



**Occupational Segregation in Highland
for Highlands and Islands Enterprise**

**Local Authority Annex
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1 Occupational Segregation in Highland

Introduction

1.1 In April 2016, ekosgen was appointed by Highlands and Islands Enterprise (HIE) to explore the extent and nature of occupational segregation across the Highlands and Islands. The research took place between April and August 2016, examining patterns of occupational segregation across and within the region to identify barriers to equal participation in the economy, which will be used to inform future policy responses.

1.2 This report presents the findings and data relating to occupational segregation in the Highland Council area (Highland). It accompanies the regional report which sets out the overall findings of the research, including detail on the causes and impacts of occupational segregation (which tend to be common across all areas), and policies and interventions that have previously been implemented.

Occupational Segregation

1.3 Occupational segregation is the distribution and concentration of people across and within jobs, based on demographic characteristics, most often – and as is the focus of this research – gender. It manifests itself in a number of different ways, including the tendency for men and women to be distributed unequally across the range of industrial sectors and occupations (horizontal segregation), or at different levels/grades (vertical segregation). Concentration either horizontally or vertically is generally accepted to be an indicator of inequality.¹

1.4 Occupational segregation affects both men and women and is an issue that impacts upon equality² and social cohesion as well as economic performance³. It is widely recognised that occupational segregation is one of the barriers which prevents women and men from fulfilling their potential in the labour market, and which presents challenges for employers when sourcing the best people for their jobs. There are a range of factors and barriers at play, including: the inequality of caring (the responsibility of caring still largely rests on women); working environments and workplace cultures (in some industries favouring men and in others favouring women); the persistence of traditional values reinforcing gender stereotypes; inequality of terms and conditions for part time working, with an implicit bias that favours full time workers; and education choices – and systems – that repeat gender stereotypes in the skills pipeline.

1.5 Generally, women are more likely than men to be underemployed, work part time, and work in lower grades within an organisation or lower value sectors. This is in spite of the significant progress that has been made to increase female participation in the labour market. One of the most widely reported and most visible impacts of occupational segregation is the gender pay gap, which continues to persist despite the fact that the Equal Pay Act⁴ was enacted more than 45 years ago.

1.6 Promoting Inclusive Growth is a key priority in Scotland's Economic Strategy (SES). Gender equality is also a key feature, and ensuring 'women's position in the economy and in employment is improved in the long term and reflected more comprehensively in Scottish Government economic policy and strategies' is one of the Scottish Government's eight Equality Outcomes⁵. Research undertaken by Close the Gap on gender equality in pay suggests that equalising gender employment could generate

¹ e.g. Blackburn, R.M. and Jarman, J. (1997) Occupational Gender Segregation, *Social Research Update 16* (University of Surrey)

² e.g. Scottish Government (2015) *Maximising Economic Opportunities for Women in Scotland*

³ e.g. HM Government (2015) *The role and contribution of women in the Scottish economy*

⁴ HM Government (1970) *Equal Pay Act*, Ch.41

⁵ Scottish Government (2015) *Equality Outcomes and Mainstreaming Report 2015*

as much as 12% of UK GDP by 2025 – 12% of the Scottish economy at current figures is just over £17 billion.⁶

1.7 The Highlands and Islands study identifies those sectors and areas which are most affected by occupational segregation to help inform how initiatives should be targeted to make an impact.

Data Use and Limitations

1.8 The most useful data source in relation to occupational segregation is the Annual Population Survey (APS), which breaks down data on a wide range of indicators by gender. This includes data on labour market participation, skills and employment for sectors and occupations, two of the key areas explored through the study. The data is updated on a quarterly basis, providing more up to date intelligence than annual surveys and the Census.

1.9 There are, however, widely recognised limitations to the APS, particularly in relation to smaller geographical areas such as the Highlands and Islands and its individual local authority areas. The limitations primarily relate to the survey based nature of the dataset and the small sample sizes within each of the Highlands and Islands local authority areas (reflecting the relative scale of the population and employment base). For example, the most recent APS data was based on a total sample of just under 4,500 for the whole Highlands and Islands region. While this offers confidence levels of +/- 1% (i.e. it is 95% certain that the actual figure will be within a range of 1% less than the estimate to 1% more than the estimate) reliability reduces further for smaller areas and breakdowns.

1.10 The limitations have been overcome by sense checking the data for Scotland, the Highlands and Islands and each local authority area against the results of the 2011 Census (which is one of the most robust datasets). While it is recognised that results may have changed over time, this approach allows us to identify any significant anomalies. We have also tested the results through the consultations and the review of existing literature. As set out in the main report, the findings of this study often reinforce previous research. The trends in the Highlands and Islands (and each of the local authorities) often align with broad national trends as would be expected. Each of these factors helps to provide further confidence in the research.

Report Structure

1.11 This report is structured as follows:

- Section 2 focuses on key population and labour market indicators, examining headline trends in participation and occupational segregation;
- Section 3 considers trends in skills and education and how these vary by gender;
- Section 4 sets out the overall levels of gender representation in the workforce, providing a benchmark that is used in the subsequent sections when examining segregation by occupation and sector;
- Section 5 sets out headline data on vertical segregation (where men and women typically work at different job levels or grades);
- Section 6 sets out headline data on horizontal segregation (where men and women are clustered into specific job types);
- Section 7 summarises the key messages of the research for Highland.

⁶ Close the Gap (2016) *Gender Equality Pays*

2 Population and the Labour Market

Introduction

2.1 This section provides an overview of how Highland performs on key population and labour market indicators and how this varies by gender. The performance and gender profile is benchmarked against the national (Scottish) and regional (Highlands and Islands) average. In particular, it examines the varying levels of participation of men and women in the workforce and how this is reflected in working patterns and pay.

