West Midlands Regional Observatory

Regional Skills Partnership Cross-cutting Issues 2006

The Knowledge Economy

Regional Skills Partnership: The Knowledge Economy Cross-Cutting Issues 2006

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1 Executive Summary

1.1 Introduction

One of the key priorities of the Regional Skills Partnership is to achieve a step change in business performance through investment in higher level skills. There is a need to increase the number of 'knowledge workers' in the Region and improve graduate retention rates and to improve the effective use of higher level skills in the workplace.

This report explores:

- How higher level skills and knowledge workers help drive up innovation and economic competitiveness
- How the West Midlands compares nationally and internationally in terms of knowledge intensity
- The strength of the Regions' private and public sector knowledge economies
- The extent to which graduates skills and abilities are fully utilised in the workplace
- The retention and utilisation within the Region of the recent intake of graduates

1.2 Key Headlines

There is potential for significant economic growth in the Region over the next few years as key service sectors and a range of high value manufacturing industries continue to expand. This would result in the generation of significant numbers of higher skilled jobs.

This potential will only be realised, however, if businesses successfully develop high quality, internationally competitive products and services. While the adoption of new and innovative technology and production processes is clearly essential, investment in skills and talents of the workforce and the development of a 'knowledge economy' is also critical. While the knowledge economy often seen as synonymous with science and technology it is also about highly skilled individuals adding value to all industries, both as employees and as the creators of new businesses.

Indeed the knowledge based economy results from the interaction of:

- Information and communication technologies – which are changing the face of many activities and occupations
- Human capital and intellectual property - use and production of knowledge intensive processes, products and services requires a skilled workforce. For knowledge based companies, talent and education become the most valuable assets, and the decisions they make on the location of knowledge intensive activities are likely to be increasingly linked to the pool of highly qualified workers into which they can tap.
- Creation and innovation – knowledge (research, design etc.) becomes a tradable product itself or makes up a large share of the actual value of many products or services.

Limitations in the availability of robust and reliable data make measurement of knowledge intensity problematic, particularly at a regional level. As a result we have developed a 'proxy' measure of knowledge intensity based on:

The proportion of people in employment that have acquired higher level qualifications (i.e. at least NVQ level 4 or equivalent, which may include graduates with a degree, those with a higher degree or those who have gained an equivalent work based or vocational qualification)

It is recognised that this is a measure of qualification attainment rather than the demand for skills from employers and the Regional economy. While this important caveat needs to be borne in mind, one of the advantages of this approach is the availability of robust and reliable data to assess how the West Midlands performs against other regions and performance within the Region by sector and occupation[1].

On this measure of knowledge intensity the West Midlands private sector, which is critical to drive up competitiveness and value-added, performs relatively poorly against other regions:

- The private sector, which employs more than 1.7 million people in the Region and has more than 360,000 people with higher level qualifications, is much larger in absolute terms than the public sector which employs just over 550,000 people of which 275,000 have higher level qualifications
- While it should be noted that in a number of private sector industries skills and experience gained informally and 'on the job' can be sometimes be perceived to be of more value than formal qualifications, based on our measure the Region's private sector, with 22% of staff with higher level qualifications, is less knowledge intensive than the public sector where 50% of staff have higher level qualifications
- Within the Region's private sector computer services is the only industry of a significant size with more than 40% of the workforce with higher level qualifications.
- Business & professional services, which is one of the Region's most important private sector knowledge industries in employment terms, has only 34% of its workforce with higher level qualifications which compares with 44% nationally

While the Region's business & professional services industry has grown strongly in recent years:

- Lower value added activity, notably labour recruitment and activities such as industrial cleaning, is more strongly represented than elsewhere in the country.
- People with higher level skills going into the industry in the Region are more likely to go into lower skilled, lower paid jobs

However more detailed analysis shows that knowledge intensity is increasing within the professional and business services 'cluster', which excludes these lower value added activities and also encompasses a range of higher value financial services

[1] It should be noted, however, that (i) sectors and occupations that have seen the highest levels of recruitment in recent years will inevitably have a higher proportion of higher qualified graduate employment (ii) the situation is far from static as the take up and diffusion of new processes, products, services and technologies stimulates flows of skills and talent across sectors and occupations

activities. While the cluster is relatively under developed in employment terms and is a little less knowledge intensive than elsewhere in the country:

- A range of industries, notably legal services, market research, hardware consultancy, real estate management, property letting, business and management consultancy, estate agency and other business services are expanding their employment to become key drivers of growth.
- A number of these industries are highly knowledge intensive with between 40% and 70% of staff qualified to at least NVQ level 4 or the vocational equivalent.

Overall, however, the Region's private sector is less knowledge intensive. Knowledge intensity in the public sector, meanwhile, is above the national average, notably in key industries such as education, health & care and public administration. The public sector appears to be 'mopping up' the supply of higher qualified people not being recruited by the Region's relatively under developed private sector knowledge economy.

It should be noted, however, that:

- Some private sector employers, particularly those that trade nationally and internationally and where the West Midlands has developed into a key 'hub' for particular activities, might be accessing knowledge workers from the rest of the UK or from overseas. Further research might be useful to explore:
    - The extent of national and international trading in the Region's key 'knowledge industries'
    - Whether the Region acts as a 'hub' for any knowledge based activities and the extent to which employers are tapping into external 'knowledge pools'
- Significant private sector activity may be 'hidden' within the public sector. For example within universities and the NHS there is significant privately funded research and development work and there is much public-private sector collaboration.

The preceding analysis gives an indication of the demand for higher level skills and knowledge intensity, it is also important to consider:

- The kind of work higher skilled staff do in their jobs
- The extent to which they use their skills and qualifications

- The areas in which changes in work organisation are creating new opportunities for those with higher level skills

- The extent to which higher level skills are being effectively developed and deployed by employers. An important precursor to this is the development of appropriate management and leadership skills. In particular managers and leaders need to have the ability to be open to new ideas, identify and exploit opportunities and to inspire, motivate and develop their people.

People working in 'traditional' graduate jobs, for which the route in is via a degree programme and the emphasis is on job-specific technical skills are strongly represented in the Region. While occupations in the private sector such as solicitors and scientists are included in this category the proportion of people in the West Midlands working in public sector occupations such as teaching and lecturing is much higher and above the national average.

The proportion of people working in modern graduate jobs (for example IT professionals and managers) and new graduate jobs (for example managers and professionals in business & professional services), meanwhile, is much lower. This may indicate:

- Weaker demand for higher level skills from the Region's private sector employers

- A shortage of the specific higher level skills required by private sector employers – do people in the Region have the right mix of high level technical skills and 'softer' generic skills needed?

- An inability, particularly among smaller private sector firms, to compete with public sector salaries and other benefits. While at a national level average salaries in the public sector staff are still a little below the private sector, the gap is narrowing year on year and the average for the public sector grew by nearly 8% between 2004 and 2005 which compares with just 4% for the private sector.

Research indicates a link between employment 'non-traditional' graduate occupations, the acquisition of 'soft' generic strategic, management and interactive skills and a propensity for entrepreneurship and enterprise. Given that private sector knowledge intensity and employment in many of these key occupations is below average it is perhaps unsurprising that the proportion of graduates from the West Midlands going into self employment is the second lowest in the country.

While graduate retention is improving, it still remains below the national average and the Region continues to lag behind in terms of attracting graduates from other parts of the UK and overseas. In addition issues associated with the utilisation of new graduates within the workforce remain:

- New graduates are still more likely to go into traditional graduate jobs in the public than new, modern or niche graduate jobs in the private sector.
- The proportion of graduates going into the Region's high knowledge intensity private sector industries remains below the national average

While graduates studying subjects allied to teaching, education, social work and medicine are most likely to go into high knowledge intensity public sector industries, business and technology graduates are most likely to go into high knowledge intensity private sector industries, notably those studying computer science, business studies, management studies, engineering or mathematics.

2 The changing demand for skills

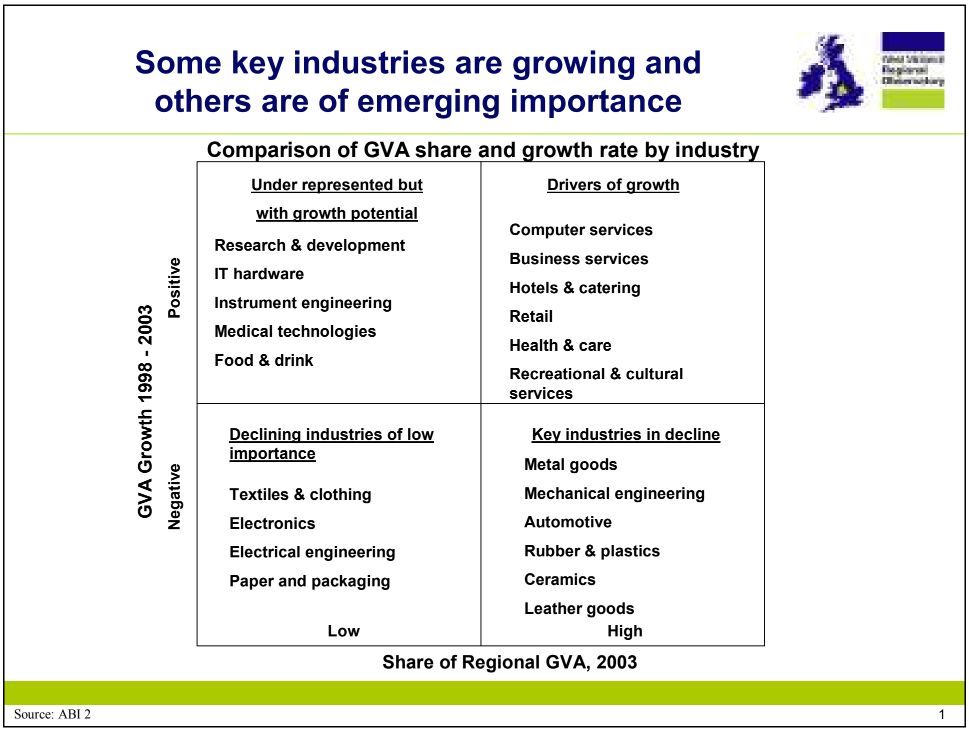
2.1 Economic restructuring

In recent years the Region's economy has restructured significantly and this restructuring is forecast to continue:

- Manufacturing industries such as metal goods, mechanical engineering, automotive, rubber & plastics, ceramics and leather goods have declined in both output and employment terms. As discussed in some detail in the 2005 RSP Regional Skills Assessment, these industries have been affected by an increasingly price sensitive market and intense competition from producers in locations elsewhere in the world with a lower cost base. While some businesses have responded by moving into new technologies and markets, in many cases this has led to the closure of businesses and the transfer of production overseas.
- In parallel, however, a range of service industries are expanding significantly and are becoming key sources of wealth creation for the Region, notably.
    - Key private sector services such as computer services, business & professional services, retail and hotels & catering
    - Public sector activities such as health & social care and recreational and cultural services

Other growing industries are currently less well represented in the Region but could potentially be key drivers of growth in the future, for example:

- Research & development
- IT hardware
- Medical technologies
- Food & drink



2.2 The potential demand for higher level skills

These developments in the Regional economy may potentially drive significant shifts in the demand for labour and skills over the next decade[2]:

- It is forecast that more than 100,000 net new jobs may potentially to be created in expanding service industries such as business & professional services, health & social care, retail & wholesale distribution, hotels & catering and recreational & cultural services

- While new job creation in manufacturing is forecast to be very limited nearly 130,000 job opportunities are expected to arise due to 'replacement demand' caused by retirements and career moves. It is expected that a significant proportion of these jobs will be in industries that have begin to expand in the Region and have the potential to expand further in the future such as IT hardware, medical technologies and food & drink.

