

HATCH



Future Monmouthshire

Economies of the Future

Economic Baseline Report

March 2018

Prepared for Monmouthshire County Council



This report presents the findings from the data review undertaken for the study: *Future Monmouthshire – Economies of the Future Analysis*. The research has been commissioned by Monmouthshire County Council to provide insight and an evidence base to inform the future economic regeneration strategy for Monmouthshire.

The principal comparators utilised in the data review for Monmouthshire County Council are:

- Cardiff Capital Region (CCR) - Bridgend, Vale of Glamorgan, Rhondda Cynon Taff, Merthyr Tydfil, Caerphilly, Monmouthshire, Blaenau Gwent, Torfaen, Newport and Cardiff;
- Wales; and
- England & Wales.

Introduction & Context

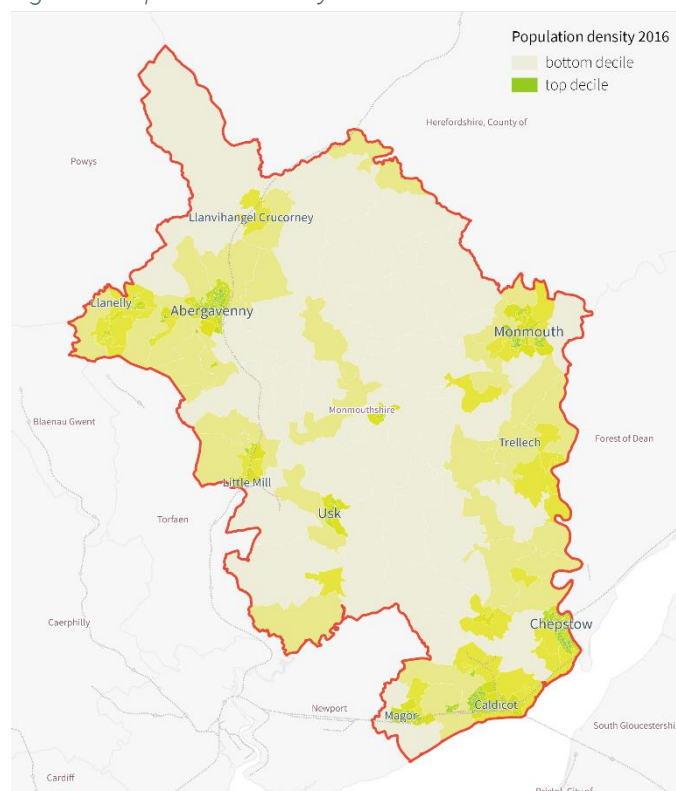
Monmouthshire is a Unitary Authority located in South East Wales, bordering with England to the east. It is also one of the ten local authorities constituting Cardiff's city region, the Cardiff Capital Region (CCR).

Monmouthshire has a primarily rural character, supports a population of 92,800 people, which accounts for 6% of Cardiff Capital Region (CCR) total population and ranks it 7th out of 10 in CCR for population size. It is the largest local authority in CCR by area, covering 850km², but also the one with the lowest population density, counting 109 people per km², and with the lowest job density of 42 jobs per km².¹

The highest population densities in Monmouthshire can be found around the centres of Abergavenny, Monmouth, Chepstow, and Caldicot (Figure 1).

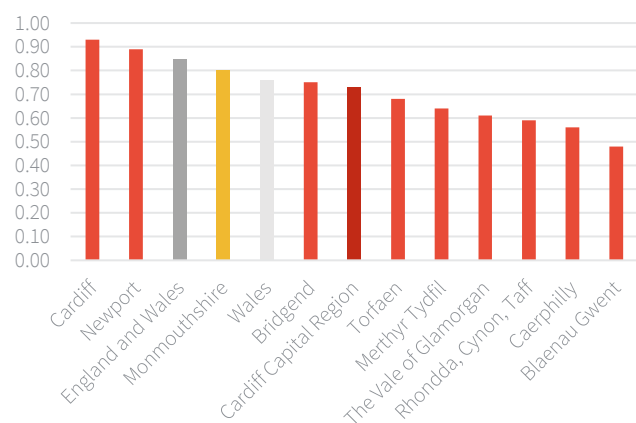
The official ONS figures for job densities (Figure 2), counting job per person aged 16 to 64, are quite positive for Monmouthshire, ranking it as third highest job density in CCR, but this is driven by a relatively small proportion of population in working age groups. A different measure of job density, calculating jobs per km² (Figure 3), gives a more intuitive picture of the relatively low number of jobs spread sparsely over a very large area.

Figure 1: Population density 2016



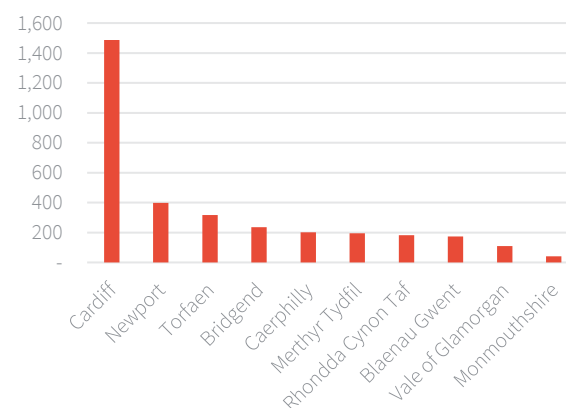
Data Source: ONS, Population Estimates

Figure 2: Job density per person aged 16-64 - 2016



Data Source: ONS, Job Densities

Figure 3: Job density per km² - 2016



¹ ONS, 2016, Population Estimates and BRES

Policy Context

There are a wide range of policies and economic programmes at the national, city region, and county levels that can shape future economic development of Monmouthshire. This section reviews some of the principal ones.

Wales

Prosperity for All: Economic Action Plan

The purpose of the Economic Action Plan launched in December 2017 is to support the delivery of Prosperity for All – the national strategy for Wales. The Plan sets out a vision for inclusive growth, built on strong foundations, ‘supercharged’ industries of the future and productive regions. The Plan supports the twin goals of growing the economy and reducing inequality. It simplifies the Government approach to sector prioritisation, recognising that traditional sector boundaries are increasingly blurred and identifying three thematic sectors for proactive government support

- Tradable Services (e.g. fintech services and online insurance)
- High Value Manufacturing (e.g. compound semiconductors and new composites manufacturing)
- Enablers (e.g. digital, energy efficiency and renewables)

The plan also recognises the importance of Foundation Sectors - tourism, food, retail and care – committing to develop cross-government enabling plans to maximise impact.

Rural Development Programme

The Welsh Government Rural Communities – Rural Development Programme 2014-2020 is a European Commission 7-year investment programme aimed at: (i) fostering the competitiveness of agriculture; (ii) ensuring the sustainable management of natural resources and climate action; and (iii) achieving a balanced territorial development of rural economies and communities, including the creation and maintenance of employment.

Cardiff Capital Region

Priority Sectors

Cardiff Capital Region prioritise five sectors for employment and skills support,² which largely overlap with some of the sectors prioritised by the Welsh Government:

- Advanced Materials & Manufacturing
- Construction
- Financial, Legal & Professional Services
- ICT/Digital - including creative industries
- Human Foundational Economy

City Deal

The Cardiff Capital Region has secured a £1.2bn City Deal with the UK and Welsh Governments. The City Deal includes the following elements:

<i>Key Element</i>	<i>Comment</i>
£1.2 billion investment in the Cardiff Capital Region’s infrastructure	A key priority for investment will be the delivery of the South East Wales Metro, including the Valley Lines Electrification programme.

² Cardiff Capital Region Employment & Skills Plan 2017

Connecting the region	The Cardiff Capital Region has established the Cardiff Capital Region Transport Authority (CCRTA) to co-ordinate transport planning and investment within the region, in partnership with the Welsh Government
Support for innovation and improving the digital network	To develop capabilities in Compound Semiconductor Applications in the UK, UK Government has invested £50 million to establish a new Catapult Centre in Wales. In addition, the Cardiff Capital Region City Deal has invested a further £37.9 million to support the development of a compound semiconductor industry cluster in south-east Wales.
Developing a skilled workforce and tackling unemployment	The Cardiff Capital Region Skills and Employment Board will be created (building on existing arrangements) to ensure skills and employment provision is responsive to the needs of local businesses and communities. The Cardiff Capital Region and the Welsh Government will work with the Department of Work and Pensions to co-design the future employment support from 2017, for people with a health condition or disability and/or long term unemployed.
Supporting enterprise and business growth	An Economic Growth Partnership has been established to commission an Economic Growth Plan for the next twenty-year period. A Regional Business Council has also been established to engage with all businesses and articulate their needs, providing a strong voice for business to guide both the design and delivery of significant economic development and regeneration activities across the South-East Wales region.
Housing development and regeneration	The Welsh Government and the Cardiff Capital Region commit to a new partnership approach to strategic planning. This will ensure the delivery of sustainable communities, through the use and re-use of property and sites. A Regional Housing Investment Fund has also been established to support house building, ranging from larger builders and developers on stalled housing sites on former industrial sites, through to small builders, community builders, custom builders and regeneration specialists, on small sites across the region. The fund will also help stimulate the SME building sector across the region by providing loan development finance and launching a Custom Build Scheme, releasing smaller plots of public sector land with a full package of support for SMEs to deliver new homes in the communities.

Data Source: Cardiff Capital Region City Deal

Over its lifetime, the Cardiff Capital Region City Deal is expected to deliver up to 25,000 new jobs, leverage an additional £4bn of private sector investment and deliver a 5% uplift³ in Gross Value Added (GVA). In February 2018, *three development strategies* were agreed by the CCR cabinet to support the strategic themes of housing, skills, and digital connectivity within CCR and drive the City Deal forward.

The City Deal is also supported by a *five-year strategic business plan*, which sets out the required actions and outcomes to achieve CCR's long-term objectives, including details of how the Wider Investment Fund can be used in the next 5 years to act as a catalyst to drive the actions forward.

Employment and Skills Plan, 2017

The latest Employment and Skills plan for Cardiff Capital Region identifies the need to develop a demand-led system that is driven by the needs of the industry and which delivers employment and skills support in response to infrastructure and other investments to achieve growth within the regional economy.

According to the plan the key regional priorities for employment and skills include objectives such as:

- Promoting digital skills and high value skills, and reversing falling numbers in STEM and computer related subjects;

³ Corresponding to an estimated per head rise in productivity of £1,000 (Wales Online)

- Promoting strategic leadership and management skills;
- Promoting 'train the trainer' programme to develop the capacity and capability of education providers;
- 'People and personal skills' programmes for soft and essential skills such as numeracy, literacy and ICT;
- Developing higher level skills to future-proof the workforce;
- Increasing the number and range of apprenticeships;
- Delivering employment and skills support for the industry, infrastructure and other investments to enable growth by creating through regional academies or centres of excellence and other institutions;
- Developing succession plans for European Union funded programmes post-Brexit-risk assessment and to support services offered through local and regional ESF operations.

Monmouthshire County

Monmouthshire Local Development Plan 2011-2021

The Local Development Plan identifies employment & economic development as one of the key issues to be addressed. It emphasises the need for inward investment and local employment opportunities, recognising high levels of out-commuting and slow uptake of employment land in the County. It acknowledges the need to regenerate and diversify the County's rural economy and the role of tourism in sustaining the historic town centres.

The Council is embarking on the preparation of a revised LDP to cover the period 2018-2033 which will be informed by this study.

Business Growth and Enterprise Strategy, 2014-2020

The Enterprise Strategy identifies three key areas of support for local businesses in order to enable Monmouthshire's business community to work in partnership and benefit from an economy which is prosperous and supports enterprise and sustainable growth. These three "strategic priorities" are detailed in the table below:

<i>Strategic Priority</i>	<i>Strategic Outcome</i>	<i>Strategic Aims</i>	<i>Headline Success Indicators</i>
Supporting Business Growth	Increased business and employment opportunities in Monmouthshire	<p>To support existing businesses to grow and diversify to give them confidence to create new employment opportunities, including the county's major events</p> <p>Enhance access to investment</p> <p>Enable businesses to take advantage of training and skills opportunities to meet present and future needs</p> <p>Support and encourage use of physical and digital infrastructure</p> <p>Support and enhance existing business networks</p> <p>Aid and support e-commerce activities</p> <p>Aid and support procurement opportunities</p>	<p>No. of business enquiries received</p> <p>No. of businesses assisted through support received</p> <p>No. of business start-ups supported</p> <p>Increase GVA</p> <p>Monitor take-up of employment land at 1.9 ha per annum in accordance with the LDP</p> <p>Monitor town centre viability and vitality in accordance with LDP indicators</p>

		<p>Improve business efficiency through the use of ICT</p> <p>Facilitate opportunities to access global network and to aid research & innovation</p> <p>Support development of LDP allocated employment sites</p> <p>Support the town centre retail economies</p>	
Encouraging Inward Investment	A clear and coordinated approach to inward investment that meets the needs of investors	<p>To enable businesses to start up and create employment opportunities</p> <p>To proactively target specific high growth sectors to develop business clusters and shared networks</p> <p>To improve broadband speed and coverage</p> <p>To improve mobile phone coverage</p> <p>To improve range and quality of employment land opportunities</p> <p>To facilitate conversations between new businesses, statutory bodies and academic institutions to enable smooth progress</p>	<p>No. of investments made in Monmouthshire as a direct result of Monmouthshire Business and Enterprise support</p> <p>No. of business start-ups supported</p> <p>No. of new jobs created</p> <p>No. of investments made in Monmouthshire as a direct result of Monmouthshire Enterprise support</p> <p>No. of business start-ups supported</p> <p>No. of new jobs created</p>
Growing Entrepreneurs	A well respected and coordinated programme of Enterprise activities that supports current and future local business needs	<p>To raise awareness of the wide range of employment opportunities</p> <p>To create a gateway to self-employment opportunities</p> <p>To improve connectivity between businesses and education to understand the future needs of businesses</p> <p>To raise aspirations and encourage creativity and innovation</p>	<p>No. of schools engaged</p> <p>No. of pupils engaged</p> <p>No. of businesses engaged</p> <p>No. of new business start-ups</p>

Data Source: Monmouthshire County Council, 2014

Digital Strategy

Monmouthshire County Council's Digital Strategy concentrates on improving its digital maturity as an organisation to enable it to capture the wider benefits for the people who live, learn, visit and work in Monmouthshire and at the same time stimulate Monmouthshire's digital economy. The strategy is based on 7 key themes:

- Building a digitally skilled and enabled workforce
- Digital Customer Services
- Business Digital Capacity and Automation
- Technology
- Data and evidence
- Digital Platforms and Standards

- Protecting our Digital Assets and Security

It also details the key actions that need to be taken to implement it.

