

**Occupational Patterns for
Employed New Zealand Women**
An analysis of the 2001 Census data

A report prepared for the
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1. Introduction

This report looks at occupational patterns for employed New Zealand women, using 2001 Census of Population and Dwellings data (2001 Census). One of the major features the report looks at is the pattern of employment known as occupational segregation by gender. This refers to women and men typically not working in the same occupations and the majority of women working in quite different jobs from the majority of men.

Earlier census data show that in New Zealand, as in other similar countries, women have tended to be employed in occupations where the majority of employees are women. Similarly, men have tended to be employed in occupations where the majority of employees are men. Women have also tended to work in a narrower range of occupations than men do.

This pattern of occupational segregation by gender is a long-standing feature of the labour market. As a major study by the International Labour Organisation (ILO) shows, it continues to be “extensive in each and every country”.¹

Equity considerations

From an equity point of view, the major feature of occupational segregation internationally is that it has different implications for women and men in general and for women and men of different ethnicities. Three aspects of occupational segregation by gender are markedly more detrimental for women than for men:

- “Female” occupations tend to be less valued, with lower pay, lower status and fewer advancement possibilities than “male” occupations.
- Segregation may occur as a result of women’s labour market choices and opportunities being more limited than men’s
- The main occupations for female workers have characteristics highly consistent with female stereotypes and, in practice, are linked with lower skill recognition, fewer opportunities for advancement, and lower pay.²

In this report’s description of occupational segregation in the New Zealand labour market, these points are relevant to the kinds of occupations in which women, particularly Māori and Pacific women, are concentrated.

Categorising occupations

Information on occupations is collected in the census and categorised using the New Zealand Standard Classification of Occupations 1999 (NZSCO99), which is based on the International Standard Classification of Occupations (ISCO-88). Jobs are assigned to occupation categories numbered with five digits. This level of categorisation, known as the 5-digit level, gives a total of 565 occupations.

1 Richard Anker (1998), *Gender and jobs: sex segregation of occupations in the world*. Geneva: International Labour Organisation, p.407.

2 Ibid p.403. However, Anker points out the inconsistent nature of such stereotyped linkages; for example, the attribution of better manual dexterity to women has not led to them dominating high-status occupations such as brain surgeon.

These occupations are then grouped into successively larger categories: unit groups (4-digit level); minor groups (3-digit level); sub-major groups (2-digit level); and finally nine major groups (1-digit level). For example, the major group of Clerks contains 25 different clerical occupations at the 5-digit level, including typist and word processor operator and human resources clerk.

The nine major groups are: Legislators, Administrators and Managers (1); Professionals (2); Technicians and Associate Professionals (3); Clerks (4); Service and Sales Workers (5); Agriculture and Fishery Workers (6); Trades Workers (7); Plant and Machine Operators and Assemblers (8); and Elementary Workers (9). A tenth group contains responses classified as “not adequately defined”, that is, where insufficient or unclear information was provided.

The level of occupational categorisation chosen for analysis has a significant effect on the level of occupational segregation by gender observed in a country, because aggregation brings together male and female dominated occupations. “The more disaggregated occupational data are, the more sex segregation will be observed ... [One-digit level data] are found to hide a large proportion of the existing sex segregation of occupations.”³

Using recently available data from the 2001 Census, this report is able to focus on 5-digit level data to explore patterns of occupation, gender and ethnicity. It looks at:

- the proportions of women in the workforce, as a whole, within occupational groups and within occupations
- the proportions of women within the various occupations, and in terms of full-time and part-time employment, in the most common occupations for women, as compared with men
- differing occupational patterns among women who are European, Māori, Pacific, or of other ethnicities,⁴ compared with one another and with the corresponding groups of men.

The report discusses issues in relation to occupational patterns and occupational segregation, including low pay, skill classification, part-time work, and labour market efficiency.

2. Occupational patterns in the workforce

What proportion of the workforce is female?

The 2001 Census showed 1,809,954 employed persons aged 15 years and over. New Zealand Europeans made up 80% of the workforce,⁵ Māori 10%, Asians 5%, Pacific peoples 4%, and others less than 1%.

³ Ibid pp.405-6.

⁴ The group defined as “other” in this report includes women and men defined in the Census as “Asian” (5% of the workforce) and those defined as “other” – that is, those not fitting into any of the other four groups (less than 1%).

Overall, women were 46.9% of the workforce. The proportion of women in the workforce remains almost the same when the workforce is disaggregated into ethnic groups.

What are the most common occupations for women?

At the 1-digit level, women are heavily clustered in three occupational groups: Clerks; Service and Sales Workers; and Professionals (Table 1). Together these three groups employ 49% of the female workforce.

Table 1: Distribution of Female Workforce across Major Occupational Groups (2001)

Occupational group (1-digit level)	Percentage of female workforce in occupational group				
	Total (%)	European (%)	Māori (%)	Pacific (%)	Other (%)
Legislators, Administrators and Managers	11	11	7	5	10
Professionals	16	17	12	9	17
Technicians and Associate Professionals	12	13	11	10	9
Clerks	21	22	18	21	18
Service and Sales	20	19	22	20	21
Agriculture and Fishery	5	6	5	2	2
Trades Workers	1	1	1	1	1
Plant/Machine Operators/Assemblers	4	3	6	9	6
Elementary Workers	5	4	9	11	4
Not Adequately Defined	5	4	8	12	10
Total	100	100	100	100	100

However, the 5-digit level gives a more detailed picture. Table 2 shows the 10 most common occupations for employed women in 2001.

In 2001, nine of the 10 most common occupations for women were the same as they were in 1991. The only new occupation since 1991 is care giver. Bank officer is no longer one of the top 10.