Population

2.2 In population terms, Highland is the largest authority in the Highlands and Islands, accounting for almost half (48%) of the total population. There is a 49:51 split between men and women in the population, which aligns with the regional and national profile. Highland has experienced strong population growth over the past ten years, the joint highest of all local authority areas within the Highlands and Islands along with Orkney. This has increased the scale of the workforce available to employers.

Geography	Population	Change since 2005
Scotland	5,347,600	5%
Highlands and Islands	487,600	4%
<i>Highland</i>	<i>233,100</i>	<i>7%</i>

Source: Mid-Year Population Estimates.

Labour Market Participation

2.3 The labour market consists of people who are employed, as well as those defined as unemployed or economically inactive, who can be considered to be potential labour supply. Based on the definitions used by ONS, the economically active includes those who are in employment⁷ or who are unemployed⁸, while the remainder of the working age population are classed as economically inactive. There are many reasons why an individual may be inactive, for example, they might be studying, looking after family or long-term sick.

2.4 As illustrated in Table 2.2, there are high levels of economic activity in Highland (84.1%) which exceed the national (77.7%) and regional (82.2%) average, and are driven by high employment and low unemployment levels. The employment rate is above the regional and national average, and is lower only to Orkney and Shetland. In addition, unemployment and inactivity rates are lower than the regional and national averages.

Geography	Working Age Population (16-64)			
	Economically Active	Employment	Unemployment	Inactive
Scotland	77.7%	73.1%	5.9%	22.3%
Highlands and Islands	82.2%	79.1%	3.8%	17.8%
<i>Highland</i>	<i>84.1%</i>	<i>81.1%</i>	<i>3.6%</i>	<i>15.9%</i>

Source: Annual Population Survey.

⁷ People who did some paid work in the reference week (whether as an employee or self-employed); those who had a job that they were temporarily away from (e.g., on holiday); those on government-supported training and employment programmes; and those doing unpaid family work.

⁸ Refers to people without a job who were available to start work in the two weeks following their interview and who had either looked for work in the four weeks prior to interview or were waiting to start a job they had already obtained.

Employment

2.5 Table 2.3 shows that the employment rate is higher than the national and regional averages for both men and women. There is, however, evidence of a gender imbalance with higher levels of participation in employment amongst men. The extent of the imbalance in Highland (7.5 percentage points) is above the national average (6.0 percentage points) and in line with the gap at the regional level (7.8 percentage points).

Geography	Working Age (16-64) Employment Rate			Male Difference (%pt)
	Total	Female	Male	
Scotland	73.1%	70.2%	76.2%	6.0
Highlands and Islands	79.1%	75.3%	82.8%	7.5
<i>Highland</i>	81.1%	77.2%	85.0%	7.8

Source: Annual Population Survey.

Self-Employment

2.6 As with the regional trend, self-employment rates are high in Highland, exceeding the national average. As set out in Table 2.4, self-employment rates for men and women in Highland are in line with the regional average and higher than the national average. Across each of these geographies, self-employment is more common amongst men and the extent of the gender gap is similar (approximately 5 percentage points).

Geography	Self-Employment Rate (Dec 2015)			Male Difference (%pt)
	Total	Female	Male	
Scotland	7.9%	5.4%	10.5%	5.1
Highlands and Islands	9.9%	7.2%	12.6%	5.4
<i>Highland</i>	9.5%	7.0%	12.0%	5.0

Source: Annual Population Survey.

Employment by Work Pattern

2.7 The balance between full time and part time working in Highland (69% and 31% respectively) is broadly in line with the regional average, although the tendency for part time working in Highland is particularly high when compared to the national average (26%).

Geography	% of working age population in employment	
	Full Time	Part Time
Scotland	74%	26%
Highlands and Islands	71%	29%
<i>Highland</i>	69%	31%

Source: Annual Population Survey

2.8 Table 2.6 demonstrates that the proportion of men and, particularly, women in part time jobs is above the regional and national average but there are gender differences. A much higher proportion of men work full time than women (85% vs 52%), while a much higher proportion of women work part time (48% vs 15%). The extent of the gender gap in full time and part time working is similar to the regional average and greater than the national average.

Geography	% of working age males and females in employment working full and part time					
	Full Time			Part Time		
	Female	Male	Total	Female	Male	Total
Scotland	59%	88%	74%	41%	12%	26%
Highlands and Islands	54%	87%	71%	46%	13%	29%
<i>Highland</i>	52%	85%	69%	48%	15%	31%

Source: Annual Population Survey

Unemployment

2.9 There is a gender gap in unemployment. The rate is higher for women than men (in line with regional patterns and in contrast to national trends). This reflects the particularly low unemployment rate for men which is below both the national and regional average. In contrast the unemployment rate for women is higher than the regional average and in line with the national average.

Geography	Total	Female	Male
Scotland	5.9%	5.1%	6.7%
Highlands and Islands	3.8%	4.2%	3.4%
<i>Highland</i>	3.6%	5.1%	2.2%

Source: Annual Population Survey.

Inactivity

2.10 The level of economic inactivity in Highland is below both the national and regional averages, and this is the case for both men and women. While there are higher levels of inactivity amongst women, the extent of the gender difference (5.7 percentage points) is lower than the regional and national average (7.1 and 7.6 percentage points respectively).

Geography	Working Age Population Inactivity Rate			Female Difference (%pt)
	Total	Female	Male	
Scotland	22.3%	26.0%	18.4%	7.6
Highlands and Islands	17.8%	21.4%	14.3%	7.1
<i>Highland</i>	15.9%	18.7%	13.0%	5.7

Source: Annual Population Survey.