Educational Assets

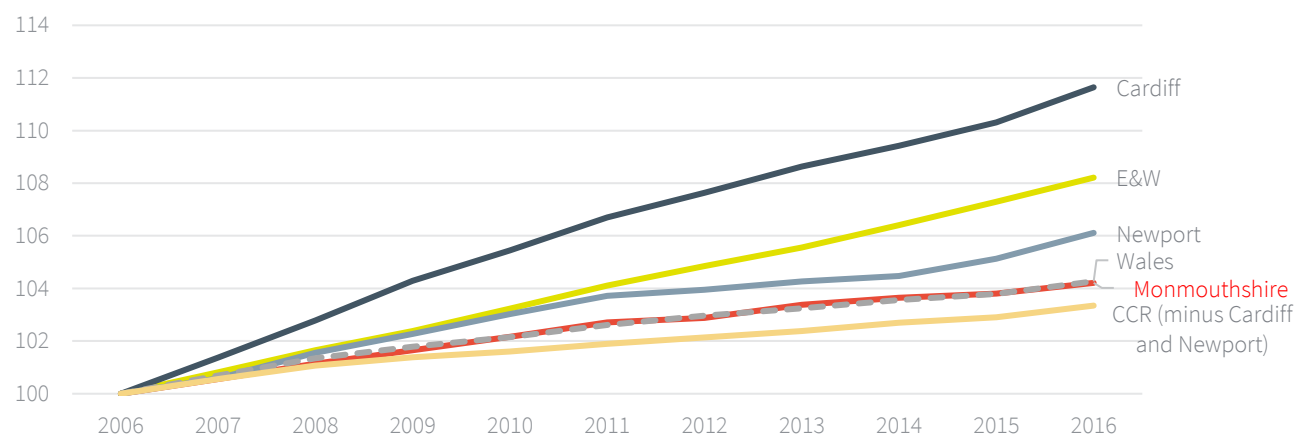
Monmouthshire boasts a strong base of primary and secondary educational providers in both the State and Independent sectors. The Haberdashers' Monmouth Schools, which include boys' and girls' boarding schools, had all their schools rated as 'excellent' in every category by Estyn, the Welsh Ofsted equivalent. Usk is home to a campus of Coleg Gwent, one of the best performing colleges in Wales offering academic or vocational courses including A-Levels and Apprenticeships, professional qualifications or workforce training for employers.

Demographics

Trends

Population growth in Monmouthshire over the last decade (Figure 4) has been modest and has aligned with growth in Wales. Given its rural character, growth has, expectedly, been lagging behind the cities of Cardiff and Newport, but it has been above the CCR average, excluding Cardiff and Newport.

Figure 4: Indexed Population Growth 2006-2016 (2006=100)

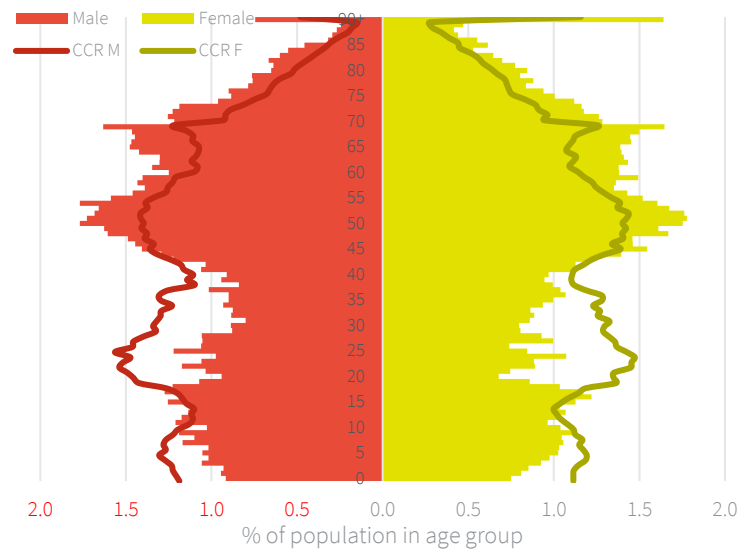


Data Source: ONS, Population Estimates

Age Structure

The age structure of Monmouthshire's population and its relation to the rest of CCR is illustrated in Figure 5. The chart shows the distribution by single year of age for males and females, comparing Monmouthshire shape, in solid colour blocks, to CCR's, outlined. The most striking feature is the low presence of people aged 20s and 30s, which are usually correlated to urban and dynamic economies. On the other hand, there is a significant proportion of population in older age groups, particularly between the age of 50 and 70, indicating that the County is largely home to a population in retirement age.

Figure 5: Population Structure 2016 - Monmouthshire vs CCR



Data Source: ONS, Population Estimates

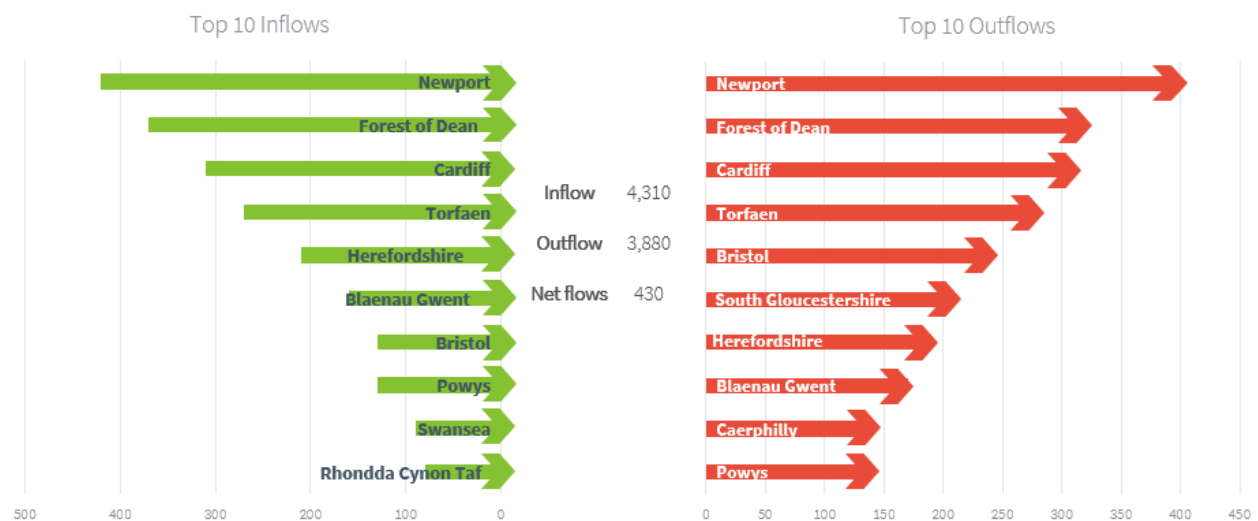
With a median age of 48, Monmouthshire is the local authority with the oldest population in CCR (Cardiff, the youngest, has a median age of 34).

Migration

The chart in Figure 6 isolates the top 10 inflows and outflows for Monmouthshire in 2016, highlighting the very strong relationship with the immediate neighbours Newport (negative net flow of 20 people) and Forest of Dean (net flow -50), but also with the cities of Cardiff and Bristol. Bristol and South Gloucestershire on the other side of the Severn, which act as a strong magnet for Monmouthshire residents, whilst the inverse relationship is weaker.

A more detailed analysis of outflows by age groups indicates that 42% of total outflows are by people aged 15 to 29, which include the years young adults move to university, graduate, and look for graduate jobs.

Figure 6: Top internal migration flows between LAs 2016



Data Source: ONS, Internal Migration Statistics - moves within the UK during the year ending June 2016

Key points:

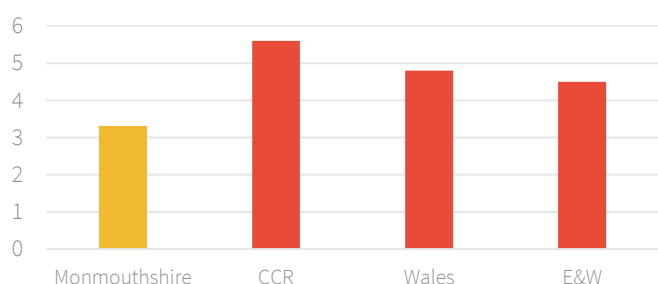
- Population growth over the last decade has been lagging behind the cities of Cardiff and Newport, but it has been above the CCR average, excluding Cardiff and Newport
- Population age structure is not geared towards growth: lack of people in their 20s and 30s, and large proportion of people in retirement age
- Monmouthshire is the local authority with the oldest population in CCR
- Strongest migration relationship with the immediate neighbours Newport and Forest of Dean, but also with the cities of Cardiff and Bristol
- Bristol and South Gloucestershire act as a strong magnet for Monmouthshire residents, but the reverse does not hold
- 42% of total migration outflows are by people aged 15 to 29, which is typically education and economically driven

Labour Market and Skills

Unemployment and inactivity rates

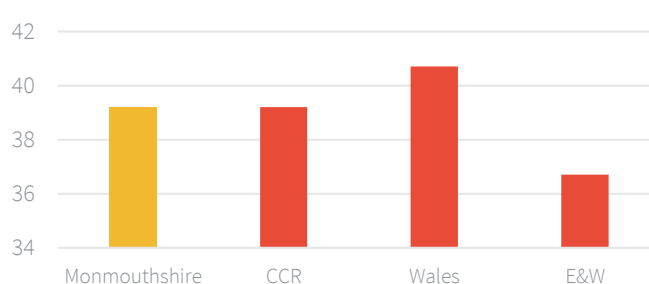
The labour market profile of Monmouthshire's residents is healthy despite high economic inactivity levels. Unemployment rate (Figure 7) is at 2.2%, 3 percentage points below the CCR average, and is also lower than the regional and national average. The economic inactivity rate (Figure 8) in Monmouthshire is at 39%, which is a reflection of its population structure where many are in retirement age. The inactivity rate is lower than the Welsh average of 41%. However, when considering the economic inactivity rate for the working age group (rather than for the aged 16+), Monmouthshire has the lowest levels (20%) among the comparators.

Figure 7: Unemployment rate (%) 16/17



Data Source: ONS, Annual Population Survey - July 2016 to June 2017
Note: Resident population aged 16+

Figure 8: Economic inactivity rate (%) 16/17

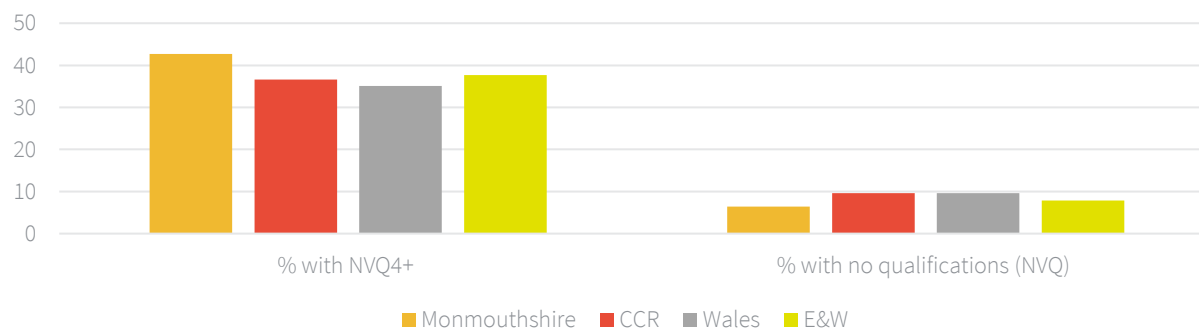


Data Source: ONS, Annual Population Survey - July 2016 to June 2017
Note: Resident population aged 16+

Qualification profile

The qualification profile (Figure 9) suggests that Monmouthshire's residents are highly educated: with around 43% qualified at degree level or above, and with only 6% of people holding no qualifications, Monmouthshire is doing better than its regional and national comparators.

Figure 9: Qualification profile (%) 2016



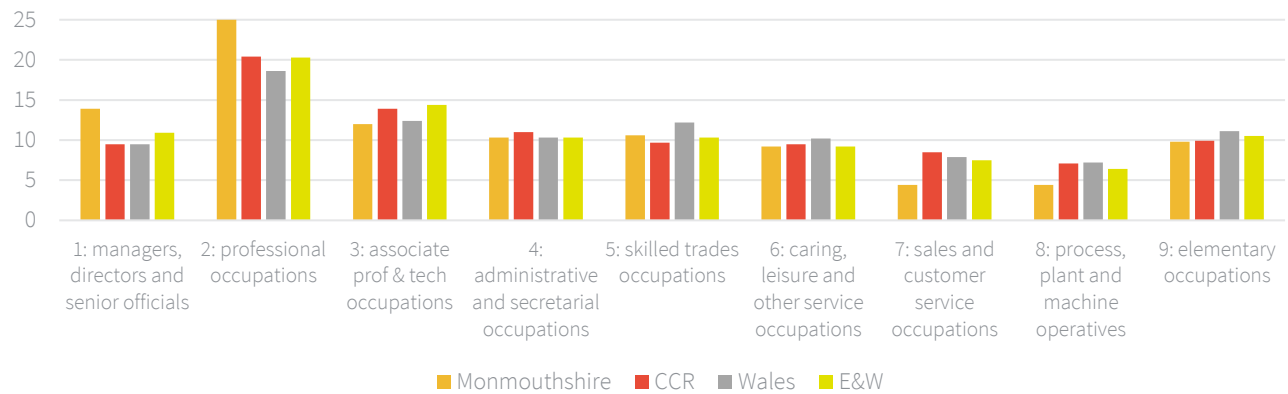
Data Source: ONS, Annual Population Survey - January 2016 to December 2016

Occupational Profile

Below we take a look at the occupational profile of Monmouthshire by residents (Figure 10) and by workplace (Figure 11).

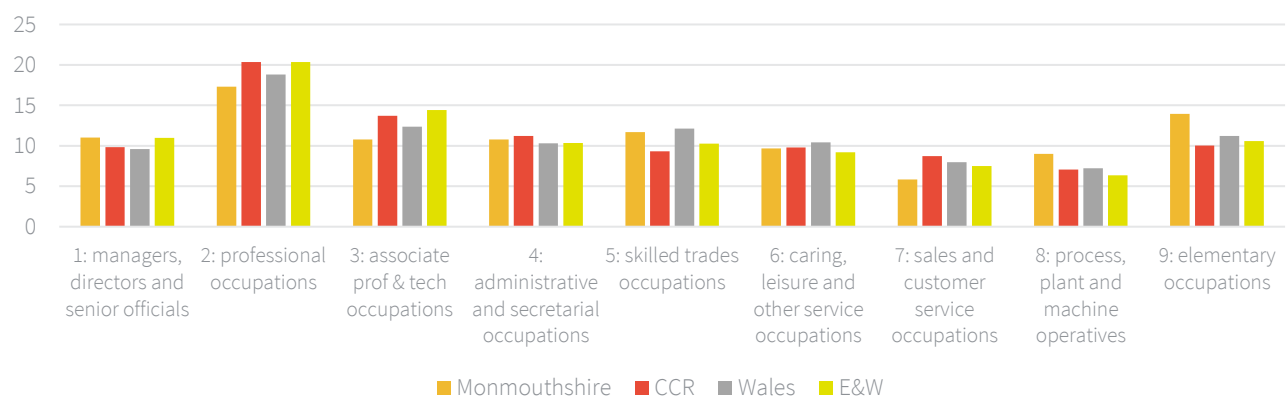
While the resident profile is markedly skewed towards high-skills/high-earning occupations (groups 1 to 3) with especially group 1 and 2 above regional and national average, the workplace profile has a smoother shape, presenting a relatively higher proportion of people employed in low-skill and routine occupations. This suggests that there is a dual labour market in Monmouthshire.