The order of the top 10 occupations has also altered little since 1991. The top three in 2001 – sales assistant, general clerk and secretary – remain in the same order as they were in 1991. However, accounts clerk now comes ninth, down from fourth in 1991. Cleaner has moved from sixth to fifth place. The new occupation, care giver, is now the sixth most common occupation for women.

5 The term “workforce” includes all those currently employed.

Table 2: Ten Most Common Occupations for Women (2001)

Occupation (5-digit level)	Percentage of female workforce in occupation (%)	Gender composition of occupation (% female)
Sales Assistant (n=56,682)	6.7	62
General Clerk	5.7	83
Secretary	3.1	97
Registered Nurse	2.9	94
Primary School Teacher	2.8	84
Cleaner	2.8	69
Care Giver	2.6	92
Information Clerk and Other Receptionist	2.6	90
Accounts Clerk	1.8	89
Retail Manager (n=14,130)	1.7	47
	Cumulative Total=32.7%	

Altogether, the top 10 occupations employ 32.7% of all women in the workforce. Just 22 occupations, including these top 10 occupations, employ 50% of all women in the workforce (Table 3).

Table 3: Occupational Distribution of the Female Workforce (2001)

Cumulative % of the workforce	Number of Occupations				
	Total females	European females	Māori females	Pacific females	Other females
25	6	6	5	4	4
50	22	22	21	17	18
67	43	43	42	32	36
75	62	62	57	45	52

Measuring the extent of occupational segregation

To explore the degree of concentration in typical occupations, the proportion of particular groups in different occupations or groups of occupations must be looked at. To do this, it is necessary to define a measure of “domination” by men or women in an occupation or occupational group. One widely used measure is to take the overall percentages of women and men in the employed workforce and multiply these by 1.5.⁶

6 See Lesley Haines and Belinda Hill (1991), *Occupational segregation in New Zealand*. Draft report for the Ministry of Women’s Affairs (typescript, 39 pages). This report gives an overview of how gender dominance of occupations was measured by previous researchers to show the rationale for deciding on the multiplier of 1.5 times the proportion of women in the employed workforce. A later report for the Ministry of Women’s Affairs focused on changes in occupational segregation from 1981 to 1996, as measured by various indices based on “the proportion of females which, together with an equal number of males, is

The 2001 Census showed that 46.9% of all people in employment were women. Therefore, any occupation in which 70% or more of those employed were women will be defined as “female dominated”. Likewise, because 53.1% of all those in employment were men, any occupation in which 80% or more of employees were men will be defined as “male dominated”.⁷

Which occupations are female dominated?

Among the nine major occupational groups, only Group 4, Clerks, appears to have a high enough percentage of women to be categorised as female dominated: 78% of those employed in this group are women (Table 4). This group employs 21% of women, so at the 1-digit level, only about one in five employed women appears to work in a female dominated occupational group.

Table 4: Gender Composition of Occupational Groups (2001)

Occupational groups (1-digit level)	Total workforce (% female)	European workforce (% female)	Māori workforce (% female)	Pacific workforce (% female)	Other workforce (% female)
Legislators, Administrators and Managers	40	39	49	45	38
Professionals	56	56	63	62	48
Technicians and Associate Professionals	52	51	59	57	46
Clerks	78	80	76	67	71
Service and Sales	65	66	66	63	55
Agriculture and Fishery	32	32	30	27	39
Trades Workers	6	5	7	9	12
Plant/Machine Operators/Assemblers	20	19	20	26	40
Elementary Workers	39	38	42	43	44
Not Adequately Defined	20	42	24	28	45

required to change occupations in order to make occupational distribution the same across the sexes, without altering the overall occupational structure of the labour force” (Jane Barnett and Phil Briggs (1998), *Occupational sex segregation: a New Zealand investigation*. Report for the Ministry of Women’s Affairs, Wellington: New Zealand Institute of Economic Research, p.2).

7 The actual percentages are 70.3% and 79.6%, but these have been rounded to 70% and 80% in this report. In 1991, because only 43.2% of those employed were female, an occupation had to have women making up only 64.8% of those employed in it to be classified as female dominated. For male dominated occupations, the proportion was 86.7%.

However, analysis at the 5-digit level shows that a total of 51 occupations can be defined as female dominated. Overall, 47% of women in the workforce are employed in these female dominated occupations. Only 4.4% of men in the workforce are employed in them.

Most common occupations for women

Among the 10 most common occupations for women, seven are female dominated (Table 5). Fourteen of the 22 occupations that together employ 50% of women are female dominated.

Two occupations in the Sales group – sales assistant and retail manager – are among the 10 most common occupations for both women and men. Sales assistant is now the most common occupation both for women, employing 6.7% of the female workforce, and for men, employing 3.5% of the male workforce, so this occupation is not defined as female dominated. Nevertheless, women are still in the majority, making up 62% of sales assistants.

Retail manager is the tenth most common occupation for women (employing 1.7%), but it is also the seventh most common occupation for men (1.7%). Women make up 47% of retail managers, matching the proportion of women in the workforce.

Table 5: Gender Composition of the 10 most Common Occupations for Women (2001)

Occupation (5-digit level)	Gender composition of occupation (% female)
Sales Assistant	62
General Clerk	83
Secretary	97
Registered Nurse	94
Primary School Teacher	84
Cleaner	69
Care Giver	92
Information Clerk and Other Receptionist	90
Accounts Clerk	89
Retail Manager	47

Heavily female dominated occupations

Some occupations employ, or have employed historically, almost exclusively women. Taking 90% female as the measure of a "heavily female dominated" occupation, at the 2001 Census there were 29 such occupations. These occupations employ 19.2% of the female workforce.