2.11 The most common reasons for being inactive in Highland are being long term sick (25.9%), followed by looking after family (21.7%), being retired (18.1%), or a student (16.5%). The proportions who are long term sick or retired is in line with the regional average, while the proportion who are looking after family is higher (21.7% compared to 19.1%) and those who are students is lower (16.5% compared to 22.0%).

2.12 In terms of differences by gender, in line with regional and national trends, men are more likely to be inactive due to long term sickness (36.3%) and being a student (19.0%), while women are more likely to be inactive due to family commitments (29.4%). The latter is slightly higher than the regional average (27.9%).

Average Earnings

2.13 As with most local authority areas in the Highlands and Islands, average earnings in Highland are below the national average and this applies for both men and women. Average earnings for men

are higher than for women, and as with all local authority areas the extent of the gender pay gap is greater than the national average.

Table 2.9: Median Full Time Weekly Gross Earnings by Gender (Residence-Based) (2015)

Geography	Total	Female	Male	Male difference	Percentage Pay Gap
Scotland	£527	£474	£561	+£87	15%
<i>Highland</i>	<i>£489</i>	<i>£434</i>	<i>£530</i>	<i>+£96</i>	<i>18%</i>

Source: Annual Survey of Hours and Earnings.

The figures are based on median (rather than mean) earnings in line with Scottish Government's approach to measuring earnings. Median values provides a better indication of typical pay as they split the top 50 per cent from the bottom 50 per cent making it less likely for figures to be skewed by the relatively small number of very high earners.

Note figures are not available at the regional level.

Average Hours

2.14 Despite below average earnings, the average hours worked are marginally above the national average. Men tend to work longer hours than women (in line with national trends), although the difference in hours worked between men and women is not proportionate to the difference in earnings locally and nationally. For example, while women in Highland on average work 93% of the hours worked by men, average earnings for women equate to just 82% of average earnings for men, demonstrating the pay gap.

Table 2.10: Median Full Time Weekly Hours worked by Gender (Residence-Based) (2015)

Geography	Total	Female	Male	Male difference
Scotland	37.5	37	38.5	+1.5
<i>Highland</i>	<i>38</i>	<i>37</i>	<i>40</i>	<i>+3.0</i>

Source: Annual Survey of Hours and Earnings.

Note figures are not available at the regional level.

3 Skills and Education

Introduction

3.1 This section provides an overview of the qualification levels of the working age population and gender variations in Highland benchmarked against the regional and national average. It also presents headline information on the attainment and destination of school leavers and participation in Modern Apprenticeships and Further Education.

Skills of the Working Age Population

3.2 Mirroring region wide-trends, the working age population in Highland is less highly qualified when compared to the national average (Table 3.1). Overall, the proportion of the working age population that holds qualifications is slightly higher in Highland (92.2%) than nationally (91.0%), although a lower proportion hold qualifications at SQV Level 4 or above (38.7% compared to 42.5% nationally).

3.3 In contrast, and in line with the regional trend, Highland has higher proportions holding qualifications at SVQ Levels 3, 2 and 1 and trade apprenticeships than nationally.

Qualifications	Highland	Highlands and Islands	Scotland
SVQ 4 and above	38.7%	37.8%	42.5%
SVQ 3	17.0%	15.7%	14.5%
Trade Apprenticeships	5.6%	5.5%	4.4%
SVQ 2	16.0%	17.3%	14.4%
SVQ 1	10.2%	9.6%	9.2%
Other qualifications	4.7%	5.7%	5.9%
No qualifications	7.8%	8.4%	9.0%

Source: Annual Population Survey.

3.4 Skills levels and qualifications vary by gender. In line with regional and national patterns, the two greatest differences in Highland relate to higher level skills (at SVQ 4 and above) and Trade Apprenticeships. As illustrated in Table 3.2, while women are more likely hold higher level qualifications (44.0% vs 33.2% of men), a higher proportion of men have completed a Trade Apprenticeship (10.2% compared to 1.1%). The extent of the gender gap in Highland and the wider region is greatest in relation to SVQ Level 4, rather than apprenticeships as per the national profile. In the case of both qualifications, the gender gap is similar to the regional difference and greater than the national average.

Qualifications	Highland		Highlands and Islands		Scotland	
	Female	Male	Female	Male	Female	Male
SVQ 4 and above	44.0%	33.2%	43.7%	32.0%	45.3%	39.6%
SVQ 3	16.4%	17.7%	14.7%	16.6%	13.0%	16.1%
Trade Apprenticeships	1.1%	10.2%	0.9%	10.1%	1.1%	7.9%
SVQ 2	18.2%	13.9%	19.2%	15.5%	15.9%	12.8%
SVQ 1	9.4%	10.9%	9.9%	9.3%	9.8%	8.6%
Other qualifications	4.4%	5.1%	4.3%	7.0%	5.3%	6.4%
No qualifications	6.6%	9.0%	7.3%	9.4%	9.5%	8.5%

Source: Annual Population Survey.

Attainment and Destinations of School Leavers

3.5 The attainment levels of schools leavers in the Highlands and Islands are set out in Table 3.3. These are based on SCQF levels outlined in the Scottish Credit and Qualifications Framework (SCQF)⁹ which shows the equivalent levels of mainstream Scottish qualifications including Scottish Qualification Authority (SQA) qualifications, Higher Education Institution (HEI) qualifications, Scottish Vocational Qualifications (SVQs) and Modern Apprenticeships (MAs).