Figure 10: Occupational profile – resident analysis (%) 16/17



Data Source: ONS, Annual Population Survey - July 2016 to June 2017

Figure 11: Occupational profile – workplace analysis (%) 16/17



Data Source: ONS, Annual Population Survey - July 2016 to June 2017

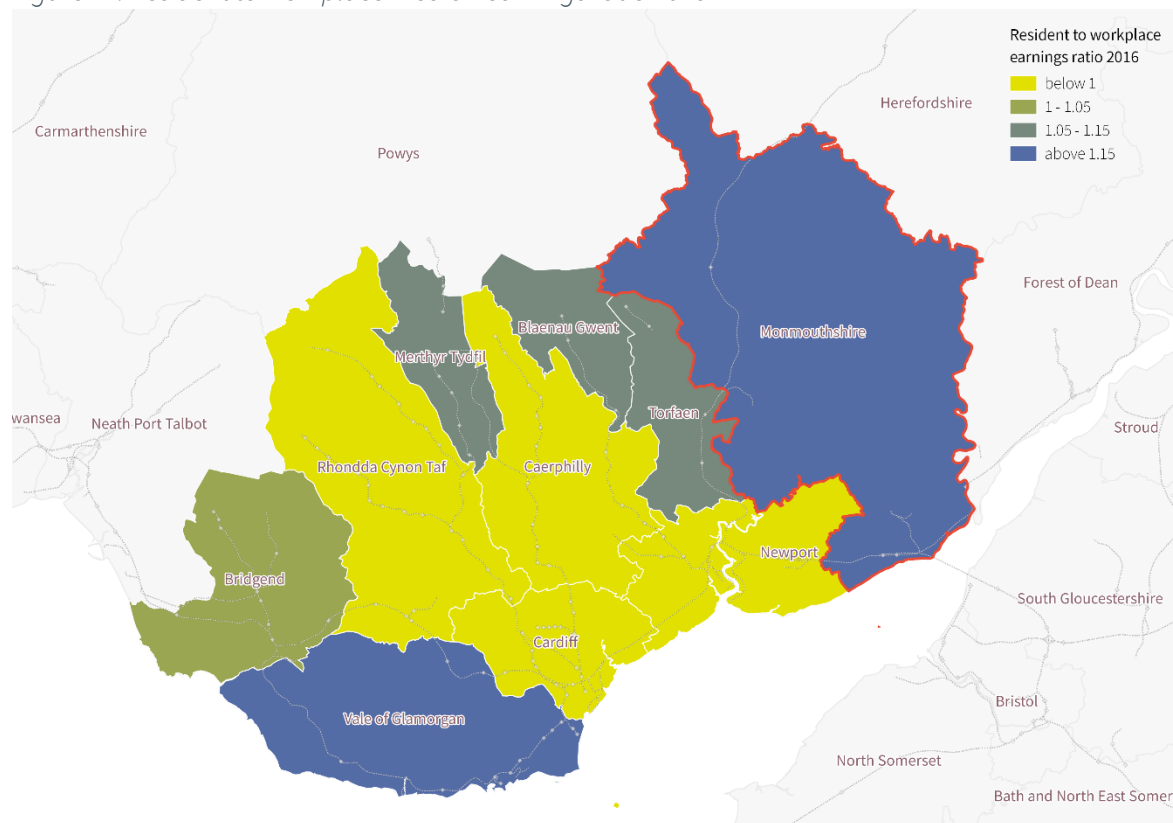
Earnings

This labour market duality is also reflected in the resident to workplace earnings difference. The map in Figure 12 presents the ratio between median earnings of residents, who are not necessarily working in the local authority they reside in, against earnings of people working in the given local authority. A ratio above one indicates that resident earnings are higher than workplace earnings.

As shown in the map below, in Cardiff, Newport, Rhondda Cynon Taff, and Caerphilly, workplace earnings are higher than resident earnings, while in the remaining local authorities, on average, residents earn more than the average salary of the place they reside in. This picture clearly reveals the underlining city region relationships between the local authorities of Cardiff Capital Region, where we find the more urban core in the middle, and the residential fringe around it.

This, coupled with the occupational analysis, suggests that Monmouthshire residents must be earning their relatively higher wages in higher skills jobs outside Monmouthshire.

Figure 12: Resident to workplace median earnings ratio 2016



Data Source: ONS, ASHE

Map contains OS data © Crown copyright and database right 2017

Regardless of this dual economy relationship, earnings in Monmouthshire are relatively high. With median resident earnings at £31,466, the County is second highest in CCR after the Vale of Glamorgan – which seems to play a similar role to Monmouthshire on the West side of CCR. Median workplace earnings, at £26,713, are relatively high too, ranking Monmouthshire 3rd highest in CCR.

Figure 13: Median annual earnings (£) – Resident 2016

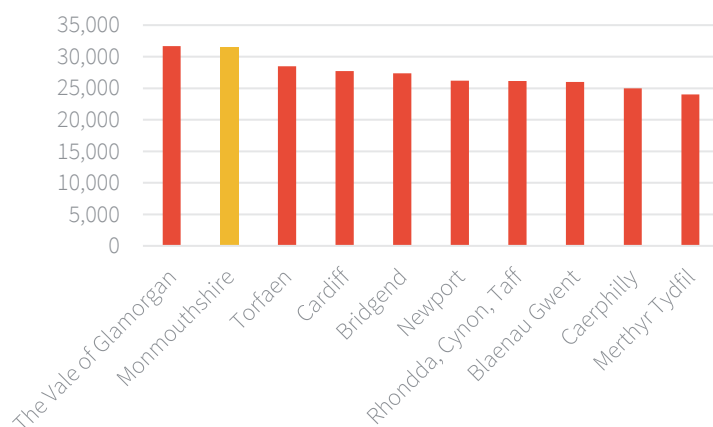
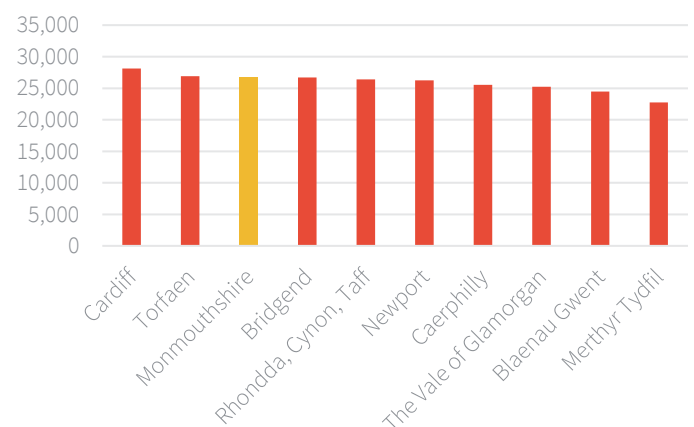


Figure14: Median annual earnings (£) – Workplace 2016

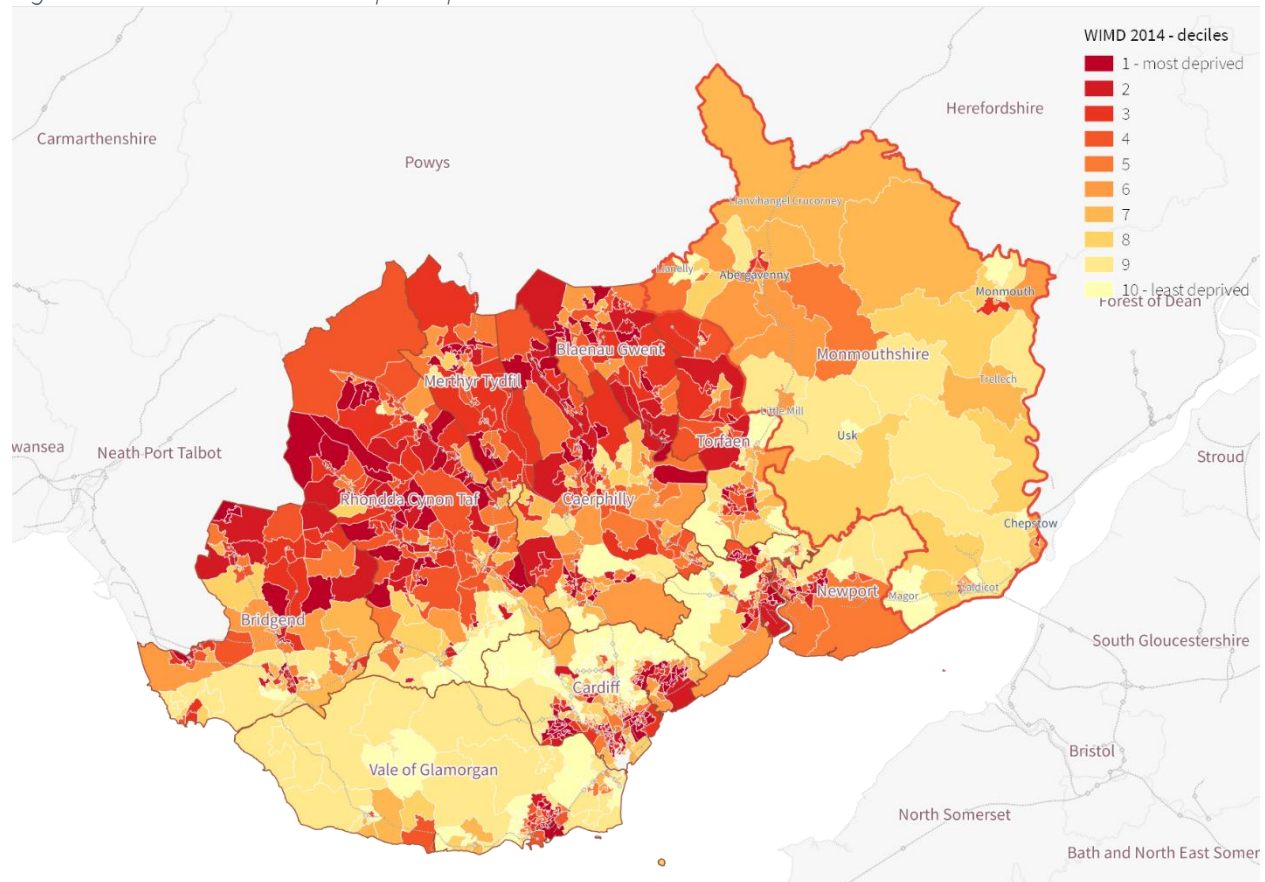


Data Source: ONS, ASHE

Deprivation

The Welsh Index of Multiple Deprivation (WIMD) also evidences a relative lack of deprivation in the County. The WIMD metric is built assigning a score for different domains of deprivation (for example income or health) to neighbourhoods in Wales, a neighbourhood rank is then drawn that allows comparative analysis for small areas across Wales. The map below (Figure 15) presents the WIMD 2014 (the latest available comprehensive assessment) expressed as deciles for neighbourhoods in CCR: the darker the red, the more deprived the neighbourhood. The County of Monmouthshire appears to do well compared to its CCR neighbours and Wales as a whole: it is the only local authority in Wales with none of its neighbourhoods ranking in the 10% most deprived. The median decile across all 56 neighbourhoods within the County is 8, indicating that the average neighbourhood in Monmouthshire is amongst the 30% least deprived in Wales.

Figure 13: Welsh Indices of Multiple Deprivation 2014 - deciles



Data Source: Statistics for Wales

Map contains OS data © Crown copyright and database right 2017

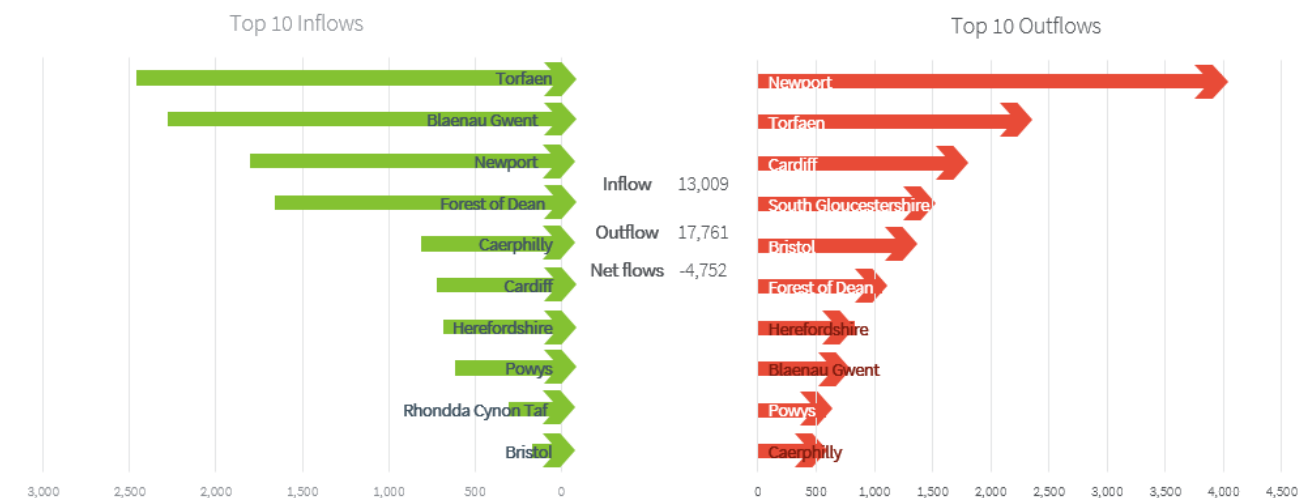
Key points:

- The labour market profile of Monmouthshire's residents is healthy despite the high economic inactivity levels
- The qualification and occupational profiles of Monmouthshire residents are representative of a high-qualified and skilled population
- There is a dual labour market in Monmouthshire, meaning that the people who live in Monmouthshire have a different profile from those who work in Monmouthshire:
 - the resident profile is markedly skewed towards high-skills/high-earning occupations, while the workplace profile presents a relatively higher proportion of people employed in low-skill and routine occupations
 - resident earnings are higher than workplace earnings - residents are likely to be earning their relatively higher wages in higher skills jobs outside Monmouthshire
- Monmouthshire is the only local authority in Wales with none of its neighbourhoods ranking in the 10% most deprived

Commuting

The analysis of commuting flows (Figure 16) confirms the relationships we uncovered in the previous section.

