or very poor was 23% in the East Midlands and 28% in

⁵⁸ BMG Research on behalf of The Learning and Skills Council in the East Midlands, 'National Employers Skills Survey 2007: report of results for the East Midlands'.

⁵⁹ Preparedness covers not just tangible attributes of general and specific skills and knowledge but more intangible personal features such as motivation or discipline.

England. The corresponding figure for 17 and 18 year olds are 16% and 21%, and for graduate labour market entrants, 9% and 11%⁶⁰.

There is little variation in the recruitment of young people sub-regionally. However, there are some differences by sector:

- Graduate recruitment tends to be higher in financial services and in the public sector; and
- Recruitment of 16 year olds and 17-18 year olds is high in retail and hospitality which suggests that employers in these sectors tend to hire young labour market entrants for casual and part-time positions.

In terms of recruitment by size of establishment, very small businesses, with 2-4 employees, are less likely to hire young labour market entrants. This suggests that young labour market entrants are not seen by small businesses as a solution to recruitment problems⁶¹.

Students in Higher Education Institutions 2007-2008⁶² reports that there was a total of 149,000 students in the East Midlands in 2007-2008. Of these 33,600 were postgraduates⁶³, 93,200 undergraduates and 22,200 other undergraduates.

Only 45.6% of those students who obtained their qualification in the East Midlands stay in the region and enter the regional labour market. This proportion is the lowest among the English regions. The retention rate is the highest in London and in the North West at 71.6% and 73.6% respectively.

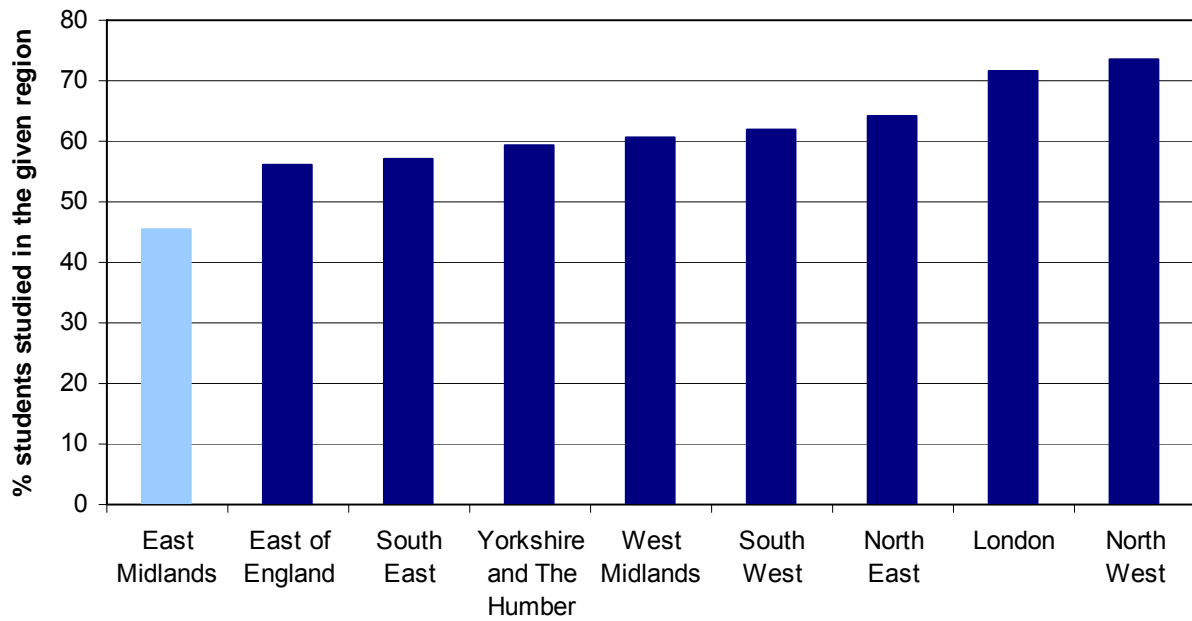
⁶⁰ BMG Research on behalf of the Learning and Skills Council in the East Midlands, 'National Employers Skills Survey 2007: report of results for the East Midlands'.

⁶¹ BMG Research on behalf of the Learning and Skills Council in the East Midlands, 'National Employers Skills Survey 2007: report of results for the East Midlands'.

⁶² Higher Education Statistics Agency, 'Students in Higher Education Institutions 2007-2008'. 2009, Table 8.

⁶³ Students cover postgraduates, first degree students and other undergraduates. Postgraduate qualifications are those courses which leading to higher degrees, diplomas and certificates which usually requires a first degree as an entry qualification. First degrees are qualifications with degree. Other undergraduate qualifications are those qualifications which aim equivalent to and below first degree level, such as foundation degrees and all other higher education qualifications not included above. Open University is excluded. For more details see Higher Education Statistics Agency, 'Students in Higher Education Institutions 2007-2008', 2009.

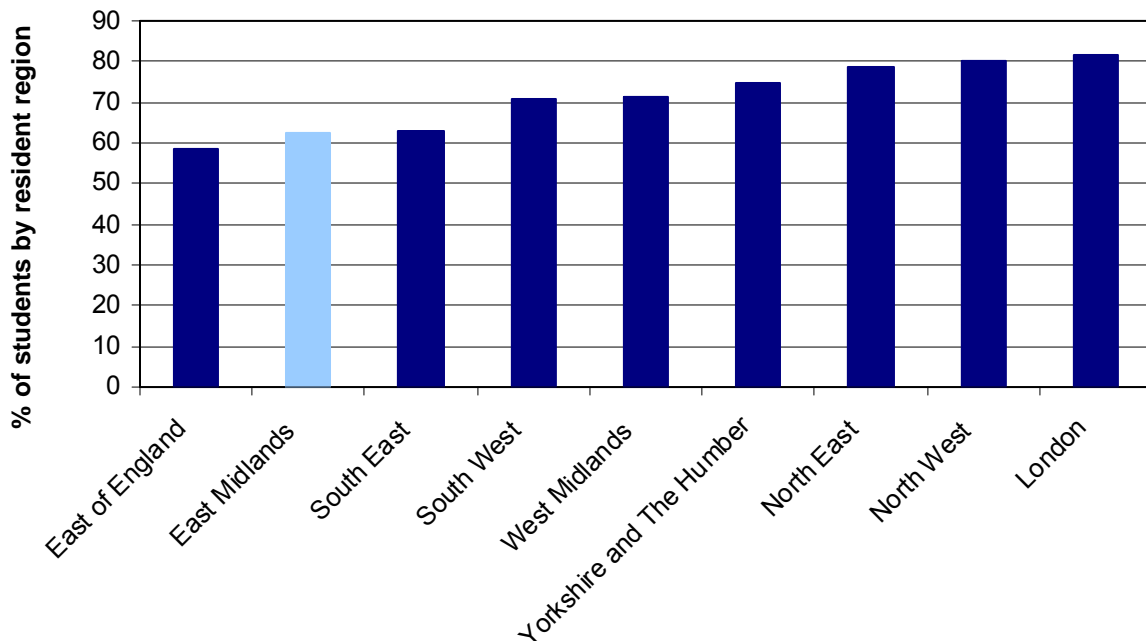
Chart 32: Proportion of students by regions who took up employment in the same region where they studied, 2007-2008 (%)



Source: Higher Education Statistics Agency, 'Destination of Leavers from Higher Education Institutions 2007/2008'. Table 7b.

Just over 62.0% of East Midlands residents find a job in the East Midlands after graduation, regardless of the region where they gained their qualification. This proportion is the third lowest among English regions.

Chart 33: Proportion of students by residency who took up employment in their resident region, 2007-2008 (%)



Source: Higher Education Statistics Agency, 'Destination of Leavers from Higher Education Institutions 2007/08'. Table 7a.

Although, graduate retention is relatively low in the region, some graduates may return to the region at a later stage in their career and therefore, the challenge is to make the East Midlands attractive for them to do so.

Key Points: Supply of skills

- The East Midlands was ranked the fourth lowest of the nine English regions in terms of the proportion of adult population qualified to Level 4 and above in 2008.
- There has been a greater than average increase of the proportion of the East Midlands population with a Level 4 and above qualification between 2001 and 2008.
- Although the proportion of those without Level 2 qualifications was higher in the East Midlands than in England, the decrease in the proportion of the adult population without a Level 2 qualification was more significant than the national average between 2001 and 2008.
- Individuals living in rural areas are more likely to have a Level 4 and above qualification. Urban residents tend to have lower qualifications.
- Due to wider access to education in the last decade the general qualification level of younger people tends to be higher than in older age groups.
- The proportion of 15 year old pupils achieving five or more GCSEs graded A*-C was only slightly lower in the region than the national average. When English and Maths is included, the region performs similar to the national average.
- Although, the overall employment rate in the East Midlands is higher than in the UK, higher qualifications seem to have less impact on employability in the region than nationally. In addition, those without any formal qualifications are more likely to be employed in the East Midlands than in the UK.
- Recruitment practices of employers in relation to young labour market entrants seem to be broadly similar regionally and nationally.
- In terms of recruitment by size of establishment, there is a clear pattern that very small businesses with 2-4 employees are less likely to hire young labour market entrants in the East Midlands.
- Less than half of those students who obtained their qualification in the East Midlands stay in the region and enter the regional labour market. This proportion is the lowest among the English regions.

4.5 Demand for skills

Although the scale of the upskilling of the East Midlands workforce is significant, the demand for these higher level skills seems to be lagging behind the increased supply. The proportion of those who reported that their highest qualification was above that required for the job they do ('over-qualified' individuals) in the East Midlands was 39.1% in 2006⁶⁴. This represents a rise of 7.4 percentage points from the figure reported in 1997 when 31.7% reported being 'over-qualified'. In England, 'over-qualification' also rose by around eight percentage points over the same period from 31.4% to 39.4%.

The demand for skills is a derived demand. It depends upon the nature of the product or service that a business supplies to its customer. This sub-section provides measures of employer demand for skills such as 'knowledge intensity' of employment and the skills gaps among current staff. The provision of and participation in training is also assessed.

4.5.1 The knowledge intensity of employment in the East Midlands

The 'knowledge intensity' of employment in the region is a measure of the demand for higher skill levels. It is measured as the proportion of total employment in four classifications of sectors: K1 sectors, which are all sectors with more than 40% of their workforce qualified to graduate level (equivalent to Level 4 and above); K2 sectors, which have between 25% and 40% of their workforce qualified to graduate level; K3 sectors, which have between 15% and 25% of their workforce qualified to graduate level; and K4 sectors, which have less than 15% of their workforce qualified to graduate level⁶⁵.

Due to technological developments and changes in working practices over the past decade, the shift from industrialised to knowledge industries has been a general trend in developed economies. If the East Midlands is to remain competitive, growth in knowledge intensive industries is essential.

Chart 34 shows that there has been a reduction in the proportion of the workforce employed in the **least** knowledge intensive (K4) sectors both regionally and nationally between 2006 and 2008. In the East Midlands the proportion of the workforce in the least knowledge intensive sectors has decreased by 7.0 percentage points (from 30.7% to 23.7%). In the UK, the proportion of the workforce in K4 sectors has decreased by 14.1 percentage points (from 29.4% to 15.3%). However, it must be noted, that due to the sample size in the Annual Population Survey, which was used for this calculation, tend to be more volatile at regional level.

⁶⁴ Alan Felstead and Francis Green on behalf of *emda*, 'Skills at Work in the East Midlands, 1997 to 2006'. 2007.

