

# OCCUPATIONAL SEGREGATION IN ORKNEY

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# 1 Occupational Segregation in Orkney

## 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 Orkney. 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.<sup>1</sup>

1.4 Occupational segregation affects both men and women and is an issue that impacts upon equality<sup>2</sup> and social cohesion as well as economic performance<sup>3</sup>. 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 Act<sup>4</sup> 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 Outcomes<sup>5</sup>. Research undertaken by Close the Gap on gender equality in pay suggests that equalising gender employment

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

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

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

<sup>4</sup> HM Government (1970) *Equal Pay Act*, Ch.41

<sup>5</sup> Scottish Government (2015) *Equality Outcomes and Mainstreaming Report 2015*

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

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 Orkney.

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<sup>6</sup> Close the Gap (2016) *Gender Equality Pays*

## 2 Population and the Labour Market

### Introduction

2.1 This section provides an overview of how Orkney 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, Orkney is the smallest local authority in the Highlands and Islands, accounting for 4% of the total population. There is a 50:50 split between men and women in the population, which largely aligns with the regional and national profile. Despite being the smallest authority, Orkney has experienced the joint strongest population growth of all local authority areas in the Highlands and Islands over the past ten years, in line with the Highland Council area. This has increased the scale of the workforce available to employers.

Geography	Population	Change since 2005
<b>Scotland</b>	<b>5,347,600</b>	<b>5%</b>
<b>Highlands and Islands</b>	<b>487,600</b>	<b>4%</b>
<i>Orkney</i>	<i>21,600</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 employment<sup>7</sup> or who are unemployed<sup>8</sup>, 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 Orkney (89.0%), the highest in the region (82.2%) and well above the national (77.7%) average. The employment rate is well above the national average, and it continues to be above other local authority areas and the regional average, reflecting low levels of inactivity.

Geography	Working Age Population (16-64)			
	Economically Active	Employment	Unemployment	Inactive
<b>Scotland</b>	<b>77.7%</b>	<b>73.1%</b>	<b>5.9%</b>	<b>22.3%</b>
<b>Highlands and Islands</b>	<b>82.2%</b>	<b>79.1%</b>	<b>3.8%</b>	<b>17.8%</b>
<i>Orkney</i>	<i>89.0%</i>	<i>86.8%</i>	<i>*</i>	<i>11.0%</i>

Source: Annual Population Survey.  
\* Denotes that data is unavailable due to small sample sizes.

<sup>7</sup> 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.

<sup>8</sup> 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 for both men and women, the employment rate in Orkney is significantly higher than the regional and national average, with the rate for women the highest of the six local authority areas within the Highlands and Islands. There is, however, evidence of gender segregation with higher levels of participation in employment amongst men. The extent of the segregation in Orkney is in line with the national average (6 percentage points) and slightly lower than the gap at the regional level (8 percentage points).

Table 2.3: Employment by Gender (Dec 2015)				
Geography	Working Age (16-64) Employment Rate			Male Difference (%pt)
	Total	Female	Male	
<b>Scotland</b>	<b>73.1%</b>	<b>70.2%</b>	<b>76.2%</b>	<b>6.0</b>
<b>Highlands and Islands</b>	<b>79.1%</b>	<b>75.3%</b>	<b>82.8%</b>	<b>7.5</b>
<i>Orkney</i>	<i>86.8%</i>	<i>83.9%</i>	<i>89.5%</i>	<i>5.6</i>

Source: Annual Population Survey.

## Self-Employment

2.6 Self-employment rates are particularly high in Orkney, they exceed the national average and are the highest in the region. As set out in Table 2.4, while self-employment rates for men and women in Orkney are both above the regional and national average, the rate is particularly high for men (17.0% of men are self-employed compared to 7.6% of women). As a result, Orkney has one of greatest gender gaps in self-employment (9.4 percentage points compared to 5.4 percentage points regionally and 5.1 nationally).

Table 2.4: Self Employment by Gender (Dec 2015) Working Age Population				
Geography	Self-Employment Rate (Dec 2015)			Male Difference (%pt)
	Total	Female	Male	
<b>Scotland</b>	<b>7.9%</b>	<b>5.4%</b>	<b>10.5%</b>	<b>5.1</b>
<b>Highlands and Islands</b>	<b>9.9%</b>	<b>7.2%</b>	<b>12.6%</b>	<b>5.4</b>
<i>Orkney</i>	<i>12.4%</i>	<i>7.6%</i>	<i>17.0%</i>	<i>9.4</i>

Source: Annual Population Survey.