3.6 The patterns in school leaver attainment in Highland are similar to those across the Highlands and Islands and Scotland as a whole. Overall levels of attainment are similar, with 97% of school leavers having achieved qualifications at SCQF Level 3 or better.

Geography	Percentage of School Leavers by total qualifications achieved (+1 @SCQF...)					
	All Leavers	Level 3 or better	Level 4 or better	Level 5 or better	Level 6 or better	Level 7 or better
	Total	Total	Total	Total	Total	Total
Scotland	52,491	97.9	96.2	85.2	60.2	18.8
Highlands and Islands	5,284	97.0[^]	95.8[^]	86.4	60.2	19.6
<i>Highland</i>	<i>2,538</i>	<i>97.0</i>	<i>95.4</i>	<i>85.1</i>	<i>59.9</i>	<i>18.2</i>

Source: Scottish Government – Attainment and Leaver Destination Supplementary Data 14/15.
Please note, percentages for H&I are estimated based on the total leavers in each local authority.
[^] Please note, percentage calculated based on the total leaver population excluding local authorities where data has been suppressed for quality and disclosure reasons.

3.7 Attainment at Level 5 and above is higher amongst women than men. The gap increases for higher level qualifications and is broadly similar locally, regionally and nationally.

Geography	Percentage of School Leavers by total qualifications achieved (+1 @SCQF...)											
	All Leavers		Level 3 or better		Level 4 or better		Level 5 or better		Level 6 or better		Level 7 or better	
	F	M	F	M	F	M	F	M	F	M	F	M
Scotland	25,810	26,681	98.1	97.6	96.7	95.7	87.3	83.1	67.0	54.7	21.3	16.4

⁹ <http://www.scqf.org.uk/framework-diagram/Framework.htm>

Table 3.4: Attainment of School Leavers by Gender (2014/15)

Highland and Islands	2,509	2,775	97.3[^]	96.9[^]	96.4	95.4[^]	88.4	84.6	66.6	54.2	23.7	16.0
<i>Highland</i>	1,208	1,330	96.9	97.1	95.5	95.3	86.8	83.7	65.9	54.5	22.5	14.4

Source: Requested from the Scottish Government – Attainment and Leaver Destination Data 14/15.

Please note, percentages for H&I are estimated based on the total leavers in each local authority.

[^] Please note, percentage calculated based on the total leaver population excluding local authorities where data has been suppressed.

3.8 In terms of destinations, a higher proportion of school leavers in Highland progress to positive destinations (94.0%) than regionally (93.1%) or nationally (92.0%). The most common destinations are employment and Higher Education.

3.9 The proportion of leavers in Highland who enter employment (35.8%) is significantly above the national average (27.8%), and exceeds the regional average (34.5%). However, the proportion of leavers in Highland and across the region more widely who enter Higher Education (32.7% and 34.2% respectively) is below the national average (36.8%). There are also lower levels of progression into Further Education than nationally.

Table 3.5: Destination of School Leavers (2014/15)

Geography	Percentage of School Leavers by destination					
	Positive destinations	HE	FE	Training	Employment	Other
	Total	Total	Total	Total	Total	Total
Scotland	92.0	36.8	23.4	2.7	27.8	1.3
Highlands and Islands	93.1	34.2	20.8	1.6[^]	34.5	N/K
<i>Highland</i>	94.0	32.7	21.5	1.8	35.8	2.2

Source: Scottish Government – Attainment and Leaver Destination Supplementary Data 14/15.

Please note, percentages for H&I are estimated based on the total leavers in each local authority.

N/K - For 'other,' too much suppressed data for Orkney and Shetland to be able to calculate for H&I.

[^] Please note, percentage calculated based on the total leaver population excluding local authorities where data has been suppressed.

3.10 Across all geographies, women are more likely to enter a positive destination than men, although the gap is slightly narrower locally than regionally and nationally. As set out in Table 3.6, the actual destination of leavers also varies by gender, particularly with regards to leavers progressing to the two most common destinations: employment and Higher Education. While a much higher proportion of women enter HE than men (39.6% vs 26.4%), a much higher proportion of men enter employment (42.0% vs 28.9%).

3.11 The gender gap for these destinations is similar in Highland and the Highlands and Islands (approximately 13-14 percentage points in favour of women progressing to Higher Education, and 13-14 percentage points in favour of men progressing to employment). However, in both cases, the gap is greater than the national average (10 and 8 percentage points respectively).

Table 3.6: Destination of School Leavers by Gender (2014/15)

Geography	Percentage of School Leavers by destination											
	Positive destinations		HE		FE		Training		Employment		Other	
	F	M	F	M	F	M	F	M	F	M	F	M
Scotland	92.8	91.3	42.1	31.7	23.8	23.1	2.0	3.5	23.8	31.8	1.1	1.2
Highlands and Islands	93.7	92.6	41.4	27.6	22.5[^]	19.4	1.0[^]	2.2[^]	27.4	40.9	1.4	N/K
<i>Highland</i>	94.3	93.7	39.6	26.4	22.9	20.2	1.2	2.3	28.9	42.0	1.7	2.8

Table 3.6: Destination of School Leavers by Gender (2014/15)

Source: Requested from the Scottish Government – Attainment and Leaver Destination Data 14/15.
 Please note, percentages for H&I are estimated based on the total leavers in each local authority.
 N/K - For 'other' for males, too much suppressed data for Eilean Siar and Orkney to be able to calculate H&I.
 ^ Please note, percentage calculated based on the total leaver population excluding local authorities where data has been suppressed.

Modern Apprenticeships

3.12 As set out in the skills profile of the working age population, men are more likely to undertake an apprenticeship than women. In Highland, men account for 67% of MA starts which is in line with the regional average. As with most of the local authorities in the Highlands and Islands, this is a wider gender gap than nationally, where men account for 60% of all MA starts.