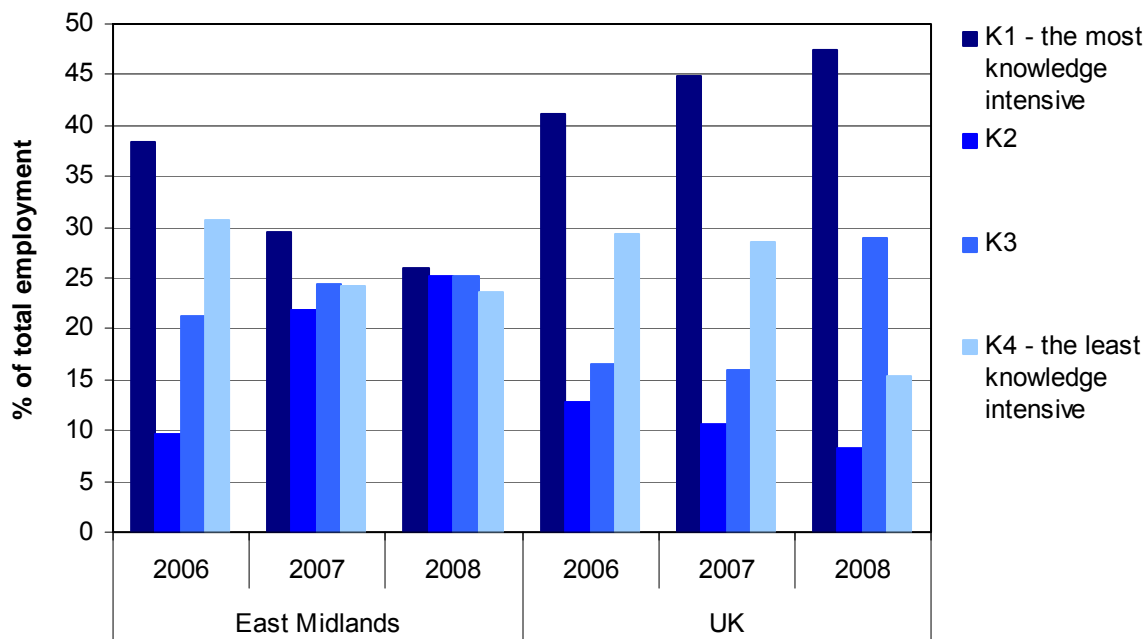
http://www.intelligenceeastmidlands.org.uk/index2.php?option=com_docman&task=doc_view&gid=380&Itemid=99999999

⁶⁵ This methodology was proposed by the European Commission in the 2000 edition of 'Employment in Europe', and has since been widely used in the UK for comparing the relative knowledge intensity of regional employment. *emda*, 'Regional Economic Strategy for the East Midlands 2006-2009 – 'A Flourishing Region': Technical Paper Number 1 – Measuring Progress Towards RES Objectives', July 2006.

There has also been a reduction in the proportion of the workforce employed in the **most** knowledge intensive sectors (K1) in the East Midlands compared to an increase in the UK. Between 2006 and 2008, in the East Midlands the proportion of the workforce in the most knowledge intensive sectors has decreased by 12.5 percentage points from 38.4% to 25.9%, while the proportion of the workforce in these sectors has increased by 6.2 percentage points in the UK from 41.2% to 47.4%.

In the East Midlands there has been a corresponding increase in the proportion of the workforce employed in the K2 and the K3 sectors between 2006 and 2008.

Chart 34: Proportion of employment in different knowledge intensive sectors 2006-2008 (%)



Source: ONS Crown Copyright, 'Annual Population Survey', 2006-2008, data provided by Office for National Statistics.

4.5.2 Skills gaps within the existing workforce

Skills gaps refer to the extent to which employers perceive their employees as not being fully proficient to undertake their job.

This section is built on evidence collected by the Learning and Skills Council from employers about existing skills issues and other recruitment problems. By using data from the employer's point of view we can complement and in some cases, contrast the employees' and the employers' perception about skills issues in the region.

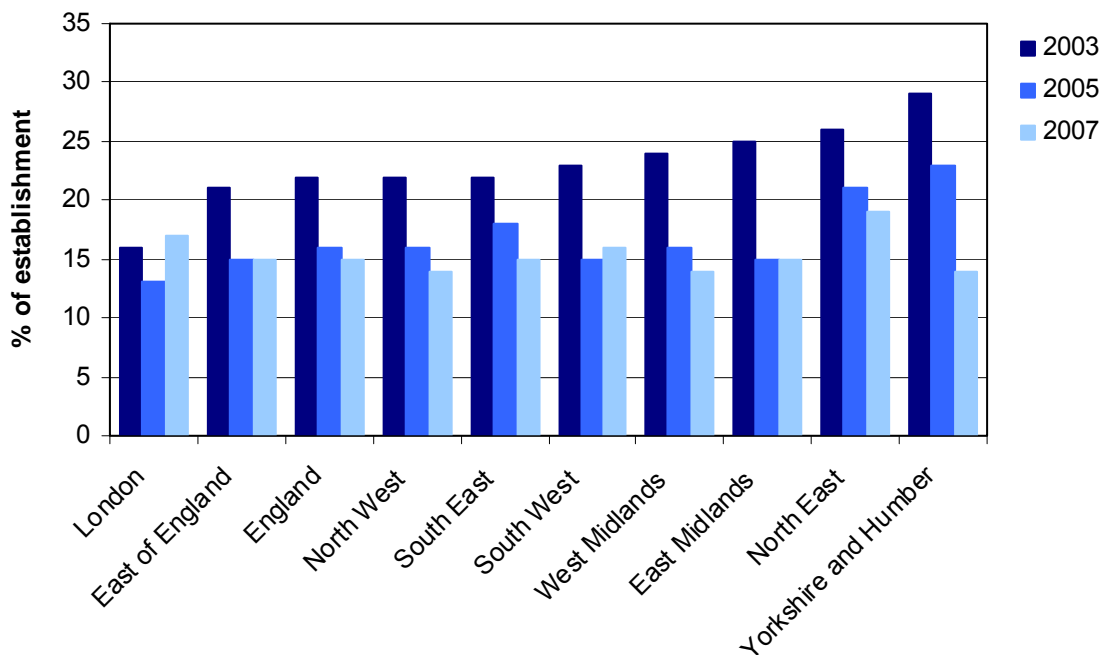
The national findings from NESS 2009⁶⁶ show that the proportion of establishments reporting skills gaps has risen from 15% in 2007 to 19% in 2009 in England. This can

⁶⁶ UK Commission for Employment and Skills, 'National Employer Skills Survey for England 2009: Key findings report' http://www.ukces.org.uk/upload/pdf/NESS%20Key%20findings%202009_2.pdf

be related to the fact that due to the recession, companies controlled their costs by decreasing their headcount. As a result, the workload of remaining staff can increase meaning that they appear to be less able to fully perform in their role – as they may not have the required skills.

There was broad stability in the level of skills gaps reported in the regional and national economy between 2005 and 2007 after a sharp fall between 2003 and 2005. In the East Midlands 15% of establishments reported skills gaps in 2007 (the same as in 2005) compared to 25% in 2003. This is a 10 percentage point fall between 2003 and 2007, which is greater than the national fall of 7 percentage points over the same period. In Yorkshire and the Humber the proportion of skills gaps decreased the most among all English regions by 15 percentage points.

Chart 35: Proportion of establishments with skills gaps (%)

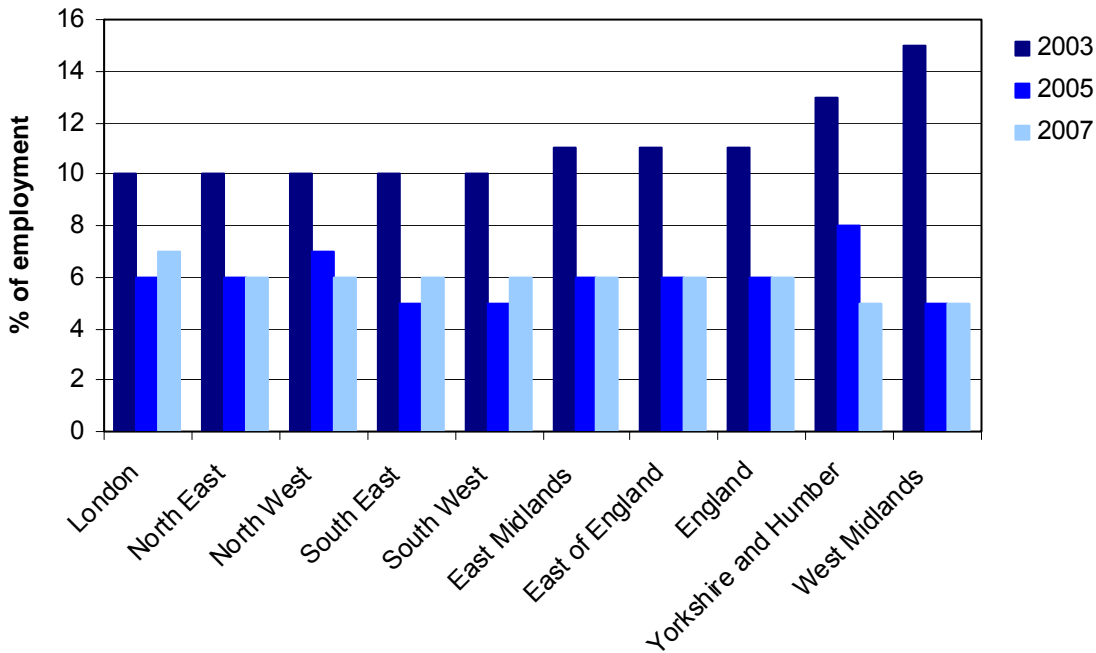


Source: BMG Research on behalf of the Learning and Skills Council in the East Midlands, 'National Employers Skills Survey 2007: report of results for the East Midlands'.

Chart 36 shows that skills gaps in the East Midlands affected around 6% of jobs in 2007, 5 percentage points lower than in 2003 and similar to the average for England. In 2007 there were around 114,700 people not seen as fully proficient by their managers in the East Midlands. In the West Midlands the percentage of skills gaps has fallen by 10 percentage points between 2003 and 2007, the largest fall among all English regions.

The reasons for this trend are not obvious, but it is possible that education and training provision and increased in-migration may have contributed to the fall in skills gaps in all the English regions. However, because of the recession cuts have been imposed on training budgets which may have negative impacts on skills gaps.

Chart 36: Skills gaps as a proportion of employment (%)



Source: BMG Research on behalf of the Learning and Skills Council in the East Midlands, 'National Employers Skills Survey 2007: report of results for the East Midlands'.

In terms of sectors, skills gaps both in absolute and in relative terms tend to be concentrated in hospitality (16% of employers with skills gaps) and retail (17%), engineering (18%) and construction (more than 14%). Skills gaps in engineering are more related to higher level skills. Generally skills gaps are most common with workers who perform quite routine tasks, such as sales and elementary occupations⁶⁷. Larger employers are more likely to have skills gaps, largely because they employ more people and the chance of having an employee who is not fully proficient is higher.

Employees are perceived to lack a mix of skills. Broadly, one group comprises a range of 'technical, practical or job specific skills' such as customer-handling skills, IT skills etc. A second group covers 'generic skills' such as, problem solving, team working, oral and written communication skills which are essential in any kind of job. The data suggests that:

- 54% of employees lack technical, practical or job specific skills;
- 31% lack team working skills;
- 28% lack customer handling skills;
- 24% lack oral communication skills; and
- 23% lack management skills.

⁶⁷ BMG Research on behalf of The Learning and Skills Council in the East Midlands, 'National Employers Skills Survey 2007: report of results for the East Midlands'

One of the instruments to address skills gaps is to provide training to develop the skills needed by the economy. The next section will examine training provision and participation in the East Midlands.