## Employment by Work Pattern

2.7 The balance between full time and part time working in Orkney (70% and 30% respectively) is broadly in line with the regional average, although there is a higher tendency for part time working in the local authority area than nationally.

Table 2.5: Employment by Work Pattern (Dec 2015)		
Geography	% of working age population in employment	
	Full Time	Part Time
<b>Scotland</b>	<b>74%</b>	<b>26%</b>
<b>Highlands and Islands</b>	<b>71%</b>	<b>29%</b>
<i>Orkney</i>	<i>70%</i>	<i>30%</i>

Source: Annual Population Survey

2.8 Table 2.6 demonstrates that men are more likely to work full time than women, while women are more likely to hold part time positions than men. Orkney does, however, have the smallest gender gap across the local authority areas. This results from the proportion of women working full and part time aligning with the national rather than regional average and there being particularly high levels of men working part time – the proportion of men who work part time in Orkney is the highest of the six local authority areas.

Table 2.6: Employment by Work Pattern (Dec 2015)						
Geography	% of working age males and females in employment working full and part time					
	Full Time			Part Time		
	Female	Male	Total	Female	Male	Total
<b>Scotland</b>	<b>59%</b>	<b>88%</b>	<b>74%</b>	<b>41%</b>	<b>12%</b>	<b>26%</b>
<b>Highlands and Islands</b>	<b>54%</b>	<b>87%</b>	<b>71%</b>	<b>46%</b>	<b>13%</b>	<b>29%</b>
<i>Orkney</i>	<i>59%</i>	<i>78%</i>	<i>70%</i>	<i>41%</i>	<i>22%</i>	<i>30%</i>

Source: Annual Population Survey

## Unemployment

2.9 In terms of unemployment, the total rate, and rates for both men and women in Orkney are not disclosed due to small sample sizes, however these rates are likely to be low, and below the regional average, based on the high employment and low inactivity rates given at Table 2.2 for Orkney.

## Inactivity

2.10 Table 2.7 shows that the overall level of economic inactivity in Orkney is well below both the regional and national average. Similarly, the inactivity rates for both men and women are low and below the regional and national average, and the extent of the gender difference is also lower than the regional and national average, reflecting higher levels of female employment.

Table 2.7: Inactivity by Gender (Dec 2015)				
Geography	Working Age Population Inactivity Rate			Female Difference (%pts)
	Total	Female	Male	
<b>Scotland</b>	<b>22.3%</b>	<b>26.0%</b>	<b>18.4%</b>	<b>7.6</b>
<b>Highlands and Islands</b>	<b>17.8%</b>	<b>21.4%</b>	<b>14.3%</b>	<b>7.1</b>
<i>Orkney</i>	<i>11.0%</i>	<i>13.9%</i>	<i>8.3%</i>	<i>5.6</i>

Source: Annual Population Survey.

2.11 The most common reasons for being inactive in Orkney are due to looking after a family (26.1%), followed by being retired (20.7%) and long-term sickness (16.0%). The area has higher levels of inactivity due to looking after family than both the regional (19.1%) and national (19.5%) average.

2.12 In terms of differences by gender, men are more likely to be inactive due to being retired (43.5%), and the overall proportion of women who are inactive due to looking after a family (42.6%) is higher than the regional and national average (27.9% and 27.5% respectively).

## Average Earnings

2.13 As with most local authority areas in the Highlands and Islands, average earnings in Orkney are below the national average and this applies for women, while the average earnings for men are not disclosed.

<b>Table 2.8: Median Full Time Weekly Gross Earnings by Gender (Residence-Based) (2015)</b>					
<b>Geography</b>	<b>Total</b>	<b>Female</b>	<b>Male</b>	<b>Male difference</b>	<b>Percentage Pay Gap</b>
<b>Scotland</b>	<b>£527</b>	<b>£474</b>	<b>£561</b>	<b>+£87</b>	<b>15%</b>
<i>Orkney</i>	<i>£505</i>	<i>£448</i>	*	<i>n/a</i>	<i>n/a</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 provide 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.

\* Denotes that data is suppressed due to being statistically unreliable.