Figure 14: Commuting flows



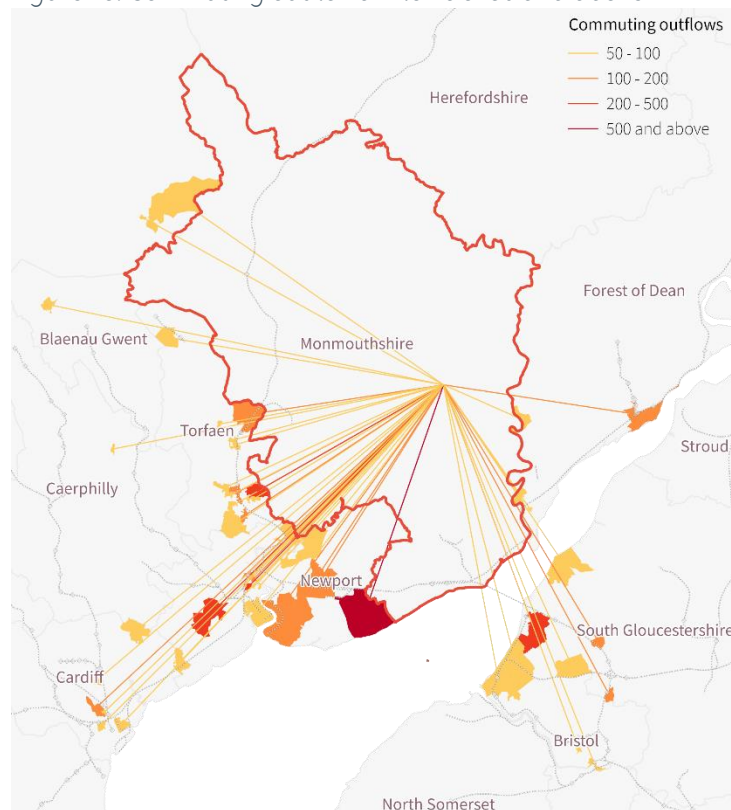
Data Source: ONS, Census 2011

Even though 13,000 people commute from outside the County to come and work in Monmouthshire, the outflow is more considerable, with 17,760 Monmouthshire residents working outside the County. Around 40% of Monmouthshire's residents who are in employment work outside the County. The pull from the neighbouring city of Newport is very strong, attracting almost a quarter of total outflows from Monmouthshire. Torfaen ranks 2nd as commuting destination, capturing 13% of outflows, followed by Cardiff, at 10%. Significant is also the pull exerted by South Gloucestershire and Bristol.

Figure 15 on the right maps the direction of the most significant outflows (50 moves and above to OAs). From the map, we can see some employment areas emerging because of their proximity to the west and east borders of the County. However, we can also see some key employment centres in Cardiff, Newport, Bristol and South Gloucestershire, some just past the Severn Bridge, south of Severn Beach.

Commuting inflows to Monmouthshire are strongest among its closer neighbours, with Torfaen constituting about a fifth of total incoming commuting. Although Monmouthshire is a net contributor to Newport and Cardiff, it also manages to attract a substantial number of

Figure 15: Commuting outflows – flows of 50 and above



Data Source: ONS, Census 2011

Map contains OS data © Crown copyright and database right 2017

commuters from the two cities. Bristol makes it to the top ten inflows chart, but commuting levels from it are low.

The announced removal of the Severn Bridge Toll is expected to foster labour market integration and strengthen commuting relationships between Monmouthshire and the Bristol City Region⁴. Also, as previously observed in the internal migration analysis, a relatively important proportion of housing moves in the last year were to Bristol and South Gloucestershire, which may have been spurred by an attempt to make the commute cheaper while increasing proximity to jobs in the Bristol City Region. The removal of the toll may curtail housing moves beyond the Severn by effectively increasing the perception of proximity to Bristol's job market. Furthermore, the plan to remove tolls may also be the cause of recent house price increases in Caldicot and Chepstow reported in December 2017.

Key points:

- Around 40% of Monmouthshire's residents who are in employment work outside the County
- The pull from Newport is very strong, attracting almost a quarter of total outflows from Monmouthshire
- Commuting inflows to Monmouthshire are strongest among its closer neighbours
- The announced removal of the Severn Bridge Toll is therefore expected to foster labour market integration and strengthen commuting relationships between Monmouthshire and the Bristol City Region
- The recent increases in house prices in Caldicot and Chepstow may also be thought to be a consequence of the plan to remove the tolls.

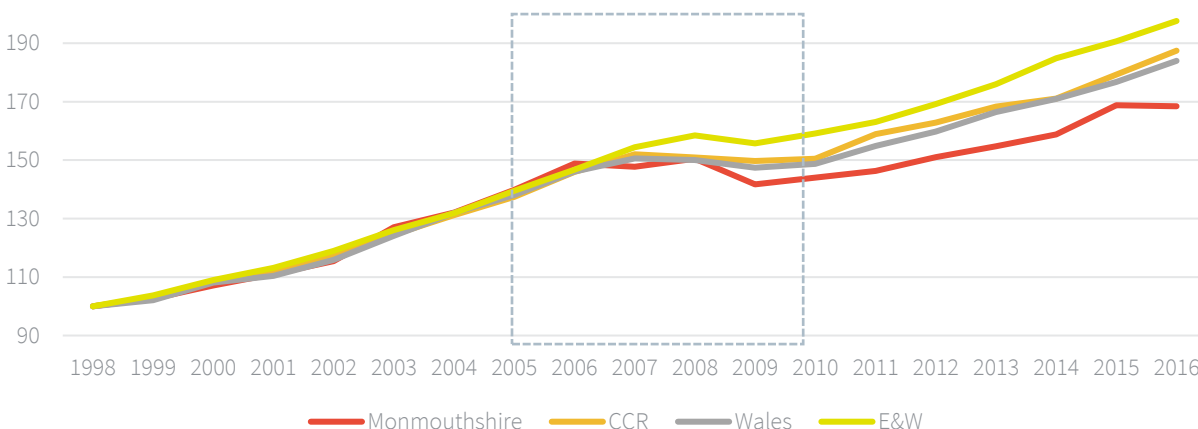
⁴ Arup, *The Impact of the Severn Tolls on the Welsh Economy* (2012)

Historic and Recent Economic Performance

The analysis of Monmouthshire's economic performance in terms of GVA growth (Figure 16) reveals that the County kept up with national growth until the financial crash, after which it has been lagging behind not only national growth but also its neighbours' performance.

A closer look at Monmouthshire's performance between 2006 and 2009 suggests that the County's economy started to slow down ahead of the crash, and it was then hit harder than its neighbours. This is likely due to the sectoral mix of employment in Monmouth which, like many areas in the UK where placed based employment is lower value than resident based employment experienced decline early.

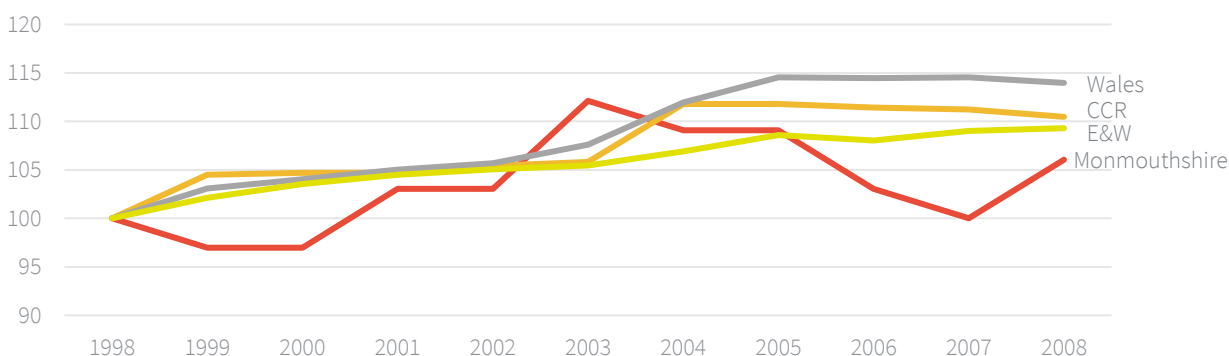
Figure 16: Indexed GVA growth 1998-2016 (1998=100)



Data Source: ONS, Regional GVA for LAs (Experimental Statistics for Local Authorities)

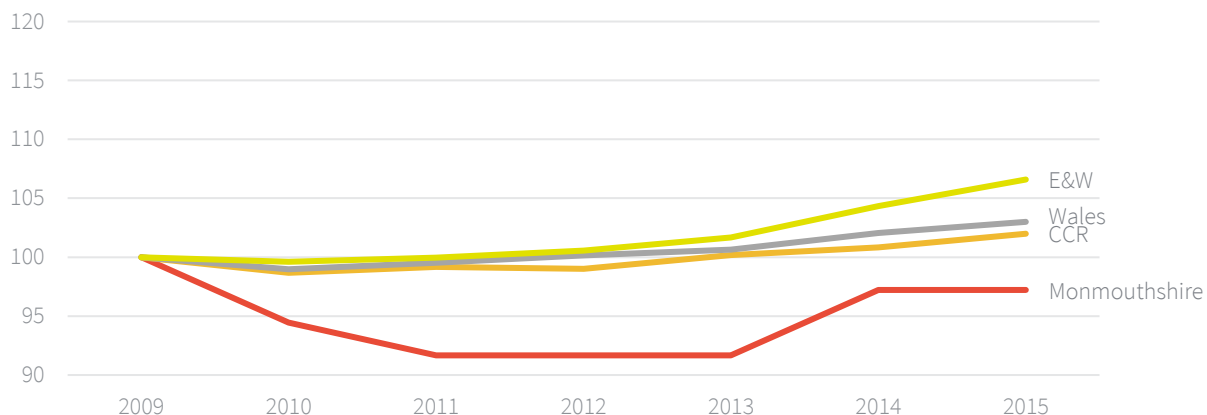
This is also reflected in the employment growth analysis in Figure 17 and Figure 18, where the growth periods were broken into pre- and post-crisis. Monmouthshire pre-crisis performance was less stable than its comparators', and after it peaks in 2003, employment begins to decline. The post-crisis picture confirms that the County's economy is somewhat stuck in a nearly 15-year-long recovery, with employment levels still below their 2003 peak. This recessionary impact is common in areas with an older working population as people take early and voluntary retirement as companies seek to cut costs.

Figure 17: Indexed Employment Growth 1998-2008 (1998=100)



Data Source: ONS, ABI

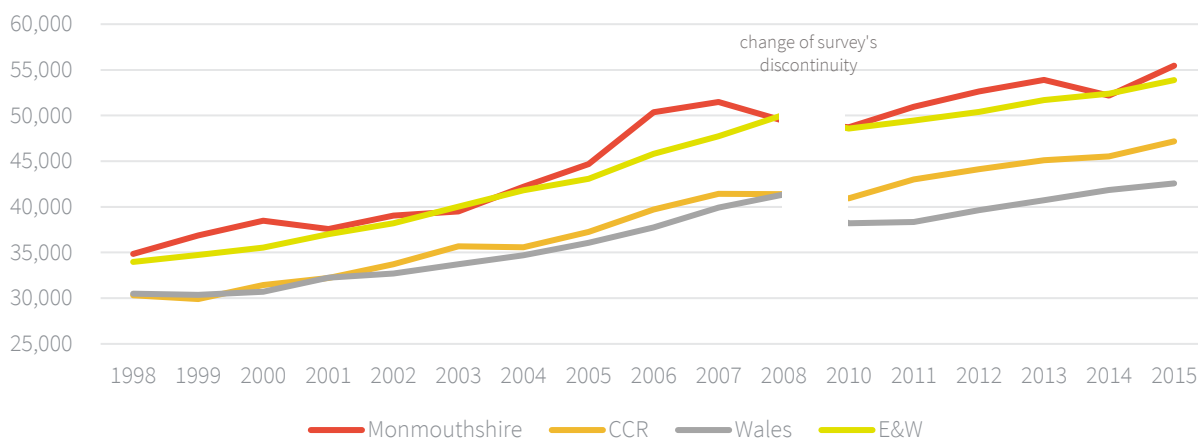
Figure 18: Indexed Employment Growth 2009-2015 (2009=100)



Data Source: ONS, BRES

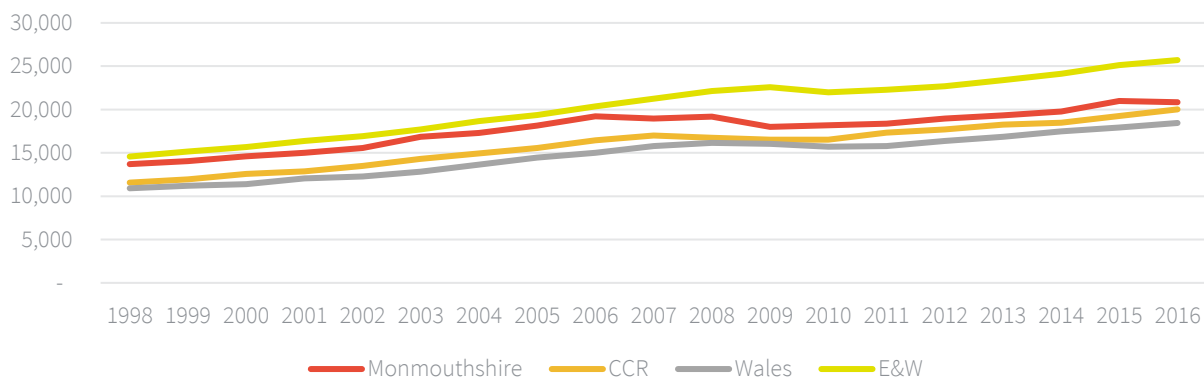
On the other hand, productivity levels (Figure 19), as signalled by GVA per job, set Monmouthshire above its regional neighbours and national average. While GVA per head of population (Figure 20) is below England & Wales but still above its regional (CCR) neighbours.

Figure 19: GVA per job 1998-2008 (£)



Data Source: ONS, Regional GVA for LAs (Experimental Statistics) & ABI & BRES

Figure 20: GVA per head 1998-2016 (£)



Source: ONS, Regional GVA for LAs (Experimental Statistics) & Population Estimates (all residents)

Key points:

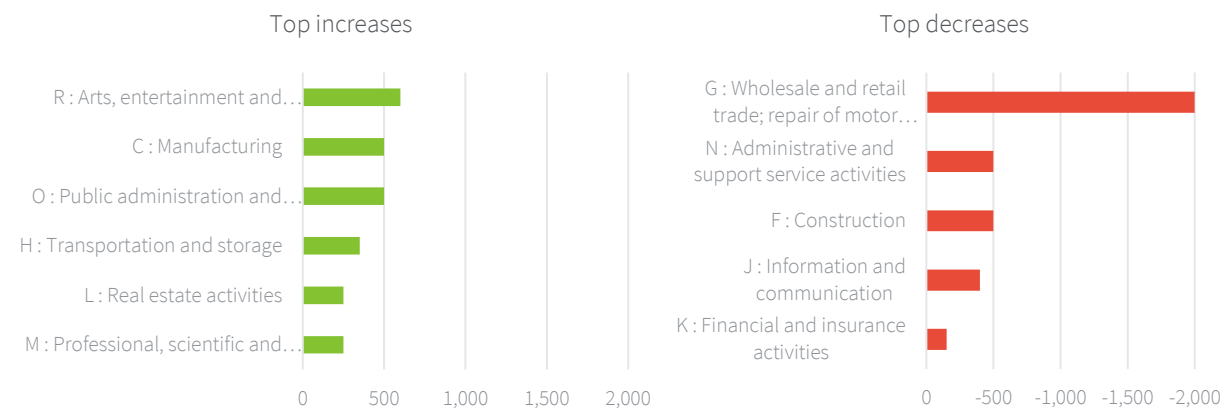
- In terms of GVA performance, Monmouthshire kept up with national growth until the financial crash, after which it has been lagging behind not only national growth but also its neighbours' performance
- The economy started to slow down ahead of the 2007 crash, and it was then hit harder than its neighbours
- In terms of employment levels, Monmouthshire economy is somewhat stuck in a nearly 15-year-long recovery, with employment levels still below their 2003 peak
- Productivity levels are above national and CCR average
- GVA per head of population is below England & Wales but still above its regional neighbours

Sectorial analysis

From the economic performance analysis in the previous section, it appears that Monmouthshire’s economy has performed below its full potential over the last decade. Large employment changes by sector have been captured in Figure 21. First of all, the largest change between 2009 and 2015 is found in the loss of 2,000 jobs in Wholesale and Retail (-1,000 Retail jobs, Figure 22), followed by losses in Administration support (-500) and Construction (-500). The decline of jobs in Information and Communication and Finance and Insurance is against national trend, and although these activities are peculiar to an urban setting, their decline is hinting towards an increasingly rural economy.