Many of these heavily female dominated occupations involve various forms of care for other people: half (15) provide health-related services, and four provide education and/or care for children. They include four of the top 10 occupations for women: secretary (97% female); registered nurse (94% female); care giver (92% female); and information clerk and other receptionist (90% female).

What are the most common occupations for men?

The picture for men is very different from that for women. Not only do men tend to work in a different range of occupations; as a group they are spread much more evenly across the nine major occupational groups, and across a wider range of occupations, than women are (Tables 6 and 7).

Only two of the top 10 occupations for men, sales assistant and retail manager, also appear among the top 10 occupations for women. Between them, the top 10 occupations for men employ only 21.1% of all employed men. A total of 39 occupations employ 50% of all men in the workforce (Table 8).

Table 6: Distribution of Male Workforce Across Major Occupational Groups (2001)

Occupational group (1-digit level)	Percentage of male workforce in each occupational group				
	Total (%)	European (%)	Māori (%)	Pacific (%)	Other (%)
Legislators, Administrators and Managers	14	15	7	5	15
Professionals	11	12	6	5	16
Technicians and Associate Professionals	10	11	7	6	10
Clerks	5	5	5	9	7
Service and Sales	9	9	10	10	16
Agriculture and Fishery	10	11	11	4	3
Trades Workers	15	16	12	13	9
Plant/Machine Operators/Assemblers	13	11	23	23	8
Elementary Workers	7	6	11	13	5
Not Adequately Defined	6	4	8	13	11
Total	100	100	100	100	100

Table 7: Ten Most Common Occupations for Men (2001)

Occupation (5-digit level)	Proportion of male workforce in occupation (%)	Gender composition of occupation (% male)
Sales Assistant (n=34,116)	3.5	38
General Manager	3.3	72
Heavy Truck or Tanker Driver	2.4	97
Builder	1.9	99
Crop and Livestock Farmer/Worker	1.9	68
General Labourer	1.9	80
Dairy Farmer/Worker	1.8	65
Retail Manager	1.7	53
Carpenter or Joiner	1.4	99
Slaughterer (n=13,071)	1.3	84
	Cumulative Total=21.1%	

Table 8: Occupational Distribution of Male Workforce (2001)

Cumulative % of the male workforce	Number of Occupations				
	Total males	European males	Māori males	Pacific males	Other males
25	11	11	10	9	6
50	39	39	35	32	27
67	79	81	68	64	56
75	111	114	95	89	79

Which occupations are male dominated?

At the 1-digit level, two major occupational groups are clearly male dominated. Men make up 94% of Group 7, Trades Workers, and 80% of Group 8, Plant and Machine Operators and Assemblers (Table 4). (Men also make up 80% of the one in 20 employed people (5%) whose occupations were “not adequately defined”.) Among the top 10 occupations for men, five are male dominated (Table 9). At the 5-digit level, 230 occupations are male dominated (compared with 51 that are female dominated). These occupations employ 41.2% of all men in the workforce. Only 4.3% of employed women work in these occupations.

Table 9: Gender Composition of the 10 Most Common Occupations for Men (2001)

Occupation (5-digit level)	Gender composition of occupation (% male)
Sales Assistant	38
General Manager	72
Heavy Truck or Tanker Driver	97
Builder	99
Crop and Livestock Farmer/Worker	68
General Labourer	80
Dairy Farmer/Worker	65
Retail Manager	53
Carpenter or Joiner	99
Slaughterer	84

Therefore, although the proportion of the male workforce employed in male dominated occupations is, overall, a little lower than the proportion of the female workforce employed in such occupations, there are many more male dominated than female dominated occupations.

Heavily male dominated occupations

Using the higher measure of 90% or more, 158 occupations can be described as heavily male dominated. Together these occupations absorb 26.9% of all employed men. Therefore, men are considerably more likely to work in heavily male dominated occupations than women are.

Most of these occupations relate to technical work, skilled trades, and the control of such work (for example, forest manager and civil engineer). They include three of the top 10 occupations for men: heavy truck or tanker driver (97% male); builder (99% male); and carpenter or joiner (99% male).

Which occupations are more equally shared between women and men?

Given that women are now almost 47% of the workforce, it is interesting to look at the range of occupations that are approximately equally divided between women and men, that is, those occupations with no less than 40% and no more than 60% women.

Three major occupational groups fit this profile: Legislators, Administrators and Managers (40% women); Professionals (56% women); and Technicians and Associate Professionals (52% women). Together these three groups include 39% of all employed women and 35% of all employed men.

The 5-digit level shows a less equal picture. Over 100 occupations have between 40% and 60% women, but together these occupations absorb only 28% of all employed women and 27% of all employed men. They include many occupations providing what have been called “symbolic-analytic services ... all

the problem-solving, problem-identifying, and strategic-brokering activities” involving “the manipulation of symbols – data, words, oral and visual representations”.⁸ These types of occupations are seen as currently having much better prospects, in terms of demand, pay, conditions and negotiating power, than the types of occupations involving either routine production or in-person services.

Many of these symbolic-analytic occupations employing approximately equal numbers of men and women seem no longer to be seen as strongly associated with one gender. Such occupations include industrial designer, optometrist, accountant, finance manager, radiologist, retail pharmacist, chief executive (local government), senior education manager, and biochemist. These occupations are between 41% and 58% female.

There appear to be fewer occupations involving routine production or in-person services with approximately proportionate numbers of women and men. Routine production occupations with this profile include packer, a group of processing machine operators for various food products, market gardener, and textile finisher. In-person services jobs with this profile include bartender, bill and debt collector, usher and cloakroom attendant, drycleaner, and gaming dealer.