4.5.3 Training provision and training participation

The 2006 Skills Survey identified the training time for the type of work individuals carry out and the learning time needed to do jobs well⁶⁸. The summary measures of training and learning times are shown in Table 5.

In the East Midlands 58.6% of jobs were reported as requiring less than three months' training time, while a quarter (25.8%) reported training times of over two years. This is compared to the national figures of 56.1% and 29.3%. The training index is slightly lower in the region than in Great Britain (see note of the table for the definition of training index).

Learning time shows that some jobs took a long time to do well, while others were picked up relatively quickly. In the East Midlands 28.8% of jobs could only be done well after spending more than two years in post, but around a fifth (20.1%) could be learnt in under a month. This is compared to the national figures of 24.9% and 19.5% respectively. Overall, the learning index is slightly higher in the East Midlands than in Great Britain (see note of the table for the definition of the learning index).

On the basis of this data it appears that the level of skills exercised in jobs in the East Midlands is not significantly different to skills level of jobs in Great Britain.

Table 5: Training and learning time required to do the given job well, East Midlands and Great Britain, 2006 (% of jobs reported by jobholders)

	East Midlands	Great Britain
Training Time		
> 2 years	25.8	29.3
< 3 months	58.6	56.1
Training Index	2.37	2.56
Learning Time		
> 2 years	28.8	24.9
< 1 month	20.1	19.5
Learning Time Index	3.69	3.59

Source: Alan Felstead and Francis Green on behalf of *emda*, 'Skills at Work in the East Midlands, 1997 to 2006' 2007, page 38, Table 3.1.

Figures for Britain are from 'Skills at Work, 1986 to 2006' National Report, page 37, Table 3.1.

Notes: Training time is defined as 'Since completing full time education, have you ever had, or are you currently undertaking, training for the type of work that you currently do? Respondents answering 'yes' were then asked: 'How long, in total, did (or will) that training last?' A range of options was given.

Training Time Index was calculated from the responses: none=0; less than 1 month=1; 1-3 months=2; 3-6 months=3; 6-12 months=4; 1-2 years=5; and over 2 years=6.

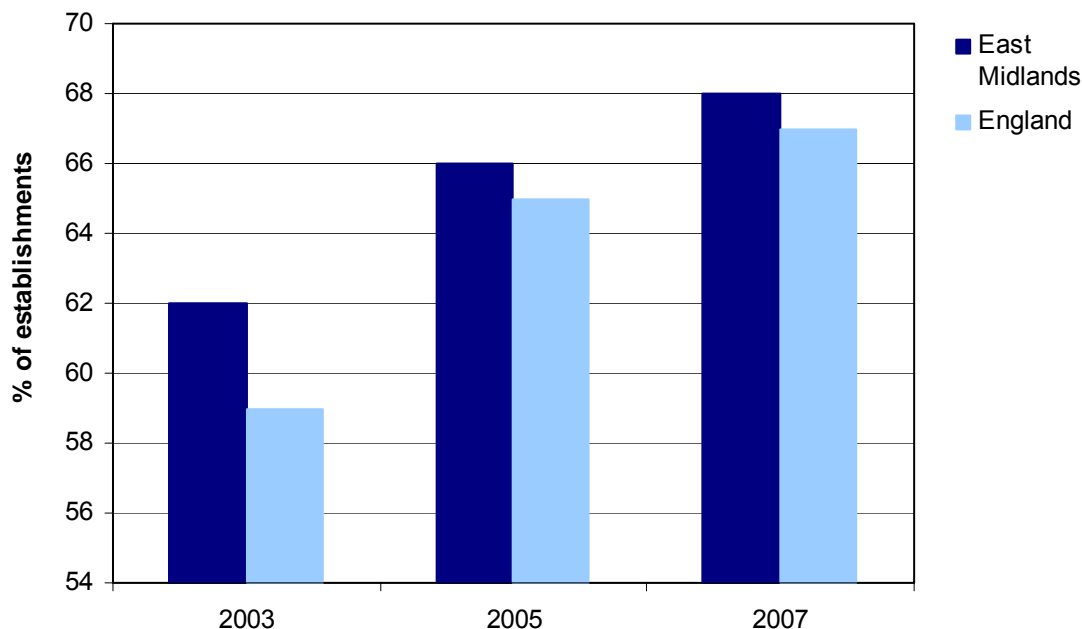
⁶⁸ Alan Felstead and Francis Green on behalf of *emda*, 'Skills at Work in the East Midlands, 1997 to 2006' 2007.

Learning time is defined as 'How long did it take for you after you first started doing this type of job to learn to do it well?'. The Learning Time Index was calculated from the responses: less than 1 month=1; less than 3 months=2; 3-6 months=3; 6-12 months=4; 1-2 years=5; and over 2 years=6.

There is a comprehensive literature about the relationship between investment in training and the growth potential of businesses. However, it is important to note, that training per se does not improve economic performance as skills development strategies have to be supplemented by efficient human resource management practices i.e. skills need to be deployed effectively⁶⁹.

Chart 37 shows a positive trend in establishments providing training for their staff, both in the East Midlands and across England. The data shows a strong growth in the proportion of training provision between 2003 and 2005 followed by slower growth between 2005 and 2007. In 2007 68% of employers in the region provided training for their staff, 6 percentage points higher than in 2003. In 2007 67% of employers across England provided training to their staff, 8 percentage points higher than in 2003.

Chart 37: Proportion of establishments providing training in past year (%)



Source: BMG Research on behalf of the Learning and Skills Council in the East Midlands, 'National Employers Skills Survey 2007: report of results for the East Midlands' Page 83, Table 49.

NESS 2009 national findings⁷⁰ also show that between 2007 and 2009 there was no significant difference in the proportion of employers providing any training or development to their staff in England. In 2007, 67% of employers provided training over the last 12 months compared to 68% reported in 2009. However, on balance, among firms that have trained any staff in the last 12 months, a larger proportion report that they train less or have spent less as a result of the recession.

Data on participation in training is available from the Annual Population Survey.

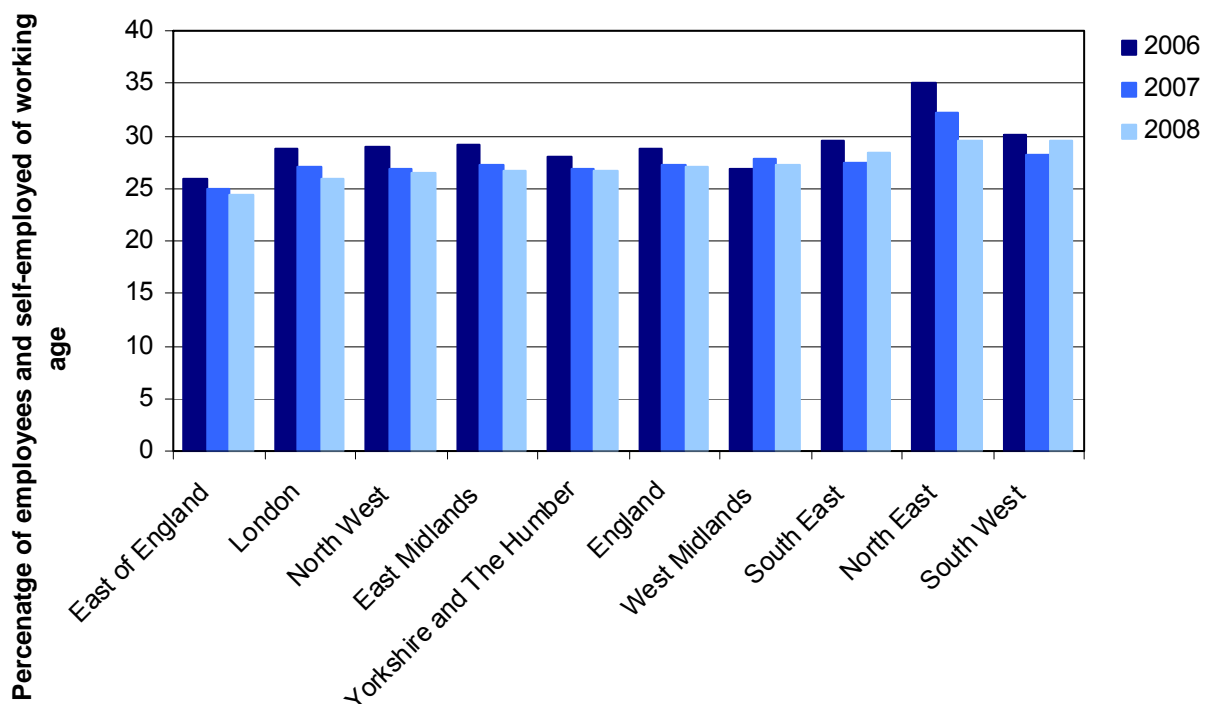
⁶⁹ Gambin Lynn et al, Warwick Institute for Employment Research, University of Warwick, commissioned on behalf of *emda*, 'Exploring the links between skills and Productivity', 2009.

⁷⁰ UK Commission for Employment and Skills, 'National Employer Skills Survey for England 2009: Key findings report' http://www.ukces.org.uk/upload/pdf/NESS%20Key%20findings%202009_2.pdf

Chart 38 shows that in 2008 in the East Midlands 26.6% of employees and self-employed people participated in training during the last 13 weeks, which is very similar to the national average of 27.0%. In 2008, in the South West and the North East 29.5% of employees and self-employed received job related training in last 13 weeks prior to the survey. In the East of England and in London the proportion of employees and self-employed undertaking any training was somewhat lower than the national average in 2008.

Chart 38 also shows that in most regions, training participation of employees and self-employed people in 2008 was lower than in 2006 or in 2007.

Chart 38: Proportion of those who received job related training in last 13 wks – employees and self-employed of working age



Source: ONS Crown Copyright, 'Annual Population Survey', via NOMIS.

The national findings from NESS 2009⁷¹ show that in 2009, 12.8 million workers participated in training over the previous 12 months which is equivalent to 56% of the workforce in England. By comparison, in 2007, 14.0 million workers had been trained over the previous 12 months, which is equivalent to 63% of all workers in England. Between 2007 and 2009, the decrease in the proportion of workforce trained is significant.

⁷¹ Ibid.

Table 6 shows differences in training participation by socio-economic group in the East Midlands and in England in 2008. The major patterns in training provision by socio-economic group are similar in both the East Midlands and in England:

- Women are more likely to participate in training than men;
- The higher the qualification level the greater the training participation rate, which suggests a widening knowledge divide between the more and less qualified;
- Part-time workers are less likely to participate in training compared to their full-time counterparts; and
- Employees in the public sector are significantly more likely to participate in training.

Table 6: Proportion of those who received job related training in last 13 wks – employees and self-employed of working age by characteristics, 2008

East	Midlands	England
Male	23.9%	23.9%
Female	30.0%	30.9%
Level 4 and above	37.7%	36.7%
Managers and senior officials	33.1%	33.6%
Public sector	43.4%	43.0%
Production	19.6%	19.9%
Service industries	29.6%	29.4%
Private services	21.2%	21.8%
Full-time	27.4%	27.6%
Part-time	24.3%	25.3%
Total	26.6%	27.0%

Source: ONS Crown Copyright, 'Annual Population Survey', January-December 2008, via NOMIS.