Note figures are not available at the regional level

## Average Hours

2.14 In line with having below average earnings, the average hours worked in Orkney are slightly below 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 larger than the gap at the national level.

<b>Table 2.9: Median Full Time Weekly Hours worked by Gender (Residence-Based) (2015)</b>				
<b>Geography</b>	<b>Total</b>	<b>Female</b>	<b>Male</b>	<b>Male difference</b>
<b>Scotland</b>	<b>37.5</b>	<b>37.0</b>	<b>38.5</b>	<b>+1.5</b>
<i>Orkney</i>	<i>37.2</i>	<i>35.5</i>	<i>38.4</i>	<i>+2.9</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 Orkney 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 Orkney is less highly qualified when compared to the national average (Table 3.1); although, overall, the proportion of the working age population that holds qualifications is higher in Orkney (95.2%) than regionally (91.6%) and nationally (91.0%).

3.3 In particular, a lower proportion than regionally and nationally hold qualifications at SVQ Level 3 or Level 4 and above. In contrast, a higher proportion hold qualifications at Level 2 (27.7% compared to 17.3% regionally and 14.4% nationally).

Qualifications	Orkney	Highlands and Islands	Scotland
SVQ 4 and above	35.6%	37.8%	42.5%
SVQ 3	11.8%	15.7%	14.5%
Trade Apprenticeships	4.8%	5.5%	4.4%
SVQ 2	27.7%	17.3%	14.4%
SVQ 1	8.1%	9.6%	9.2%
Other qualifications	7.2%	5.7%	5.9%
No qualifications	4.8%	8.4%	9.0%

Source: Annual Population Survey.

3.4 Skills levels and qualifications vary by gender. Broadly in line with regional and national patterns, and where data allows comparison, the two greatest differences in Orkney relate to higher level skills (at SVQ 4 and above) and those holding SVQ 2. As illustrated in Table 3.2, a higher proportion of women hold both of these qualification levels when compared to men.

3.5 The extent of the gender gap in Orkney is greatest in relation to SVQ 2, rather than Trade Apprenticeships and SVQ 4 and above as per the national and regional profiles. The gender gap in Orkney is smaller than the regional average and similar to the national average for SVQ 4 and above, and much greater than both regionally and nationally for SVQ 2.

Qualifications	Orkney		Highlands and Islands		Scotland	
	Female	Male	Female	Male	Female	Male
SVQ 4 and above	38.6%	33.0%	43.7%	32.0%	45.3%	39.6%
SVQ 3	9.2%	14.1%	14.7%	16.6%	13.0%	16.1%
Trade Apprenticeships	*	9.0%	0.9%	10.1%	1.1%	7.9%
SVQ 2	34.6%	21.5%	19.2%	15.5%	15.9%	12.8%
SVQ 1	13.9%	*	9.9%	9.3%	9.8%	8.6%
Other qualifications	*	11.3%	4.3%	7.0%	5.3%	6.4%
No qualifications	*	8.2%	7.3%	9.4%	9.5%	8.5%

Source: Annual Population Survey.  
\* Denotes that data is suppressed due to being statistically unreliable.

## Attainment and Destinations of School Leavers

3.6 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)<sup>9</sup> which shows the equivalent levels of mainstream Scottish qualifications including Scottish Qualifications Authority (SQA) qualifications, Higher Education Institution (HEI) qualifications, Scottish Vocational Qualifications (SVQs) and Modern Apprenticeships (MAs).

3.7 The patterns in school leaver attainment in Orkney are similar to those across the Highlands and Islands as a whole. Overall, the area outperforms the regional and national average in terms of high levels of attainment (Table 3.3), with 22.8% of school leavers having achieved qualifications at SCQF Level 7 or better, compared to 19.6% regionally and 18.8% nationally. In contrast, the area does, however, underperform slightly in terms of Level 6 upwards, when compared to the regional and national average.

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
<b>Scotland</b>	<b>52,491</b>	<b>97.9</b>	<b>96.2</b>	<b>85.2</b>	<b>60.2</b>	<b>18.8</b>
<b>Highlands and Islands</b>	<b>5,284</b>	<b>97.0<sup>^</sup></b>	<b>95.8<sup>^</sup></b>	<b>86.4</b>	<b>60.2</b>	<b>19.6</b>
<i>Orkney</i>	<i>241</i>	<i>*</i>	<i>*</i>	<i>90.5</i>	<i>58.5</i>	<i>22.8</i>

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

3.8 These comparative trends in attainment apply to both men and women within Orkney. However, as illustrated in Table 3.4, in line with the regional and national averages, attainment at all levels is higher amongst women than men. The gap increases for higher level qualifications and varies locally to regionally and nationally.