Some relatively high-status and/or high-profile occupations, while not yet approaching proportionately equal numbers of women and men, do have women making up between a quarter and a third of their number.

Such occupations include Member of Parliament (32% female), physician (32%), judge (30%), radio and television presenter (30%), general manager (28%), and minister of religion (25%). Women are also now well over a third (37%) of general practitioners, barristers, and solicitors. However, only 2% of all employed women and 5% of all employed men are in these nine occupations.

3. Māori women and men

Māori women make up 47% of the Māori workforce. Their occupational patterns differ from those of Māori men and also of Pakeha men. They also differ, although to a lesser extent, from those of European women.

In terms of the nine major occupational groups, Māori women are considerably less likely to be Legislators, Administrators and Managers or Professionals than European women or men are. They are more likely to have Elementary occupations, such as cleaner (Table 1). However, Māori women make up almost half of all Māori employed as Legislators, Administrators and Managers, 63% of Māori employed as Professionals, and 59% of Māori employed as Technicians and Associated Professionals (Table 4).

The 10 most common occupations for Māori women include seven of the 10 most common for European women, but in a different order (Tables 10 and 11). Cleaner is the second most common occupation for Māori women. Three of the top 10 occupations for Māori women are not among the top 10 occupations for

8 Robert B. Reich (1992), *The work of nations: preparing ourselves for 21st century capitalism*. NY: Vintage Books, p.177.

European women: social worker (73% women); packer (59% women); and catering counter assistant (74% women). Therefore, overall, the top 10 occupations for Māori women are somewhat less female dominated than the top 10 for European women.

Table 10: Ten Most Common Occupations for Māori Women (2001)

Occupation (5-digit level)	Proportion of Māori women in occupation (%)	Gender composition of occupation (% female)
Sales Assistant (n=4,935)	5.6	62
Cleaner	4.9	69
General Clerk	4.8	83
Care Giver	3.5	92
Primary School Teacher	2.5	84
Information Clerk and Other Receptionist	2.3	90
Social Worker	2.1	75
Packer	1.9	59
Secretary	1.9	97
Catering Counter Assistant (n=1,536)	1.8	74
	Cumulative Total=31.3%	

Table 11: Ten Most Common Occupations for European Women (2001)

Occupation (5-digit level)	Proportion of European women in occupation (%)	Gender composition of occupation (% female)
Sales Assistant (n=46,509)	6.9	62
General Clerk	6.0	83
Secretary	3.5	97
Registered Nurse	3.1	94
Primary School Teacher	3.1	84
Information Clerk and Other Receptionist	2.7	90
Caregiver	2.5	92
Cleaner	2.5	69
Accounts Clerk	1.9	89
Office Manager (n=11,841)	1.7	74
	Cumulative Total=34.0%	

The top 10 jobs for Māori men (Table 12) show even less overlap with the top 10 for Māori women than is the case for European women and men. Only one occupation, sales assistant, appears among the top 10 for both groups. Māori men have two occupations among their top 10 that differ from those for

European men (Table 13), and both are clearly male dominated: forest hand (95% men); and loader and/or checker (82% men). Neither of the other two occupations among the top 10 for European men, retail manager and dairy farmer/worker, is male dominated. Therefore, the top 10 occupations for Māori men are somewhat more male dominated than the top 10 for European men.

Table 12: Ten Most Common Occupations for Māori Men (2001)

Occupation (5-digit level)	Proportion of Māori men in occupation (%)	Gender composition of occupation (% male)
Heavy Truck or Tanker Driver (n=4,686)	4.7	97
General Labourer	3.6	80
Slaughterer	3.4	84
Sales Assistant	2.4	38
Forest Hand	1.8	94
Crop and Livestock Farmer/Worker	1.7	68
Loader or Checker	1.5	82
Carpenter or Joiner	1.4	99
Builder	1.4	99
General Manager (n=1,350)	1.4	72
	Cumulative Total=23.3%	

Table 13: Ten Most Common Occupations for European Men (2001)

Occupation (5-digit level)	Proportion of European men in occupation (%)	Gender composition of occupation (% male)
General Manager (n=28,836)	3.7	72
Sales Assistant	3.6	38
Heavy Truck or Tank Driver	2.3	97
Dairy Farmer, Dairy Farm Worker	2.2	65
Builder	2.1	99
Crop and Livestock Farmer, Worker	2.1	68
Retail Manager	1.7	53
General Labourer	1.6	80
Carpenter/Joiner	1.5	99
Administration Manager (n=11,595)	1.5	57
	Cumulative Total=22.3%	

The top 10 occupations for Māori women employ 31.3% of all Māori women in the workforce. While this is slightly lower than the proportion of European women employed in their top 10 jobs, it is still high. For Māori men, the proportion in their top 10 occupations is slightly higher (23.3%) than it is for

European men (22.3%). A total of 21 occupations employ half of all Māori women in the workforce, whereas 35 occupations absorb half of all Māori men.

4. Pacific women and men

Pacific women make up 46% of the Pacific workforce. Occupational patterns for Pacific women differ from the patterns for both European women and Māori women.

Pacific women are the least likely of the three groups of women to be employed as Legislators, Administrators and Managers (5%) or as Professionals (9%) (Table 1). However, Pacific women make up 45% and 62% respectively of all Pacific peoples employed in these two groups (Table 4). They also make up a relatively high proportion (12%) of those in the “not adequately defined” group.

At the 1-digit level, although similar proportions of Māori, Pacific and European women are employed as Clerks and as Service and Sales Workers, Pacific women make up a comparatively low percentage (67%) of the Pacific peoples working as Clerks. They are the most likely of the three groups of women to work as Plant and Machine Operators and Assemblers (26%) and Elementary Workers (43%).