Also, very interesting, and against trend, is the increase in manufacturing, which gained 500 jobs between 2009 and 2015. Arts, Entertainment and Recreation has been driving growth with the addition of 600 jobs over the period, 550 of which have been in Sports and recreation activities (Figure 21 and 22).

Figure 21: Largest employment increases and decreases between 2009 and 2015



Data Source: ONS, BRES

Figure 22: Largest employment increases and decreases between 2009 and 2015 - subsectors



Data Source: ONS, BRES

Figure 23 introduces a more dynamic analysis of Monmouthshire sectoral strengths and weaknesses. The chart depicts patterns of sectorial specialisation, as indicated by the location quotient⁵, against sectorial growth trends. Broadly speaking, in the top right quadrant of the chart we can find Monmouthshire sectors of strength, intended as industrial areas of specialisation and growth. Sectors in the bottom left quadrant represent areas of weakness, underlined by underrepresentation with respect to national average and in decline in overall employment terms.

Strengths

Arts, entertainment and recreation is the sector with the highest location quotient, meaning that it represents an area of specialism for Monmouthshire, and it is also amongst the highest growth sectors (67%). A further breakdown at subsector level reveals that growth is driven primarily by Sports activities and amusement and recreation activities, and at even more detailed level (SIC5) by Operation of sports facilities.

⁵ A location quotient for a place is ratio of a sector share of employment in that place compared to the average, in this case, for England & Wales.

The sector of water supply is also exhibiting high growth and specialism, which is aligned with the large number of businesses operating in it as observed in the previous section.

Manufacturing appears as a relatively large sector, employing 3,500 people; it is growing against national trend and is also found in relatively higher concentration in Monmouthshire than compared to the E&W average.

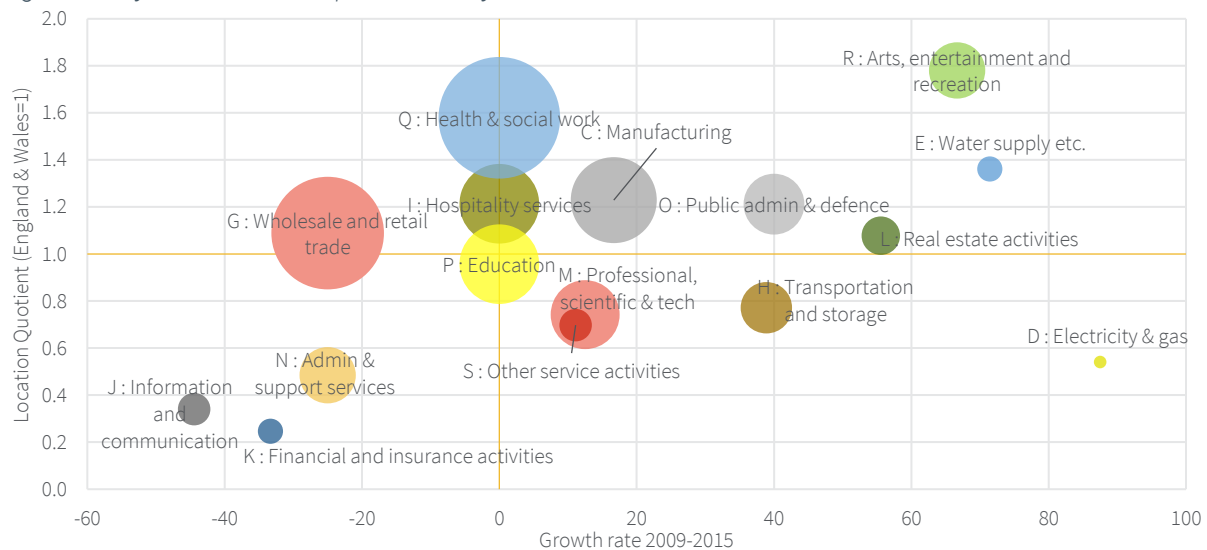
Real estate activities have undergone high growth but their degree of specialisation is only just above average.

Public administration and defence is a sizable sector too, exhibiting specialisation and growth, but rather than considering it a sector of strength, its relatively large size can be explained by the nature of necessary services the County requires despite its relatively small pool of jobs.

Weaknesses

Information and communication, Finance and Insurance, and Administration, are all displaying a low location quotient and have experienced decline over the last few years. These sectors are part of the modern service economy which is driving growth at a national level. They are however predominantly urban sectors and as they have restructured post -recession growth has been stronger in larger towns and cities which may explain the lower relative growth in Monmouthshire.

Figure 23: Dynamic location quotient analysis 2009-2015

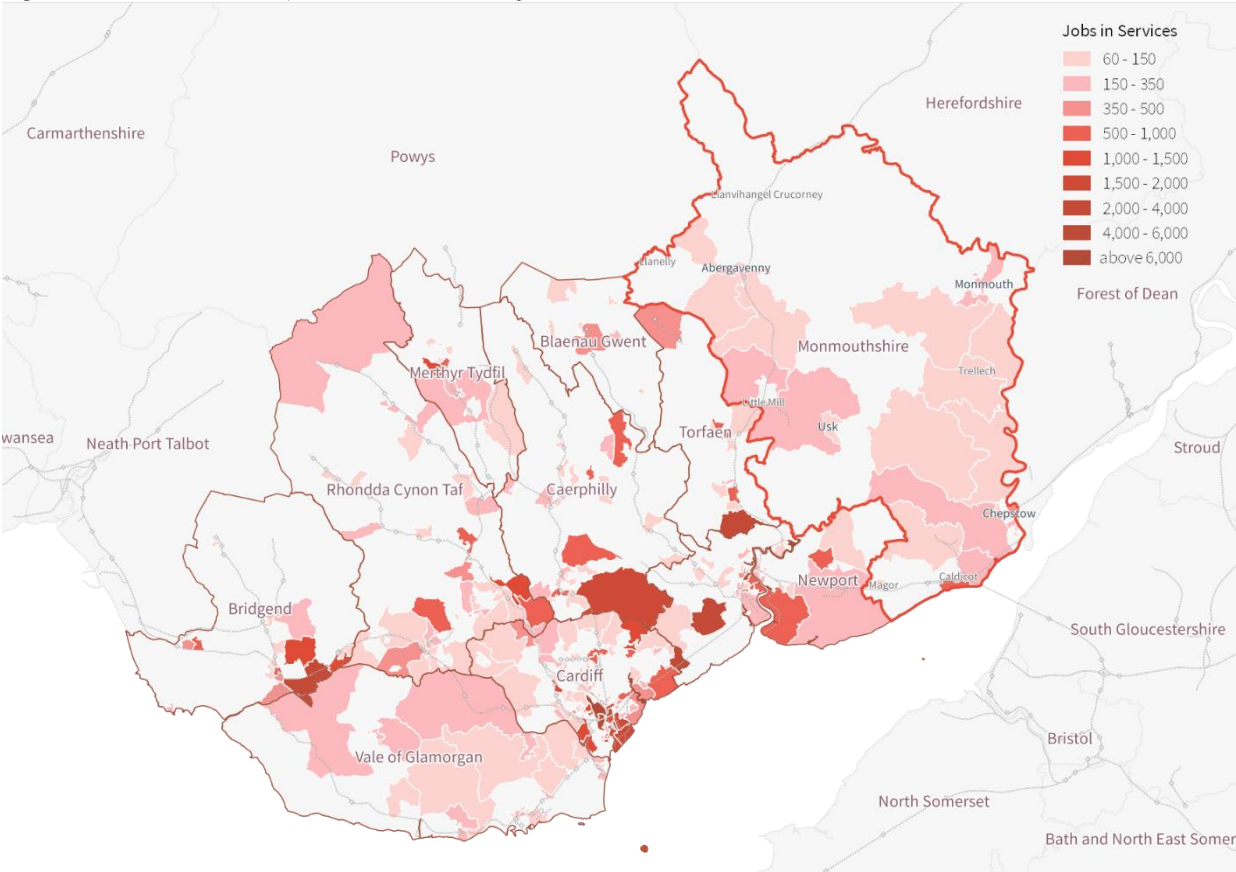


Data Source: ONS, BRES

Note: since not all farm jobs are covered by the BRES database, the sector of Agriculture was excluded from the analysis

Figure 24 below maps the distribution of jobs in Professional services in CCR. These include Information and communication, Administration and support services, Finance and insurance, but also Real estate activities and Professional, scientific and Technical occupations. With the exception of a small employment area near Caldicot, jobs in Professional Services are found in very low concentration in Monmouthshire.

Figure 24: Distribution of professional service jobs in CCR - 2016

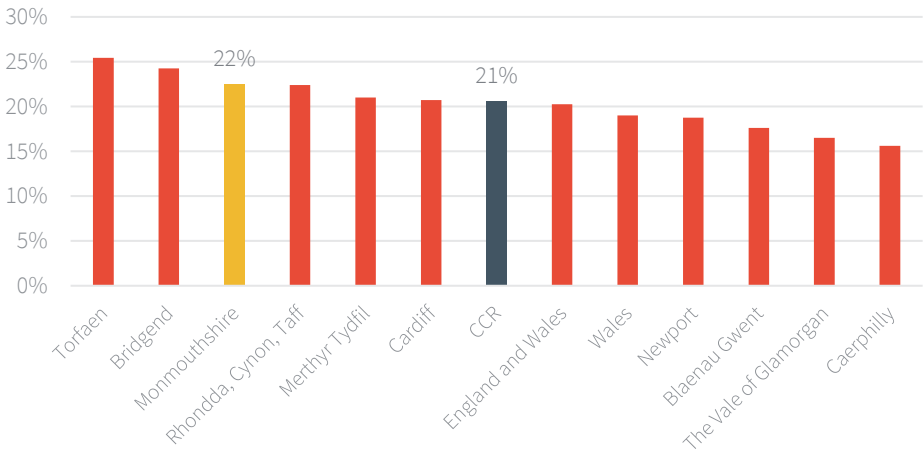


Data Source: ONS, BRES
Map contains OS data © Crown copyright and database right 2017

Science & Technology

The Science and Technology (S&T) sector is usually intensive in knowledge and linked to innovation activity. In Monmouthshire, 22% of total jobs are in S&T, making the County the third in CCR for employment in the sector, even though very close to the CCR average of 21% (Figure 25).

Figure 25: Proportion of employment in S&T - 2016

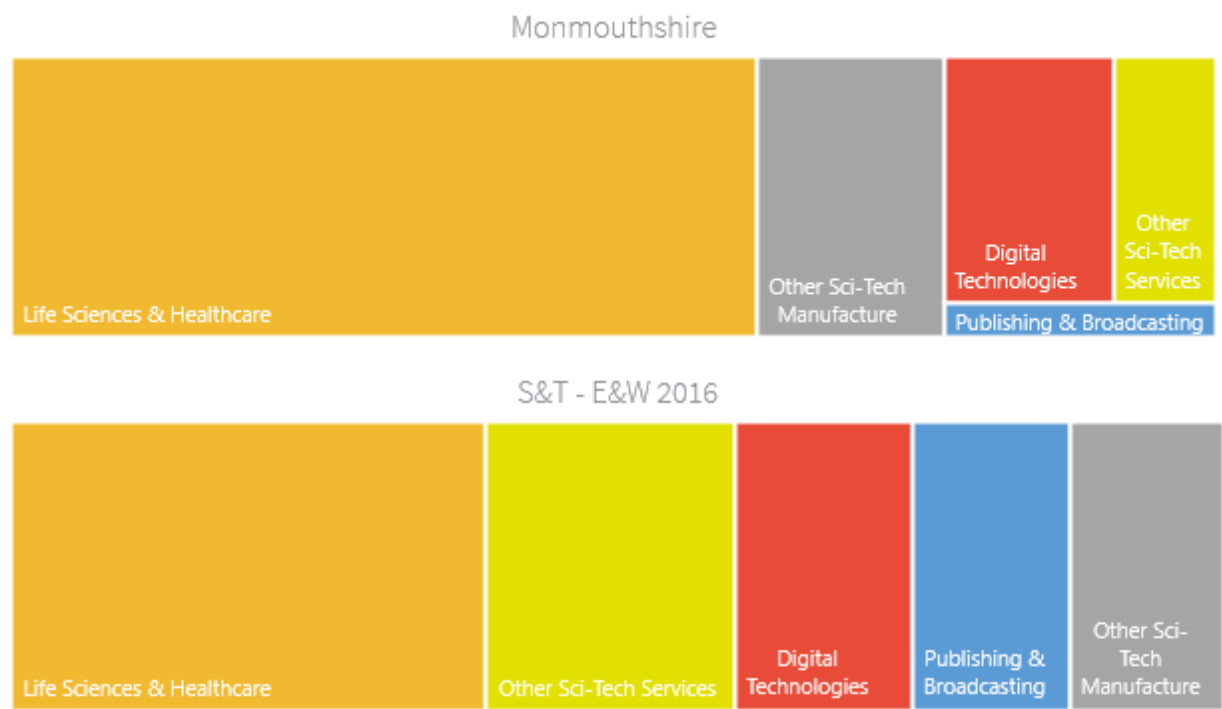


Data Source: ONS, BRES

The composition of employment in the S&T sector is dominated by Life Sciences & Healthcare, which employs 5,000 people in Monmouthshire and is proportionally larger than the E&W average (Figure 26). On the other hand, Publishing and Broadcasting is underrepresented and employs only 225 people.

Figure 27 provides a further breakdown into the Life Sciences & Healthcare sector in Monmouthshire. The majority of employment is in Hospital Activities, which supports 3,500 (Figure 27 indicates 3,500 jobs).