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

Table 3.4: Attainment of School Leavers by Gender (2014/15)												
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
<b>Scotland</b>	<b>25,810</b>	<b>26,681</b>	<b>98.1</b>	<b>97.6</b>	<b>96.7</b>	<b>95.7</b>	<b>87.3</b>	<b>83.1</b>	<b>67.0</b>	<b>54.7</b>	<b>21.3</b>	<b>16.4</b>
<b>Highlands and Islands</b>	<b>2,509</b>	<b>2,775</b>	<b>97.3<sup>^</sup></b>	<b>96.9<sup>^</sup></b>	<b>96.4</b>	<b>95.4<sup>^</sup></b>	<b>88.4</b>	<b>84.6</b>	<b>66.6</b>	<b>54.2</b>	<b>23.7</b>	<b>16.0</b>
<i>Orkney</i>	<i>103</i>	<i>138</i>	<i>98.1</i>	<i>*</i>	<i>96.1</i>	<i>*</i>	<i>91.3</i>	<i>89.9</i>	<i>71.8</i>	<i>48.6</i>	<i>23.3</i>	<i>22.5</i>

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

3.9 In terms of destinations, the proportion of school leavers progressing to positive destinations in Orkney (93.8%) is largely in line with the regional (93.1%) and national (92.0%) average. The most common destinations are Higher Education (HE) and employment.

3.10 In line with the regional trend, a lower proportion of leavers in Orkney enter Higher Education (34.2%) than nationally (36.8%), while the proportion who enter employment (33.8%) is significantly above the national average (27.8%). In contrast, there are marginally 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
<b>Scotland</b>	<b>92.0</b>	<b>36.8</b>	<b>23.4</b>	<b>2.7</b>	<b>27.8</b>	<b>1.3</b>
<b>Highlands and Islands</b>	<b>93.1</b>	<b>34.2</b>	<b>20.8</b>	<b>1.6<sup>^</sup></b>	<b>34.5</b>	<b>N/K</b>
<i>Orkney</i>	<i>93.8</i>	<i>34.2</i>	<i>22.9</i>	<i>*</i>	<i>33.8</i>	<i>N/K</i>

Source: Scottish Government – Attainment and Leaver Destination Supplementary Data 14/15.  
\* Information has been suppressed for quality and disclosure reasons.  
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 to be able to calculate for H&I.  
<sup>^</sup> Please note, percentage calculated based on the total leaver population excluding local authorities where data has been suppressed

3.11 Across all three geographies, women are more likely to enter a positive destination than men and the gap is larger 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: Higher Education and employment. While a much higher proportion of women in Orkney enter Higher Education than men (43.7% and 27.0%), a much higher proportion of men enter employment (39.4%).

3.12 The gender gap in favour of women progressing to Higher Education is larger in Orkney (approximately 16 percentage points) than the regional (14 percentage points) and national average (10 percentage points). However, the gender gap in favour of men entering employment in Orkney is similar to the regional average (13-14 percentage points), with both greater than the national average (8 percentage points).

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 <sup>^</sup>	19.4	1.0 <sup>^</sup>	2.2 <sup>^</sup>	27.4	40.9	1.4	N/K
Orkney	95.1	92.7	43.7	27.0	*	21.9	0	*	26.2	39.4	N/K	N/K

Source: Requested from the Scottish Government – Attainment and Leaver Destination Data 14/15.  
\* Information has been suppressed for quality and disclosure reasons.  
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 to be able to calculate H&I.  
<sup>^</sup> Please note, percentage calculated based on the total leaver population excluding local authorities where data has been suppressed

## Modern Apprenticeships

3.13 As set out in the skills profile of the working age population, men are more likely to undertake a trade apprenticeship than women in the Highlands and Islands and Scotland as a whole. In terms of modern apprenticeships, in Orkney, men account for almost three quarters of starts which is well above the regional and national average, although this is from a very low base (65). This is one of the largest gender gaps of the local authorities in the Highlands and Islands, with men accounting for 68% of all apprenticeship starts across the region.