- There is potential for significant new job creation in higher skilled occupations. Nearly 45,000 net new jobs in managerial occupations, more than 50,000 net new jobs in professional occupations and nearly 40,000 net new jobs in associate professional & technical occupations may potentially be created over the next decade.

[2] Source: Working Futures II

2.3 The knowledge economy, innovation and growth

The Region's potential for growth and new job creation and the potential demand for higher level skills will only be realised, however, if businesses successfully develop high quality, internationally competitive products and services.

While the adoption of new and innovative technology and production processes is clearly essential, investment in skills and talents of the workforce and the development of a 'knowledge economy' is also critical. While the knowledge economy often seen as synonymous with science and technology it is also about highly skilled individuals adding value to all industries, both as employees and as the creators of new businesses[3].

Indeed the knowledge based economy results from the interaction of[4]:

- Information and communication technologies – which are changing the face of many activities and occupations
- Human capital and intellectual property - Use and production of knowledge intensive processes, products and services requires a skilled workforce. For knowledge based companies, talent and education become the most valuable assets, and the decisions they make on the location of knowledge intensive activities are likely to be increasingly linked to the pool of highly qualified workers into which they can tap.
- Creation and innovation – knowledge (research, design etc.) becomes a tradable product itself or makes up a large share of the actual value of many products or services5.

[3] The Work Foundation – Ideopolis: knowledge city regions, 2006
[4] Employment in Europe 2000
[5] For further detail on the skills required to support innovation see WMRO's cross cutting issues report available via
http://www.wmro.org/standardTemplate.aspx/Home/RSPSkillsResearch/CrosscuttingIssues

3 The knowledge economy and knowledge intensity

Limitations in the availability of robust and reliable data make measurement of knowledge intensity problematic, particularly at a regional level. As a result we have developed a 'proxy' measure of knowledge intensity based on:

The proportion of people in employment that have acquired higher level qualifications (i.e. at least NVQ level 4 or equivalent, which may include graduates with a degree, those with a higher degree or those who have gained an equivalent work based or vocational qualification)

It is recognised that this is a measure of qualification attainment rather than the demand for skills from employers and the Regional economy. While this important caveat needs to be borne in mind, one of the advantages of this approach is the availability of robust and reliable data to assess:

- How the UK performs internationally
- How the West Midlands performs against other regions
- Performance within the Region by sector and occupation[6]

3.1 National and international comparisons

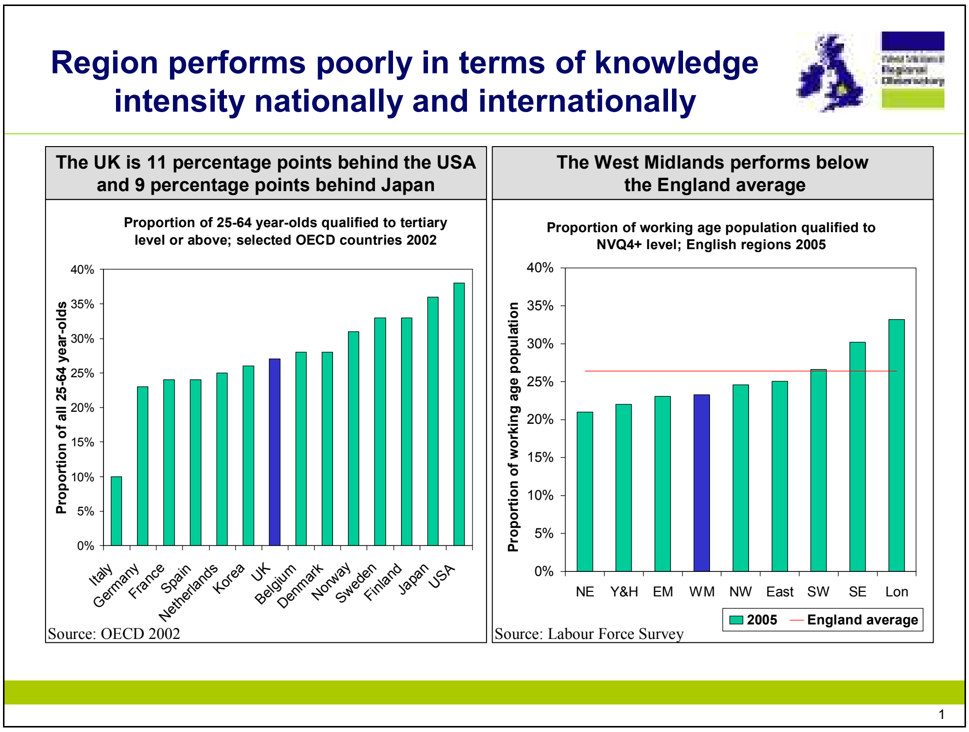
On this measure of knowledge intensity the UK performs more poorly than a number of key international competitors. In terms of the proportion of the working age population qualified to tertiary level or above, while the UK is ahead of Germany, France, Spain and the Netherlands it is 11 percentage points behind the USA, 9 percentage points behind Japan and also behind Finland, Sweden, Norway and Denmark.

[6] It should be noted, however, that (i) sectors and occupations that have seen the highest levels of recruitment in recent years will inevitably have a higher proportion of higher qualified graduate employment (ii) the situation is far from static as the take up and diffusion of new processes, products, services and technologies stimulates flows of skills and talent across sectors and occupations

Many of these countries combine high levels of educational attainment with a high share of employment in knowledge intensive sectors. The link between these two indicators is likely to be as much demand-led as supply driven:

- These knowledge intensive sectors demand qualifications of a consistent quality from the education system, putting pressure on the system to provide them
- The large pool of qualified people may foster the creation and development of businesses using these skills[7]

In turn, knowledge intensity in the West Midlands is below the national average[8].



Nevertheless it may be that some employers, particularly those that trade nationally and internationally and where the West Midlands has developed into a key 'hub' for particular activities, might be accessing skills and talent from beyond the region. Further research might be useful to explore:

- The extent of national and international trading in the Region's key 'knowledge industries'
- Whether the Region acts as a 'hub' for any knowledge based activities and the extent to which employers are tapping into external 'knowledge pools'

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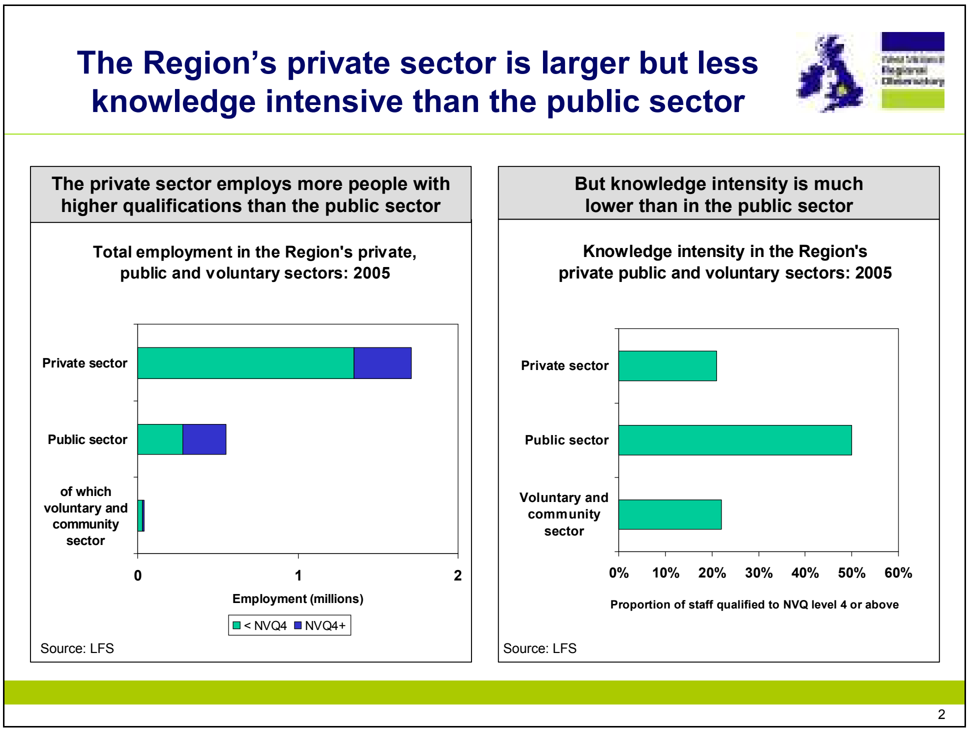
[7] Employment in Europe 2000

[8] It should be noted that the OECD measure of the proportion of people qualified to tertiary level is not exactly comparable with the UK measure of the proportion of people qualified to NVQ level 4 or above as some people qualified to NVQ level 3 are included.