Table 3.7: Total MA Starts by Gender (2014/15)

Geography	Total	Female	Male
Scotland	25,245	40%	60%
Highlands and Islands	2,335	32%	68%
<i>Highland</i>	<i>1,270</i>	<i>33%</i>	<i>67%</i>

Source: Skills Development Scotland.

3.13 While data is not available at the local level on the types of apprenticeships that men and women undertake, the regional data presented in the main report shows that there are considerable differences in take up across sectors by gender. Both regionally and for Scotland, MA starts related to construction, engineering and energy, transport and logistics and automotive, are almost entirely men. Men also account for the majority (80-90%) of starts related to other services (including ICT professionals) and animal care, land and water.

3.14 In contrast, women are more highly represented in starts relating to sectors classed as lower value, including personal services (91%) and administration (84%); and to a lesser extent sport, health and social care (69%); hospitality and tourism (63%) and retail and customer services (63%).

3.15 The balance of men and women in the food and drink sector, although weighted towards men (63%), is largely in line with the gender profile of total MA starts.

Further Education

3.16 There were 21,057 students studying at Further education colleges in the Highlands and islands in 2014-15. As with the regional and national trend, women are marginally more likely to be at FE College in Highland than men.

Table 3.8: FE Provision (Headcount) by Gender (2014/15)

Geography	Total	Female	Male
Scotland	260,079	51%	49%
Highlands and Islands	21,057	51%	49%
<i>Highland</i>	<i>8,774</i>	<i>51%</i>	<i>49%</i>

Source: Scottish Funding Council.
 Please note, FE provision in Highland is via North Highland College, West Highland College, Inverness College and Sabhal Mor Ostaig.
 Highlands and Islands total includes those studying at Inverness College, Orkney College, Moray College, Shetland College, North Highland College, West Highland College, Argyll College, Lews Castle College and Sabhal Mor Ostaig.

3.17 As with MAs, take up of FE provision by sector varies significantly by gender at the regional level (local data is not available). The differences tend to be greatest in subjects dominated by men, suggesting that gender stereotyping remains most persistent in these subjects. In particular, men account for 94% of students studying engineering, and 93% in construction and nautical studies. Women are highly represented (although to a lesser extent) across a wider range of subjects. Focusing on those subjects where there is a high intake of above 500 students, women are highly represented on courses relating to hairdressing, beauty and complementary therapies (98%), languages (66%); care (62%); hospitality and tourism (60%); and computing and ICT (56%).

Higher Education

3.18 There is a range of Higher Education Institutions (HEIs) operating in the Highlands and Islands: the University of the Highlands and Islands (UHI) (the region's main university which is a federation of 13 colleges and research institutions), Stirling University's Inverness and Stornoway Campuses and research facility at Machrihanish (MERL), Heriot Watt's facility ICIT based in Stromness in Orkney, Aberdeen's Medical Training Centre and Cromarty Marine Lab, and Robert Gordon University Clinical Pharmacy Masters courses as well as the Glasgow School of Art which has established an outreach facility in Forres.

3.19 While data is not available on the number of students participating in HE in each local authority area, it is useful to consider the region-wide trends. Based on enrolments to UHI and Stirling University's Inverness and Stornoway Campuses, 8,499 students were participating in Higher Education in the Highlands of Islands in 2014-15. Women accounted for 59% of the total compared to 51% of the population. This reflects national trends where 58% of HE students are women.

3.20 As with MA and FE provision, there are significant differences in the take up of HE subjects by gender and the patterns in HE broadly reflect the subject patterns in FE and for MAs. The HE subjects that are dominated by men include engineering (92%); computer science (75%); architecture, building and planning (80%); and technologies (91%). HE subjects that are dominated by women include those allied to medicine (93%); social studies (88%) and education (76%).

4 Gender Representation in the Workforce

Introduction

4.1 This brief section sets out the overall representation of men and women in the workforce compared to the gender balance in the working age population. Importantly, the gender balance in employment provides benchmarks used in the subsequent chapters when examining segregation by level (vertical segregation) and by job type (horizontal segregation).

Workforce Representation

4.2 In order to measure horizontal and vertical segregation, it is important to understand the extent to which there is an imbalance in the overall workforce and what an equal workforce would look like. Gender equality in the workforce would be reflected by the gender split matching that of the working age population and resulting in equal employment rates at all levels and jobs types.

4.3 However, this is not the case, and there continues to be an imbalance in favour of men in Highland (who account for 53% of employment compared to 49% of the working age population). This is similar to the regional profile, where there is a slightly higher gender imbalance than nationally. As set out in the following chapters, this hides significant variances in the gender profile of different jobs types and levels.

Geography	Employment		Working Age Population	
	Female	Male	Female	Male
Scotland	49%	51%	51%	49%
Highlands and Islands	47%	53%	50%	50%
<i>Highland</i>	<i>47%</i>	<i>53%</i>	<i>51%</i>	<i>49%</i>

Source: Annual Population Survey and Mid-Year Population Estimates.

5 Vertical Segregation

Introduction

5.1 Vertical segregation is where men and women are distributed unequally at different levels/grades. For example, one gender may be more predominant at higher levels than the other. To understand the nature and extent of vertical segregation in Highland, the proportions of men and women in each of the standard occupational groups and the median weekly full time earnings for each group are analysed to provide a proxy for job level. The analysis allows us to identify trends in vertical segregation and provides an indication of the extent to which women continue to face a glass ceiling¹⁰.

5.2 The section begins with an overview of the occupational categories and then sets out analysis of how representation of men and women varies.