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%
Orkney	65	26%	74%

Source: Skills Development Scotland.

3.14 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.

3.15 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%).

3.16 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

3.17 There were 21,057 students studying at Further Education (FE) colleges in the Highlands and Islands in 2014/15. There is a higher representation of women studying FE at Orkney College, than across all FE colleges in the Highlands and Islands and nationally where there is a slightly more even balance.

<b>Table 3.8: FE Provision (Headcount) by Gender (2014/15)</b>			
<b>Geography</b>	<b>Total</b>	<b>Female</b>	<b>Male</b>
<b>Scotland</b>	<b>260,079</b>	<b>51%</b>	<b>49%</b>
<b>Highlands and Islands</b>	<b>21,057</b>	<b>51%</b>	<b>49%</b>
<i>Orkney</i>	<i>3,644</i>	<i>54%</i>	<i>46%</i>

Source: Scottish Funding Council.  
Please note, FE provision in Orkney is via Orkney College.  
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.

3.18 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

3.19 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.

3.20 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.

3.21 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 In Orkney there continues to be a gender imbalance in favour of men in the workforce, with men accounting for 54% of employment compared to 50% of the working age population. This is slightly greater than the gap regionally and nationally.

Geography	Employment		Working Age Population	
	Female	Male	Female	Male
<b>Scotland</b>	<b>49%</b>	<b>51%</b>	<b>51%</b>	<b>49%</b>
<b>Highlands and Islands</b>	<b>47%</b>	<b>53%</b>	<b>50%</b>	<b>50%</b>
<i>Orkney</i>	<i>46%</i>	<i>54%</i>	<i>50%</i>	<i>50%</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. To understand the nature and extent of vertical segregation, 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 ceiling<sup>10</sup>.

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 ranked based on the national median weekly full time earnings (highest to lowest) for each group (Table 5.1). The occupational categories broadly fall into three pay bands (high, mid, and low), with the most senior positions within the highest pay band.

Table 5.1 Standard Occupational Group and Median Weekly Earnings		
Occupational Group	Coverage of Group	National Weekly Earnings*
<b>Highest Pay Band</b>		
Managers, directors and senior officials	<ul style="list-style-type: none"> <li>Corporate managers and directors</li> <li>Other managers and directors (e.g. agriculture, health, hospitality, other services)</li> </ul>	£755
Professional	<ul style="list-style-type: none"> <li>Science, research, engineering and technology</li> <li>Health</li> <li>Teaching and educational professionals</li> <li>Business, media and public service</li> </ul>	£678
Associate professional and technical	<ul style="list-style-type: none"> <li>Science, engineering and technology</li> <li>Health and social care</li> <li>Protective service</li> <li>Culture, media and sports</li> <li>Business and public service</li> </ul>	£575
<b>Mid Pay Band</b>		
Skilled trades	<ul style="list-style-type: none"> <li>Skilled agricultural and related</li> <li>Skilled metal, electrical and electronics</li> <li>Skilled construction and building</li> <li>Textiles, printing and other skilled trades</li> </ul>	£495
Process, plant and machine operatives	<ul style="list-style-type: none"> <li>Process, plant and machine operatives</li> <li>Transport and mobile machine drivers</li> </ul>	£466
Administrative and secretarial	<ul style="list-style-type: none"> <li>Administrative</li> <li>Secretarial and related</li> </ul>	£405
<b>Low Pay Band</b>		
Caring, leisure and other service	<ul style="list-style-type: none"> <li>Caring personal service</li> <li>Leisure, travel and related personal service</li> </ul>	£360
Elementary <sup>1</sup>	<ul style="list-style-type: none"> <li>Elementary trades</li> <li>Elementary administration and service</li> </ul>	£348
Sales and customer service	<ul style="list-style-type: none"> <li>Sales</li> <li>Customer services</li> </ul>	£344
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 <sup>1</sup> This 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.		

<sup>10</sup> 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.

## Vertical Segregation in Orkney

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 the most senior and well paid occupational group. In Orkney, they account for 77% of managers, directors and senior officials. While data is not available on the gender split in associate, professional and technical occupations, the regional and national data shows that men are also highly represented in this group. 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, highly represented in professional posts, accounting for 55% of that occupational group.