The 10 most common occupations among Pacific women (Table 14) vary markedly from the top 10 for European women (Table 11). Only five occupations appear among the top 10 for both Pacific and European women. For Pacific women, cleaner (employing 5%) is the most common job. Packer makes the top 10 for Pacific women, as it does for Māori women, but while it is the eighth most common job for Māori women, for Pacific women it is the fourth. Three occupations appear on the list for Pacific women only: sewing machinist (90% female); technical representative (53% female); and nurse aide (94% female). Fewer than a third (31.2%) of Pacific women work in these top 10 occupations. However, just 17 occupations absorb half of all employed Pacific women (see Table 3).

Table 14: Ten Most Common Occupations for Pacific Women (2001)

Occupation (5-digit level)	Proportion of Pacific women in occupation (%)	Gender composition of occupation (% female)
Cleaner (n=1,806)	5.0	69
Sales Assistant	4.4	62
General Clerk	4.2	83
Packer	3.6	59
Care Giver	3.0	92
Information Clerk /Other Receptionist	2.5	90
Sewing Machinist	2.4	90
Catering Counter Assistant	2.2	74
Technical Representative	2.0	53
Nurse Aide (n=696)	1.9	94
	Cumulative Total=31.2%	

The top 10 occupations for Pacific women and men show more overlap than for men and women of other groups. The top 10 occupations for Pacific men (Table 15) include three of those on the list for Pacific women: sales assistant; cleaner; and packer. However, when the top 10 for Pacific men are compared with those for Māori and European men, five occupations are among the top 10 for Pacific men only: cleaner (31% male); packer (41% male); automated machine operator (79% male); stock clerk (77% male); and security officer (84% male). Heavy truck or tanker driver (97% male) is the only one of the top 10 occupations for Pacific men that is heavily male dominated, and only five of these occupations can be defined as male dominated (that is, made up of 80% or more men).

A higher percentage of Pacific men (24.1%) than of Māori men (23.3%) or European men (22.3%) work in the top 10 occupations for Pacific men. Overall, just 32 occupations absorb half of all employed Pacific men, compared with 35 occupations for Māori men, and 39 occupations for European men (see Table 8).

Table 15: Ten Most Common Occupations for Pacific Men (2001)

Occupation (5-digit level)	Proportion of Pacific men in occupation (%)	Gender composition of occupation (% male)
General Labourer (n=1,602)	3.8	80
Automated Machine Operator	3.5	79
Stock Clerk	3.0	77
Sales Assistant	2.7	38
Cleaner	2.4	31
Packer	2.1	41
Loader or Checker	1.8	82
Slaughterer	1.7	84
Security Officer	1.7	84
Heavy Truck or Tanker Driver (n=600)	1.4	97
	Cumulative Total=24.1%	

5. “Other” women and men

In the tables produced for this report, the “other” group includes women and men defined in the Census as “Asian” (5% of the workforce) and those defined as “other” – that is, those not fitting into any of the other four groups (less than 1%).

Given the recent rapid population growth of “Asian” women and men (mainly of Indian or Chinese origin), the occupational patterns of this group and of the much smaller group defined as “other” require specific and detailed research.

This needs to include gender analysis, both in terms of Census data and other aspects of their workforce and labour market involvement.

6. Part-time work

Part-time work is defined as 1 to 29 hours of work per week; full-time work is defined as at least 30 hours of work per week. Overall, the 2001 Census shows that 38% of the female workforce and 13% of the male workforce were working part time in March 2001. Census data on hours of employment in five-hour blocks shows that women are concentrated in very short hours of employment, while high proportions of men are employed full-time or for even longer hours.⁹

Of the 10 occupations that have the highest percentage of part-time workers, seven can be defined as female dominated, and three of these seven (teacher aide, 84% part-time; bookkeeper, 77% part-time; health assistant, 72% part-time) are heavily female dominated (Table 16).

Table 16: Occupations in Which Part-time Work is Most Common (2001)

Occupation (5-digit level)	Percentage of employees working part-time (%)	Percentage of employees who are female (%)	Percentage of employees who are male (%)
Teacher Aid	84	93	7
Singing and Music Teacher	84	73	27
Bookkeeper	77	94	6
Instrumentalist	73	31	69
Health Assistant	72	94	6
Usher and Cloakroom Attendant	72	53	47
Checkout Operator	72	85	15
Dancing Teacher/Choreographer	70	90	10
Sports Officials	70	33	67
Weight Loss Consultant	69	99	1

In three of the top 10 occupations for women, the majority of women are employed part-time (Table 17): sales assistant (54% part time); cleaner (78%); and care giver (60%). Collectively these three occupations, all of which are relatively low-paid, employ more than one in 10 (10.9%) of women in the workforce. In the other seven top occupations for women, substantial proportions of women – never fewer than one in five – also work part-time.

9 Statistics .New Zealand, 2001 Census of population and dwellings. Tables 73, 37a. <http://www.stats.govt.nz>

Table 17: Percentages of Women Working Part-Time and Full-Time in the 10 Most Common Occupations for Women (2001)

Occupation (5-digit level)	Part time	Full time
	(%)	(%)
Sales Assistant	54	46
General Clerk	39	61
Secretary	32	68
Registered Nurse	35	65
Primary School Teacher	24	76
Cleaner	78	22
Care Giver	60	40
Information Clerk and Other Receptionist	31	69
Accounts Clerk	32	68
Retail Manager	19	81

The top 10 occupations for Māori women and for Pacific women include six occupations that are not among the top 10 for all women (Table 18). Only one of these occupations, catering counter assistant, has a majority (58%) of all women employed in it working part-time. In three of the other five occupations, about one in five women works part-time.