Occupational Categories and Job Levels

5.3 The standard occupational categories are set out in Table 5.1 ranked based on the national median weekly full time earnings (highest to lowest) for each group to provide an indication of the level of job. The occupational categories broadly fall into three pay bands (high, mid, and low), with the most senior positions falling within the highest pay band.

Table 5.1 Standard Occupational Group and Median Weekly Earnings		
Occupational Group	Coverage of Group	National Weekly Earnings*
Highest Pay Band		
Managers, directors and senior officials	<ul style="list-style-type: none"> • Corporate managers and directors • Other managers and directors (e.g. agriculture, health, hospitality, other services) 	£755
Professional	<ul style="list-style-type: none"> • Science, research, engineering and technology • Health • Teaching and educational professionals • Business, media and public service 	£678
Associate professional and technical	<ul style="list-style-type: none"> • Science, engineering and technology • Health and social care • Protective service • Culture, media and sports • Business and public service 	£575
Mid Pay Band		
Skilled trades	<ul style="list-style-type: none"> • Skilled agricultural and related • Skilled metal, electrical and electronics • Skilled construction and building • Textiles, printing and other skilled trades 	£495
Process, plant and machine operatives	<ul style="list-style-type: none"> • Process, plant and machine operatives • Transport and mobile machine drivers 	£466
Administrative and secretarial	<ul style="list-style-type: none"> • Administrative • Secretarial and related 	£405
Low Pay Band		
Caring, leisure and other service	<ul style="list-style-type: none"> • Caring personal service • Leisure, travel and related personal service 	£360

¹⁰ An invisible upper limit, above which it is difficult or impossible for women to rise in the ranks. "Glass ceiling" is a metaphor for the hard-to-see informal barriers that keep women from getting promotions, pay raises and further opportunities.

Elementary¹	<ul style="list-style-type: none"> • Elementary trades • Elementary administration and service 	£348
Sales and customer service	<ul style="list-style-type: none"> • Sales • Customer services 	£344
<p>Source: ONS Standard Occupational Classifications and Annual Survey of Hours and Earnings *Median, Full Time – note that equivalent data is not available for the Highlands and Islands due to small sample sizes ¹This major group covers occupations which require the knowledge and experience necessary to perform mostly routine tasks, often involving the use of simple hand-held tools and, in some cases, requiring a degree of physical effort. Most occupations in this major group do not require formal educational qualifications but will usually have an associated short period of formal experience-related training.</p>		

Vertical segregation in Highland

5.4 There is evidence of vertical segregation in the local, regional and national economies. Table 5.2 demonstrates that men are more highly represented than women in two of the three most senior and well paid occupational groups. In Highland, they account for 59% of managers, directors and senior officials and 60% of associate, professional and technical occupations. This suggests that women are facing a glass ceiling effect that is preventing them from entering and progressing into these higher level positions. Women are, however, more highly represented in professional posts, accounting for 55% of that occupational group.

Occupation	Highland		Highlands and Islands		Scotland		
	No.	% Females	% Males	% Females	% Males	% Females	% Males
Highest pay band							
Managers, directors and senior officials	9,100	41%	59%	36%	65%	37%	63%
Professional occupations	17,800	55%	45%	57%	43%	52%	48%
Associate professional and technical occupations	15,400	40%	60%	42%	58%	44%	56%
Mid pay band							
Skilled trades occupations	17,000	16%	84%	13%	87%	11%	89%
Process, plant and machine operatives	10,600	8%	92%	10%	90%	15%	85%
Administrative and secretarial occupations	16,700	79%	21%	80%	20%	78%	22%
Low Pay Band							
Caring, leisure and other service occupations	12,100	89%	11%	86%	14%	82%	18%
Elementary occupations	12,900	43%	57%	46%	54%	45%	55%
Sales and customer service occupations	11,100	47%	53%	59%	41%	62%	38%
Total	122,900	47%	53%	47%	53%	49%	51%
Source: Annual Population Survey. Figures may not sum due to rounding.							

5.5 There is an even greater representation of men in the two most highly paid occupational categories that fall within the mid pay band category. In Highland, men account for 84% of skilled trades occupations and 92% of process, plant and machine operatives. Conversely, women account for 79% of administrative and secretarial occupations which are typically lower paid. Women are also more highly represented in caring, leisure and other service occupations which fall within the lowest pay band, accounting for 89% of those working in the occupation. In the remaining low pay band occupations, there is an imbalance towards men, who account for 57% of elementary occupations and 53% of sales and customer occupations.

5.6 The pattern in Highland is similar to the regional and national pattern, with just one exception – sales and customer service occupations, where there are more men in the occupation than women in contrast to higher representation of women regionally and nationally.

5.7 The extent of the segregation across the remaining occupations does, however, vary.

5.8 The key points to note for Highland are:

- Highland has the lowest concentration of men in the most senior and well paid positions (managers, directors and senior officials) of the six local authority areas. It is one of two areas (with Eilean Siar), where men's share of these positions (59%) is lower than regionally (65%) and nationally (63%). Men do, however, continue to dominate these roles and there are higher

concentrations of men in associate professional and technical occupations (60%), than regionally (58%) and nationally (56%).