Table 5.2: Employment gender split by occupation, 2015							
Occupation	Orkney			Highlands and Islands		Scotland	
	No.	% Females	% Males	% Females	% Males	% Females	% Males
<b>Highest pay band</b>							
Managers, directors and senior officials	1,300	*	77%	36%	65%	37%	63%
Professional occupations	1,100	55%	*	57%	43%	52%	48%
Associate professional and technical occupations	1,500	*	*	42%	58%	44%	56%
<b>Mid pay band</b>							
Skilled trades occupations	1,500	*	93%	13%	87%	11%	89%
Process, plant and machine operatives	1,300	*	92%	10%	90%	15%	85%
Administrative and secretarial occupations	1,300	85%	*	80%	20%	78%	22%
<b>Low Pay Band</b>							
Caring, leisure and other service occupations	1,100	73%	*	86%	14%	82%	18%
Elementary occupations	2,000	50%	50%	46%	54%	45%	55%
Sales and customer service occupations	800	*	*	59%	41%	62%	38%
<b>Total</b>	<b>12,100</b>	<b>46%</b>	<b>54%</b>	<b>47%</b>	<b>53%</b>	<b>49%</b>	<b>51%</b>
Source: Annual Population Survey. Figures may not sum due to rounding. * Data not available due to sample sizes.							

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 Orkney, men account for 93% of skilled trades occupations and 92% of process, plant and machine operatives. Conversely, women account for 85% of administrative and secretarial occupations which are typically lower paid. Women are also more highly represented in one of the lowest paid occupational groups - caring, leisure and other service occupations – accounting for 73% of those working in these roles. There is an even gender split in elementary occupations.

5.6 The pattern in Orkney is similar to the regional and national pattern, with the exception of elementary occupations (which has an even gender split compacted to being slightly weighted towards men regionally and nationally). The extent of the gender imbalance does, however, vary. The key points to note are:



- Orkney is one of four local authority areas<sup>11</sup> where vertical segregation is most pronounced. Men account for an even higher share of the most senior and highly paid roles as managers, directors and senior officials (77%) than both the regional (65%) and national (63%) averages. In particular, Orkney has the highest representation of men in these positions of the six local authority areas.
- 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 Highland and Eilean Siar, Orkney is one of the three local authority areas where women's share of professional occupations is slightly lower than the regional average (57%).
- Across the mid pay band, the extent of the gender gap is greater than both the regional and national average for all three occupational groups. Specifically, men account for an even higher share of skilled trade occupations in Orkney (93% compared to 87% regionally and 89% nationally) and process, plant and machine operatives (92% compared to 90% regionally and 85% nationally).
- Orkney also has the highest representation of women in administrative and secretarial occupations within the region (85% versus 80% regionally and 78% nationally).
- In the lowest pay band, the representation of women in caring, leisure and other services is slightly lower than the regional and national average (73% compared to 86% and 82% respectively), although women continue to dominate these occupations.

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<sup>11</sup> There is evidence that vertical segregation is most pronounced in Orkney, Shetland, Moray, and Argyll and Bute

## 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 In Orkney, approximately 12,100 residents are in employment, 5% of the regional workforce.

Geography	Employment
<b>Scotland</b>	<b>2,577,300</b>
<b>Highlands and Islands</b>	<b>244,300</b>
<i>Orkney</i>	<i>12,100</i>

Source: Annual Population Survey

6.4 Table 6.2 shows employment by sector in Orkney as well as how this compares to the representation nationally (as denoted by the location quotients<sup>12</sup>). This begins to provide an overview of the types of jobs residents work in. Public administration, education and health is the largest employment sector (3,200 residents), followed by distribution, hotels and restaurants (2,300 residents). Collectively, these sectors account for 45% of the area's residents who are in employment.

6.5 Whilst a relatively small sector in employment terms, employment levels in agriculture and fishing in Orkney are over five times the national average. Transport and communications, construction, manufacturing and other services<sup>13</sup> are also more highly represented. Employment levels in distribution, hotels and restaurants are in line with the national average, while public administration, education and health; and financial, professional and business services are underrepresented.