Key Points: Demand for skills

- The education system has been successful in increasing the qualification level of the regional workforce. However, the demand for skills has not kept pace with this increased supply. Almost 40% of East Midlands' employees reported that their highest qualification was above that required for the job they do. This is similar to the English average.
- There has been a reduction in the proportion of the workforce employed in the least knowledge intensive (K4) sectors both regionally and nationally between 2006 and 2008.
- Between 2006 and 2008 there has also been a reduction in the proportion of the workforce employed in the most knowledge intensive sectors in the East Midlands compared to an increase in the UK. However, data tend to be more volatile at regional level.
- In the East Midlands 15% of establishments reported skills gaps in 2007, compared to 25% in 2003.
- In terms of sectors, skills gaps tend to be concentrated in hospitality (16% of employers with skills gaps) retail (17%), engineering (18%) and construction (more than 14%).
- The data shows a strong growth, both nationally and regionally, in the proportion of establishments providing training between 2003 and 2005, followed by a slower growth between 2005 and 2007.
- However, data also shows that in most regions, training participation of employees and self-employed people in 2008 was lower than in 2006 or in 2007.
- The higher the qualification level the greater the training participation rate, which suggests a widening knowledge divide between the more and less qualified.

4.6 Occupational structure

The term 'occupation' describes what individuals do in their work place. The two main concepts on which major occupational groups are defined are the type of job and the skills required by the given job.

Recent changes in the occupational structure of developed economies can be related to the decline of primary and manufacturing industries and a shift of the workforce towards services and an increase in management activities. This latter point is related to the fundamental changes in the way the production of goods and services are organised in developed economies.

These changes obviously have an impact on the skill requirements across occupations. There are different opinions about whether technological changes have increased or decreased the required skills level of different occupations. However, overall, it can be concluded that the way goods and services are produced in developed economies has pushed the demand for skills upwards.

4.6.1 Current occupational structure of the East Midlands

Chart 37 shows the occupational structure of employment in the East Midlands. It is useful to think in terms of three broad groups: upper tier occupations, intermediate occupations and lower tier occupations. This shows that there are relatively fewer employees in upper tier occupations in the East Midlands compared to the UK.

Upper tier occupations

Upper tier occupations are managers and senior officials⁷², professional occupations⁷³ and associate professional and technical occupations⁷⁴. The proportion of those in employment who work in upper tier occupations was 39.1% in the East Midlands, 3.9 percentage points below the UK figure of 43.0% in 2008.

- Managers and senior officials account for 15.5% of both regional and national employment.

⁷² Managers and senior officials describes jobs with greater responsibilities and management skills to coordinate an organisation or business such as senior officials, directors. Office for National Statistics, 'Standard Occupational Classification 2000', <http://www.ons.gov.uk/about-statistics/classifications/current/SOC2000/>

⁷³ Professional occupations describes jobs requiring a degree or equivalent, such as physiotherapists, laboratory technicians, engineering technicians. Office for National Statistics, 'Standard Occupational Classification 2000'.

⁷⁴ Associate professionals describes jobs often requiring a high level of vocational qualification, such as legal associate professionals, brokers, graphic designers. Office for National Statistics, 'Standard Occupational Classification 2000'.

- Professional occupations are also under-represented in the East Midlands labour market compared to the UK accounting for 11.3% and 13.0% of employment respectively.
- The difference between the East Midlands and the UK is more significant for associate professional occupations which makes up 12.3% of regional employment, 2.2 percentage points less than in the UK.

Intermediate occupations

Intermediate occupations are administrative and secretarial⁷⁵, skilled trades⁷⁶, personal service and sales and customer service occupations⁷⁷. The proportion of those in employment who work in intermediate tier occupations was similar in the East Midlands and the UK at 38.9% and 38.1% respectively in 2008.

- Personal service occupations account for 8.3% of regional and 8.2% of national employment. Sales and customer service occupations make up 7.8% of the regional and 7.6% of the national employment.
- Due to the greater relative importance of manufacturing in the regional economy, the proportion of skilled trades occupations is slightly higher in the East Midlands than in the UK, at 12.0% and 10.9% respectively. On the other hand, administrative and secretarial occupations contributes a slightly lower share of employment in the East Midlands at 10.8% compared to 11.4% in the UK.

Lower tier occupations

Lower tier occupations are machine and transport operatives⁷⁸ and elementary occupations⁷⁹. These positions have lower associated skill requirements and lower earnings. The proportion of those in employment who work in lower tier occupations was 21.8% in the East Midlands, 3.3 percentage points above the UK figure (18.5%).

⁷⁵ Administrative and secretarial occupations include jobs in administrative work, generally requiring a good standard of general education, such as administrative officers and assistants. Office for National Statistics, 'Standard Occupational Classification 2000'.

⁷⁶ Skilled trades occupation include goldsmith, butchers and TV engineers, where the individual performs often complex manual tasks, requiring a level of experience and sometimes formal vocational training. Office for National Statistics, 'Standard Occupational Classification 2000'.

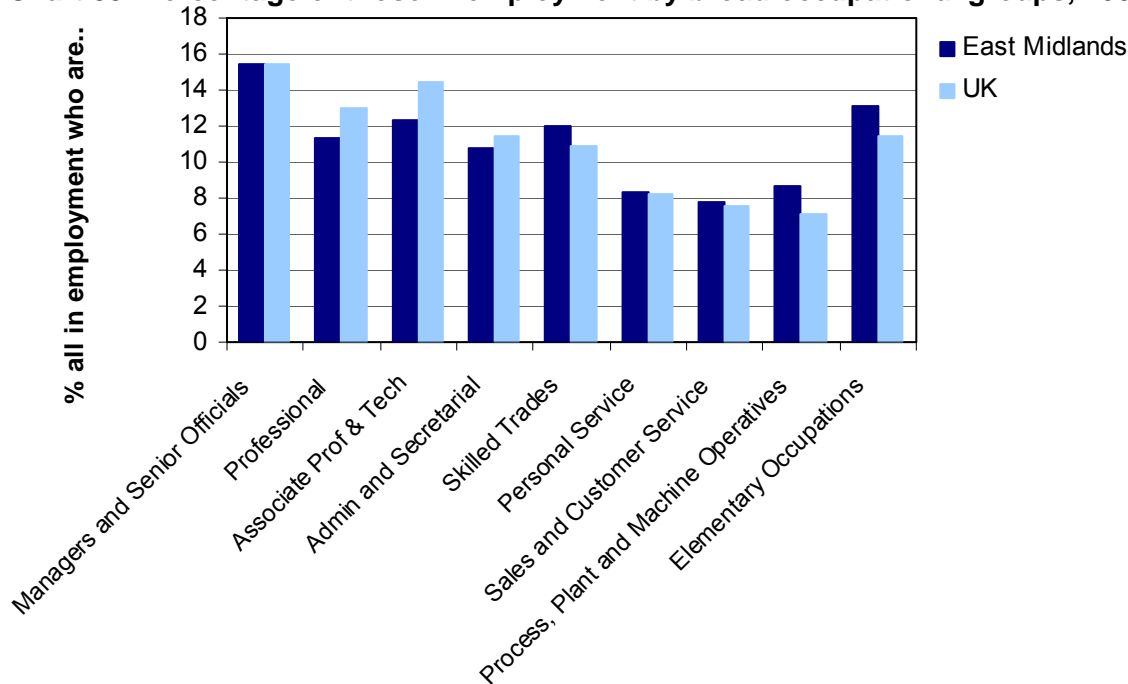
⁷⁷ Sales and customer services occupations covers jobs such as cashiers, market and street traders and call centre agents, whilst personal service occupations describes jobs such as nurses, hairdressers or home carers. Office for National Statistics, 'Standard Occupational Classification 2000'.

⁷⁸ Process, plant and machine operatives describes occupations where knowledge is required to operate and monitor machines or tools such as textile machine operatives, construction operatives. These occupations include transport and mobile machine drivers and operatives such as taxi drivers. Office for National Statistics, 'Standard Occupational Classification 2000'.

⁷⁹ Elementary occupations describe jobs predominated by routine tasks, usually requiring no formal educational qualifications, such as shelf fillers and window cleaners Office for National Statistics, 'Standard Occupational Classification 2000'.

- More than 13.0 % of employment in the region was in elementary occupations in 2008 compared to 11.4% in the UK.
- The proportion of process, plant and machine operatives in the East Midlands was also above the UK figure at 8.7% compared to 7.1%.

Chart 39: Percentage of those in employment by broad occupational groups, 2008



Source: ONS Crown Copyright, 'Annual Population Survey', January-December 2008, from NOMIS.
Note: Residence based analysis.

4.6.2 Future prospects for occupational change

Technological change, globalisation and other factors continuously influence the patterns of demand for goods and services and consequently the demand for skills. Occupations that benefit from such changes will experience employment growth. Conversely some will experience job losses⁸⁰. The following analysis provides an assessment of future prospects for occupational change in the East Midlands.

Working Futures 2007-2017 projections provided by the UK Commission for Employment and Skills and the Learning and Skills Council, forecast changing employment by sector, occupation, gender and status. However, it is crucial to note that these projections should not be regarded as facts more as a likely future map of the occupational structure of employment⁸¹ given current information.

It is important to note that Working Futures 2007-2017 projections represent a view of what the future might look like assuming that past performance and behaviours continue

⁸⁰ Warwick Institute for Employment Research and Cambridge Econometrics, on behalf of the UK Commission for Employment and Skills and Learning and Skills Council, 'Working Futures 2007-2017' 2008.

⁸¹ Warwick Institute for Employment Research and Cambridge Econometrics, on behalf of the UK Commission for Employment and Skills and Learning and Skills Council, 'Working Futures 2007-2017' 2008.

over time. It is also important to note that the baseline macroeconomic forecast that underpins the Working Futures results was developed in the first half of 2008, before the extent of the recession became fully apparent. There is, therefore, a significant degree of uncertainty relating to these projections. However they still provide a useful assessment of the potential change in occupational structure over the next decade.

Changes in the structure of occupation are driven by two factors, expansion demand and replacement demand. Expansion demand refers to job creation which is generated by sectoral growth. These jobs are genuinely new jobs which did not exist before and which are the result of the changing demand for goods and services. The underlying factors of this change are related to the evolving global, national and regional economic landscape. The second factor is replacement demand which are not new jobs, but jobs that need filling as their current occupants leave the labour market (predominantly into retirement).

4.6.3 Expansion demand

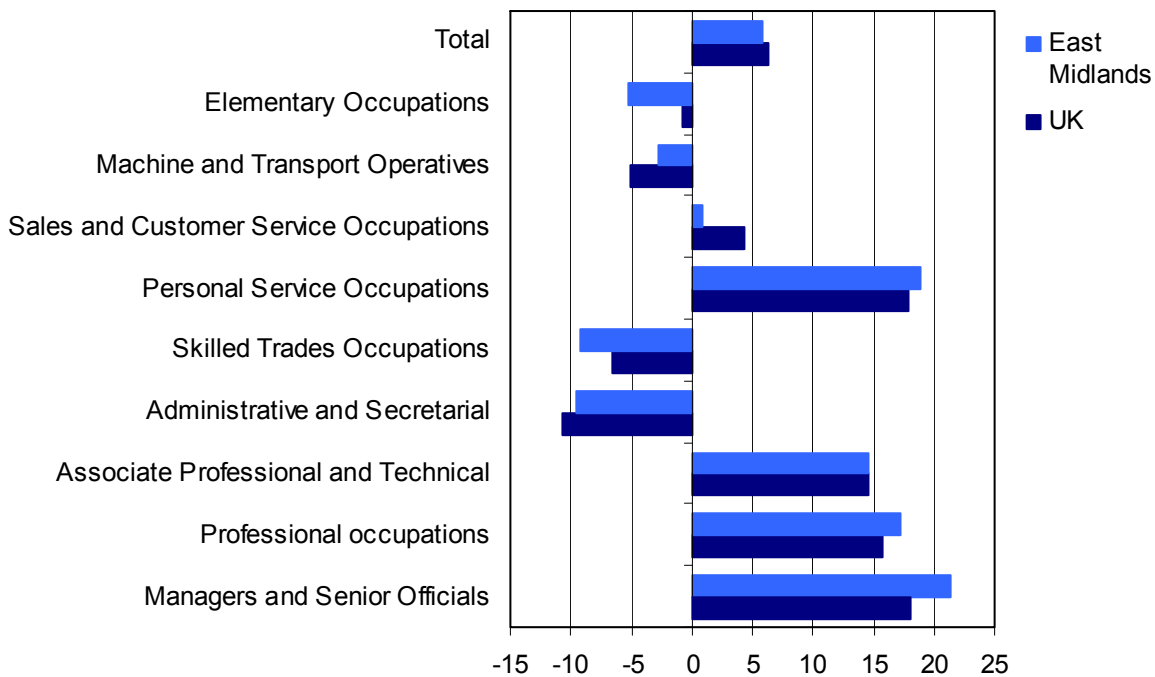
Working Futures 2007-2017 projects an increase of employment in the East Midlands of 5.9% which is similar to the UK average of 6.2%⁸².