- As for all local authority areas in the region, the representation of women in professional occupations (55%) exceeds the national (52%) average, although, along with Orkney and Eilean Siar, Highland is one of the three local authority areas in the region where women's share of professional occupations is slightly lower than the regional average (57%).
- Across the mid and the low pay bands, the extent of the gender gap tends to be higher than the national average, with the exception of skilled trades (and sales and customer service occupation where patterns differ as mentioned above). The representation of men in process, plant and machine roles and of women in caring, leisure and other service occupations, is approximately 7 percentage points higher. There are also greater gaps of 1-2 percentage points for administrative and secretarial occupations (weighted towards women) and elementary occupations (weighted towards men).
- With the exception of administrative and secretarial occupations, the extent of the gender gap in these occupational groups is also 2-3 percentage points higher than the regional average.
- In particular, the high representation of women from Highland in caring, leisure and other service occupations (89%) drives the higher representation regionally (86% compared to 82% nationally). Highland has the largest number of people working in this occupational group and the representation of women is the highest of the local authority areas. It is the only area where it exceeds the regional average.
- In terms of skilled trade occupations, while the representation of men (84%) is below both the regional (87%) and national (89%) averages, men continue to dominate these professions.

6 Horizontal Segregation

Introduction

6.1 Horizontal segregation is the tendency for men and women to be distributed unequally in different types of jobs. For example, one gender may be more likely to work in a certain type of job than the other. In the regional report, this is explored by analysing the representation of men and women in each sector, and in the standard occupational groupings within each sector – two of the main factors that will influence the nature of jobs.

6.2 Based on the data that is available at the local authority level, this section focuses on the representation of men and women in each sector. The chapter begins by providing an overview of the scale and the nature of employment opportunities taken up by local residents.

The Employment Base

6.3 Highland is the largest local authority in employment terms, accounting for half of the total regional employment base.

Geography	Employment
Scotland	2,577,300
Highlands and Islands	244,300
Highland	122,900

Source: Annual Population Survey.

6.4 Table 6.2 shows employment by sector in Highland as well as how this compares to the representation nationally (as denoted by the location quotients¹¹). This begins to provide an overview of the types of jobs residents work in. Public administration, education and health is the largest employment sector (39,700 residents), followed by distribution, hotels and restaurants (24,000 residents). Collectively, these sectors account for 52% of the area's residents who are in employment.

6.5 Whilst reasonably small sectors in employment terms, agriculture and fishing and utilities are more highly represented in Highland, with employment levels at least one and a half times the national average. Employment levels in public administration, health and education; distribution, hotels and restaurants; transport and communications; and construction are in line with the national average and most other sectors are underrepresented. This includes financial, professional and business services in particular.

Sector	No.	%	LQ
Public admin. education and health	39,700	32%	1.03
Distribution, hotels and restaurants	24,000	20%	1.06
Financial, professional and business	14,900	12%	0.76
Manufacturing	9,700	8%	0.92
Transport and communications	9,500	8%	1.06
Construction	8,300	7%	1.00
Utilities	7,000	6%	1.56
Other services	6,600	5%	0.90
Agriculture and fishing	3,100	3%	1.66
Total	122,900	100%	1.00

¹¹ A LQ of one indicates that employment in the sector is equivalent to the national level, while a sector with a LQ of more than one denotes a high level of representation and specialisation. A LQ of less than one highlights that a sector is under-represented.

Table 6.2: Highland Employment by Sector (2015)

Source: Annual Population Survey

Horizontal Segregation in Highland

6.6 There is evidence of horizontal segregation in the local, regional and national economies, with clear differences in the types of jobs held by women and men. The extent of gender segregation varies significantly by job type and sector. It is important to note that the trends affect both genders. For example, while some sectors have a high representation of men, others have a high representation of women. This aligns with the findings of the Training and Employment Research Unit's (TERU) research on equalities in Growth Sectors¹².

6.7 As shown in Table 6.3, men in Highland are highly represented in five sectors (agriculture and fishing, manufacturing, and particularly; transport and communications; construction; and energy and water), accounting for between 55% and 96% of the workforce. In contrast, women are highly represented in three sectors (other services¹³; distribution, hotels and restaurants; and particularly public administration, education and health) accounting for between 55% and 71% of the workforce. There is a 50:50 gender split in financial, professional and business services.

Table 6.3: Employment gender split by sector, 2015

Sector	Highland			Highlands and Islands		Scotland	
	No. Employment	% Females	% Males	% Females	% Males	% Females	% Males
Public admin. education and health	39,700	71%	29%	71%	29%	71%	29%
Distribution, hotels and restaurants	24,000	57%	43%	58%	42%	53%	47%
Financial, professional and business services	14,900	50%	50%	48%	52%	47%	53%
Manufacturing	9,700	25%	75%	27%	73%	26%	74%
Transport and communications	9,500	8%	92%	14%	86%	22%	78%
Construction	8,300	*	94%	7%	93%	14%	86%
Energy and water	7,000	*	96%	3%	97%	19%	81%
Other services	6,600	55%	45%	56%	44%	56%	44%
Agriculture and fishing	3,100	45%	55%	24%	76%	20%	80%
Total	122,900	47%	53%	47%	53%	49%	51%

Source: Annual Population Survey. Figures may not sum due to rounding.

* Data not available due to sample sizes.

6.8 These local sectoral patterns generally reflect regional and national patterns, although the extent of the imbalances vary. In most cases, the extent of the imbalance is equal to or greater than the national

¹² <http://eprints.gla.ac.uk/113002/>

¹³ Includes activities of membership organisations; repairs of computers and personal and household goods; and other personal service activities such as dry cleaning, hairdressing and physical wellbeing activities

average and in some cases it exceeds the regional average. There are, however, also cases where the gender gaps are smaller.