Sector	No.	%	LQ
Public admin. education and health	3,200	26%	0.84
Distribution, hotels and restaurants	2,300	19%	1.03
Manufacturing	1,200	10%	1.16
Transport and communications	1,100	9%	1.25
Agriculture and fishing	1,000	8%	5.43
Construction	1,000	8%	1.22
Other services	800	7%	1.11
Financial, professional and business	800	7%	0.42
Utilities	*	*	*
<b>Total</b>	<b>12,100</b>	<b>100%</b>	<b>1.0</b>

Source: Annual Population Survey.  
\* Data not available due to sample sizes.

<sup>12</sup> 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.

<sup>13</sup> 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

## Horizontal Segregation in Orkney

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 Sectors<sup>14</sup>.

6.7 As shown in Table 6.3, men are highly represented in four sectors in Orkney<sup>15</sup> (manufacturing; transport and communications, and particularly, agriculture and fishing; and construction), accounting for between 75 and 90 percent of those working in these sectors. In contrast, women are highly represented in two sectors (distribution, hotels and restaurants; and particularly public administration, education and health) accounting for between 57% and 81% of those working in the sector.

Sector	Orkney			Highlands and Islands		Scotland	
	No. Employment	% Females	% Males	% Females	% Males	% Females	% Males
Public admin. education and health	3,200	81%	19%	71%	29%	71%	29%
Distribution, hotels and restaurants	2,300	57%	43%	58%	42%	53%	47%
Manufacturing	1,200	*	75%	27%	73%	26%	74%
Transport and communications	1,100	*	82%	14%	86%	22%	78%
Agriculture and fishing	1,000	*	90%	24%	76%	20%	80%
Construction	1,000	*	90%	7%	93%	14%	86%
Other services	800	*	*	56%	44%	56%	44%
Financial, professional and business services	800	*	*	48%	52%	47%	53%
Energy and water	*	*	*	3%	97%	19%	81%
<b>Total</b>	<b>12,100</b>	<b>46%</b>	<b>54%</b>	<b>47%</b>	<b>53%</b>	<b>49%</b>	<b>51%</b>

Source: Annual Population Survey, 2015 (Resident-based). 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 sectoral imbalances in Orkney vary when compared to the regional and/or national average. In all cases (where data is available) the extent of the imbalance is above the national average. In some cases, it is also greater than the regional average.

6.9 In terms of sectors that are dominated by men:

- Manufacturing; transport and communications; construction; and agriculture and fishing have an even higher representation of men in Orkney when compared with the national sector profile (at 1, 4, 4 and 10 percentage points higher respectively). In the case of manufacturing

<sup>14</sup> <http://eprints.gla.ac.uk/113002/>

<sup>15</sup> For which data is available. Note that data is missing for energy and water which is typically dominated by men, and other services which is typically dominated by women. Data is also missing for financial, professional and business services which is typically more balanced in gender terms.

and agriculture and fishing, the extent of the imbalance is also greater than the regional average. In particular, Orkney, along with Argyll and Bute, has the highest representation of men in agriculture and fishing of the six local authorities.

6.10 In terms of sectors that are dominated by women:

- Orkney has the highest representation of women in public administration, education and health of the six local authority areas. Women's share of the sector exceeds both the regional and national average by 10 percentage points.
- There is a greater imbalance towards women locally in the distribution, hotels and restaurants sector than nationally (by 4 percentage points). Women's share of the sector is, however, slightly lower (by 1 percentage point) than the regional average.

6.11 It should be noted that the sector trends only capture part of horizontal segregation in Orkney. 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 Chapter 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 communications; and financial, professional and business services, and also leisure and other service roles in transport and communications 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.

6.15 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 Orkney

7.1 There is evidence that occupational segregation exists in Orkney 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 Orkney work 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 Orkney. Vertical segregation is evidenced by the fact that men are more likely than women to be in the most senior positions, and Orkney is one of four local authority areas<sup>16</sup> in the Highlands and Islands where this is most pronounced.

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 Orkney typically exceeds the national average, and there are some cases where imbalances also exceed the regional average (manufacturing and agriculture and fishing which are weighted towards men, and public administration, education and health where the level of representation of women is the highest across the region).

### 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 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.

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<sup>16</sup> The other local authority areas are Moray, Shetland, and Argyll and Bute.

## Conclusions

7.8 Overall, the nature of occupational segregation in Orkney is similar to the region as a whole and the national profile. In the majority of 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 Orkney exceeds the regional average too, this also applies to some other local authority areas. This means that Orkney 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.