Figure 26: Composition of employment in S&T for Monmouthshire and E&W - 2016



Data Source: ONS, BRES

Figure 27: Composition of employment in Life Sciences & Healthcare for Monmouthshire - 2016

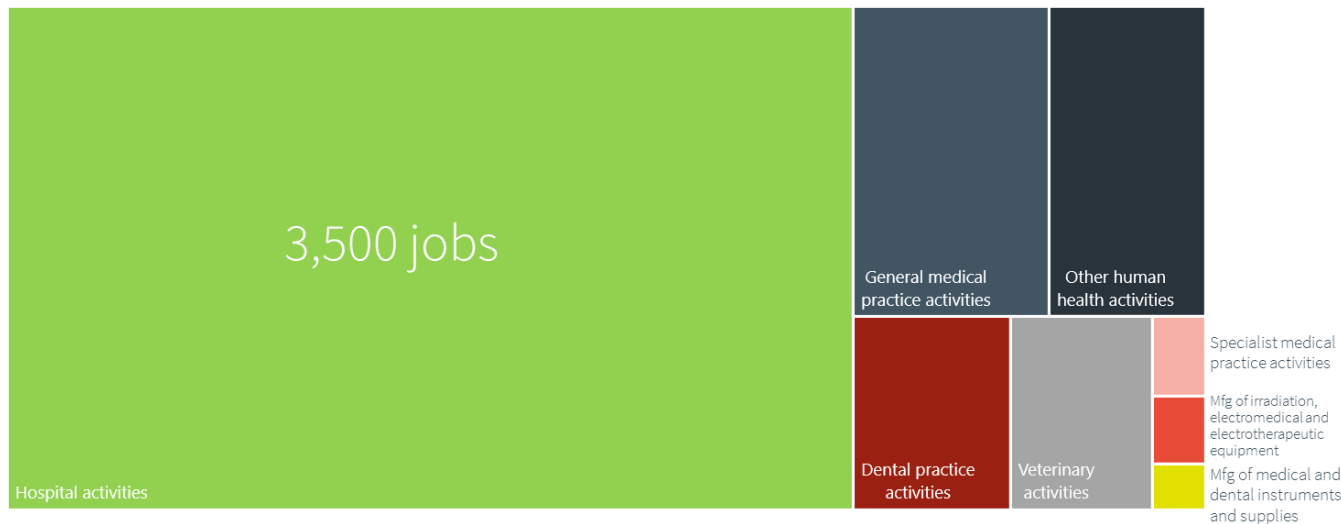
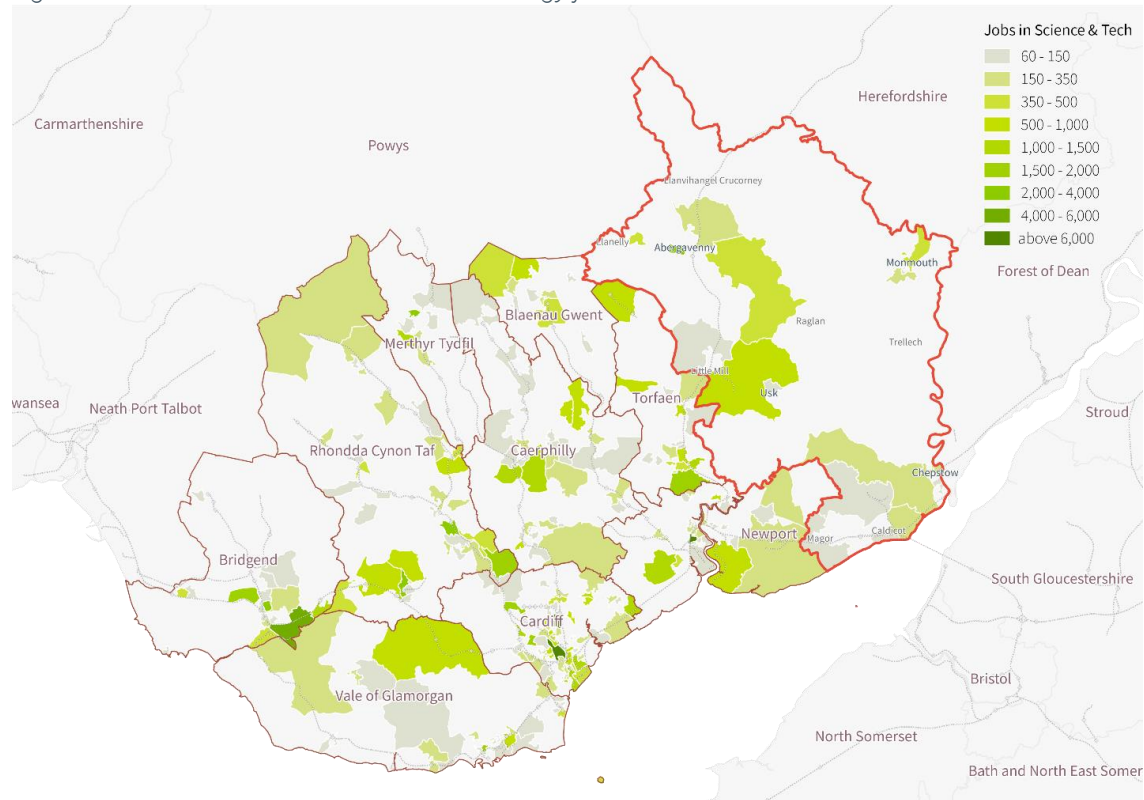


Figure 28 maps out the distribution of Science and Technology jobs across CCR. Although Monmouthshire’s employment in the sector is not particularly dense, some areas emerge around Monmouth, Abergavenny, Chepstow and Caldicot, and along a corridor between Abergavenny and Usk.

Figure 28: Distribution of science and technology jobs in CCR - 2016



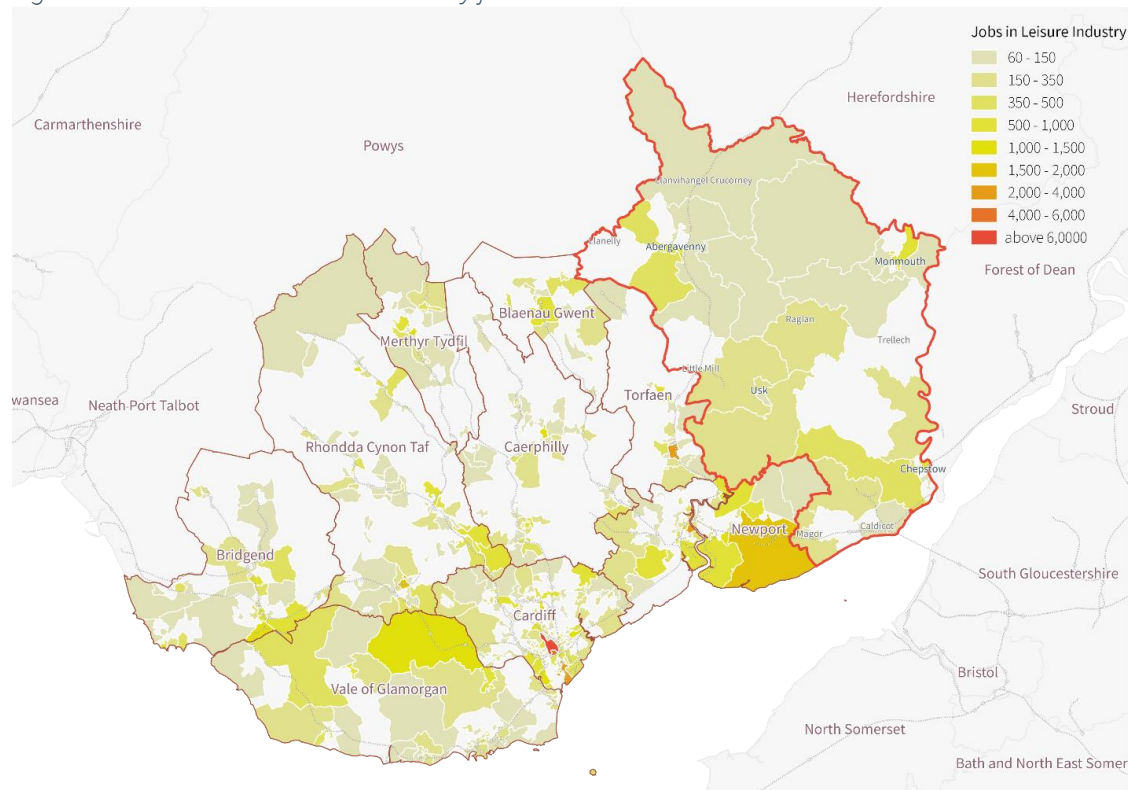
Data Source: ONS, BRES

Map contains OS data © Crown copyright and database right 2017

Leisure Industry

Employment in the leisure industry is more evenly distributed across CCR, expectedly with some very high concentrations in the centres of Cardiff and Newport. The leisure industry, which includes tourism and hospitality, seems to be among the sectors more evenly spread across Monmouthshire.

Figure 29: Distribution of leisure industry jobs in CCR - 2016



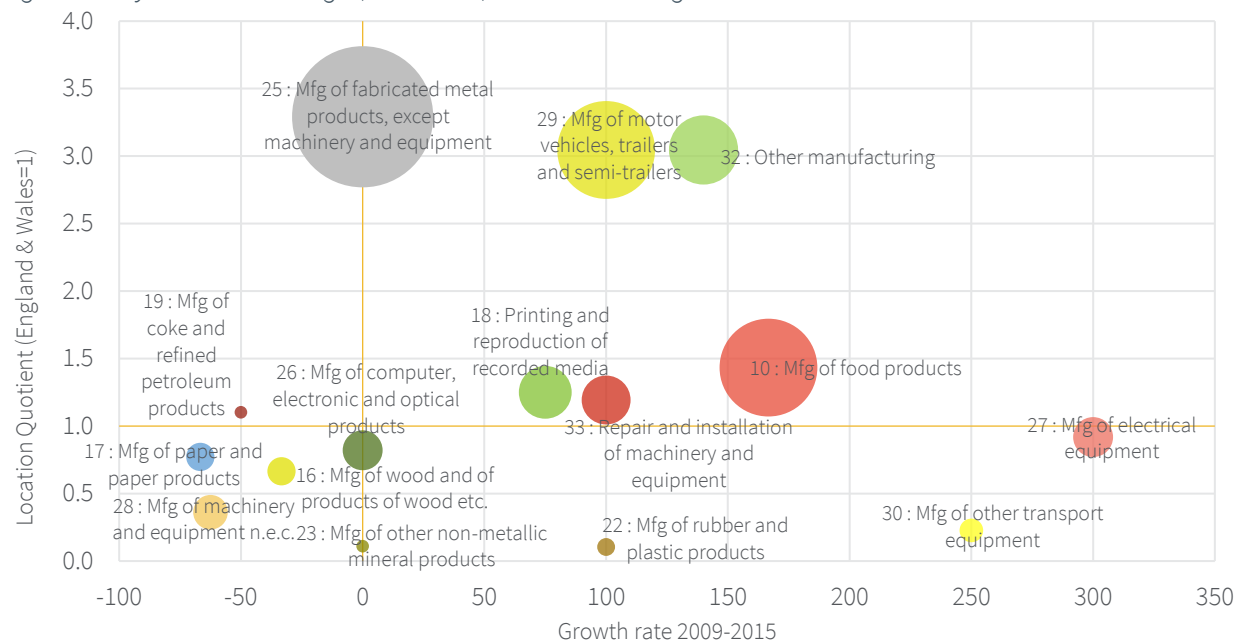
Data Source: ONS, BRES

Map contains OS data © Crown copyright and database right 2017

Manufacturing

In order to better understand what is driving growth and specialisation within the manufacturing sector, Figure 31 presents the breakdown for manufacturing at subsector level. Manufacturing of electrical equipment is the subsector that has experienced the fastest employment growth (300%); its location quotient is still below one but given the observed high growth there is an opportunity for it to become a sector of specialisation for the County. The highest level of specialisation is found in the Manufacturing of metal products, which supports 1,250 jobs but experienced zero growth over the analysis period. Manufacturing of food products is another large sector of specialisation, employing 600 people, which also experienced high growth over the period and is important for the County's rural economy. Manufacturing of Motor vehicles is highly concentrated in Monmouthshire, being three times more concentrated than the national average, and has doubled in size between 2009 and 2015.

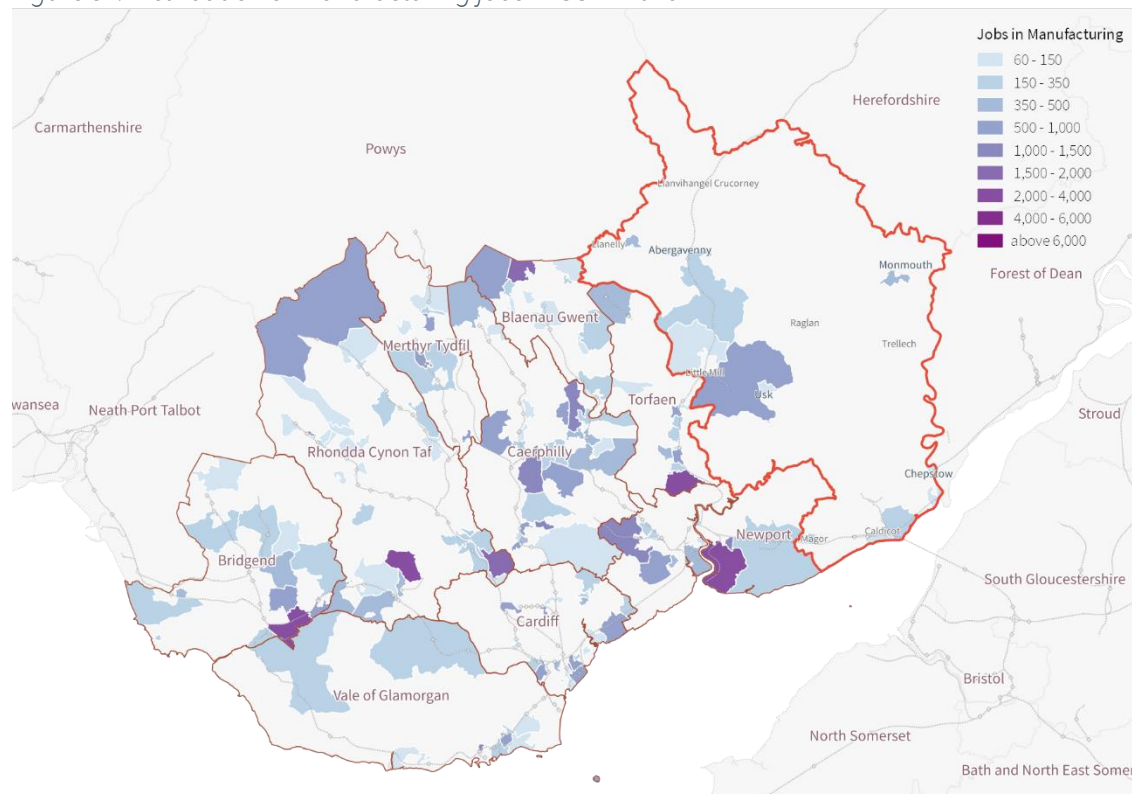
Figure 30: Dynamics of change (2009-2015) – Manufacturing subsectors



Data Source: ONS, BRES

As illustrated by Figure 31, manufacturing jobs in Monmouthshire are mostly located along the corridor between Usk and Abergavenny, and near Monmouth, Caldicot and Chepstow.

Figure 31: Distribution of manufacturing jobs in CCR - 2016



Data Source: ONS, BRES

Map contains OS data © Crown copyright and database right 2017

Key points:

- The largest employment losses between 2009 and 2015 were in Wholesale and Retail (-2,000 jobs), Administration support (-500 jobs) and Construction (-500 jobs)
- Manufacturing is a relatively large and growing sector – against national trend
- Arts, entertainment and recreation is the sector exhibiting the highest specialisation and very strong growth
- Many service sectors have declined and are underrepresented - against national trend
- Professional, scientific and technical activities are under-represented but growing
- With 22% of total jobs are in Science & Technology, Monmouthshire is third in CCR for employment in the sector
- The composition of employment in the Science & Technology sector is dominated by Life Sciences & Healthcare, which employs 5,000 people and is proportionally larger than the average for England and Wales. Hospital activities form a significant part of this employment.