6.9 In terms of sectors that are dominated by men:

- Manufacturing; construction; transport and communication; and energy and water have an even higher representation of men in Highland when compared to the national sector profile (at 1, 8, 14, and 15 percentage points higher than the national average respectively). With the exception of energy and water, the extent of the imbalance is also greater than the regional average. In particular, Highland has the highest representation of men in the transport and communications sector of the six local authorities.
- The extent of the imbalance towards men (55%) is much lower in agriculture and fishing than regionally (76%) and nationally (80%). Overall, Highland has the lowest representation of men in the agriculture and fishing sector of the six local authority areas and is the only area where this representation is below the regional average.

6.10 In terms of the sectors that are dominated by women:

- The imbalance in public administration, education and health in Highland is in line with the regional and national average.
- There is a greater imbalance (of 4 percentage points) towards women locally in the distribution, hotels and restaurants sector than nationally, although their share of the sector is slightly lower than the regional average.
- The representation of women in the other services sector is 1 percentage point lower than the regional and national average.

6.11 It should be noted that the sector trends only capture part of horizontal segregation in Highland. As set out in the regional report, there is further segregation within the sectors with clear patterns in terms of the types of jobs that men and women do (i.e. the occupations they work in within these sectors).

6.12 While this data is not available at the local level, the regional data shows that (in line with the findings in Section 5), men are more likely to work in skilled trade occupations and roles as process, plant and machine operatives, while women are more likely to work in administrative and secretarial, caring, teaching, sales and customer service roles. In many cases, these roles reflect traditional views of what is 'men's work' and what is 'women's work'.

6.13 These patterns are evident across all sectors (with the exception of sales and customer service roles in transport and storage; and financial, professional and business services, and also leisure and other service roles in transport and storage where men dominate these occupations rather than women).

6.14 Even within sectors with a high gender imbalance towards men or women, traditional occupational patterns persist. For example, where women work in sectors such as construction and manufacturing which are dominated by men, it is often in female gendered roles, such as administrative and sales positions and vice versa. There is also evidence of traditional occupational patterns in financial, professional and business services, despite the sector appearing more balanced in gender terms overall. In terms of the more senior occupational categories, overall, women work in a narrower range of senior positions, concentrated in the sectors where they are highly represented (e.g. public administration, education and health). They also continue to be underrepresented in the most senior positions, even in sectors where they make up the majority of the workforce, a further indication of the glass ceiling effect.

7 Key Messages

Occupational Segregation in Highland

7.1 There is evidence that occupational segregation exists in Highland and is at least as prominent in the local area as it is nationally. Men and women tend to be highly represented in different types of jobs and at different levels or grades. In some cases, the gender split is very significant.

7.2 Generally the nature of the segregation, in terms of the types and levels of jobs in which men and women from Highland is similar to the regional and national profiles (as with all local authority areas in the Highlands and Islands). Instead, it is the extent of the segregation which varies (on an occupation by occupation and sector by sector basis) within this region-wide pattern.

Vertical and Horizontal Segregation

7.3 As section 5 and 6 show, there is clear evidence of both vertical and horizontal segregation in Highland. Vertical segregation is evidenced by the fact that men are more likely than women to be in the most senior positions, and while it is less pronounced in Highland than in other parts of the region, it remains a pertinent issue.

7.4 Horizontal segregation is evidenced by men being more likely to work full time and work in sectors such as construction, manufacturing and transport, while women are more likely to work part time and work in education, health, retail and sectors associated with tourism, such as accommodation and food. Men are also more likely than women to be self-employed. In many cases, these patterns link with traditional views of what is 'men's work' and what is 'women's work'. The extent of horizontal segregation in Highland is typically in line with or above the national average. While there are cases where imbalances also exceed the regional average (notably transport and communications), there are also cases where the gender gaps are smaller than both the regional and national averages (including agriculture and fishing).

The Pay Gap and Underemployment

7.5 Occupational segregation affects both men and women. It is, however, recognised that it tends to be women who experience the negative consequences. This is demonstrated by one of the most widely recognised measures and tangible impacts of gender segregation – the gender pay gap.

7.6 On average, women earn less than men and although this is also a national issue, the gender pay gap is greater in Highland (and the region as a whole). The lower levels of pay amongst women are not only influenced by vertical segregation and the levels of jobs that women tend to work in, but also by horizontal segregation and the types of jobs they are employed in. This includes part time work as well as working in sectors and roles which are typically classed as lower value, and which are often undervalued, contributing to underemployment. This is in spite of women tending to be more highly skilled than men.

7.7 Underemployment (where an individual's skills are under-utilised in the workplace) is a major issue for women, manifesting itself in different ways and preventing women from reaching their full potential and delivering their maximum economic contribution.

Conclusions

7.8 Overall, the nature of occupational segregation in Highland is similar to the region as a whole and the national profile. In many sectors and occupations the imbalance is greater than the national average, although this is very common across the Highlands and Islands local authority areas. While there are also cases where the imbalance in Highland exceeds the regional average too, this also applies to some other local authority areas. This means that Highland does not stand out as an area that has a much greater issue of occupational segregation than other parts of the Highlands and Islands, or as an area that requires a specific intervention to tackle a specific issue that is not required elsewhere.

7.9 Both vertical and horizontal occupational segregation are pronounced across the Highlands and Islands and, if men's and women's contributions to growing the economy are to be maximised, initiatives must be implemented to tackle occupational segregation. The significant gender gaps show that further action is required in each area to achieve a greater gender balance in different types and levels of jobs.

7.10 As set out in the regional report, there is a need for a region-wide strategic approach to address segregation and this will require buy-in and involvement of partners in local areas. To be successful, all relevant players must take ownership of the issue and of being part of the solution. Also, in developing the actions flowing from this research, it may be that between areas, some interventions will differ in focus to reflect local circumstance, the profile of the business base and the particular workforce characteristics. Further details on the recommended approach are provided in Chapter 9 of the regional report.