3.2 Knowledge intensity in the West Midlands

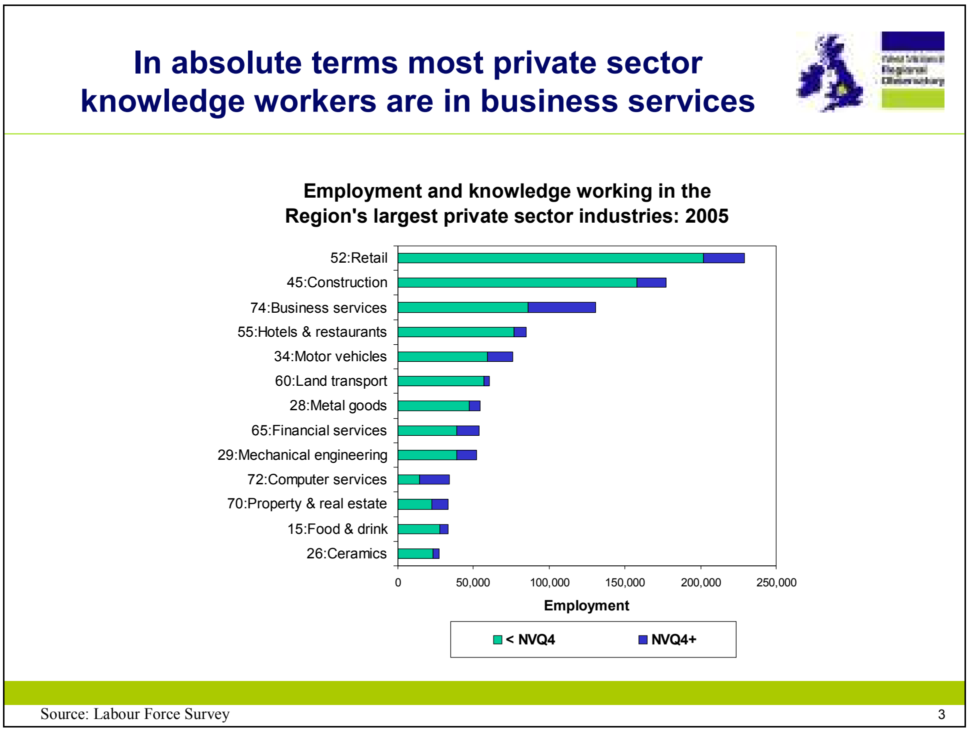
There are significant differences in knowledge intensity in terms of the proportion of people qualified to at least NVQ level 4 or the equivalent in the Region's private and public sectors:

- The private sector, which is critical to drive up competitiveness and value-added, is much larger in absolute terms employing more than 1.7 million people, of which more than 360,000 have these higher level qualifications
- The public sector employs just over 550,000 people, just under 275,000 of which have these higher level qualifications
- But 'knowledge intensity' in terms of the proportion of employment accounted for those with higher level qualifications is just 22% in the private sector which compares with 50% in the public sector



3.3 The Region's private sector knowledge economy

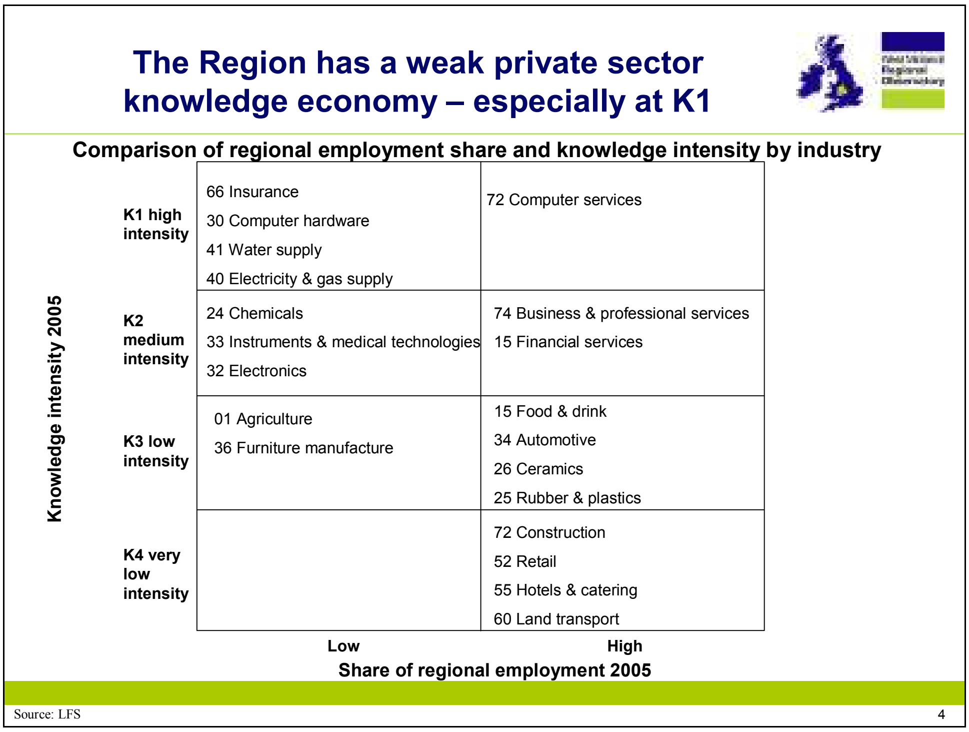
Within the Region's 20 largest private sector industries more than 250,000 staff have attained higher level qualifications. The industry with the highest number of staff with higher level qualifications is business & professional services (which includes accountancy, legal services, advertising, market research, management and other specialist consultancy, and labour recruitment) with more than 50,000.



While it should be noted that in a number of private sector industries skills and experience gained informally and 'on the job' is seen to be of more value than formal qualifications, based on our measure the West Midlands private sector is less knowledge intensive than is the case in many other regions:

- Among industries classified as high knowledge intensity with more than 40% of staff with higher level qualifications (K1) only computer services has a significant share of regional employment
- Business & professional services, which is one of the Region's most important private sector knowledge industries in employment terms, and financial services are both classified as only medium knowledge intensity (K2) with between 25% and 40% of staff with higher level qualifications[9]
- Overall only 4% of regional employment is in K1 high knowledge intensity private sector industries which compares with 14% in England as a whole

[9] Although specific activities are high knowledge intensity as highlighted in section 3.4

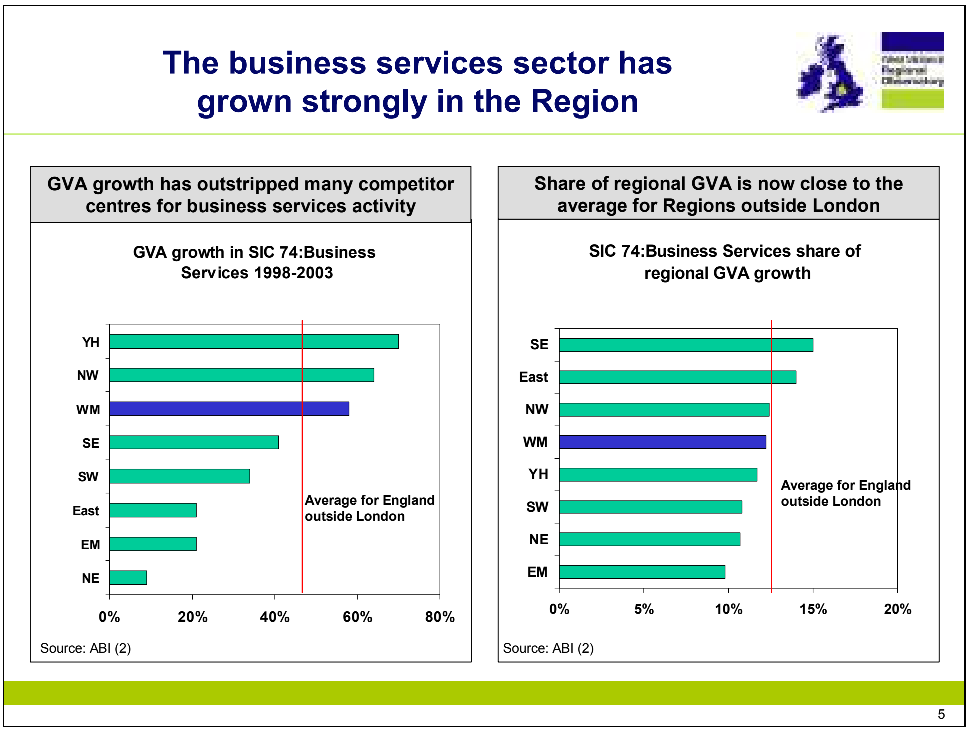


3.4 Case study – business & professional services

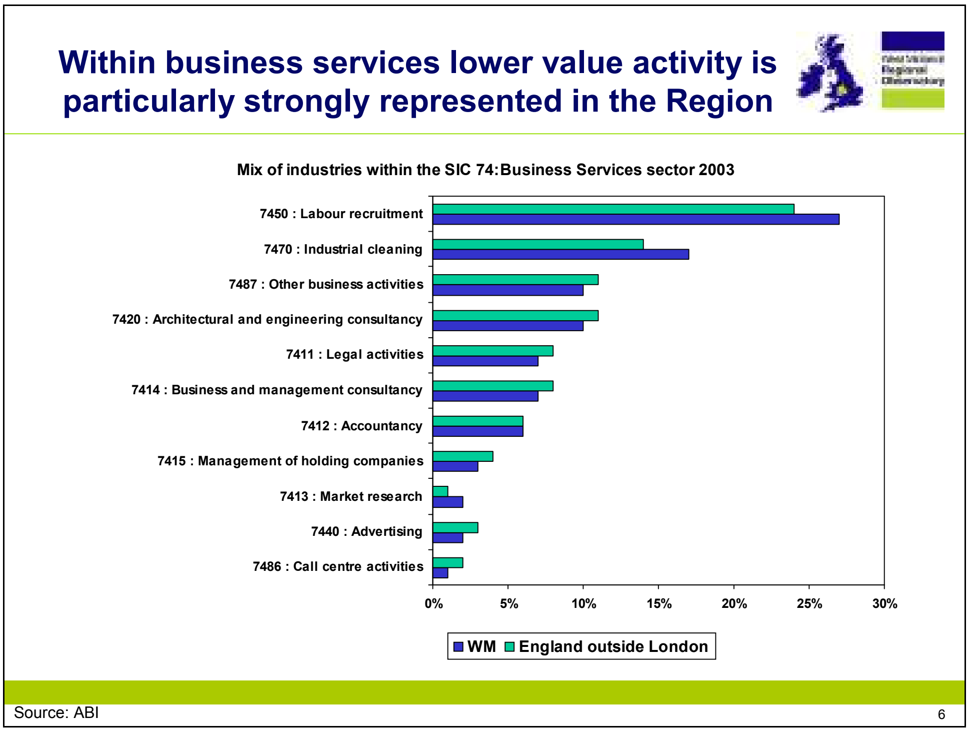
Stimulating a greater demand for higher level skills and the attainment of higher level qualifications within the Region's business & professional services industry, which as already discussed is a major employer but is characterised by a lower demand for higher level skills than is the case in England as a whole, would have a significant impact on overall knowledge intensity.