In both the UK and in the East Midlands, employment in managerial and professional occupations is expected to increase, whilst the number of employees in elementary occupations and machine and transport operatives are projected to decline. Skilled trade occupations and administrative and secretarial positions are also projected to decline. The East Midlands will continue to employ a relatively small share of its workforce in upper tier occupations. These patterns of expansion demand were highlighted in the previous Working Futures estimations as well and these changes are often referred to as “hollowing out the middle”.

- The increase in employment in upper tier occupations is projected to be more significant in region than in the UK between 2007 and 2017. However, by 2017, the proportion of those in upper tier occupations is forecast to be 44.4% in the East Midlands, 2.5 percentage points below the UK figure of 46.9%.
- The proportion of those in employment who work in intermediate occupations in 2017 is forecast to be 36.9% in the East Midlands, around 1 percentage point above the UK figure of 36.0%.
- The decrease of those in lower tier occupations is projected to be more significant in the East Midlands than in the UK. Still, the proportion of those in employment who work in lower tier occupations in 2017 is forecast to be 18.7% in the East Midlands, about 1.5 percentage points above the UK figure of 17.1%.

⁸² Quantitatively, this projection is different from that in the Economy chapter which is based on the Scenario Impact Model developed by Experian on behalf of *emda*. However, both suggests that employment growth in the East Midlands will be similar to the national average.

Chart 40: Projected change in employment by major occupation groups, 2007-2017, (% change), expansion demand



Source: Warwick Institute for Employment Research and Cambridge Econometrics, on behalf of the UK Commission for Employment and Skills and Learning and Skills Council, 'Working Futures 2007-2017' 2008.

4.6.4 Replacement demand

Replacement demand takes into account the need to replace those who leave their jobs because of retirement or other reasons. These are not new jobs but jobs that need filling as their current occupants leave the labour market. These replacement demand jobs therefore need to be added to any structural change (or so called expansion demand or decline) that is projected, in order to obtain an estimate of the overall change in the occupational structure of employment⁸³.

The Working Futures 2007-2017 report suggests that all occupations are expected to have a large and positive replacement demand. In addition, replacement demand will considerably exceed the number of jobs created by economic growth. Therefore, replacement demand is likely to be much more significant in terms of education and training requirements than expansion demand.

Chart 41 shows the East Midlands expansion demand, replacement demand and the overall change in the occupational structure of the region's employment by occupation between 2007 and 2017.

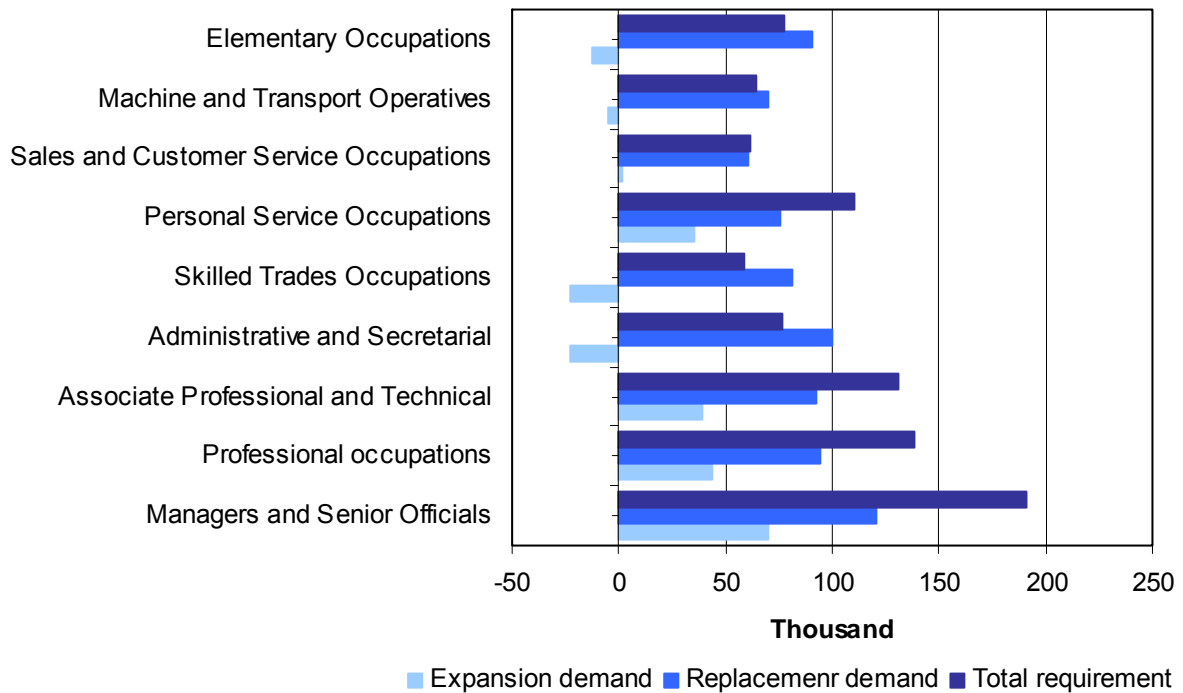
Due to structural changes in the economy, some occupations are expected to shrink, such as administrative and secretarial occupations, skilled trades, process plant and elementary occupations. However, there will still be a large number of vacant posts that will need filling as their current occupants retire.

⁸³ Warwick Institute for Employment Research and Cambridge Econometrics, on behalf of the UK Commission for Employment and Skills and Learning and Skills Council, 'Working Futures 2007-2017' 2008.

Chart 41 shows that expansion demand of lower tier occupations is often negative or insignificant. However, replacement demand outweighs negative expansion demand and results in positive total requirements in these lower tier occupations.

Replacement demand between 2007 and 2017 in the East Midlands is forecast to be the most significant among managers and senior officials. There will also be a significant replacement demand for professionals and associate professional, administrative and secretarial occupations.

Chart 41: Projected change in occupations, East Midlands, 2007-2017, thousands



Source: Warwick Institute for Employment Research and Cambridge Econometrics, on behalf of the UK Commission for Employment and Skills and Learning and Skills Council, 'Working Futures 2007-2017' 2008.

Note: Replacement Demand = Retirements + Occupational Mobility + Migration.
 Total requirement = Expansion demand + Replacement demand.

Key Points: Occupational structure

- The East Midlands has significantly more people in 'lower tier occupations' than the UK average.
- 'Intermediate occupations', account for a similar share of the workforce in the East Midlands than in the UK. However, due to the relatively greater importance of manufacturing in the regional economy, the proportion of skilled trades is slightly higher in the East Midlands than in the UK.
- The difference between the East Midlands and the UK is more significant for 'upper tier' occupations which make up a lower share of the regional workforce.
- Expansion demand by occupation shows that in the East Midlands and UK the number of manager and professional occupations are expected to increase, whilst the number of elementary occupations, machine and transport operatives and particularly skilled trades and administrative and secretarial occupations are projected to decline. These patterns of expansion demand are often referred to as "hollowing out the middle".
- Replacement demand between 2007 and 2017 in the East Midlands is forecast to be the most significant among managers and senior officials. There will also be a significant replacement demand for professionals and associate professional, administrative and secretarial, skilled trades and elementary occupations.
- As replacement demand will considerably exceed the number of jobs created by economic growth, replacement demand is likely to be much more significant in terms of education and training requirements than expansion demand.

4.7 Earnings in the East Midlands

This section analyses the general pattern of earnings in the East Midlands in 2009⁸⁴. Although earnings reflect factors other than workforce skills, skills are an important determining factor. On the basis of lower levels of qualifications and occupational structure outlined above, it is expected that earnings in the East Midlands would be lower than average. Differences in earnings by gender are discussed more fully in the Deprivation and Economic Inclusion chapter.

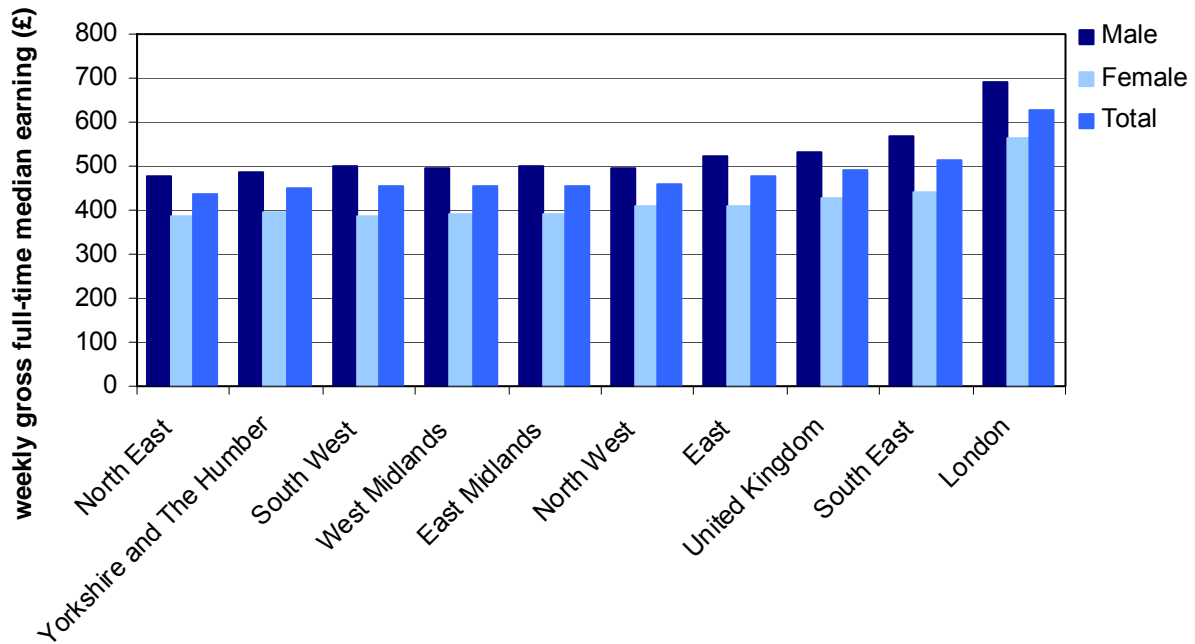
Chart 42 compares gross weekly workplace based full-time earning estimates for men and women working full-time in each of the English regions and the UK average.

Median weekly earnings for all full-time workers in the East Midlands were below the UK average by 6.6%, at £456.6 compared to £488.7, in 2009. Compared to the UK average, earnings are the highest in London (28.4 % above average) and lowest in the North East (lagging behind the national average by 10.8%).