Table 18: Percentages of All Women Working Part-Time and Full-Time in other Most Common Occupations for Māori and Pacific Women (2001)

Occupation (5-digit level)	Part-time	Full-time
	(%)	(%)
Social Worker	33	67
Packer	24	76
Catering Counter Assistant	58	42
Sewing Machinist	22	78
Technical Representative	21	79
Nurse Aide	42	58

By contrast, among the top 10 occupations for men, none has a majority working part-time (Table 19). However, there are substantial proportions of men working part-time in three of these occupations: sales assistant (30% part time); crop and livestock farmer/worker (19%); and general labourer (18%). In all 10 occupations, at least 5% of men work part-time.

Table 19: Percentages of Men Working Part-Time and Full-Time in the 10 Most Common Occupations for Men (2001)

Occupation (5-digit level)	Part-time (%)	Full-time (%)
Sales Assistant	30	70
General Manager	6	94
Heavy Truck or Tanker Driver	6	94
Builder (Including Contractor)	5	95
Crop and Livestock Farmer, Worker	19	81
General Labourer	18	82
Dairy Farmer, Dairy Farm Worker	9	91
Retail Manager	7	93
Carpenter and/or Joiner	6	94
Slaughterer	8	92

7. Discussion

Occupational segregation by gender is a worldwide phenomenon, with remarkable international similarities:

[N]ational levels of occupational segregation by sex are quite similar within regions and sub-regions of the world (where cultural and historical experiences, and therefore values, are similar), yet more or less unrelated to socio-economic and labour market conditions.¹⁰

In most OECD countries, over the 20 years 1970-1990, occupational segregation by gender did decrease, and in general it continued to decrease over the next decade. However, levels of segregation “had previously been so high outside Southern Europe that levels in 1970 were similar to those found today in many developing countries”.¹¹

It can be argued that segregation helps protect some women from competition by men for a particular group of “women’s jobs”.¹² In New Zealand as elsewhere, obvious labour shortages in typically female occupations, such as primary teaching and nursing, have not led to large numbers of men taking up these occupations. Much of women’s increased labour participation has been in expanding service industries involving commercialised aspects of women’s traditional role and unpaid work in the home, such as serving food or caring for children or the elderly.

Insofar as occupational segregation does offer this kind of “protection”, men have more opportunity to benefit from it. As the 2001 Census data show, in New Zealand as in other similar countries, male workers are considerably more likely to be employed in occupations heavily dominated by their own gender than

¹⁰ Anker (1998), p.418.

¹¹ Ibid pp.412-3.

¹² Anker (1998) discusses this point at some length.

women are, and there are many more male dominated than female dominated occupations. Internationally, while men have not been able to increase their protected position in any country studied, they have been able to maintain their position in several countries.

Occupational classification and definitions of skill

The picture of women continuing to “crowd” into a narrower range of occupations than men do may arise partly out of the classification system itself. International research has noted “a bias in occupational classifications, which tend to be more finely disaggregated for typical occupational groups where male workers tend to be concentrated, as compared to those where women workers tend to be concentrated”.¹³

This bias can be observed in NZSCO99 at the 5-digit level.¹⁴ Male dominated areas appear to be more likely to be broken down in sub-specialties than female dominated areas are. For example, there is no such occupation as “motor vehicle driver”. Instead, “Motor Vehicle Drivers” form a minor group at the 3-digit level (832). At the 5-digit level, five occupations of this type are listed: taxi driver; light truck or van driver; driving instructor; passenger coach driver; and heavy truck or tanker driver. Two more occupations may be seen to refer primarily to motor vehicle drivers: courier and deliverer; and tow truck operator. By contrast, the minor group of Personal Care Workers (513) contains five considerably more disparate occupations: hospital orderly; health assistant; ambulance officer; nurse aide; and care giver.

Part of the explanation may lie in the way occupations have been differentiated historically, then incorporated into the International Standard Classification of Occupations. Some of the finer gradations of occupation where men predominate reflect past trade union negotiations about job demarcation that established skilled differentials and pay margins, defined in a context of male trades and occupations working primarily with substances and/or machinery, and acquiring and using technological skills.¹⁵

The relative lack of differentiation in occupations where women predominate is seen partly to reflect the lack of recognition or value, in terms of skills and pay, for working primarily with people, and acquiring and using interpersonal skills. Some analysts:

understand skill itself as a social rather than a technical phenomenon, and ... the distinctions commonly made between men’s “skilled” work and

13 Anker (1998), p.406.

14 *Occupational trends in New Zealand: 1991-2001* Department of Labour (2002) discusses the way skill is defined, and compares the conceptual bases of the New Zealand system of classification with those used elsewhere, particularly in Australia.

15 C. Cockburn. (1988), "The gendering of jobs: workplace relations and the reproduction of sex segregation", in Sylvia. Walby (ed.), *Gender segregation at work*. Milton Keynes; New York: Open University Press, p.31.

women's "unskilled" work as being a social construct in which men have played an active part.¹⁶

As a 2002 Ministry of Women's Affairs pay equity discussion document points out,¹⁷ there are complex connections between "female" occupations, skill recognition, female stereotyping, and rates of pay. Some of the skills involved in typical women's occupations:

are often considered to be simply "natural" attributes of women, rather than being developed through learning, practice and experience. The skills required in interacting well with people (managers, staff or clients) and in other kinds of emotional labour often go unnoticed ... Complex interpersonal skills, heavy physical effort and responsibility for life and death are requirements of many jobs caring for children, the sick, the elderly. These components are likely to be undervalued in women's pay packets.¹⁸

Occupational segregation and earnings

In June 2001, the average hourly earnings of New Zealand women, as measured by Statistics New Zealand's annual Income Survey, were 84.3% of men's average hourly earnings, a gap of 15.7 percentage points.¹⁹ This gender pay gap had narrowed just 5 percentage points since 1984, when it was 20.7 percentage points. For women, average hourly earnings were \$14.93 compared with \$17.71 for men.