The industry (as defined by Standard Industrial Classification (SIC) code 74) has grown strongly in recent years. Growth in gross value added of nearly 60% over the 1998-2003 period[10] was the third highest among competitor regions and 10 percentage points above the average for England outside London. As a result the industry is increasing its presence in the Region. By 2003 the industry accounted for 12% of employment in the Region, which is approaching the average for England outside London. Further growth since 2003 may well have increased this share to a level above the national average.

[10] Unfortunately 2003 is the latest available data



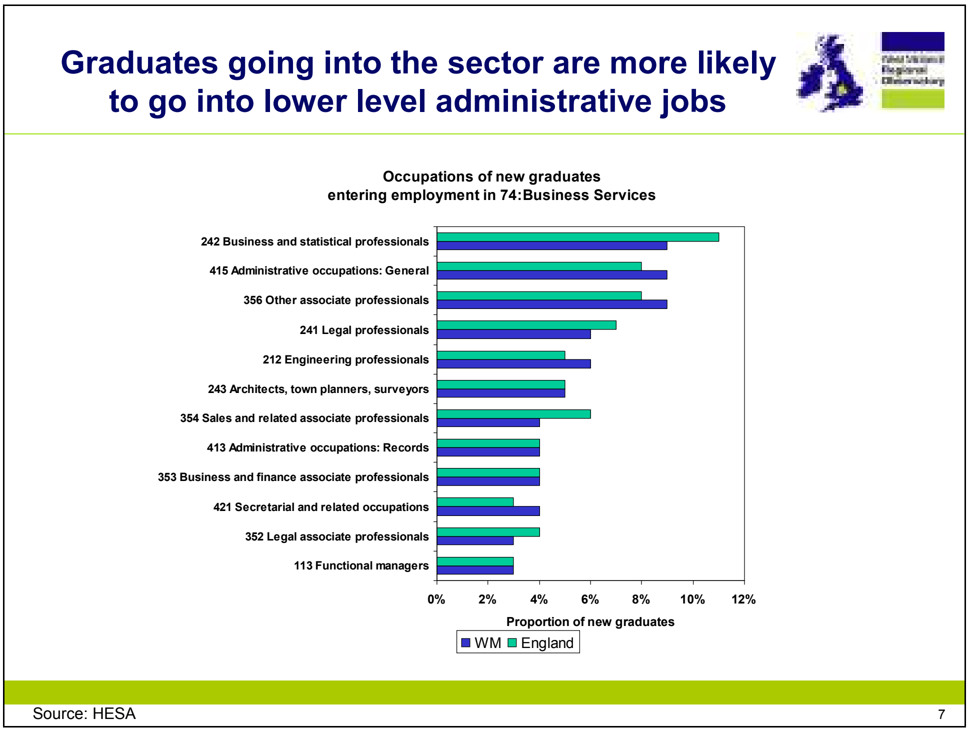
In the West Midlands lower value added activity, notably labour recruitment and activities such as industrial cleaning, is more strongly represented than elsewhere in the country.



The importance of these lower value added activities in the West Midlands has a significant impact on the occupational profile of the sector and the types of jobs that graduates go into:

- a lower proportion go into higher level legal, business and statistical professional and associate professional occupations

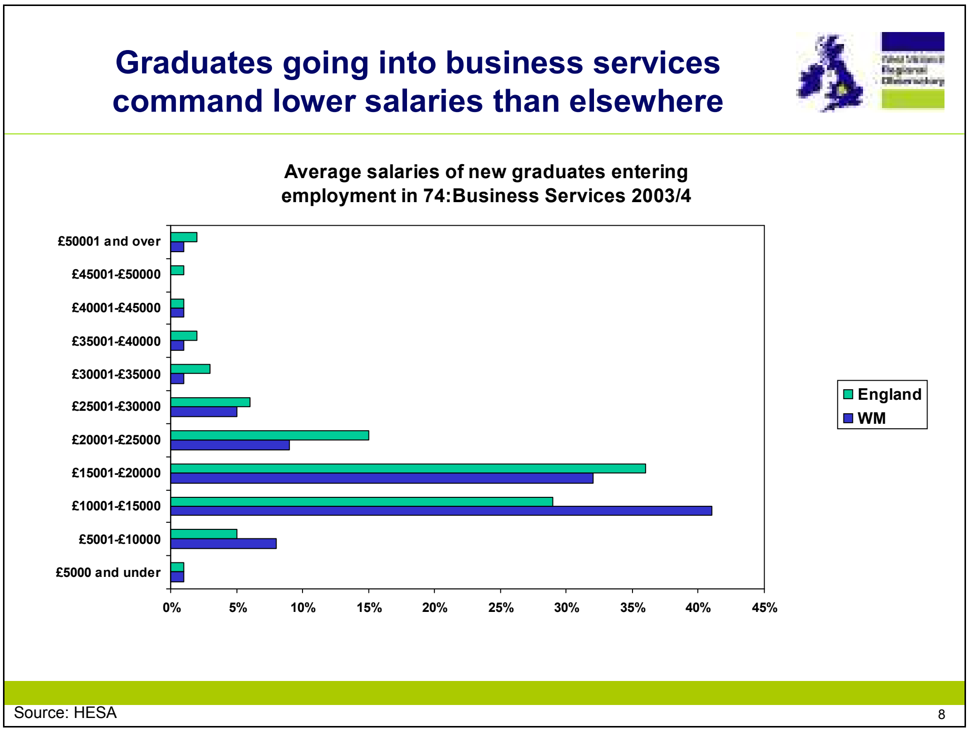
- A higher proportion go into lower level administrative and secretarial occupations



In turn the salaries commanded by higher skilled people entering the industry in the West Midlands tend to be lower than in other parts of the country. For example:

- More than 40% of new graduates have a starting salary of between £10,000 and £15,000 which compares with less than 30% in England as a whole

- Only 32% have a starting salary of £15,000 to £20,000 compared with 36% in England as a whole and only 9% have a starting salary of £20,000 to £25,000 compared with 15% in England as a whole



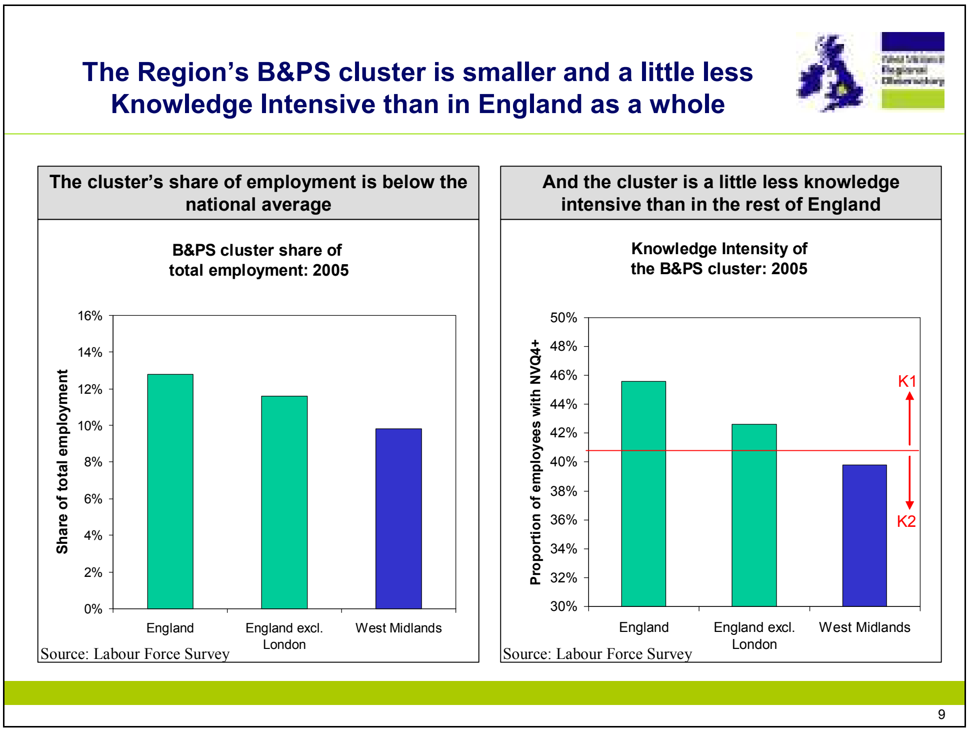
3.4.1 *The Region's professional and business services cluster*

However knowledge intensity is increasing within the professional and business services 'cluster', which excludes these lower value added activities and also encompasses a range of higher value financial services activities. Specifically the cluster includes:

- Financial services: banking, insurance, financial services and stockbrokers
- Higher value activities within the business & professional services industry (SIC code 74) including accountancy, advertising, PR and media, architects, surveyors and civil engineering, property services and estate agents, ICT and telecoms, human resource consultancy and recruitment agencies, management, technical and other consultancy

The cluster is relatively under developed in employment terms and is a little less knowledge intensive than elsewhere in the country:

- The cluster accounts for 9.8% of total regional employment which compares with nearly 13% in England as a whole and nearly 12% in England outside London
- 38% of staff have higher level qualifications which compares with nearly 46% in England as a whole and nearly 45% in England outside London



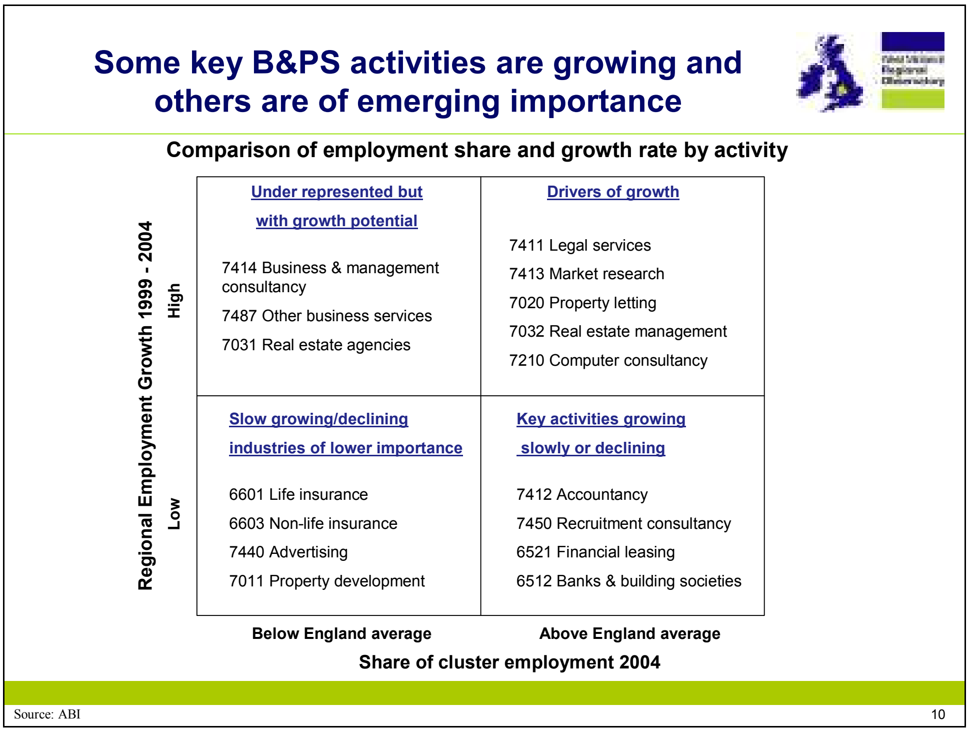
Nevertheless, a range of industries are driving growth and promoting knowledge intensity within the cluster:

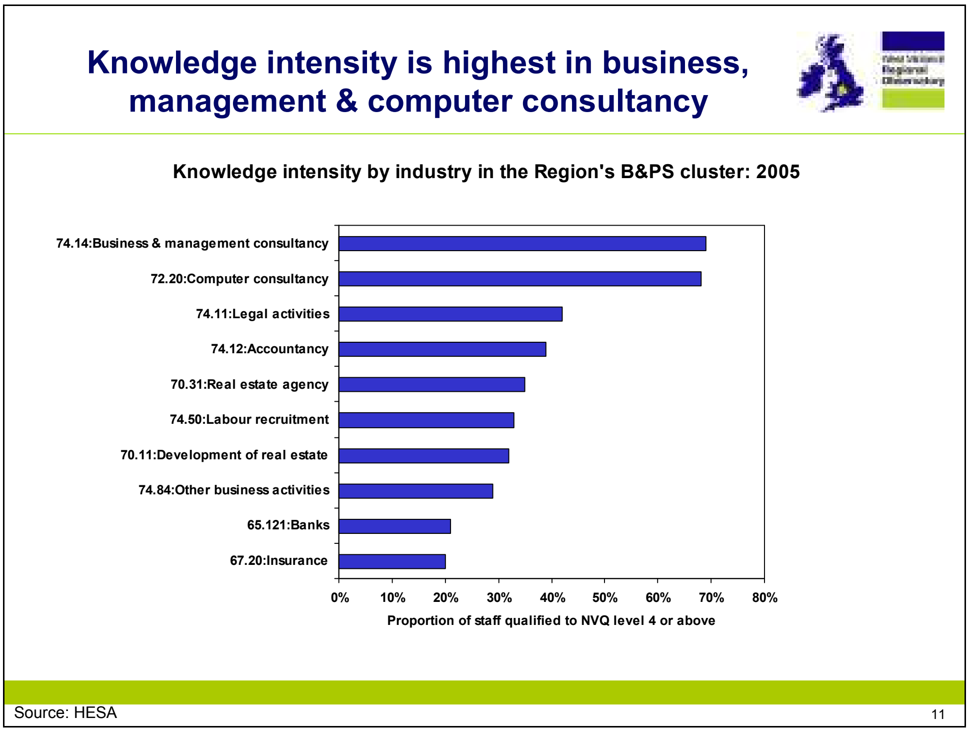
- Legal services, market research, hardware consultancy, real estate management and property letting account for a share of employment greater than the national average and have grown strongly in employment terms in recent years

- Business and management consultancy, estate agency and other business services are potential drivers of growth for the future. While their share of cluster employment is lower these industries have grown strongly in recent years.

- Among existing drivers of growth both computer consultancy, with 68% of staff with higher level skills, and legal services, with 42% of staff with higher level skills, are highly knowledge intensive industries

- Among potential future drivers of growth business and management consultancy, with nearly 70% of staff with higher level skills, is highly knowledge intensive





The strategy for the cluster includes a range of actions which should help to further improve the knowledge intensity, productivity and growth of both the cluster itself and the regional economy as a whole. These include[11]:

- Raising educational and training aspirations and attainments to ensure that firms have access to people with the right skills required to deliver success

[11] Professional and business services cluster strategy and business plan 2005-2008

- Developing an innovative culture by encouraging service improvement through new ideas, technology and working practices
- Encouraging connectivity and collaboration by linking partners (public and private) and projects to add more value through working together and sharing information

3.5 The Region's public sector knowledge economy

In contrast to the Region's weak private sector knowledge economy, knowledge intensity using our qualifications based definition in the public sector is above the national average:

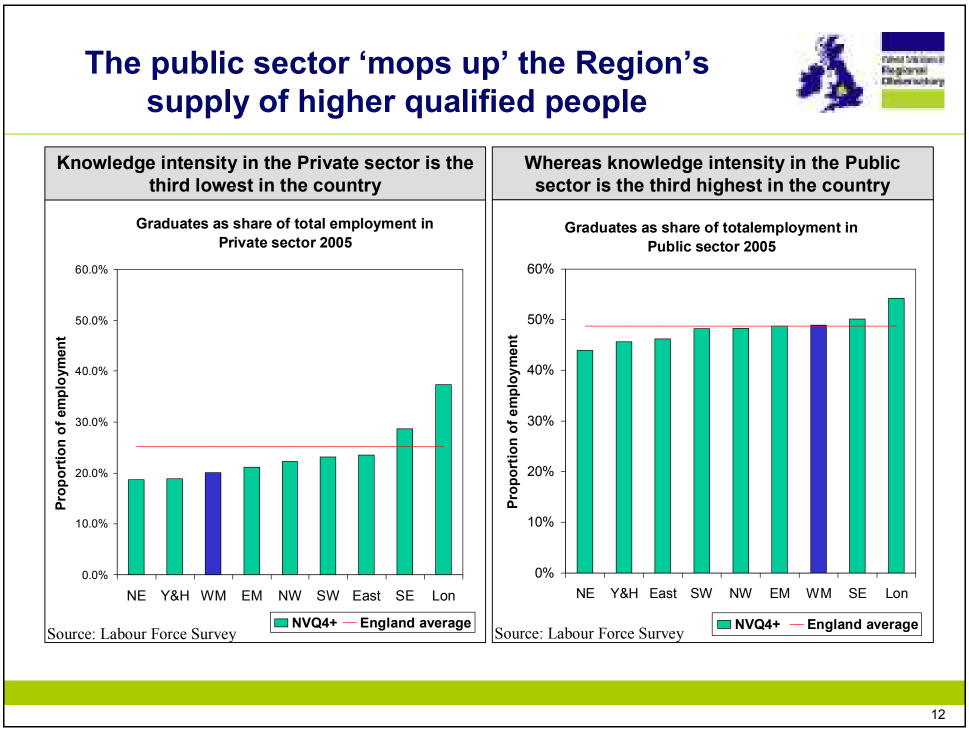
- High knowledge intensity public sector industries, where at least 40% of staff have higher level qualifications, account for 16% of overall regional employment which compares with less than 15% in England as a whole
- Within the Region's public sector industries nearly half of staff have higher level qualifications which is slightly above the national average and the third highest figure in the country
- The public sector appears to be 'mopping up' the supply of higher qualified people not being recruited by the Region's relatively under developed private sector knowledge economy

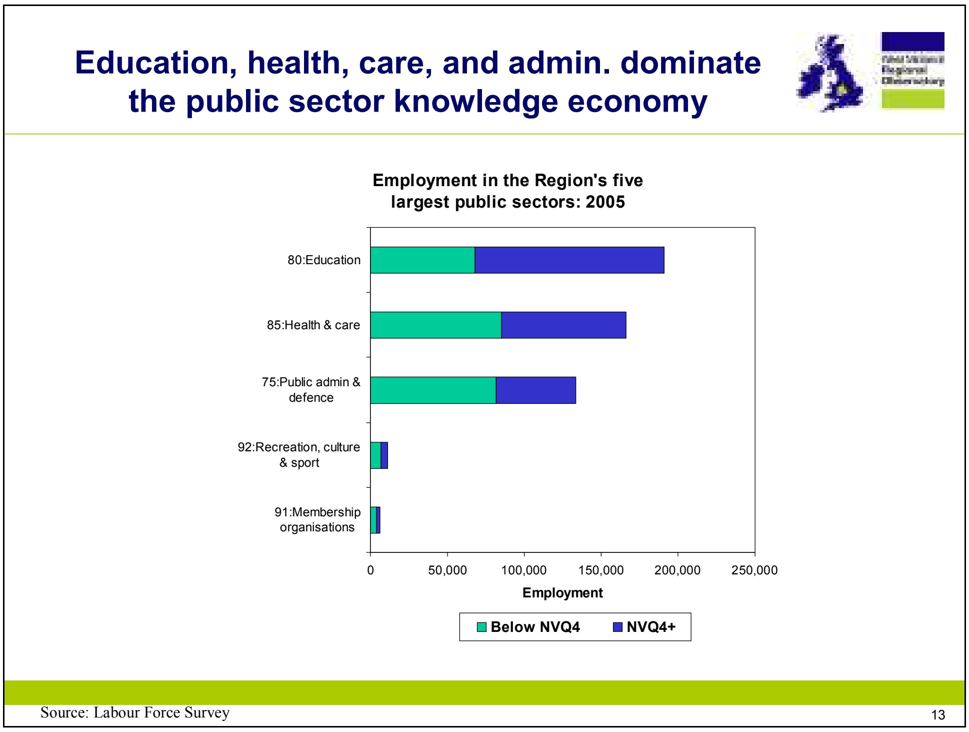
It should be noted, however, that:

- Some private sector employers, particularly those that trade nationally and internationally and where the West Midlands has developed into a key 'hub' for particular activities, might be accessing knowledge workers from the rest of the UK or from overseas. Further research might be useful to explore:
    - The extent of national and international trading in the Region's key 'knowledge industries'
    - Whether the Region acts as a 'hub' for any knowledge based activities and the extent to which employers are tapping into external 'knowledge pools'
- Significant private sector activity may be 'hidden' within the public sector. For example within universities and the NHS there is significant privately funded research and development work and there is much public-private sector collaboration.