The median weekly gross full-time earnings for men was £531.1 in the UK in 2009. The difference between male and female earnings in the UK was £104.7 – a 19.7% difference. The median earnings for men working in the East Midlands were £500.0, which is £111.3 a week more than the median for women – a 22.3% difference. The difference between male and female earnings in the East Midlands is greater than in the UK and is the third highest among the English regions after the South West (22.4%) and the South East (22.4%). The smallest differential between male and female earnings was in London (18.1%) and the North West (18.1%).

⁸⁴ Data from the 2009 Annual Survey of Hours and Earnings (ASHE), produced by the Office for National Statistics is used. The analysis will focus on the median, which is the mid-point of the distribution, if one imagines all results set out in a line. This is preferable to the mean (the arithmetic average) as it is not skewed by a small number of respondents reporting very high earnings.

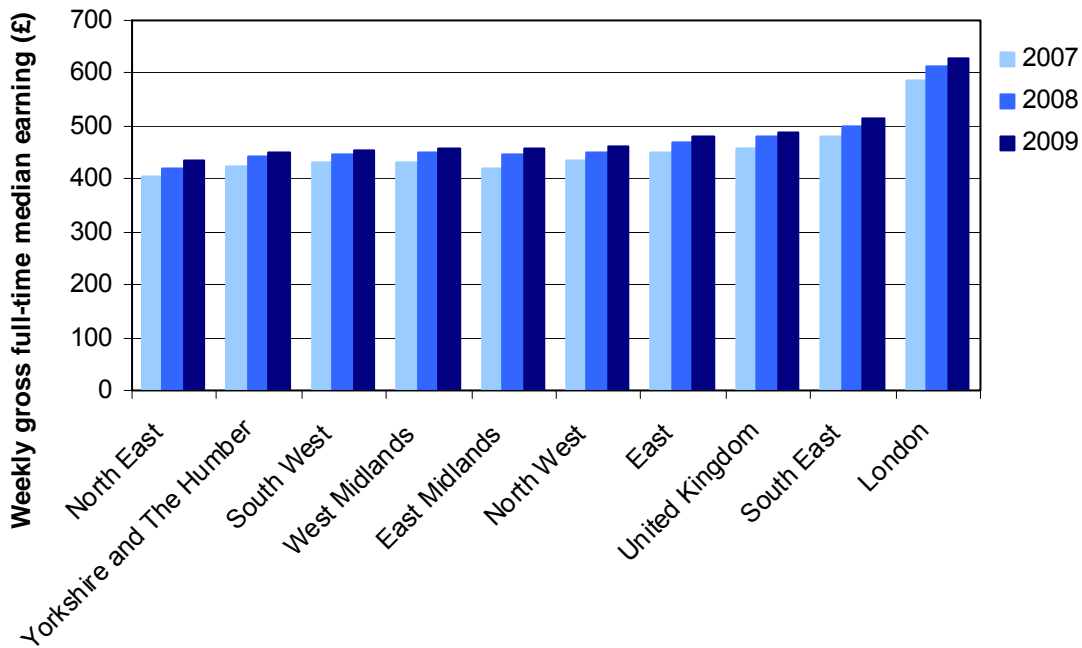
Chart 42: Regional comparisons of gross weekly workplace based full-time earnings (median), 2009



Source: ONS Crown Copyright, 'Annual Survey of Hours and Earnings - workplace analysis' 2009, from NOMIS.

Due to the recession, there has been a greater increase in weekly median gross full-time earnings between 2007 and 2008 than between 2008 and 2009. Weekly median gross earnings increased by 4.7% in UK between 2007 and 2008 and by 2.0% between 2008 and 2009. The corresponding figures for the East Midlands were 5.6% and 2.6% respectively. Between 2008 and 2009 earnings growth in the East Midlands was the second highest among the English regions after the North East (3.6 %). Between 2008 and 2009, earnings increased the least in the South West at 1.5%.

Chart 43: Weekly pay - Gross (£) – For full-time earnings (workplace based)



Source: ONS Crown Copyright, 'Annual Survey of Hours and Earnings - workplace analysis', from NOMIS.

4.7.1 Earnings by occupation

As higher level occupations tend to be associated with higher pay, lower levels of employment in these occupations goes some way to explaining why overall median earnings are lower in the East Midlands.

Chart 44 shows comparative earnings for broad occupational groups. Across all occupational groups, with three exceptions – sales and customer service occupations, skilled trades and elementary occupations – all other occupations have lower earnings in the East Midlands than in the UK.

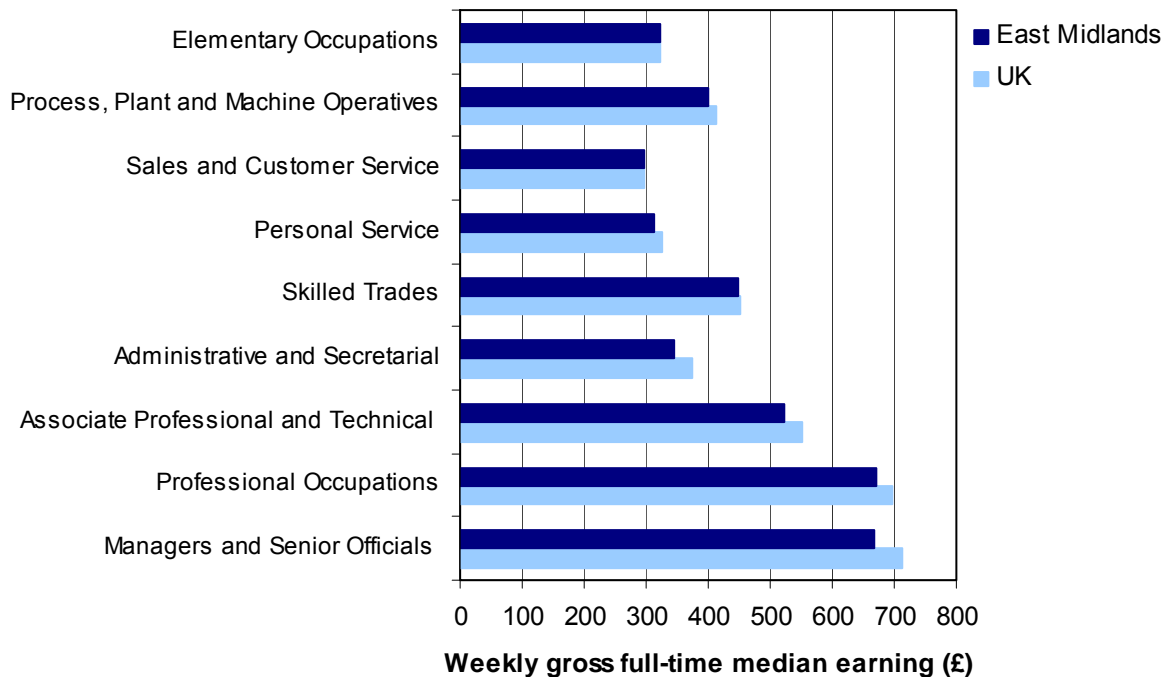
The largest pay gap between the East Midlands and the UK is for upper tier occupations and administrative and secretarial occupations.

- Among administrative and secretarial occupations the median in the East Midlands was £345, £28.7 less than the median in the UK, a 7.7% difference.
- Among managers and senior officials, the median in the East Midlands was £667.8, £45.1 less than the median in the UK, a 6.3% difference.
- The third largest gap in earnings was for associate professional and technical occupations, where the median in the East Midlands was £521.3 compared to the national average of £551.1 (a gap of £29.8, equivalent to a 5.4% difference).

The pay gap between the East Midlands and the UK was somewhat lower for intermediate occupations. The median weekly pay of those working in personal service occupations was £311.5 in the East Midlands, £14.3 less than the median in the UK – a 4.4% difference.

Although the median weekly full-time earnings for elementary occupations were not significantly different in the East Midlands than in the UK, earnings for process, plant and machine operatives are slightly lower than the national average by 3.1%. This reflects the sectoral composition of the East Midlands and the high demand for unskilled employment in the regional labour market.

Chart 44: Weekly pay – Gross (£) – for full-time employee jobs, 2009



Source: Office for National Statistics, 'The Annual Survey of Hours and Earnings (ASHE) 2009' From Table 3_1a, Levels, distribution and make-up of earnings and hours paid for employees within industries, occupations and regions.

Between 2008 and 2009 in the East Midlands the increase in median earnings were the highest in personal service occupations at 5.1%, associate professional at 3.9% and sales and customer services at 3.9%. The lowest increase was in process, plant and machine operatives and elementary occupations at 0.3%⁸⁵. This is largely related to the sectoral and occupational characteristics of the recession as the most hard hit jobs were low skilled low paid positions in the manufacturing and the construction sectors. The following section provides some more information on the earnings by sectors.

4.7.2 Earnings by industry

There are a significant pay differences among industries both in the East Midlands and in the UK.

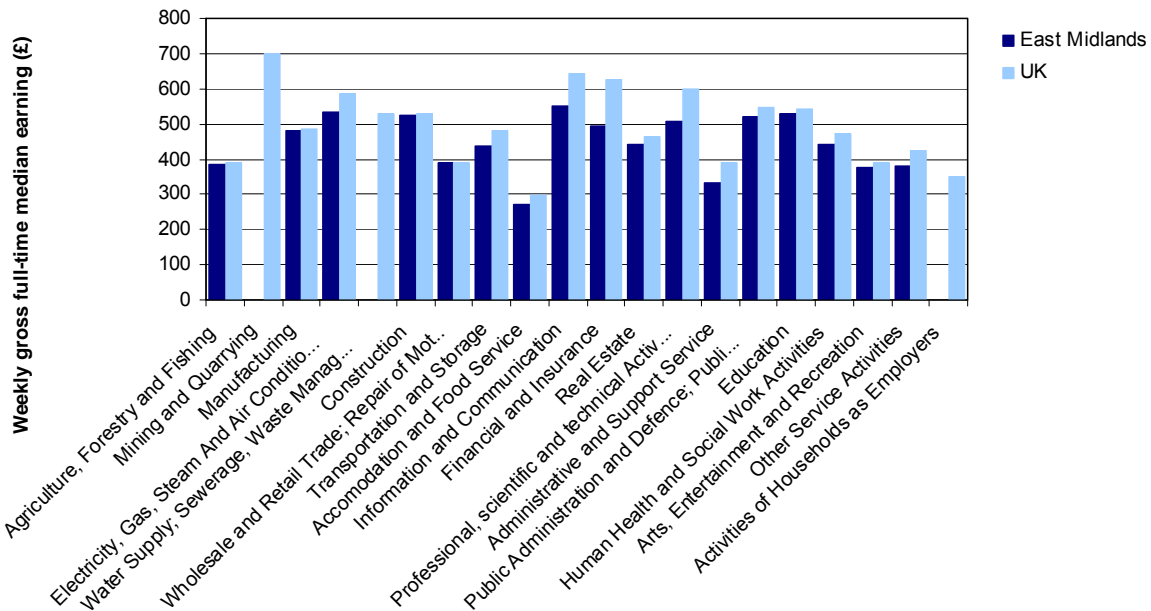
⁸⁵ Office for National Statistics, 'The Annual Survey of Hours and Earnings (ASHE) 2009' From Table 3_1a, Levels, distribution and make-up of earnings and hours paid for employees within industries, occupations and regions. <http://www.statistics.gov.uk/StatBase/Product.asp?vlnk=15313> These tables use the SIC 2007 classification.

Earnings are lower in the East Midlands compared to the UK average in almost every industry. Chart 45 illustrates the generally lower earnings by industry in the East Midlands compared to the UK.

Differences in earnings between the East Midlands and the UK tend to be greater in those industries with higher pay. For example, jobs in financial and insurance; professional, scientific and technical activities; information and communication; administrative and support services are clearly associated with significantly higher earnings in the UK than in the East Midlands.