Department of Labour analysis at the 3-digit level of occupations attributed 20% to 40% of the gender pay gap in average earnings to the occupational differences between women and men.²⁰ It went on to note that:

Although occupational and industrial wage effects are treated as part of the "explained" portion of the gender earnings pay gap, this should not be taken to imply that they are necessarily either efficient or equitable.²¹

The report considered it likely that more of the pay gap could be "explained" by occupational differences between women and men if earnings data were available at more detailed levels of categorisation.

Although the Census provides the data for a more detailed study of occupations, it asks about income within broad brackets, not about hourly earnings. The Income Survey, which provides hourly earning data by gender

16 See Cockburn (1988) and Anne Phillips and Barbara Taylor (1980), "Sex and skill: notes towards a feminist economics". *Feminist Review* 6: 79-88.

17 Ministry of Women's Affairs (2002), *Next steps towards pay equity*. Wellington: Ministry of Women's Affairs.

18 See Ronnie Steinberg (1999), "Emotional labour in job evaluation: redesigned compensation practices" *Annals of the American Academy of Political and Social Sciences* 561: 143-156 and Ronnie Steinberg (1990), "Social construction of skill: gender power and comparable worth" *Work and Occupations* 17(4): 449-483.

19 Statistics New Zealand (2002), Average Hourly Earnings (from Salary and Wages), Table 1, June 2001 Income Supplement. <http://www.stats.govt.nz>

20 Sylvia Dixon (2000), *Pay inequality between men and women in New Zealand*. Occasional Paper 35(2). Wellington: Labour Market Policy Group, Department of Labour.

21 Ibid p.88.

and ethnicity, does not provide a large enough sample to allow occupations to be analysed at the 4-digit or 5-digit level.

However, the Household Labour Force Survey for the 2002 June quarter provides general information on low hourly earnings.²² At that time, the minimum hourly wage was \$8 per hour. However, 3% of women and 2% of men were earning less than this. Overall, 15% of women were earning \$10 or less per hour, compared with 9% of men.

Twenty percent of Māori women, 23% of Pacific women, and 20% of “other” women were earning \$10 or less per hour, compared with 14% of European women. Māori women (6%) and Pacific women (5%) were the most likely groups of women to be earning less than the minimum wage.

Among men, 11% of Māori men, 19% of Pacific men and 14% of “other” men were earning \$10 or less per hour, compared with 8% of European men. Pacific men were the most likely group of men (6%) (and even more likely than Pacific women) to be earning less than the minimum wage.

Part-time work and low pay

Average hourly earnings are lower for part-time workers than for full-time workers. The Department of Labour has attributed this mainly to differences in age, education and parental status. They note that mothers in paid work are far more likely to be employed part-time, and suggest that opportunity for part-time employment may be restricted to occupations that tend to be lower paying.²³ This is verified by the findings above, which show high proportions of women working part-time in low paying occupations, such as sales assistant, cleaner, care giver, and catering counter assistant. Part-time work is common among women working in the most common “female” occupations, although it is less common for Māori and Pacific women (Tables 16-18).

The gender pay gap among part-time employees is narrower than among full-time employees, mainly because average hourly pay rates for men in part-time work are considerably lower than rates for men in full-time work. In June 2001 the average hourly rate for men in full-time employment was \$18.18; for women it was \$15.66. The average hourly rate for men in part-time work was \$14.88; for women it was \$13.74.

Household Labour Force Survey data for the 2002 June quarter show that among women earning \$10 or less per hour, the majority were working part-time: 20% were working up to 10 hours a week, and another 41% were working from 11 to 30 hours a week. However, 39% of these low-paid women were working for at least 31 hours a week, some for 41 hours or more. Therefore, while low pay for women is clearly associated with part-time employment, it is by no means confined to women who work part-time hours.

For men, low pay is not strongly associated with working part-time. Among the men who earned \$10 or less per hour in June 2002, the majority were working

22 Information in this section comes from a working note on women and low pay, Ministry of Women's Affairs, 2003.

23 Dixon (2000), pp.108-111.

full-time. Only 11% were working up to 10 hours a week and another 25% were working from 11 to 30 hours a week. However, 37% were working 31 to 40 hours and 27% were working 41 or more hours.

Occupational segregation and labour market efficiency

The ILO occupational segregation study concluded that when occupations become “marked” as “male” or “female”, and/or as most suitable for a particular group of women or men, this has:

a negative effect on labour market efficiency and labour market functioning ... human resources are wasted and consequently income levels are reduced, as many of the best suited and most skilled people are excluded from working in the occupation where they would be most productive.²⁴

Moreover, such segregation represents:

a major labour market rigidity, greatly reducing a labour market’s ability to respond to change ... When these labour market inefficiencies and rigidities are seen in the context of the recent large increases in female labour force participation rates throughout the world and the need for labour markets to adjust to rapid economic changes, it is clear that countries can ill afford to ignore occupational segregation by sex and still remain competitive in today’s global market-place.²⁵

Much of the literature on occupational segregation sees more effective measures to achieve equal opportunity as the major way of changing this pattern. In other words, women should continue to be encouraged to move into male dominated occupations. This would also require more men to move into female dominated occupations.