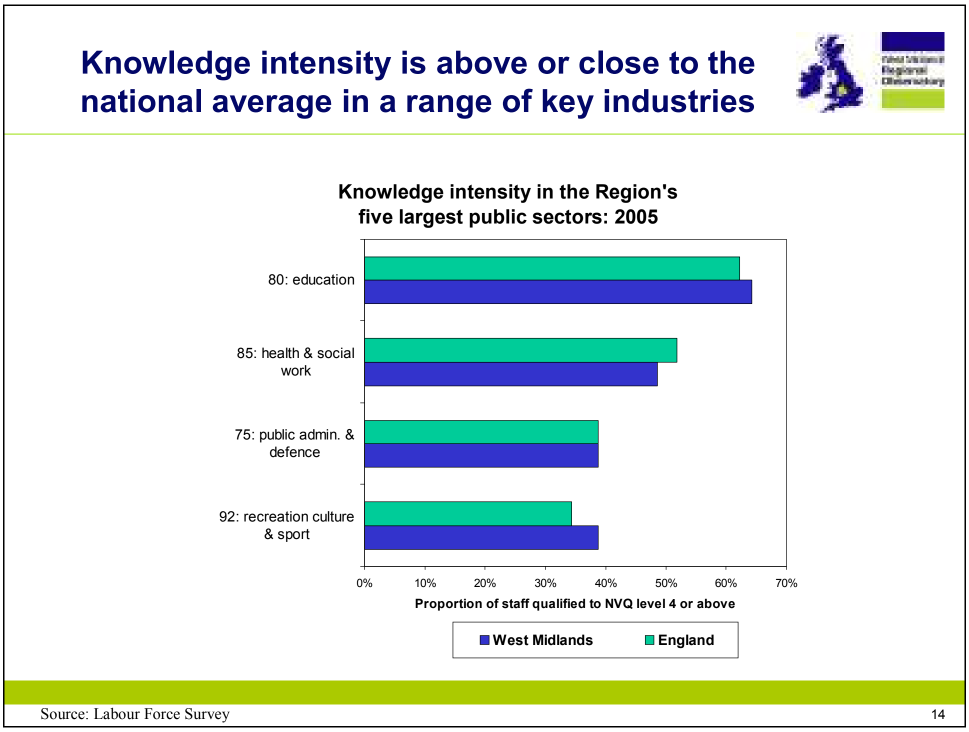
More than 260,000 staff have higher level qualifications in three key public sector industries:

- More than 120,000 staff have higher level qualifications in education
- More than 80,000 staff have higher level qualifications in health & care
- Nearly 52,000 staff have higher level qualifications in public administration





In contrast to the private sector, the proportion of the workforce with higher level qualifications is above or close to the national average in a range of key industries.



3.6 The utilisation of higher level skills

While the preceding analysis is an indication of the demand for higher level skills in the Region, it should be noted that sectors and occupations that have seen the highest levels of recruitment in recent years will inevitably have a higher proportion of higher qualified graduate employment. In addition it is also important to consider:

- The kind of work higher skilled staff do in their jobs
- The extent to which they use their skills and qualifications
- The areas in which changes in work organisation are creating new opportunities for those with higher level skills
- The extent to which higher level skills are being effectively developed and deployed by employers. An important precursor to this is the development of appropriate management and leadership skills. In particular managers and leaders need to have the ability to be open to new ideas, identify and exploit opportunities and to inspire, motivate and develop their people.

Our analysis of the utilisation of higher level skills in the Region is based on a four fold classification of key 'graduate occupations'[12], with typical examples of the kind of jobs that fit into each (see Table 1).

[12] While these occupations can be filled by graduates they are also often filled by people with higher level skills gained via a vocational/work based route

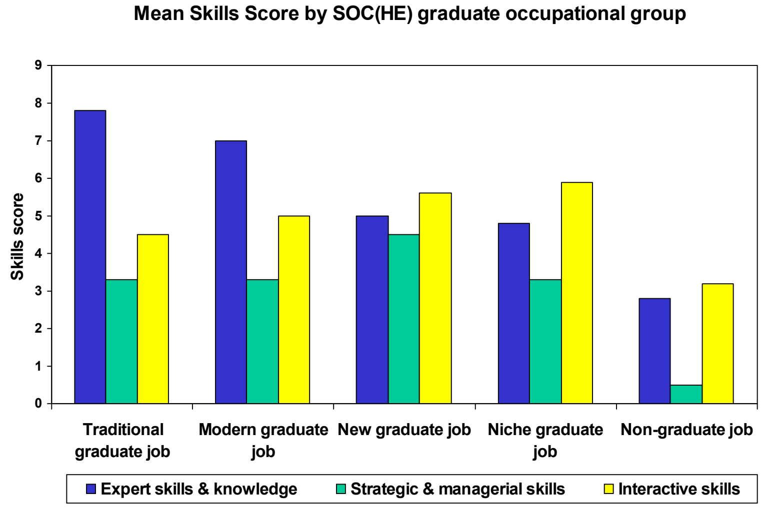
Table 1: classification of graduate occupations[13]		
SOC(HE) Category	**Description**	**Example occupations**
1. Traditional occupations	Established professions for which the normal route has been via an undergraduate degree programme	Solicitors Medical practitioners HE and secondary education teachers Biological scientists/biochemists
2. Modern graduate occupations	Newer professions which graduates have been entering since educational expansion in the 1960s and which also offer opportunities for those who have gained higher level skills via a vocational/work based route	Directors, chief executives of major organisations Software professionals, computer programmers Authors/writers/journalists
3. New graduate occupations	New/expanding occupations with a requirement for higher level skills	Marketing and sales managers Physiotherapists, occupational therapists Management accountants Welfare, housing and probation officers
4. Niche graduate occupations	Occupations where the majority of employees are not graduates but within which there are stable or growing specialist niches that require higher level skills	Leisure and sports managers Hotel, accommodation managers Nurses, midwives Retail managers

Each of these occupations require a different mix of skills:

- In traditional graduate jobs there tends to be a focus on job specific expert skills and knowledge
- In modern graduate jobs the emphasis on these job specific skills is less and the need for softer interactive skills is greater
- In new graduate jobs the need for both strategic and managerial skills and interactive skills is significant
- In niche graduate jobs the need for interactive skills is particularly prominent

[13] Warwick Institute for Employment Research/Employment Studies Research Unit - Measuring change in the graduate labour market, 2003

Each type of graduate job demands a particular mix of skills



Source: Purcell, Elias and Wilton, 2004

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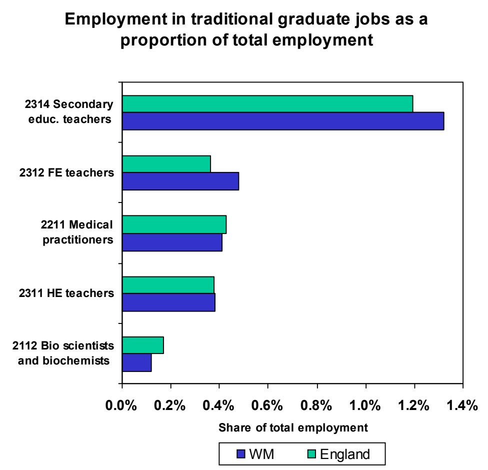
The proportion of people working in these different types of high level occupations within the Region varies greatly. Traditional graduate jobs are strongly represented within the Region. While occupations in the private sector such as solicitors and scientists are included in this category the proportion of people in the West Midlands working in public sector occupations such as teaching and lecturing is much higher and above the national average.

Traditional graduate jobs are strongly represented in the Region's public sector



Source: LFS 2005

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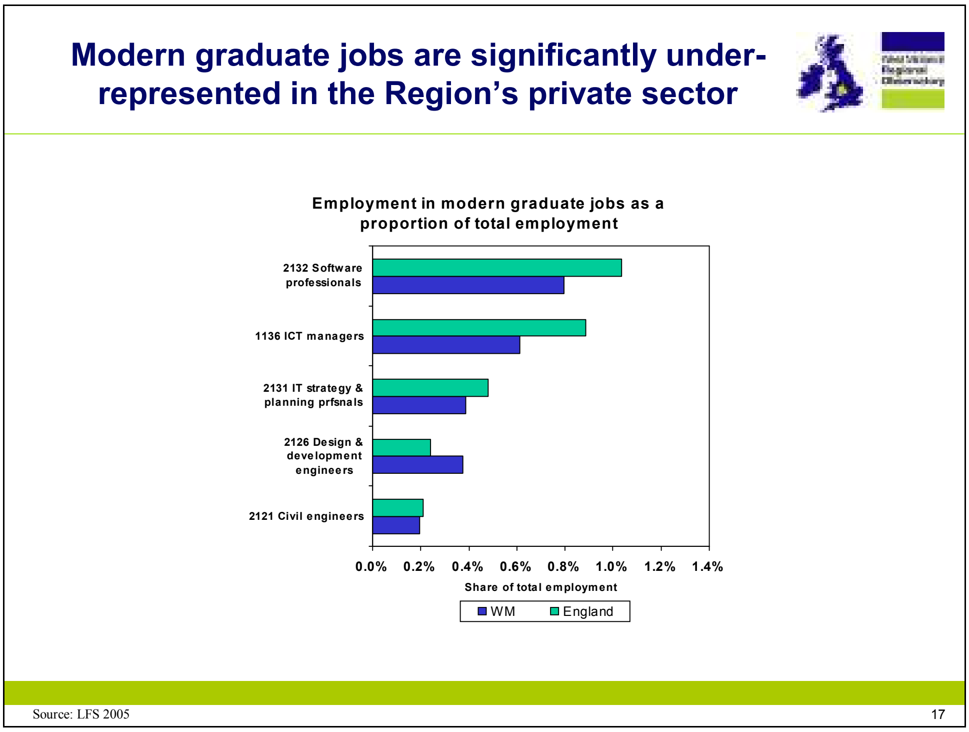
The proportion of people in the Region working in the other categories of higher level jobs, meanwhile, which are principally found in the private sector, is lower. This may indicate:

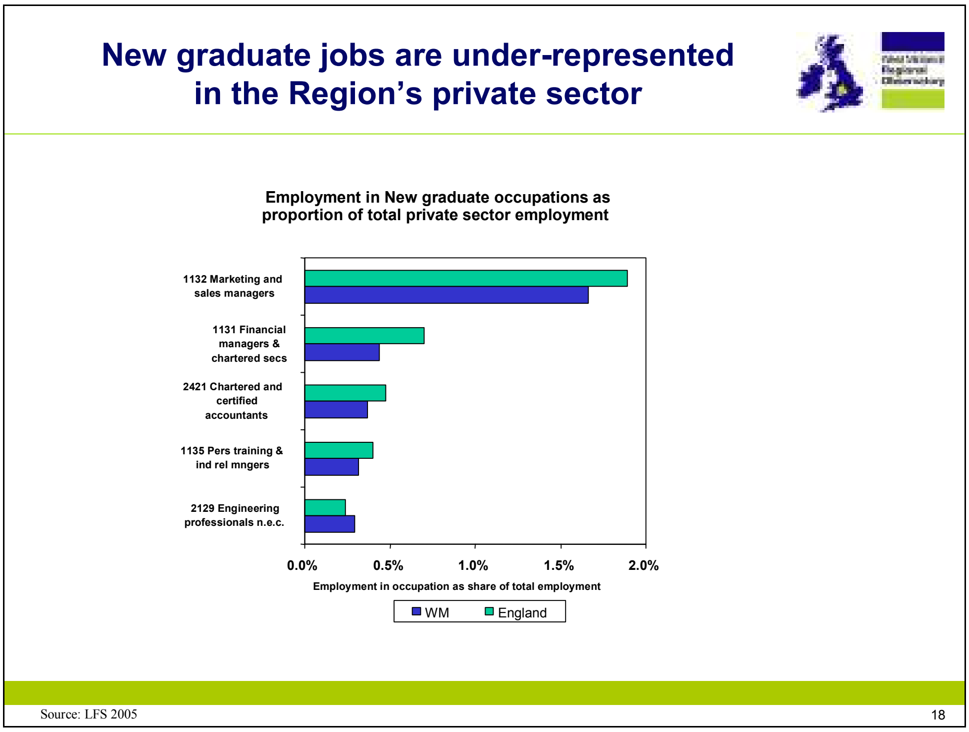
- Weaker demand for higher level skills from the Region's private sector employers
- A shortage of the specific higher level skills required by private sector employers – do people in the Region have the right mix of high level technical skills and 'softer' generic skills needed?
- An inability, particularly among smaller private sector firms, to compete with public sector salaries and other benefits at a national level[14]:
    - At just under 22,000 the average salary of public sector staff in 2005 was still a little below the figure for private sector staff of just under £25,000
    - However the gap is narrowing year on year and the average for the public sector grew by nearly 8% between 2004 and 2005 which compares with just 4% for the private sector
    - Fringe benefits such as pensions are often more attractive in the public sector

Modern graduate jobs, that tend to be found in the private sector and in computer services in particular, are significantly under represented in the Region. The proportion of people working as IT software professionals, IT managers or IT strategy and planning professionals is well below the national average.

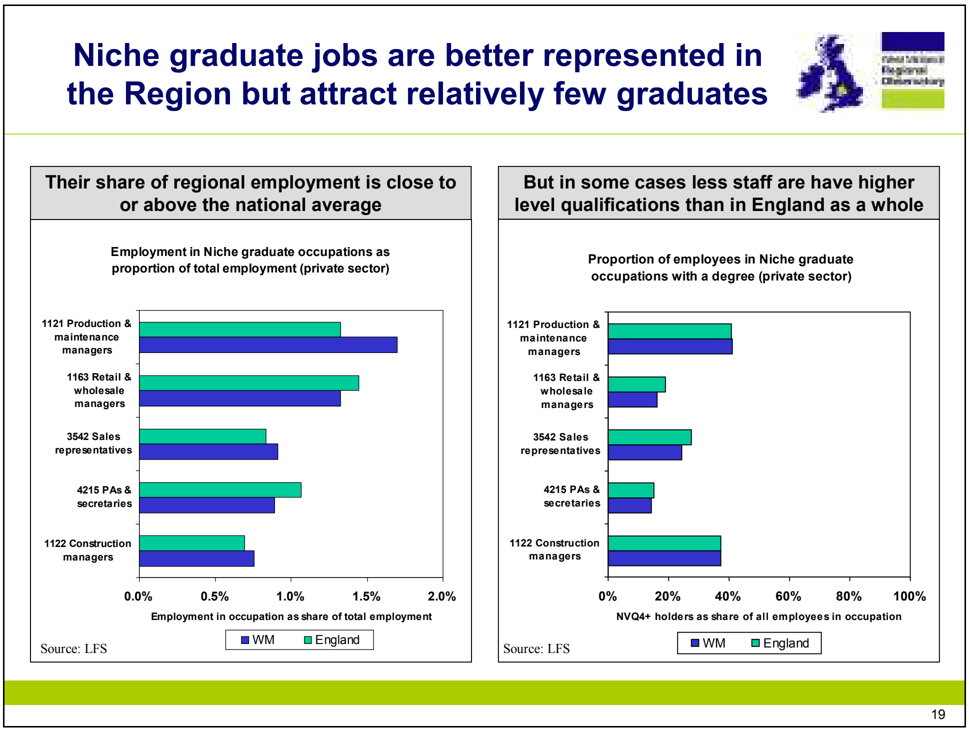
[14] Regional level data is not available



New graduate jobs, that tend to be found in the private sector and in business & professional services in particular, are also under represented. The proportion of people working as accountants or marketing, sales financial, or HR managers is below the national average.



The share of regional employment accounted for by roles defined as niche graduate occupations is close to the national average and above average for production & maintenance managers, sales representatives and construction managers. However for some categories staff are less likely to be qualified to degree level, suggesting that many may not be working in the specialist niches that require higher level skills.



3.7 Entrepreneurship and enterprise among those with higher level skills

Research indicates a link between[15]:

- Employment in new, modern and niche graduate occupations
- The acquisition 'soft' generic strategic, management and interactive skills
- Entrepreneurship and enterprise among the graduates and other higher skilled people

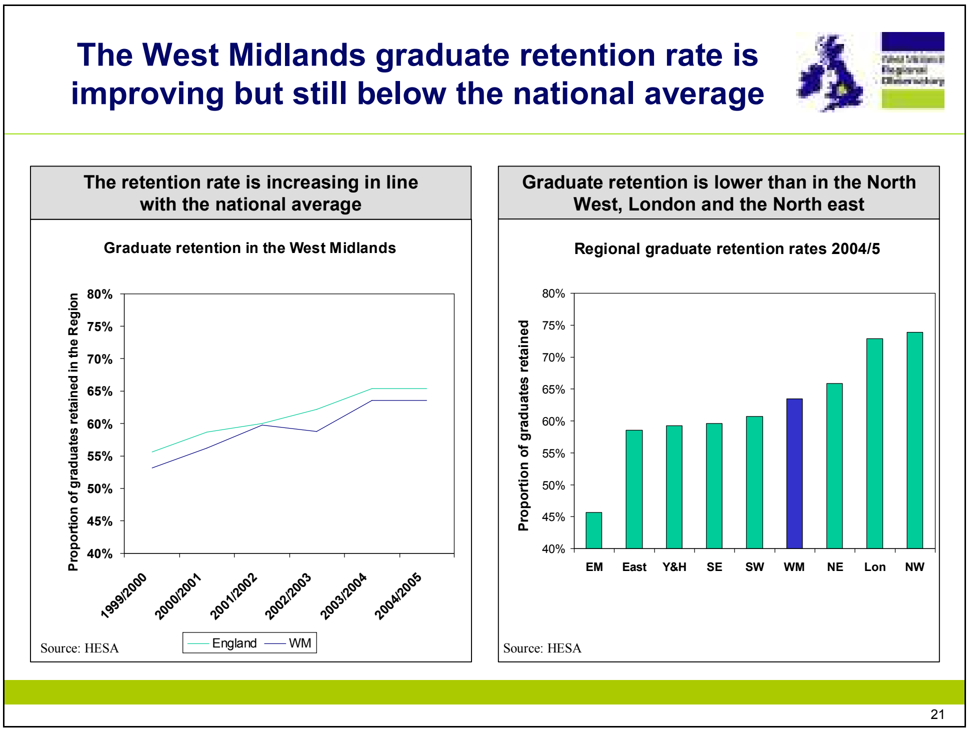
Given that private sector knowledge intensity and employment in many of these key occupations is below average it is perhaps unsurprising that the proportion of graduates from the West Midlands going into self employment is the second lowest in the country.

[15] National Council for Graduate Entrepreneurship 2006

4 The demand for new graduates

4.1 Graduate retention and attraction

Historically the region has been a net exporter of graduates, reflecting a weak knowledge economy and relatively low demand for higher level skills. In recent years, however, the Region's graduate retention rate has improved suggesting that the West Midlands economy may be becoming more knowledge intensive.



It should be noted, however, that:

- The graduate retention rate remains below the national average
- The Region still lags behind in terms of attracting graduates from other parts of the country and overseas. At 60% the proportion of new graduates

registering at West Midlands higher education institutions from outside the Region is the second lowest in the England[16].

4.2 Graduate utilisation

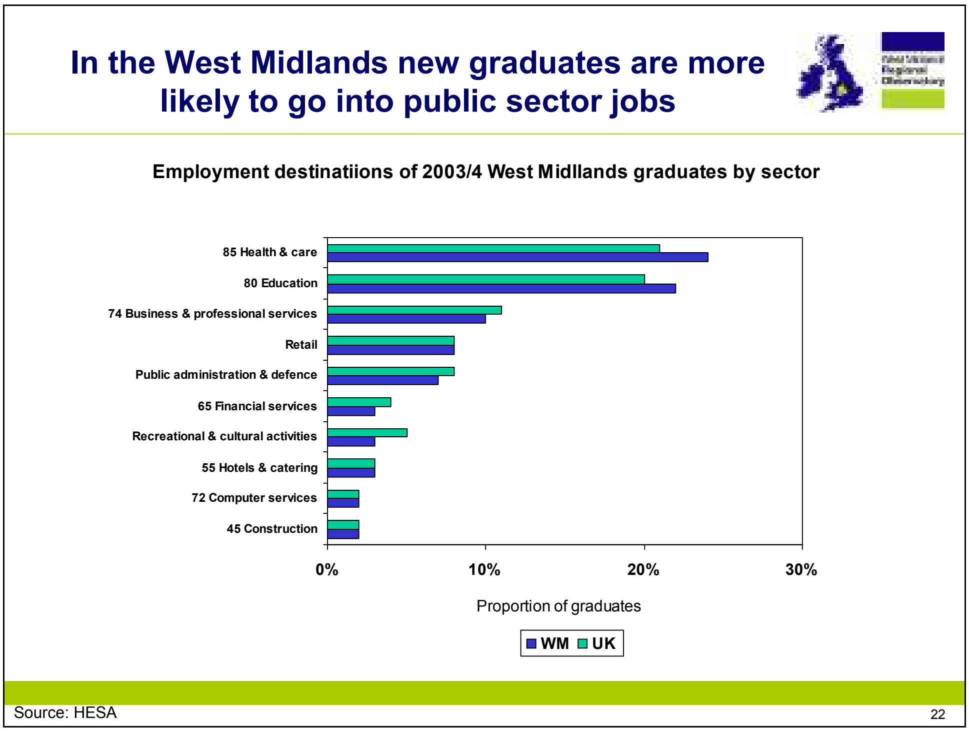
While the Region's graduate retention rate is improving a key issue is types of jobs graduates are accessing. In particular:

- The proportion of graduates going into private sector knowledge industries that are currently under developed in the region
- The extent to which the public sector is continuing to act as a 'buffer' for the region's under developed private sector knowledge economy
- The extent to which graduates are going into so called 'graduate occupations' where it is possible to utilise their skills to the full

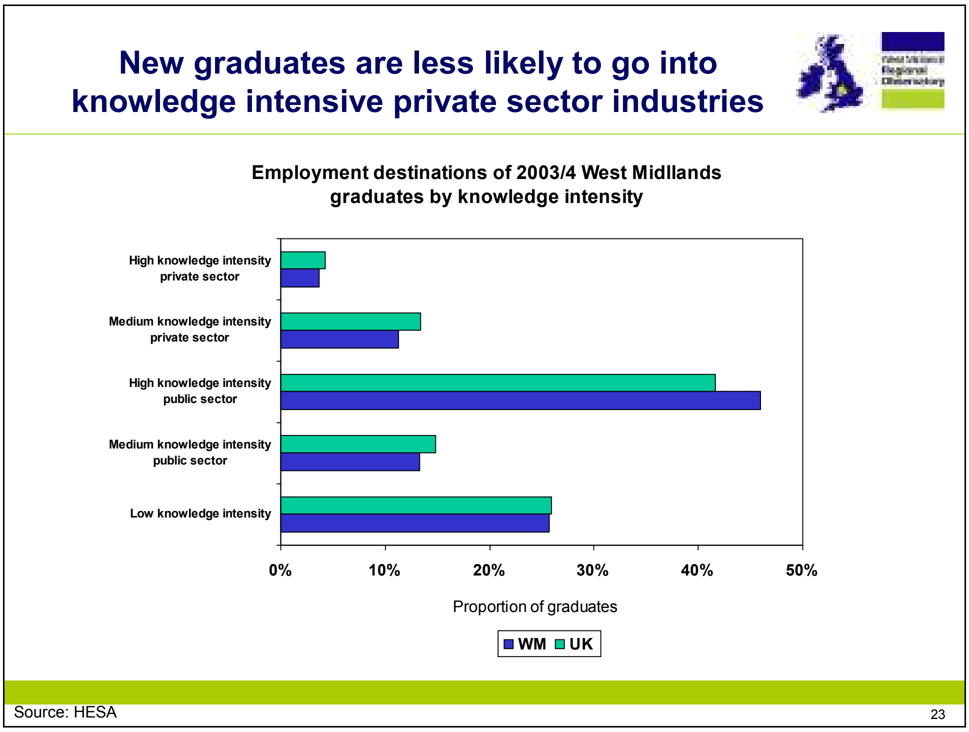
The proportion of West Midlands graduates going into the region's private sector knowledge industries has improved but remains below the national average and the public sector continues to be the key source of graduate employment. In 2003/4:

- The proportion of graduates going into jobs in health & care and education was above the national average
- But the proportion of graduates going into business & professional services and financial services was below the national average

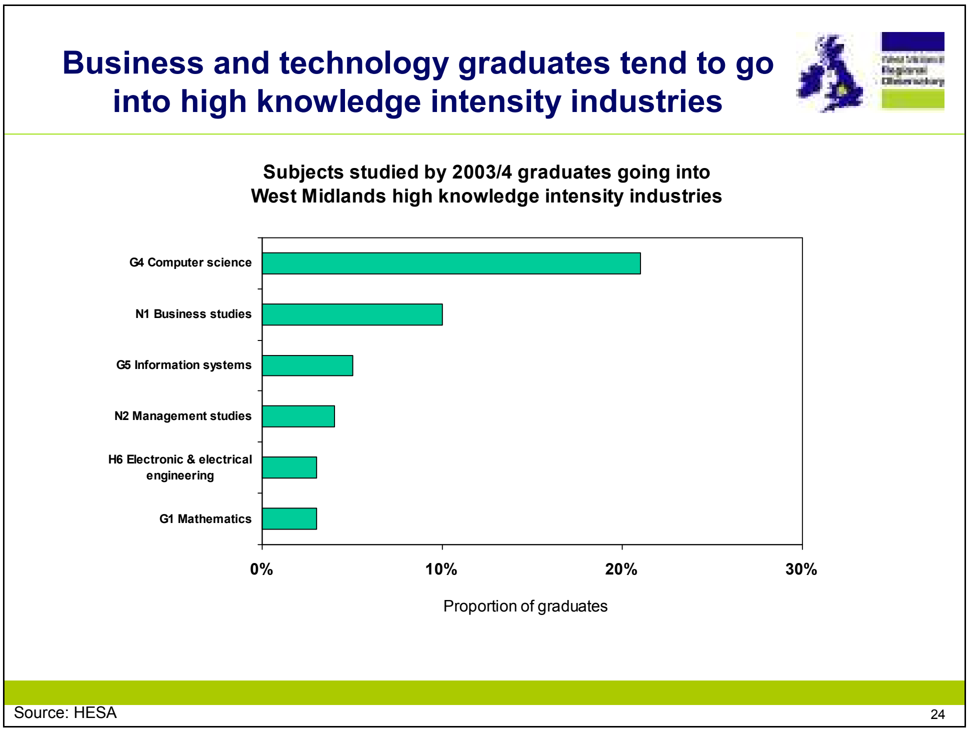
[16] HEFCE Regional Profiles 2004/5



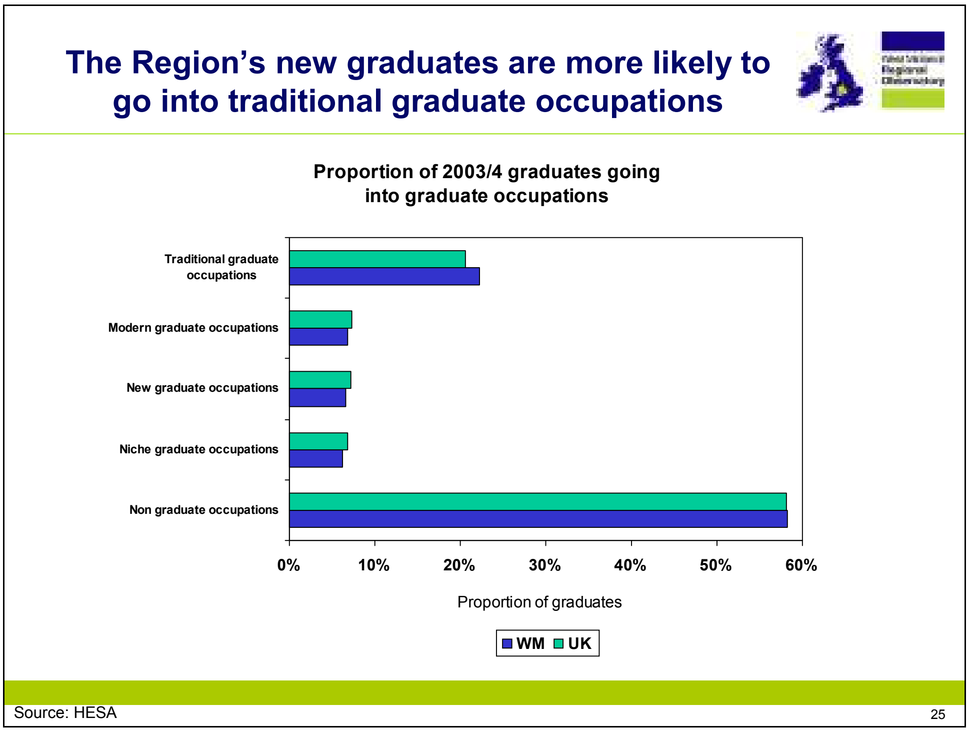
- While the proportion of graduates going into high knowledge intensity public sector industries was above the national average, the proportion going into high knowledge intensity private sector industries was below the national average



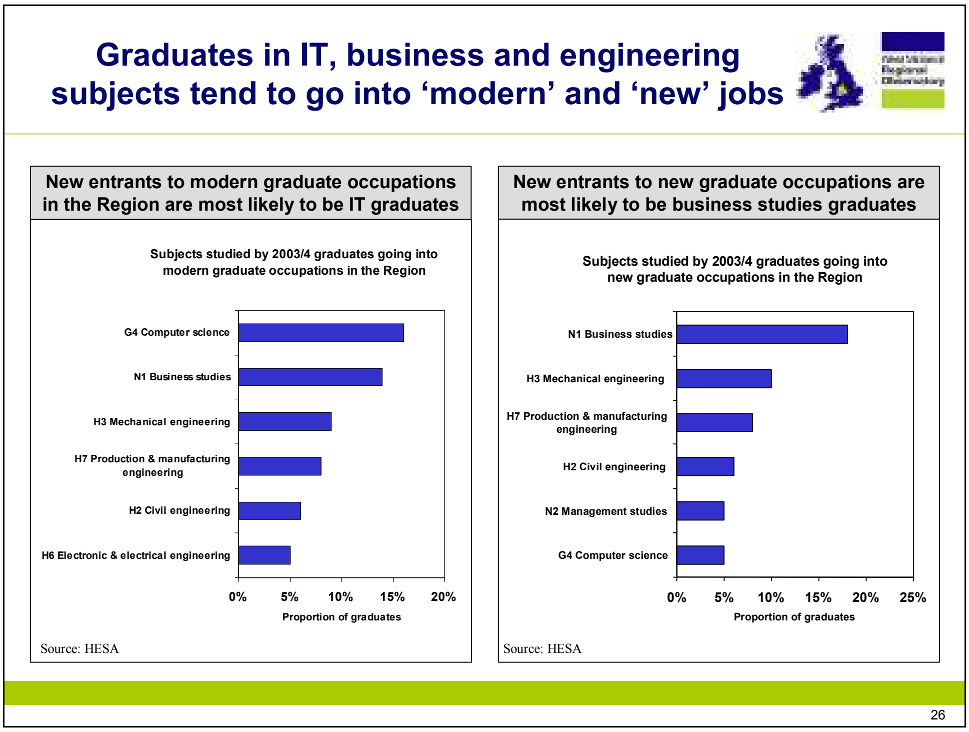
- While graduates studying subjects allied to teaching, education, social work and medicine are most likely to go into high knowledge intensity public sector industries, business and technology graduates are most likely to go into high knowledge intensity private sector industries, notably those studying computer science, business studies, management studies, engineering or mathematics



- The proportion of West Midlands graduates going into traditional graduate jobs was above the national average but the proportion going into modern, new or niche graduate jobs was below the national average



- Computer science, business studies and engineering graduates are most likely to go into modern graduate occupations and business studies, engineering and management graduates are most likely to go into new graduate occupations. Business studies, management studies, design studies or marketing graduates are most likely to go into niche graduate occupations.



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