Therefore in 2009 the differences in weekly gross full-time earnings between the East Midlands and the UK were the highest in financial and insurance (21.4%), in professional, scientific and technical activities (15.0%), in administrative and support services (14.9%) and in information and communication (14.6%). The smallest pay differences between the East Midlands and the UK were in arts, entertainment and recreation (2.7%), education (2.4%) and construction (1.2%).

Chart 45: Weekly pay – Gross (£) – for full-time employee jobs, 2009



Source: Office for National Statistics, 'The Annual Survey of Hours and Earnings (ASHE) 2009' from Table 5_1a.

Note: The coefficient of variation (CV) is the ratio of the standard error of an estimate to the estimate, expressed as a percentage. The smaller the CV, the higher the quality of the estimate. The lowest CV is <= 5%. The confidence variation of the estimations for Mining and Quarrying and Activities of Households as Employers are between 5% and 10% for the UK. Data on Activities of Extraterritorial Organisations and Bodies is not available for the East Midlands and is left out due to the relatively large confidence variation of the estimation for the UK. The confidence variation of the estimations for Agriculture, Forestry and Fishing; Electricity, Gas, Steam and Air Conditioning Supply; Accommodation and Food Service Activities; Information and Communication; Financial and Insurance Activities; Real Estate Activities; Professional, Scientific and Technical Activities; Arts, Entertainment and Recreation; Other Service Activities; are between 5% and 10% for the East Midlands. Estimations of Mining and Quarrying is not available. Estimations for Water Supply; Sewerage, Waste Management and Remediation Activities is not shown for the East Midlands due to the relatively large confidence interval. Data on Activities of Households as Employers; Undifferentiated Goods and Services Producing Activities of Households for Own Use are not available for the East Midlands.

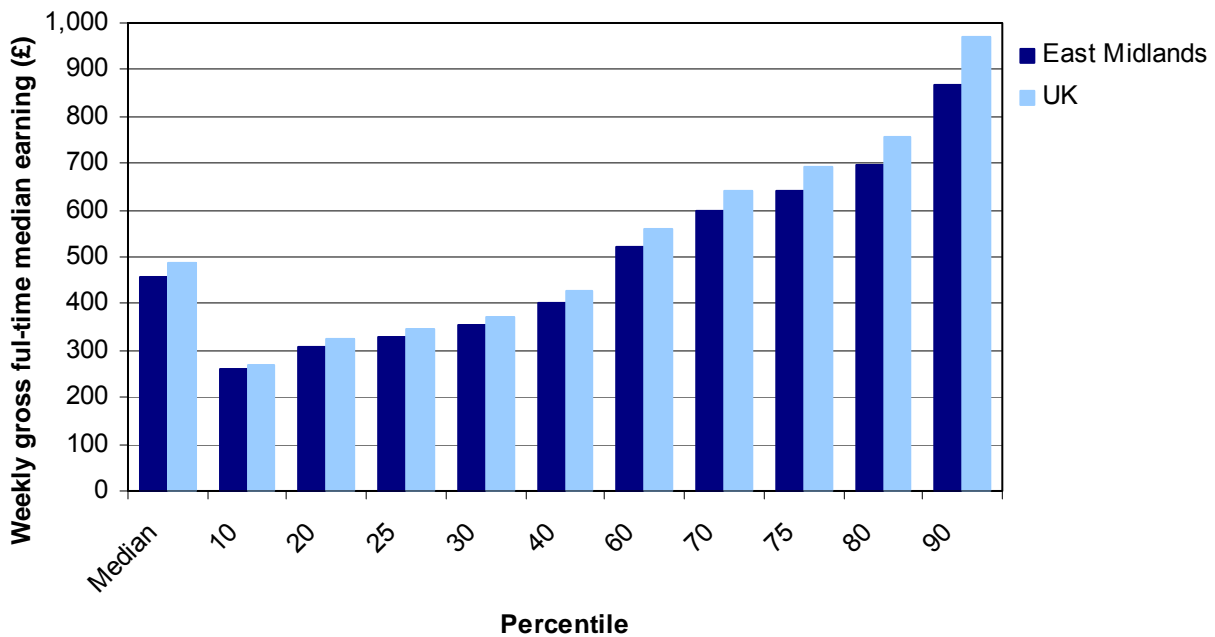
4.7.3 Disparities between high and low earning groups

The Annual Survey of Hours and Earnings (ASHE) 2009 provides estimates for earnings in bands from the lowest 10% of earners to the highest 10%⁸⁶. Chart 44 shows that the earnings profile for the region appears more ‘evenly’ distributed than in the UK. This is principally due to the earnings of the more highly paid being relatively depressed compared to the national average.

The top 10% of earners in the UK earn £971.0 a week, whilst the top 10% working in the East Midlands earn £865.8, a difference of £105.2. Earners in the top 10% in the UK earn 198.7% of the UK median, whilst earners in the top 10% in the East Midlands earn 189.6% of the East Midlands median.

The bottom 10% of earners in the UK earns £270.6 a week. This is compared to £259.6 in the East Midlands. Expressed as an index of the corresponding medians, earners in the bottom 10% in the UK earn 55.4% of the UK median, whilst earners in the bottom 10% in the East Midlands earn 56.9% of the East Midlands median.

Chart 46: Gross weekly workplace based median earnings in UK and East Midlands, 2009



Source: ONS Crown Copyright, ‘Annual Survey of Hours and Earnings – workplace analysis’ 2009 from NOMIS.

4.7.4 Workplace based compared to residence based earnings

The Annual Survey of Hours and Earnings (ASHE) provides separate estimates based on individuals’ place of residence and their workplace. Variation between the two estimates indicates the extent to which the earnings of the residential and working

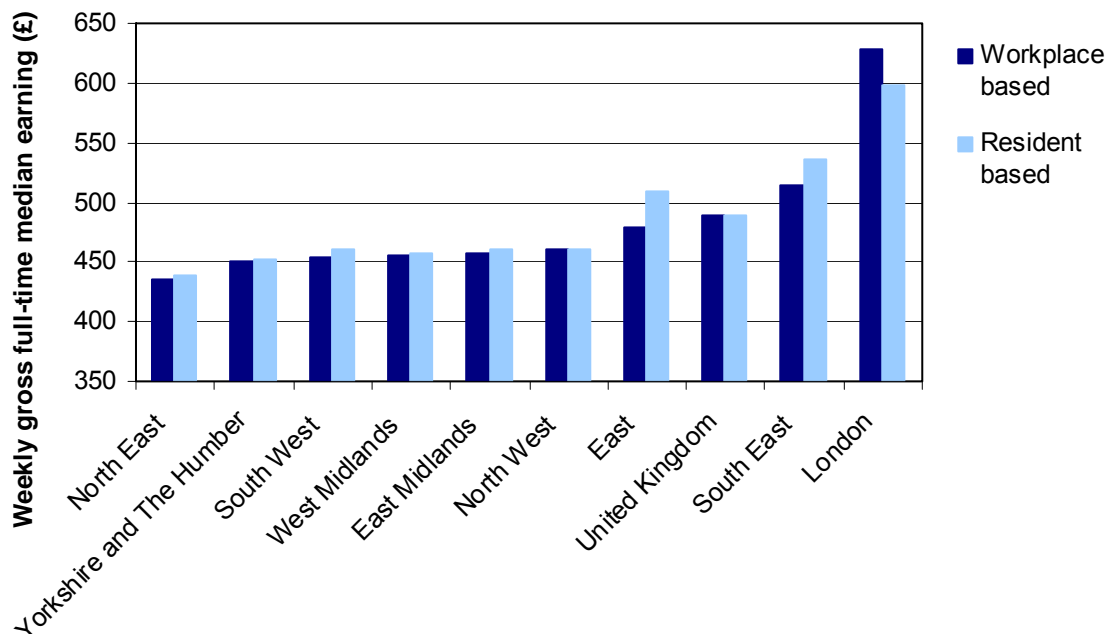
⁸⁶ The distribution of earnings by decile (10%, 20%, etc). Earning deciles show the earning charts below which the given proportion (10%, 20%, etc.) of employees fall. For example, the 10% decile will give the earnings chart below which the lowest 10% of earners fall.

populations are different. This allows inferences to be drawn as to the nature of commuting⁸⁷.

In the East Midlands, as in other regions except London, the resident based earnings are higher than the workplace based estimates. This suggests that many higher paid workers commute to work outside the region. The gap between residence and workplace based earnings – as a percentage of workplace based estimates – was 0.9% in the East Midlands, which is the fourth greatest after the East (6.3%), the South East (4.5%) and the South West (1.4%).

Unlike the other English regions, the gap between resident and workplace earnings in London was 4.6% higher for those who work in the capital compared to those who live in the city. This reflects the large numbers of individuals in higher paid jobs who commute to the city from surrounding regions.

Chart 47: Regional comparison of gross median weekly earnings by place of work and residence, 2009



Source: ONS Crown Copyright, 'Annual Survey of Hours and Earnings' workplace and residence based analysis 2009, from NOMIS.

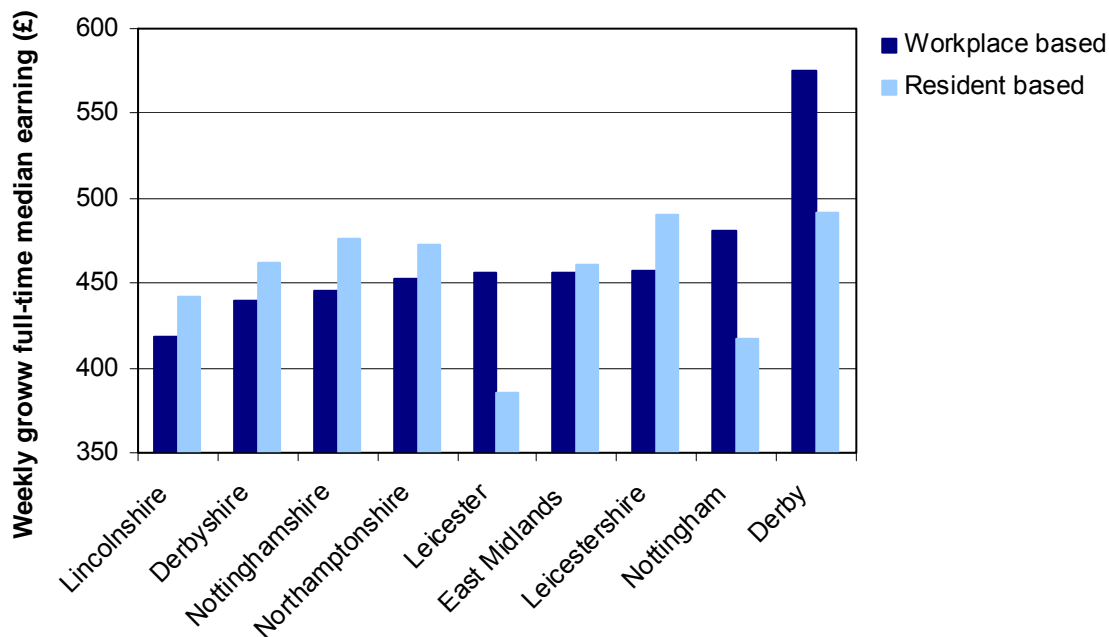
Generally, variations between workplace and residence based earnings are much more pronounced at sub-regional level. The region's major economic centres all have higher workplace than residence based earnings, indicative of in-commuting.

Derby has the highest workplace based earnings in the East Midlands at £574.9 which can be explained by the relatively high proportion of skilled engineering jobs in the city. In contrast, Leicester has the lowest workplace based earnings of all Unitary Authorities in the East Midlands at £456.0 in 2009. This compares to its residence based figure of £385.1. Income deprivation in Leicester is examined in the Deprivation and Economic Inclusion chapter of the Evidence base.