A 1998 study for the Ministry of Women’s Affairs looked at changes in the male and female share of broad job categories over 15 years and adjusted for increases in the number employed.²⁶ Between 1981 and 1996, occupational segregation had decreased in full-time work and among 15-24 year olds, but it had increased in part-time work. At this rate of change, the authors noted, it would take 75 years before occupational segregation disappeared. An Australian study estimated that current progress might achieve desegregation in around 300 years.²⁷

Conclusion

In New Zealand, a relatively small number of occupations have a large impact on occupational patterns. Data from the 2001 Census show that “approximately 33% of New Zealand employment is concentrated in just 20 occupational

24 Anker (1998), p.7.

25 Ibid p.7.

26 Barnett and Briggs (1998).

27 Cited in Natasha Cortis (2000), "Gender pay equity and human service work: a New South Wales case study". *Australian Journal of Political Science* 35(1): 49-62.

titles”.²⁸ Moreover, the majority of these occupations are clearly “gendered” – that is, they typically employ either women or men.

Between 1991 and 2001, job growth was concentrated in a few occupations, most typically undertaken by women.²⁹ Of the ten occupations that grew most, seven employed mainly women. Four could be classed as female dominated, two of these heavily so. By contrast, none of these occupations was male dominated, and only one, general manager, employed fewer than 30% women.

Analysis of the 2001 Census data demonstrates that this growth in employment does not appear to have significantly changed employment patterns. The New Zealand labour market continues to show patterns of occupational segregation by ethnicity as well as by gender, with occupational differences not just between women and men, but also between Pākehā, Māori and Pacific women and men.

Occupational segregation is an important issue. It may reflect a real lack of equal employment opportunity for women, resulting from factors such as the influence of past discrimination or barriers to women’s employment in some fields. In addition, occupational differences may be linked to the level of women’s wages, and therefore to the gap between women’s and men’s average earnings. International evidence, for example, shows that the higher the proportion of women or an ethnic minority employed in an industry, an occupation, a firm, or even a work team, the lower the average pay.³⁰ This difference in remuneration rates may be the result of explainable factors, such as skills and experience, or the result of market supply and demand factors. A proportion of the gender pay gap, however, may be the result of a failure to reward workers in some predominantly female occupations according to the contribution they make to the economy and will, therefore, be inequitable.

The gender pay gap affects women’s life choices. It affects family incomes, particularly those of women raising children alone. Lower average earnings for women also affect lifetime income, including retirement income. There is a need, therefore, to develop a range of policy options to address the pay gap. This may include policies to increase the range of jobs in which neither gender predominates, as well as policies to ensure that women receive equal pay for work of equal value. The extent to which women, particularly Māori and Pacific women, are highly represented in low-paying jobs justifies the re-evaluation, in terms of skills and responsibilities, of predominantly female occupations to identify those jobs which have been undervalued in the marketplace. Where there is evidence that pay and employment opportunities are based on gender or ethnicity, rather than on skills and abilities, there may well be a need to

28 Department of Labour (2002), *Occupational trends in New Zealand: 1991-2001*. Wellington, p.32.

29 See *Occupational trends in New Zealand: 1991-2001* Department of Labour (2002) for detailed discussion of which occupations grew, and which declined, without gender analysis.

30 See, for example, Jane Lapidus and Deborah M. Figart (1998), "Remedying 'unfair acts': US pay equity by race and gender". *Feminist Economics* 4(3): 7-28 and Deborah M. Figart and Peggy Kahn (1997), *Contesting the market: pay equity and the politics of economic restructuring*. Detroit: Wayne State University.

ensure adjustments in pay rates to progress employment equity and labour market efficiency.

References

- Anker, Richard (1998), *Gender and jobs: sex segregation of occupations in the world*. Geneva: International Labour Organisation.
- Barnett, Jane and Phil Briggs (1998), *Occupational sex segregation: a New Zealand investigation*. Report for the Ministry of Women's Affairs, Wellington: New Zealand Institute of Economic Research.
- Cockburn, C. (1988), The gendering of jobs: workplace relations and the reproduction of sex segregation, in Sylvia Walby (ed.), *Gender segregation at work*. Milton Keynes; New York: Open University Press.
- Cortis, Natasha (2000), "Gender pay equity and human service work: a New South Wales case study". *Australian Journal of Political Science* 35(1): 49-62.
- Department of Labour (2002), *Occupational trends in New Zealand: 1991-2001*. Wellington.
- Dixon, Sylvia (2000), *Pay inequality between men and women in New Zealand*. Occasional Paper 35(2). Wellington: Labour Market Policy Group, Department of Labour.
- Figart, Deborah M. and Peggy Kahn (1997), *Contesting the market: pay equity and the politics of economic restructuring*. Detroit: Wayne State University.
- Haines, Lesley and Belinda Hill (1991), *Occupational segregation in New Zealand*, draft report for the Ministry of Women's Affairs (typescript, 39 pages).
- Lapidus, Jane and Deborah M. Figart (1998), "Remedying 'unfair acts': US pay equity by race and gender". *Feminist Economics* 4(3): 7-28.
- Ministry of Women's Affairs (2002), *Next steps towards pay equity: a discussion document*. Wellington: Ministry of Women's Affairs.
- Phillips, Anne and Barbara Taylor (1980), "Sex and skill: Notes towards a feminist economics". *Feminist Review* 6: 79-88.
- Reich, Robert B. (1992), *The work of nations: preparing ourselves for 21st century capitalism*. NY: Vintage Books.
- Statistics New Zealand (2002), 2001 Census of population and dwellings. <http://www.stats.govt.nz>
- Steinberg, Ronnie (1990), "Social construction of skill: gender power and comparable worth". *Work & Occupations* 17(4).
- Steinberg, Ronnie (1999), "Emotional labour in job evaluation: redesigned compensation practices". *Annals of the American Academy of Political and Social Sciences* 561.