Business Demography

Business demography data (Figure 32) suggest that Monmouthshire business activity is relatively low. The lower than average death rate and the 5-year survival rate are positive but can be partially explained by a very low and below average business start-up rate.

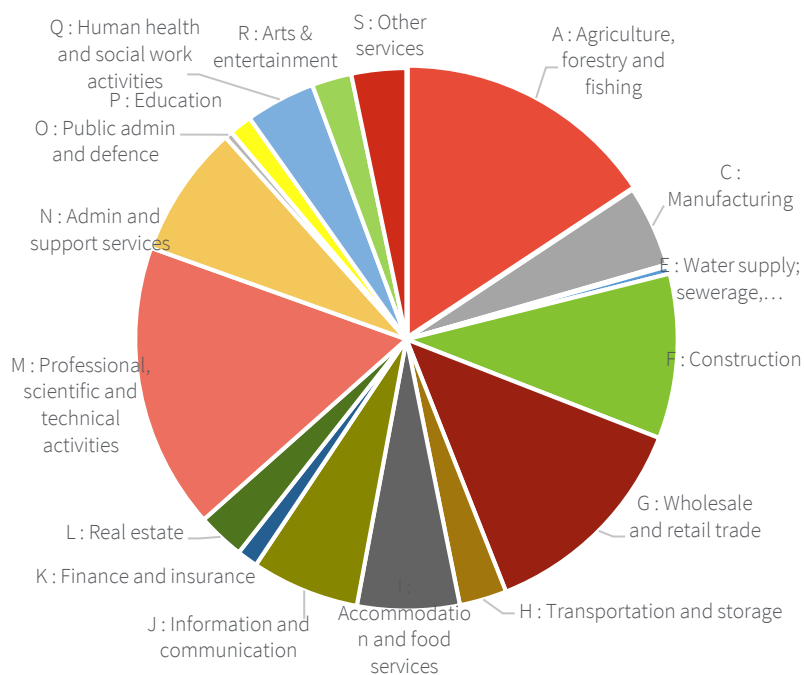
Figure 32: Business demography data 2016

	Birth rate	Death rate	Active	5-year survival rate
Monmouthshire	10.4	9.7	4,120	45
CCR	14.3	11.4	45,480	42
Wales	12.3	10.5	98,445	43
E&W	14.9	11.6	2,597,505	44

Data Source: ONS, Enterprise Demography - % of active enterprises

Data for 2017 report 4,430 active enterprises in Monmouthshire which measured per 10,000 of population is the second highest in Wales. As shown in Figure 33, the majority of enterprises (17%) are involved in Professional, scientific and technical activities, which is a sector normally associated with high-skill and high-value jobs. There is also a very large proportion (16%) of businesses involved in Agriculture, forestry & fishing, which is expected given the widely rural character of the County. The number of enterprises in the sector is almost 3 times and a half the average for England & Wales. Despite the seemingly low number of businesses in Water Supply and Public Admin, these sectors are over represented in Monmouthshire. This can be a symptom of a relatively small economy that nevertheless requires a minimum number of businesses involved in necessary services providing activities.

Figure 33: Sectorial distribution of enterprises with location quotient (E&W=1) table 2017

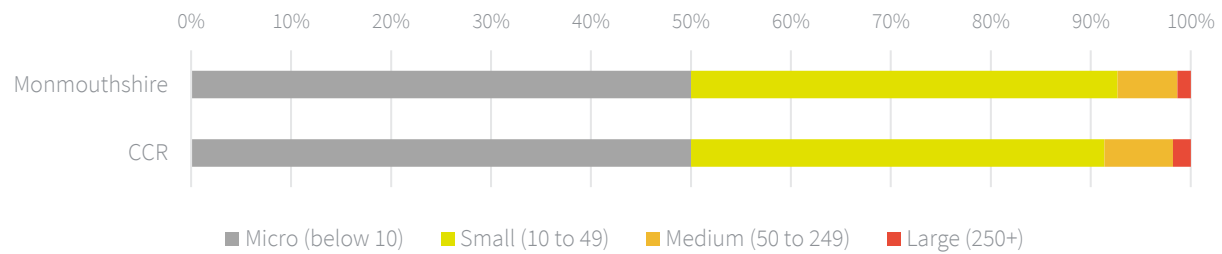


Data Source: ONS, UK Business Counts

	LQ 2017	No.
A : Agriculture, forestry and fishing	3.4	695
B : Mining and quarrying	0.0	0
C : Manufacturing	1.0	215
D : Electricity, gas, steam etc.	0.7	5
E : Water supply; sewerage,...	1.6	20
F : Construction	0.8	435
G : Wholesale and retail trade	0.9	580
H : Transportation and storage	0.7	125
I : Accommodation and food	1.1	270
J : Information & communication	0.8	285
K : Finance and insurance	0.6	55
L : Real estate	0.8	125
M : Professional, scientific & tech.	0.9	755
N : Admin and support services	0.9	350
O : Public admin and defence	1.5	20
P : Education	0.7	60
Q : Human health and social work	0.9	185
R : Arts & entertainment	1.0	105
S : Other services	0.8	145

When considering business size (shown in Figure 34) - where size refers to a business' number of employees - Monmouthshire supports a smaller proportion of large and medium-size companies relative to the average for CCR.

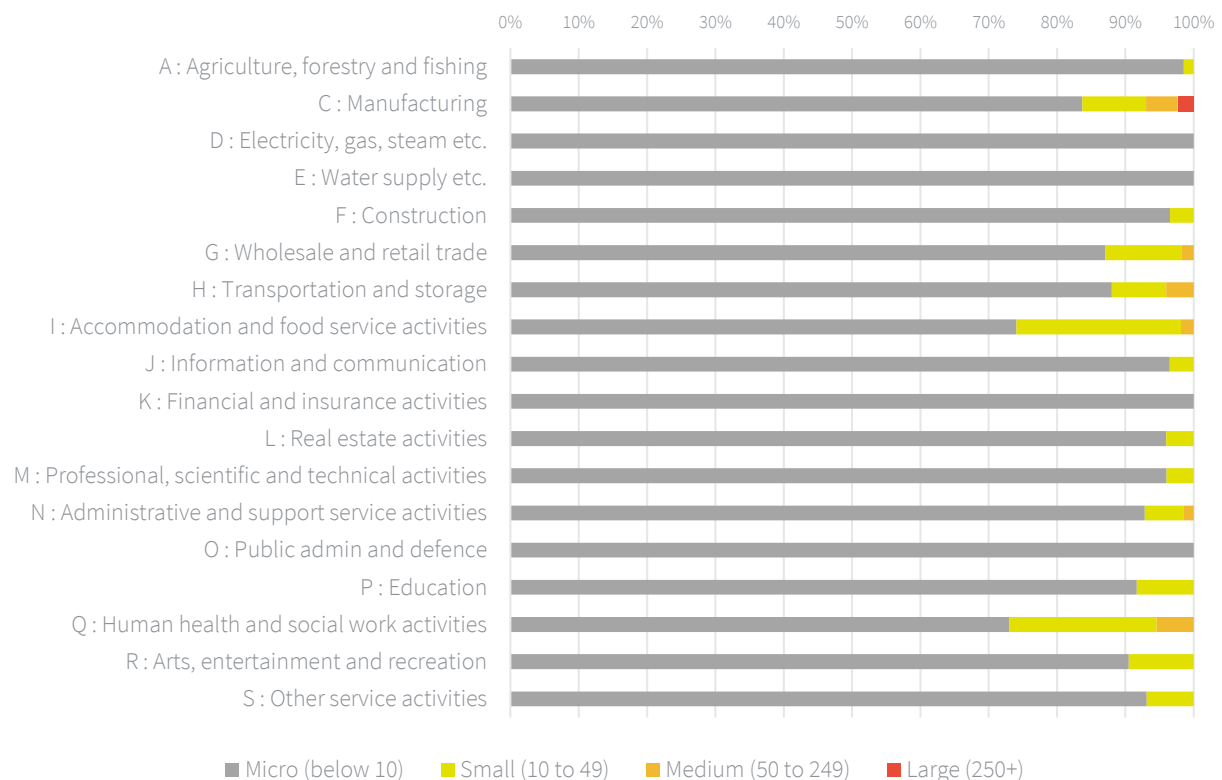
Figure 34: Split of enterprises by size - 2017



Data Source: ONS, UK Business Count

Figure 35 presents the enterprise split by sector and size. The only sector presenting large firms (i.e. businesses with 250 people or above) is the manufacturing sector, while Human Health, followed by Accommodation and Food Services, are the sectors with a proportionally larger number of small & medium-sized businesses vs micro businesses. Utilities companies appear to be all micro size in Monmouthshire, but so is it true for Public Admin and Defence. Data for these sectors (which are understood to be mostly constituted by few medium/large-size companies/organisations) are likely to be misrepresented by statistics for business counts, where figures are disclosed rounded up to the nearest 0 or 5.

Figure 35: Enterprise split by size and sector - 2017



Data Source: ONS, UK Business Count

Key points:

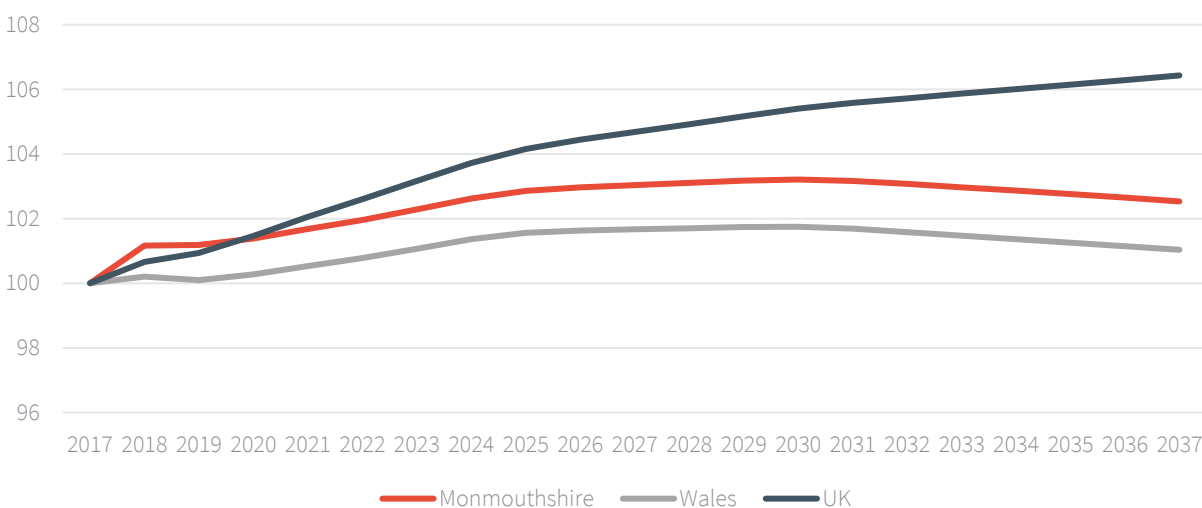
- Monmouthshire business activity is relatively low, with a very low and below average business start-up rate
- The largest sector by number of business is in Professional, scientific and technical activities
- Agriculture, forestry & fishing supports 16% of the businesses and in terms of enterprises numbers is almost 3.5 times the average for England & Wales
- Monmouthshire supports a smaller proportion of large and medium-size companies relative to the average for CCR
- In terms of total businesses per 10,000 of population Monmouth is the second highest in Wales.

Baseline Projections

While the snap-shot analysis indicates that the County's labour market and resident population are doing well, baseline projections into the next two decades suggest that Monmouthshire's ageing population is set to hinder and slow down economic growth.

Baseline projections on employment growth by Oxford Economics⁶, shown in Figure 36, indicate that Monmouthshire is expected to perform above the Welsh average (3% vs 1% growth), adding 1,155 new jobs by 2037, but well below the UK (6%), particularly from the second half of 2020s onwards. A closer look at the trend reveals that Monmouthshire's employment is also expected to peak in 2030 and decline thereafter.

Figure 36: Projected Indexed Employment Growth (2017-2037)



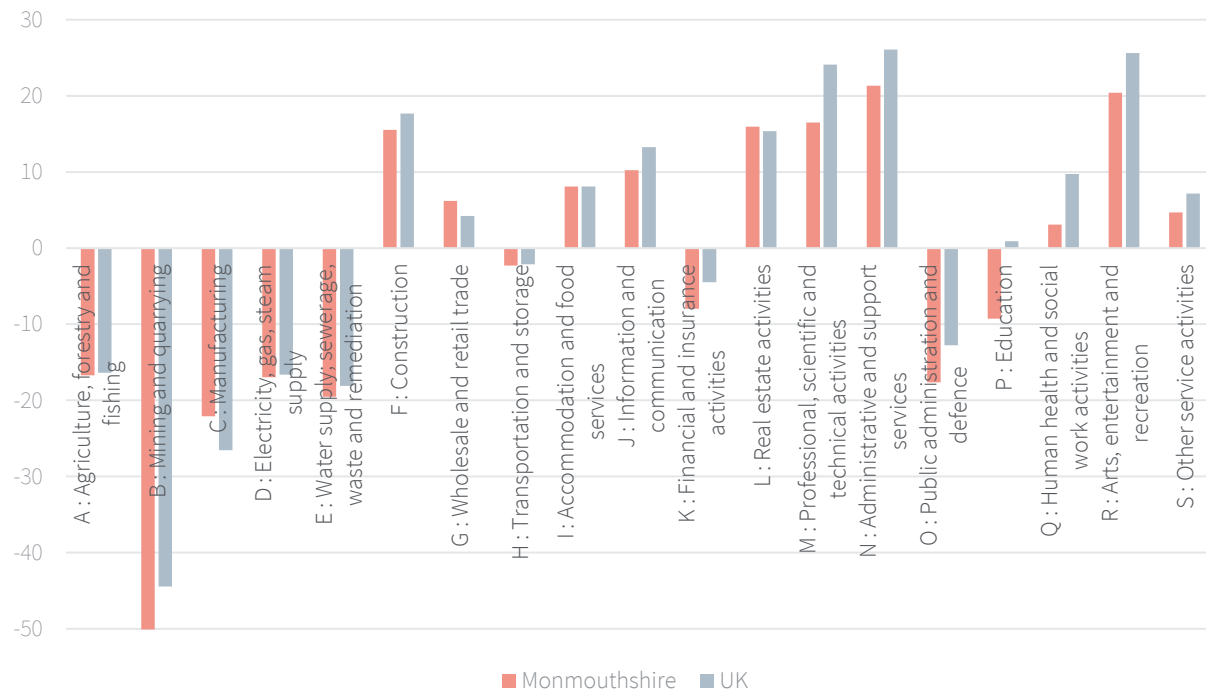
Data Source: Oxford Economics

The composition of employment change by sector is illustrated in Figure 38 below. Broadly, Monmouthshire's trend follows the UK economy, with a general expansion of the private sectors and employment decline in traditional primary sectors and manufacturing. Education is the only sector projected to behave against UK trend (which is predicted to decline by around 9%), whereas in Monmouthshire it is anticipated to experience growth of about 1%.