⁸⁷ For more information please see the Spatial Economy chapter.

There is much less variation in residence based earnings across the region. The highest residence based earnings were in Leicestershire at £490.0, which was well above the regional average of £460.5. The lowest residence based earnings – excluding Unitary Authorities – were in Lincolnshire where the average weekly median gross salary was £442.0 in 2009.

Chart 48: Sub-regional gross median weekly earnings by place of work and place of residence, 2009



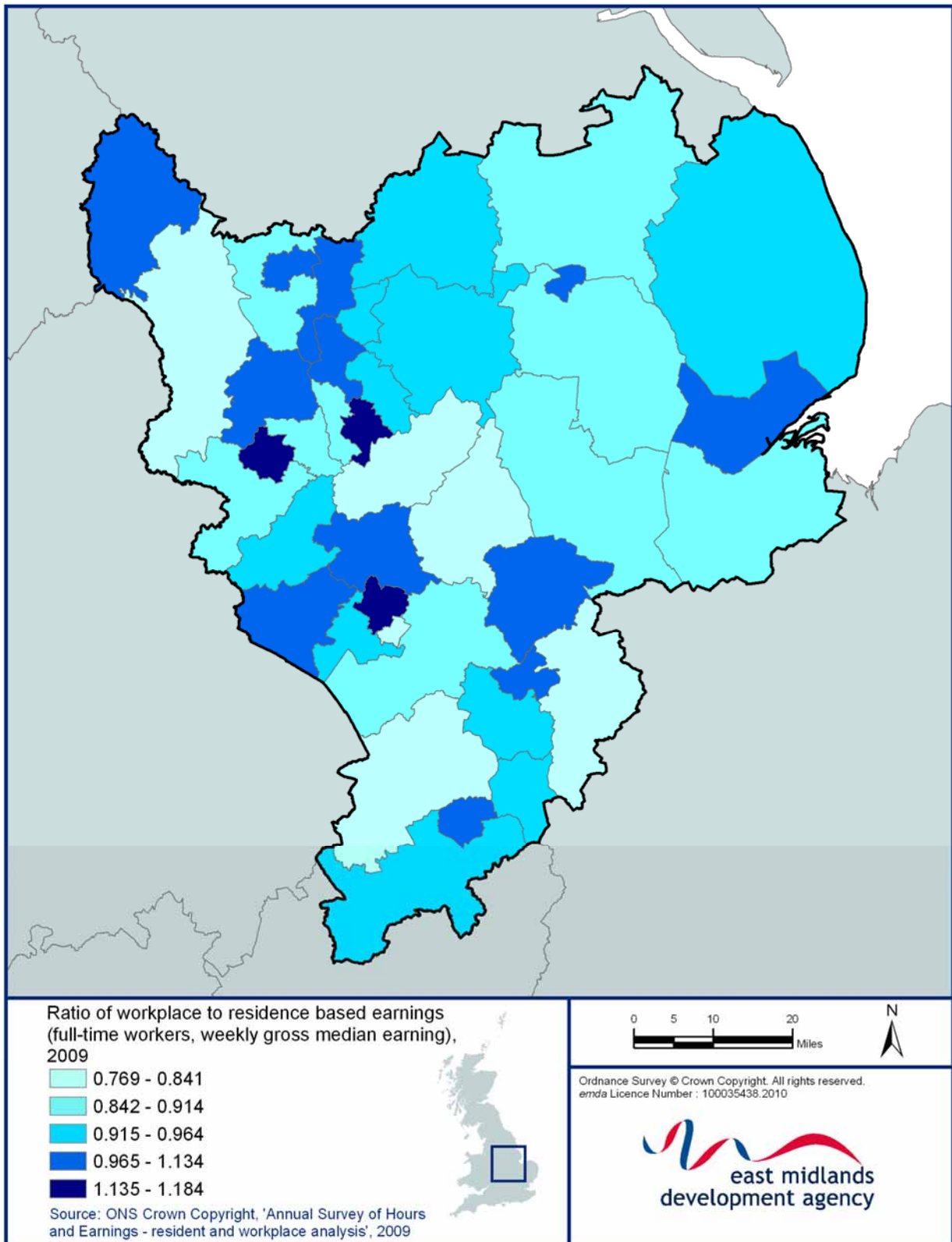
Source: ONS Crown Copyright, 'Annual Survey of Hours and Earnings' workplace and residence based analysis 2009, from NOMIS.

Note: Rutland Unitary Authority is suppressed due to the big confidence interval and the small sample size.

Map 6 presents the median weekly gross workplace based estimates of earnings against residence based estimates as a ratio at LAD level. A value of 1 represents an exact match between the two earnings estimates. A value of greater than 1 represents a higher workplace based estimate relative to residence. A value less than 1 reflects higher residence based earnings relative to workplace. From this we can see that:

- The areas with the highest workplace to residence based earnings ratios are in the three cities of Nottingham, Derby and Leicester, suggesting that a significant proportion of individuals in higher paid jobs commute from elsewhere; and
- The light blue shaded areas indicate those districts where individuals in higher paid jobs commute to work elsewhere. These are principally those areas that border the East of England and the West Midlands such as East Northamptonshire, Daventry and Derbyshire Dales. In addition, residence based earnings are higher than the workplace based estimates in Rushcliffe where those individuals in higher paid jobs commute to work to Nottingham.

Map 6: Ratio of workplace to resident based earnings (median) 2009



Key Points: Earnings

- The difference between male and female earnings in the East Midlands is greater than in the UK.
- Due to the recession, there has been a greater increase in weekly median gross full-time earnings between 2007 and 2008 than between 2008 and 2009.
- Across all occupational groups, with three exceptions – sales and customer service occupations, skilled trades and elementary occupations – all other occupations have lower earnings in the East Midlands than in the UK.
- Earnings are lower in the East Midlands compared to the UK average in almost every industry. Differences in earnings between the East Midlands and the UK tend to be greater in those industries with higher pay.
- In 2009 the differences in weekly gross full-time earnings between the East Midlands and the UK were the highest in financial and insurance (21.4%), in professional, scientific and technical activities (15.0%), in administrative and support services (14.9%) and in information and communication (14.6%).
- The average earnings of higher skilled occupations is lower in the region than in the UK.
- The earnings profile for the region appears more 'evenly' distributed than in the UK. This is principally due to the earnings of the better off being relatively depressed compared to the national average.
- The residence based median for the East Midlands was £460.5, higher by £3.9 than the workplace based estimate of £456.6 in 2009. This suggests that many higher paid workers commute to work outside the region.
- Lower overall earnings can be explained by at least two factors. First, the lower levels of employment in the East Midlands in those occupations which tend to be associated with higher pay. Second, the median earnings of the higher level occupations are somewhat lower in the East Midlands than in the UK.

4.8 Conclusions

Due to the recession, labour market indicators deteriorated both nationally and regionally from the summer of 2008. However, unemployment in the region remains below the national average, and the employment rate is above the national average. The latest data shows that the unemployment rate in the region was 7.7% in November-January 2010, compared to the UK average of 8.1%. Unemployment has levelled off both nationally and regionally over the last two quarters. Forecasts suggest that unemployment rates may continue to increase in most OECD countries in 2010, but some signs of easing will emerge in 2011 as economies recover.

The East Midlands is the only region out of the five northern and midlands regions to exceed the national average employment rate, though there are pockets of severe employment deprivation in the three cities, coalfields and coastal areas of the region. In the short term there are social and economic imperatives to get people back into work as recovery takes hold. However, future economic growth in the East Midlands will be driven by increases in productivity. This will depend on the skills of the workforce. Improving the quality of employment through increased workforce skills remains a key challenge along with the need to increase employers' demand for skills.

The East Midlands is ranked fourth lowest out of the nine English regions in terms of the proportion of adult population qualified to Level 4 and above. The proportion of the working age population without a Level 2 qualification is the second highest out of the nine English regions. The scale of the upskilling of the East Midlands workforce in recent years has been significant, but the demand for these higher level skills appears to be lagging behind the increased supply. It is still the case that almost two-fifths of employees in the region think that their highest qualification was above that required for the job they do (defined here as 'over-qualification')⁸⁸ and this proportion has increased over time in line with the trend for England.

The higher the qualification level, the more employable an individual becomes. However, in the context of a higher regional employment rate compared to the UK, higher qualifications appear to have less impact on employability in the region than nationally. In addition, it appears that those without any formal qualifications are more likely to be employed in the East Midlands than in the UK. Employer demands for low qualifications suggest that in the East Midlands – and this may be more the case in some sub-regions than others – some businesses tend to compete on the basis of price. This is especially challenging in those peripheral areas where the concentration of low-skilled labour may have a stronger negative effect on productivity⁸⁹ such as the coastal areas of Lincolnshire.

The occupational composition of the region shows that the proportion of employees in upper tier occupations (specifically professionals and associate professionals) is lower

⁸⁸ Alan Felstead and Francis Green on behalf of *emda*, 'Skills at Work in the East Midlands, 1997 to 2006' 2007.

⁸⁹ Gambin Lynn et al, Warwick Institute for Employment Research, University of Warwick, commissioned on behalf of *emda*, 'Exploring the links between skills and Productivity', 2009.

Webber et al, 'Explaining Spatial Variation in Business Performance in Great Britain', *The European Journal of Comparative Economics*, 2007, 4(2): 319-332.

than in the UK, whilst the region has a greater proportion of employment in lower tier occupations (elementary occupations and process, plant and machine operatives). Although upper tier occupations are expected to grow more significantly in the region than in the UK, these are projected to account for a lower share of the regional employment compared to the national average in the next decade.

The earnings profile for the region appears more evenly distributed than in the UK which is principally due to the more depressed earnings of the top deciles. The reasons for this are interrelated covering a range of factors including the different sectoral and industrial composition of the regional economy. Overall lower earnings can be partly explained by at least two factors. First, the lower levels of employment in the East Midlands in those occupations which tend to be associated with higher skills and pay. Second, the median earnings of the higher level occupations are somewhat lower in the East Midlands than in the UK.

Residents in rural districts of the East Midlands tend to perform better in both employment rates and measures of workforce qualifications. Therefore, earnings of residents living in rural districts are also higher compared to their urban counterparts suggesting that many better paid, higher skilled individuals choose to live in rural districts and commute to work elsewhere. In contrast, many local labour markets in rural districts provide comparatively low paid, low skilled employment such as the Lincolnshire coast and the coalfield areas.

Overall, the East Midlands low pay low skills equilibrium remains, even though the region has shown significant improvements in a number of indicators recently and it is not so badly positioned compared to the UK and other regions. The factors that are associated with the low pay low skills equilibrium include those relating to the individual worker, the characteristics of the job and features of the firm. Due to its sectoral and occupational composition, the East Midlands has more employment in the lower end of the occupational scale and less employment in the upper tier occupations. In addition, the financial return of human capital investment as measured by median earnings of higher level occupations seems to be somewhat lower in the East Midlands than in the UK.

There is a danger that the recent economic downturn may put some businesses under pressure to retain low cost, low value-low skills business models⁹⁰. This would further constrain opportunities to move towards high skills and high value added business strategies which ultimately may mean the region does not fully benefit from economic recovery later. Therefore, it is important that employment and skills strategies are joined up with innovation and enterprise policies to achieve sustainable economic growth.

⁹⁰ Kayte Lawton, 'Nice Work If You Can Get It!' Institute for Public Policy Research (IPPR), January 2009. <http://www.ippr.org.uk/members/download.asp?f=%2Fecomm%2Ffiles%2Fnice+work+if+you+can+get+it%2Epdf>