Professional Service Occupations, with the exclusion of finance which is forecast to decline, are projected to grow, with Administrative and Support Service Activities expected to be the sector registering the highest growth at 21%, despite having experienced decline in recent years. Similarly, Information and Communication, which underwent decline in previous years, is projected to increase by 10%. Conversely, Manufacturing, which experienced a 17% employment growth between 2009 and 2015, is forecast to undergo a 17% employment decline, mimicking, albeit less severely, the UK trend.

⁶ Oxford Economics are one of the most established and well regarded producers of economic forecasts in the UK and internationally, however all forecasts are trends based and should be regarded as indicative rather than as a precise prediction and as such should be reviewed periodically.

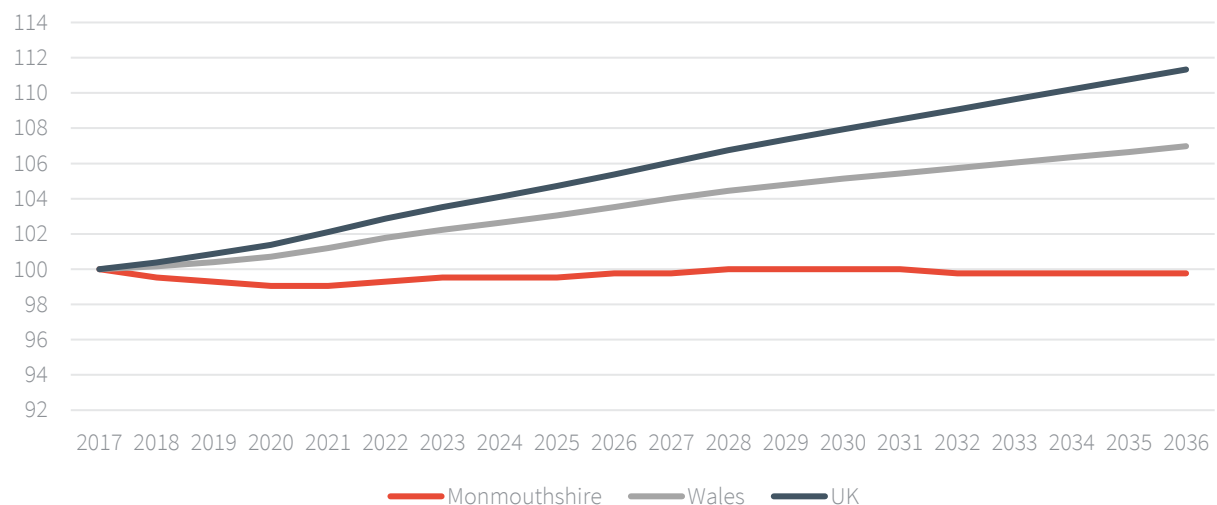
Figure 37: Projected % Employment Growth 2017-2037 by Sector



Data Source: Oxford Economics

The relatively low employment growth projections for Monmouthshire were challenged by considering another set of employment projections by Experian, illustrated in Figure 38, which were found to be even more negative for the County. As per Experian's projections, employment growth is expected to stagnate/decline throughout the next two decades, placing Monmouthshire below both UK and Welsh projected growth levels.

Figure 38: Projected Indexed Employment Growth (2017-2036)

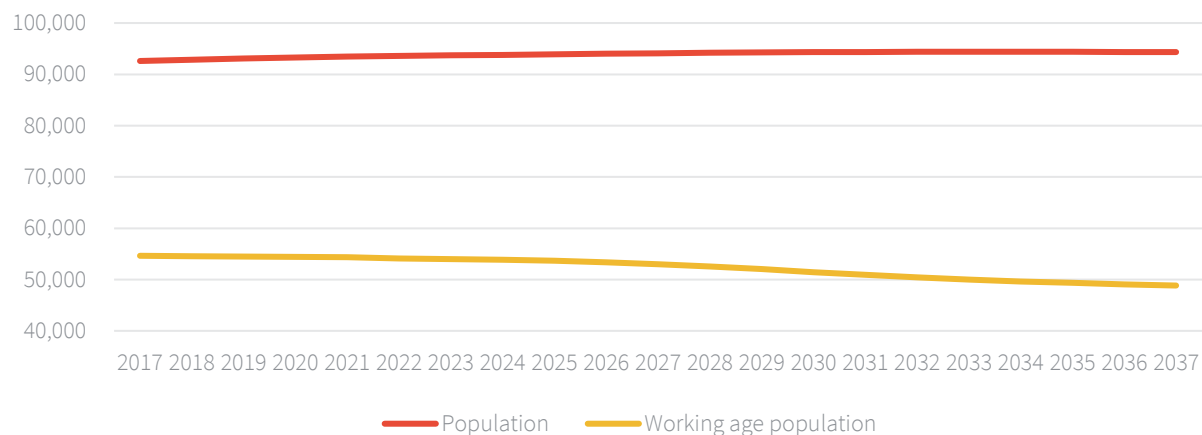


Data Source: Experian

In order to validate the hypothesis that the distinctive population-age structure of Monmouthshire may partially explain projected low employment growth, we also considered projections for population by Oxford Economics and Statistics for Wales.

As illustrated in Figure 39, while Monmouthshire population is expected to experience a very low growth of 2%, the working age population is projected to decline by 11% (or 5,800 people) over the same period.

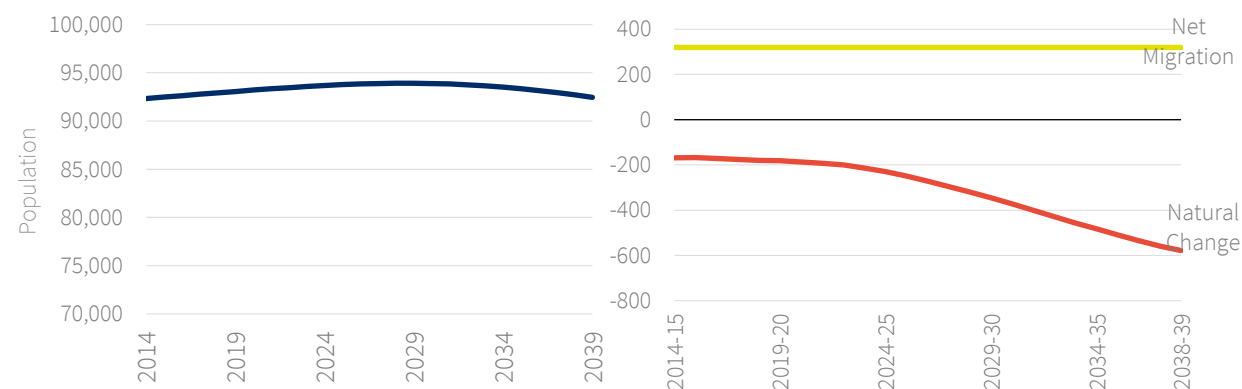
Figure 39: OE Population Projections (2017-2037)



Data Source: Oxford Economics

This is also confirmed by population projections by Statistics for Wales⁷ (based on past trends), shown in Figure 41, which attribute the largest decline to natural change, indicating that death rate is going to significantly outstrip birth rates to a level that cannot be offset by positive net migration.

Figure 40: Projected Population, Natural Change and Net Migration for Monmouthshire (2014/15-2038/39)



Data Source: Statistics for Wales

⁷ Statistics for Wales is the most reliable and widely cited source for considering future population change in Wales. In this case it's projection aligns with other independent sources including Oxford Economics. This is a trend based projection and does not take into account specific or arbitrary changes on the ground such as toll removal etc. which would be extremely difficult to quantify.

Key points:

A comprehensive approach was undertaken in this study to the analysis of baseline population and employment growth forecasts to 2037. Three established sources were considered: Oxford Economics, Experian and Statistics for Wales. The evidence points unequivocally to the fact that (without significant intervention) Monmouthshire's ageing population is set to hinder and slow down employment growth.

Populations structure is critical to economic growth in any area because the availability of working age population underpins the ability to increase economic activity and employment rates. In Monmouthshire an ageing population and shrinking working age population is limiting economic growth. This finding is supported by both sets of forecasts and the population projections produced by Statistics for Wales.

- Baseline projections to 2037 suggest that Monmouthshire's ageing population is set to hinder and slow down economic growth
- In terms of employment growth, Monmouthshire is expected to perform above the Welsh average, but well below the UK, particularly from the second half of 2020s onwards
- Professional service occupations, with the exclusions of finance, are projected to grow, with Administrative and Support Service Activities expected to be the sector registering the highest growth
- Manufacturing is forecast to undergo a 17% employment decline according to national trends
- Monmouthshire total population is expected to experience a very low growth, while the working age population is projected to significantly decline by 11% over the same period

What does all this mean for future growth

Demography, scale and a dual economy combine to drive low growth in Monmouthshire

Findings from the baseline analysis presented in this report suggest that **future growth in Monmouthshire is set on a low trajectory**. The County exhibits features of a dual economy structure, whereby the resident population is better off than the people who work in the area. The County is home to a relatively high-skilled, high-earning population, with over 50% of its residents being in managerial or professional occupations (SOC groups 1 to 3) however, the profile of people working in Monmouthshire is skewed towards the lower end of the skills/occupational spectrum. This is further evidenced by commuting flow patterns indicating that 40% of residents travel to work outside the County. The direction of flow of incoming commuters suggests that Monmouthshire imports workers that take up lower skill jobs in the County, while high-skill residents commute out for high-skill and high-paid jobs, mostly located in Newport, Cardiff and Bristol/South Gloucestershire. The low local availability of attractive employment opportunities is intensified by low business formation rates and concentrations. In addition, the age structure of the resident population is very different from that of a dynamic, high-growth economy, where we would observe a larger proportion of people in working-age groups, particularly in their 20s and 30s. Instead, only about a fifth of Monmouthshire residents are aged between 20 and 39 years old, while as much as 55% are aged 45 or above. The impact of the age structure on future growth will be particularly acute as the current relatively small working age population moves into retirement age. These demographic factors are also reflected in the baseline employment projections by both Oxford Economics and Experian.

Economic interventions can bring about modest gains

Economic policy or intervention has some potential to set the economy on a higher growth path, but, **given the current low base, future growth rates would still be modest**. Support to priority sectors, if effectively targeted and resourced, could lead to higher future growth, for example there maybe something to be gained from capturing the potential indicated by the ‘green shoots’ in the Professional Service Sector, which has been growing rapidly in recent years but is still under-represented in the County (suggesting the potential to capture further growth). In addition, the breakdown of employment forecasts at sectorial level points towards a potentially very sharp decline in manufacturing jobs, which could however be partially contained by targeting specific sectors and capitalising on policy alignment with Cardiff Capital Region’s and Welsh Government’s sector priorities. Furthermore, the recent data shows a resurgence in manufacturing employment in Monmouthshire and across Wales in general and it is possible that the forecasts overlay the decline locally.

If stronger growth is desired, then more radical intervention is required to tackle the demographic factors that underpin low growth

If transformational growth is to be delivered, supply side issues will need to be addressed. The provision of good quality housing in the right locations to attract economically mobile younger people is essential. Increased housing coupled with the creation of more attractive employment opportunities in accessible, well connected locations would enable greater retention of the existing high-skill workforce and also encourage the attraction of high-skilled workers from other parts of Cardiff Capital Region and potentially from Bristol City Region too. This will have the combined effect of increasing the scale of available labour force and increasing the economic activity rates by changing the demographic structure. Efforts to attract inward investment through the increased availability of high-quality employment sites and premises would not only help to drive local employment but contribute to the creation of a more fertile environment for businesses and in turn also increase the range of employment opportunities.

A multifaceted approach is required

It is important to note that just building new homes in itself doesn't directly increase local jobs, rather there needs to be a multifaceted approach with each element delivered in parallel to achieve sustainable growth, involving the following steps:

- 1- **Increasing housing provision targeted at economically active people and working households.** This will positively change the demographic structure by increasing the proportion that is working age. This will automatically raise economic activity rates and employment rates.
- 2- **Delivering new employment sites and premises.** Many of those new residents described above would inevitably travel outside the County to access work due to lack of opportunities locally, therefore in parallel new employment sites in well-connected locations would need to be delivered targeting higher value employment to meet the needs of both the future and existing Monmouthshire labour market.
- 3- **Undertaking both elements in parallel to optimise the impact.** The creation of local employment in the County without increasing the local working age population would just lead to much higher in-commuting and the County would lose much of the associated economic benefits because additional spend from the new jobs will leak out of the economy. Furthermore, it is unlikely that large employers would be attracted to Monmouth if there wasn't a sufficient local workforce.
- 4- **The final consideration is affordability,** new housing must be accessible to younger economically mobile people and working families in order to support growth.

SWOT analysis

<i>Strengths</i>	<i>Opportunities</i>
<ul style="list-style-type: none"> • Strong resident skill base with occupational profile skewed towards high-pay/high-skill jobs • Low unemployment and economic inactivity rates • Relative lack of deprivation across the County • High quality of life is an element of attraction for economically mobile individuals • A large Manufacturing sector growing despite overall decline across the UK • High growth in the manufacturing of food products • Proportional size of Science and Technology sector is significant (albeit low in absolute terms) • Internationally renowned, high-quality schools act as an attractor for economically mobile families • Benefit from belonging to the wider city-region policy context of Cardiff Capital Region 	<ul style="list-style-type: none"> • Removal of Severn Bridge toll will take down an economic barrier between Cardiff Capital Region and Bristol City Region, opening up opportunities to businesses and workforce by effectively enlarging the labour market • Growth in Professional, Scientific and Technical occupations • Manufacturing of electrical equipment is undergoing high growth and there is potential for it to become a sector of specialisation • High growth in transportation and storage - possibility to play a bigger role in the logistics sector of Cardiff Capital Region • Availability of employment land • Availability of land for new residential development • Capitalising on good connectivity of key settlements in the southern part of the County • A proportion of the existing high-skill residential workforce could be retained and commuter rates lowered if good jobs could be provided locally
<i>Weaknesses</i>	<i>Threats</i>
<ul style="list-style-type: none"> • Low job density • Low business formation rates • Population age structure not geared towards growth: relative absence of people aged 20s and 30s • 42% of total migration outflows are by people aged 15 to 29 • A dual economy with the population working in the area being relatively less skilled and doing lower paid jobs than the resident population • Around 40% of Monmouthshire's residents who are in employment work outside the County • Large proportion of public sector employment • Lack of large companies 	<ul style="list-style-type: none"> • High median age with a large proportion of people in and approaching retirement age • Overall population is projected to decline • Significant projected decline in working age population • Decline in some key 'knowledge economy' sectors such as Information and communication, Finance and Insurance, and Administration suggest Monmouthshire is losing jobs to other areas outside the County and this could hinder future growth • Projected decline in public sector employment • Projected further decline in Finance and Insurance activities • The business base is relatively small and threatened by forecast decline in some key sectors such as the public sector